

**UNIVERSITY OF SOUTH ALABAMA**



**UNIVERSITY OF  
SOUTH ALABAMA**

**2017 - 2018**

**Undergraduate and  
Graduate Bulletin**

# USA Bulletin Disclaimer

## University Of South Alabama

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# Academic Calendar 2017-2018

## Fall Semester 2017

Event	Date	Day
Registration for Continuing Students	April 3 - August 15	Monday - Tuesday
Registration for New Fall 2017 Graduate Students	July 28 - August 15	Friday - Tuesday
15% of all tuition and fees including housing and meals due	July 24	Monday
All registration schedules released if payment deadline not met	July 25	Tuesday
Financial Aid/Scholarship Bookstore charges begin	August 4	Friday
Fall 2017 International Student Orientation	August 7	Friday
Late Freshman Orientation	August 9	Wednesday
Late Transfer Orientation	August 10-11	Thursday - Friday
Payment Deadline	August 11	Friday
Residence Halls Open	August 12	Saturday
All registration schedules released if payment deadline not met	August 15	Tuesday
Convocation	August 15	Tuesday
<b>Classes begin</b>	<b>August 16</b>	<b>Wednesday</b>
100% Refund Period	August 16	Wednesday
Late Registration Period	August 16-18	Wednesday - Friday
Financial Aid Bookstore charges end	August 18	Friday
Final registration cancellation for unpaid accounts	August 22	Tuesday
Census 5:00 PM	August 22	Tuesday
50% refund period begins on dropped courses and complete withdrawals	August 23	Wednesday
Refunding financial aid credit balances to students begins	August 24	Thursday
No Refunds after this date	August 29	Tuesday
Last day for Spring Semester 2018 degree applications	September 1	Friday
<b>Labor Day Holiday for students, faculty, staff and administration</b>	<b>September 4</b>	<b>Monday</b>
Priority readmission deadline for Spring Semester 2018	September 22	Friday
Time Tickets Posted for Spring 2018 Registration	September 22	Friday
Incomplete Grades Deadline	October 6	Friday
Mid-term grades due	October 6	Friday
<b>Fall Break for Students</b>	<b>October 12-13</b>	<b>Thursday - Friday</b>
Last day to drop from a course (4:59 p.m.)	October 20	Friday

Last day to withdraw from University (4:59 p.m.)	October 20	Friday
Spring Semester 2018 registration for continuing students	October 23 - January 5	Monday - Friday
Theses/dissertations first submission deadline to Office of Graduate Dean by 5:00 p.m.	October 23	Monday
Theses/dissertations due in the Office of the Graduate Dean by 5:00 p.m.	November 10	Friday
<b>Thanksgiving Holidays for Students begins at 5:00 p.m. (Includes weekend classes)</b>	<b>November 21-26</b>	<b>Tuesday - Sunday</b>
Thanksgiving Holidays begins at noon on Wednesday for faculty, staff, and administration	November 22-26	Wednesday - Sunday
Registration for New Spring 2018 Graduate Students	November 27 - January 5	Monday - Friday
<b>Last Day of Classes</b>	<b>December 1</b>	<b>Friday</b>
<b>Final Examinations</b>	<b>December 4-7</b>	<b>Monday - Thursday</b>
15% of all Spring 2018 tuition and fees including housing and meals due	December 5	Tuesday
Registration for Spring 2018 cancelled if 15% payment not received by December 5 (students with awarded financial aid that exceeds 15% of tuition and fees and students participating in tuition payment plan will be excluded)	December 6	Wednesday
Residence Halls Close	December 8	Friday
<b>Commencement and Official Graduation Date</b>	<b>December 9</b>	<b>Saturday</b>
Final grade web entry due by 10:00 a.m.	December 11	Monday
Grades posted by 12:00 noon	December 13	Wednesday
Holidays for staff and administration	December 20 - January 1	Wednesday - Monday

## Spring Semester 2018

Event	Date	Day
Faculty, staff and administration return to work	January 2	Tuesday
Financial Aid/Scholarship bookstore charges begin	January 2	Tuesday
International Orientation	January 2	Tuesday
Late Freshman Orientation	January 3	Wednesday
Late Transfer Orientation	January 4-5	Thursday - Friday
Fee payment deadline for all charges	January 5	Friday
Residence Halls Open	January 5	Friday
<b>Classes begin</b>	<b>January 8</b>	<b>Monday</b>
100% refund period begins on dropped courses and complete withdrawals (including housing)	January 8	Monday

All registration schedules released if payment deadline not met 7:00-9:00 a.m.	January 8	Monday
Late Registration and Drop/Add (ends at 5:59 p.m. on January 11)	January 8-11	Monday - Thursday
Financial Aid Bookstore/Scholarship charges end	January 11	Thursday
Final registration cancellation for unpaid accounts	January 12	Friday
Last Registration Cancellation 8:00-10:00 a.m.	January 12	Friday
Census 5:00 p.m.	January 12	Friday
<b>Martin Luther King Holiday for faculty, staff and administration</b>	<b>January 15</b>	<b>Monday</b>
50% refund period begins on dropped courses and complete withdrawals	January 15	Monday
Refunding financial aid credit balances to students begins (refunds)	January 17	Wednesday
No course refunds after this date	January 21	Sunday
Last Day for Summer Term 2018 degree applications	February 2	Friday
<b>Mardi Gras Holiday for students, faculty, staff and administration</b>	<b>February 13</b>	<b>Tuesday</b>
Last day for faculty reports on incomplete grades (undergraduate and graduate)	February 19	Monday
Mid-term grades posted	March 2	Friday
Theses/dissertations first submission deadline to Office of Graduate Dean by 5:00 p.m.	March 20	Monday
Time Tickets posted for Summer/Fall 2018 Registrations	March 19	Monday
<b>Spring Break for students (includes weekend classes)</b>	<b>March 26 - April 1</b>	<b>Monday - Sunday</b>
Last day to drop from a course or withdraw (4:59 p.m.)	April 6	Friday
Summer 2018 Registration for continuing and readmitted students	April 2 - May 29	Monday - Tuesday
Fall 2018 Registration for continuing and readmitted students	April 2 - August 15	Monday - Wednesday
Theses/dissertations due in Office of Graduate Dean by 5:00 p.m.	April 6	Friday
Last day of classes	April 27	Friday
Final Examinations	April 30 - May 3	Monday - Thursday
Registration for New Summer 2018 Graduate Students	April 30 - May 28	Monday - Monday
Residence Halls Close	May 4	Friday
<b>Commencement and Official Graduation Date</b>	<b>May 5</b>	<b>Saturday</b>
Final grade web entry due by 10:00 a.m.	May 7	Monday
Grades posted by 12:00 noon	May 9	Wednesday

## May Semester 2018

Event	Date	Day
Open Registration for Summer 2018	April 30 - May 6	Monday - Sunday
All tuition, fees, housing and meal plan balances are due in full	May 2	Wednesday
Registration schedules released if payment deadline not met	May 3	Thursday
<b>Classes begin</b>	<b>May 7</b>	<b>Monday</b>
No refunds after this date for May Term classes	May 7	Monday
Last Day for May Term classes	<b>May 25</b>	<b>Friday</b>
Final web grade entry May classes due by 10:00 a.m.	May 29	Tuesday

## Summer Semester 2018

Event	Date	Day
Financial Aid bookstore charges begin	May 22	Tuesday
All tuition, fees, housing and meal plan balances are due in full (\$50 late payment fee assessed May 25th)	May 24	Thursday
Residence Halls Open	May 25	Friday
Open Registration for Summer 2018	May 25-28	Friday - Monday
<b>Memorial Day Holiday for faculty, staff and administration</b>	<b>May 28</b>	<b>Monday</b>
<b>Classes for Full/First Term begin</b>	<b>May 29</b>	<b>Tuesday</b>
Registration schedules released if payment deadline not met	May 29	Tuesday
100% refund period begins on dropped courses and complete withdrawals for Full/First Terms (including housing)	May 29	Tuesday
Late Registration and Drop/Add Summer 2018 (ends at 5:59 p.m. on June 1)	May 29 - June 1	Tuesday - Friday
Last Day to add a course Summer 2018 (5:59 p.m.) Last Day to change to audit Summer 2018 (5:59 p.m.)	June 1	Friday
Financial Aid bookstore charges end	June 1	Friday
50% refund period begins on dropped courses and complete withdrawals for First Term	June 1	Friday
Last day for Fall Semester 2018 degree applications	June 1	Friday
All registration schedules released if payment deadline not met	June 4	Monday
No refunds after this date for First Term classes	June 5	Tuesday
50% refund period begins on dropped courses and complete withdrawals for Full Term	June 5	Tuesday
Refunding financial aid credit balances to students begins (refunds)	June 6	Wednesday
No refunds after this date for Full Term classes	June 11	Monday
Last Day to Drop a First Term class (11:59 p.m.)	June 12	Tuesday

Last Day to Withdraw from University if taking all First Term classes (11:59 p.m.)		
Second Term Registration Opens	June 20	Wednesday
<b>Classes End for First Term classes</b>	<b>June 25</b>	<b>Monday</b>
Exam day for First Term classes	June 25	Monday
<b>Second Term classes begin</b>	<b>June 26</b>	<b>Tuesday</b>
Theses/dissertations first submission deadline to Office of Graduate Dean by 5:00 p.m.	June 27	Wednesday
Final web grade entry (First Term classes) due by 10:00 a.m.	June 28	Thursday
50% refund period begins on withdrawals for Second Term Courses	June 28	Thursday
No refund after this date for Second Term courses	July 2	Monday
<b>Fourth of July Holiday for students, faculty, staff, and administration</b>	<b>July 4</b>	<b>Wednesday</b>
Last day to drop a Full Term course (11:59 p.m.) Last day to withdraw from University (Full Term) (11:59 p.m.)	July 5	Thursday
Last day to drop a Second Term course (4:59 p.m.)	July 10	Tuesday
Last day for faculty reports on graduate and undergraduate incomplete grades	July 11	Wednesday
Theses/dissertations due in Office of Graduate Dean by 5:00 p.m.	July 13	Friday
Last Day for Full Term/Second Term Classes	July 23	Monday
Final Examinations for Full Term/Second Term classes	July 24-27	Tuesday - Friday
Official Graduation date	July 28	Saturday
Residence Halls Close	July 28	Saturday
Final web grade entry (Full Term and Second Term classes) due by 10:00 a.m.	July 30	Monday

# About The University

The University of South Alabama, founded in 1963, offers a superb, well-rounded educational experience with high academic standards. USA's fields of study are remarkably diverse, encompassing business, the liberal arts, education, engineering, computing, the sciences and health care.

USA enrolls more than 16,000 students and has awarded more than 82,000 degrees in its history. The Mitchell-Moulton Scholarship Initiative, a \$50-million fundraising challenge, is strengthening USA's commitment to expanding opportunities for current and future students.

A University of South Alabama education provides opportunities for students to explore and develop interests that build the foundation of lifelong career paths. With more than 50 undergraduate degree programs, there are plenty of avenues for discovery. Through graduate study in 34 master's and 12 doctoral programs, students focus on specific areas of learning and research to gain specialized skills. Academic programs are offered through 10 divisions: Pat Capps Covey College of Allied Health Professions; College of Arts and Sciences; Mitchell College of Business; School of Computing; College of Education and Professional Studies; College of Engineering; College of Medicine; College of Nursing; the Graduate School; and the Auburn University School of Pharmacy at USA.

USA's undergraduate Honors College for highly motivated and accomplished students includes course work and extracurricular activities throughout the four years of a student's undergraduate career. In the past few years, USA students have been awarded national scholarships and fellowships that include a National Merit Scholar, five Goldwater Scholarships, seven Hollings Scholarships, 29 Tau Beta Pi Scholarships (Engineering Honor Society), and 17 fellowships for graduate study from organizations such as the American Heart Association and the National Science Foundation.

The faculty at USA promote an environment in which hands-on research is widely available to undergraduate and graduate students. As problem-solvers and pioneers in developing new technologies and promoting bold ideas, USA researchers collaborate across disciplines to address global issues and uncover new fields of inquiry. The outcomes are new information and opportunities, the transformation of traditional disciplines, new global partnerships and innovations that benefit society.

In health care, USA Health serves the region with advanced and innovative care through USA Medical Center, USA Children's & Women's Hospital, USA Physicians Group and the USA Mitchell Cancer Institute.

USA's beautiful, tree-shaded main campus spreads across 1,200 acres. The campus includes state-of-the-art educational facilities as well as a 116,000-square-foot recreation center, indoor and outdoor pools, a nature trail and even a disc golf course.

In addition to USA's outstanding academic programs, our students enjoy a wide variety of social, cultural, entertainment and athletic activities that contribute to an outstanding college experience. The USA Jaguars men's and women's athletics teams compete in 17 Division I sports within the Sun Belt Conference. Intramural and club sports allow all students the opportunity to participate at a level that suits their abilities.

Students have many choices for on-campus housing, with six residential communities that are home to 32 residence halls. These co-ed communities offer standard double occupancy rooms, plus suite and apartment-style accommodations with kitchenettes. Each community has recreational and study lounge areas, multipurpose rooms and laundry facilities. The Greek housing community is made up of nine houses for specific social Greek organizations.

USA's location in the historic city of Mobile, Alabama, and the University's close proximity to the beaches of the Gulf Coast affords a wide variety of off-campus recreational, arts and cultural opportunities.

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

# The University

## University Of South Alabama

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

## The Gulf Coast Region

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

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

# Mission Statement

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

# Vision Statement

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

# Institution Philosophies And Purposes

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

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

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

causes recognition of the University's responsibility to cooperate with local, civic, professional, and governmental organizations. It inculcates an awareness of the necessity for effective leadership in the social, political, and economic affairs of our society.

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

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

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

## Institutional Effectiveness

### The University Of South Alabama Statement On Institutional Effectiveness

To insure continued excellence as an educational institution, the University of South Alabama is committed to evaluating its effectiveness. The institution has carefully developed goals and objectives which are used as the basis for planning and evaluation. A variety of assessment methods are employed to determine the extent to which each goal has been met, and the results of such assessments are used to improve both educational and support activities.

## Athletic Department Mission

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

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

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

#### Core Values

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

#### Guiding Principles

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

## University Organization

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

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

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

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

- The President, appointed by the Board of Trustees;
- Other chief administrative officers who report directly to the President include the Executive Vice President, Provost and Senior Vice President for Academic Affairs, Vice President for Development and Alumni Relations, Vice President for Finance and Administration; Vice President for Medical Affairs; Chief Executive Officer and Sr. Associate Vice President for Medical Affairs for USA Health; Vice President for Research and Economic Development; and Vice President for Student Affairs.

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

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

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

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

## Accreditations

The University of South Alabama (USA) is accredited by the Southern Association of Colleges and Schools Commission on Colleges (SACSCOC) to award Bachelor's, Master's, Specialist, and Doctoral degrees. On December 9, 2013, this accreditation was reaffirmed by SACSCOC. The next SACSCOC accreditation reaffirmation process is scheduled to take place in 2023.

Contact the Southern Association of Colleges and Schools Commission on Colleges at 1866 Southern Lane, Decatur, Georgia 30033-4097 or call 404-679-4500 for questions about the accreditation of the University of South Alabama or visit <http://www.sacscoc.org/index.asp> to learn more about SACSCOC.

Other accrediting agencies for specific University of South Alabama degree programs are available at the following link: [USA Degrees with accrediting agency](#)

## Policy Of Non-Discrimination

The University of South Alabama and its colleges and subdivisions follow a policy of nondiscrimination on the basis of race, sex (including pregnancy), sexual orientation, religion, color, national origin, age, or genetic information in admission policies and practices, educational programs, activities, and employment practices according to Title IX of the Education Amendments of 1972. The University of South Alabama does not discriminate in its student and employment practices in violation of any applicable laws. The University of South Alabama is an Equal Opportunity/Equal Access educational institution. The University of South Alabama does not discriminate on the basis of disability. No otherwise qualified person with a disability, solely on the basis of such disability, will be excluded from participation in, be denied the benefits of, or be subjected to discrimination in the administration of any educational program or activity including admission or access thereto or in treatment or employment therein by the University of South Alabama.

## Compliance With Rehabilitation And ADA

The University of South Alabama complies with Section 504 of the Rehabilitation ACT of 1973 and the ADA of 1990 as amended. Any questions relating to the accessibility should be directed to the Manager, Special Student Services, Student Center, Room 270, (251)460-7212.

## University Libraries

The need for authoritative information is critical for student success at the University of South Alabama. The University Libraries provide the resources and services necessary to obtain, understand, and think critically about information, whether it is located physically in one of the libraries, or available electronically in a licensed database. The computer network not only provides bibliographic information about the collections of the University Libraries through SOUTHcat, but also provides access to licensed full-text article services, periodical indexes and abstracts, eBooks, and electronic reference sources. The Libraries' book, journal, microform, and audiovisual collections provide students with physical information not otherwise available through the Internet. Individual and group study rooms and comfortable seating is available throughout the libraries. All University librarians hold Master of Library Science degrees, specialize in particular fields of study, and are available to provide instructional classes to students at the request of faculty about how to use these resources effectively for student success.

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

- Marx Library, the general library on the main campus
- Doy Leale McCall Rare Book and Manuscript Library, located in Marx Library
- Charles M. Baugh Biomedical Library, main campus adjacent to the College of Medicine
- Children's & Women's Hospital Library, on Center Street in midtown Mobile
- USA Medical Center Library, on Fillingim Street
- Mitchell College of Business Learning Resource Center

The Marx Library houses a U.S. Documents Collection; an Instructional Media Center (IMC) with educational materials such as videotapes, DVDs, CDs; audiovisual viewing and listening rooms; group study rooms, photocopiers, networked printers; a computer lab; an auditorium and classrooms available for reservations; two art galleries featuring student/faculty and regional artists, traveling statewide shows, and special displays. Reference, interlibrary loan, photocopying, and other services are also available. Marx Library also provides instructional services at the USA Baldwin County Campus. A full-service Starbucks is located at the west entrance to Marx Library.

See the following websites for more information:

- [Biomedicallibrary.southalabama.edu/library](http://Biomedicallibrary.southalabama.edu/library)
- [Southalabama.edu/departments/library](http://Southalabama.edu/departments/library)
- [Southalabama.edu/univlib/mcob](http://Southalabama.edu/univlib/mcob)

- [Southalabama.edu/mccallarchives](https://southalabama.edu/mccallarchives)

# Admissions / Enrollment Services

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

## Admission To The University

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The Office of Admissions processes all applications for admission to undergraduate and graduate programs at the University. Inquiries about admission should be addressed to the Director of Admissions, Meisler Hall Suite 2500, University of South Alabama, Mobile, Alabama 36688-0002, or telephoned to (251)460-6141, toll-free number at (800)872-5247, or e-mail at [admiss@southalabama.edu](mailto:admiss@southalabama.edu). Information is also available via a link on the University's Home Page on the World Wide Web: <http://www.southalabama.edu/departments/admissions/>.

## Application For Admission

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Students applying for admission to the University of South Alabama are required to file an application for admission with the \$35 nonrefundable processing fee (paper fee \$45) by the deadlines noted. The application is available on the Admissions web site via a link from <http://www.southalabama.edu/departments/admissions/applytousa.html>.

Note: The University reserves the right to change fees without prior notice, as deemed necessary by the [Board of Trustees](#).

## Deadlines, Transcripts, And Test Scores

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

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

First Time Freshmen must submit an official high school transcript showing grades earned and courses pursued. (A final official high school transcript showing the date of graduation is required for those who apply before the end of their senior year.) In addition, First-Time Freshmen applicants must submit official college entrance examination scores-either the result of the ACT or the Scholastic Assessment Test (SAT).

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

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

(See "Special Freshmen Admission" under Admission Types).

# Admission Types

## Requirements For First Time Freshmen Admission

### 16 hours of required academic core courses

Curriculum Area	Units	Courses
English	4	
Mathematics	3	Must include Algebra I and Algebra II or higher.
Science	3	At least 2 of the sciences must include labs.
Social Science	3	
Advanced Electives	3	Courses chosen from any of the four core areas above and foreign language.
<b>Total Core Units</b>	<b>16</b>	

## GPA And Test Scores

USA generally admits students with:

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

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

It is recommended that students submit the following items for additional consideration:

1. Letter of recommendation from your high school counselor or a teacher in a college preparatory course.
2. Personal essay on your reason for attending USA and your career plans.
3. Resume, to include a summary of special talents or skills.

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

Students will be permitted to enroll in mathematics classes based on either a prerequisite course, their Math-ACT score, their Math-SAT score, or the Mathematics Placement test. Mathematics placement can be found at <http://www.southalabama.edu/colleges/artsandsci/mathstat/placementinfo.html>. Students may also be required to take reading or English courses based upon their ACT-English, ACT-Reading or SAT-Critical Reading score. English or Reading placement can be found at <http://www.southalabama.edu/colleges/scesp/ds/info.html>.

Permanent Residents who have not attended a US institution, whose native language is not English, must submit a score of 61 or above on the Test of English as a Foreign Language (TOEFL) for admission. Applicants who hold a baccalaureate or graduate degree from a regionally accredited United States institution are exempt. Students transferring from postsecondary institutions within the United States are exempt, subject to the following conditions:

- a. transfer credits total at least 24 semester hours; and
  - b. completion of English Composition I with grade of "C" or above
1. The exempted transfer students ARE NOT subject to the proficiency examination discussed below. In addition, the TOEFL may be substituted with the following:
    - a. SAT Reading Test Score of 24
    - b. ACT English score of 19

- c. Advanced Level English examinations from the United Kingdom with a score of "A", "B" or "C/A-E"
- d. A minimum IELTS score of 5.5
- e. International Test of English Proficiency (iTEP) score of 3.6
- f. Pearson (PTE Academic) score of 44

2. Standardized Tests - Permanent residents of the U.S. who have completed less than 30 semester hours from a US institution must submit an acceptable score on the ACT or SAT examination. Students who have graduated from a US high school 5 or more years previously, or apply on the basis of the GED are exempt.

### **Admission Appeal Procedure**

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

### **Special Freshman Admission**

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

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

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

**Permanent Residents** who have not attended a US institution, whose native language is not English, must submit a score of 61 or above on the Test of English as a Foreign Language (TOEFL) for admission. Applicants who hold a baccalaureate or graduate degree from a regionally accredited United States institution are exempt. Students transferring from postsecondary institutions within the United States are exempt, subject to the following conditions:

- a. transfer credits total at least 24 semester hours; and
  - b. completion of English Composition I with grade of "C" or above
1. The exempted transfer students ARE NOT subject to the proficiency examination discussed below. In addition, the TOEFL may be substituted with the following:
- a. SAT Reading Test Score of 24
  - b. ACT English score of 19
  - c. Advanced Level English examinations from the United Kingdom with a score of "A", "B" or "C/A-E"
  - d. A minimum IELTS score of 5.5
  - e. International Test of English Proficiency (iTEP) score of 3.6
  - f. Pearson (PTE Academic) score of 44
2. Standardized Tests - Permanent residents of the U.S. who have completed less than 30 semester hours from a US institution must submit an acceptable score on the ACT or SAT examination. Students who have graduated from a US high school 5 or more years previously, or apply on the basis of the GED are exempt.

### **GED First Time Freshmen Admission**

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

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

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

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

**Permanent Residents** who have not attended a US institution, whose native language is not English, must submit a score of 61 or above on the Test of English as a Foreign Language (TOEFL) for admission. Applicants who hold a baccalaureate or graduate degree from a regionally accredited United States institution are exempt. Students transferring from postsecondary institutions within the United States are exempt, subject to the following conditions:

- a. transfer credits total at least 24 semester hours; and
  - b. completion of English Composition I with grade of "C" or above
1. The exempted transfer students ARE NOT subject to the proficiency examination discussed below. In addition, the TOEFL may be substituted with the following:
- a. SAT Reading Test Score of 24
  - b. ACT English score of 19
  - c. Advanced Level English examinations from the United Kingdom with a score of "A", "B" or "C/A-E"
  - d. A minimum IELTS score of 5.5
  - e. International Test of English Proficiency (iTEP) score of 3.6
  - f. Pearson (PTE Academic) score of 44
2. Standardized Tests - Permanent residents of the U.S. who have completed less than 30 semester hours from a US institution must submit an acceptable score on the ACT or SAT examination. Students who have graduated from a US high school 5 or more years previously, or apply on the basis of the GED are exempt.

## Freshmen With Previous Credits

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

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

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

**Permanent Residents** who have not attended a US institution, whose native language is not English, must submit a score of 61 or above on the Test of English as a Foreign Language (TOEFL) for admission. Applicants who hold a baccalaureate or graduate degree from a regionally accredited United States institution are exempt. Students transferring from postsecondary institutions within the United States are exempt, subject to the following conditions:

- a. transfer credits total at least 24 semester hours; and
  - b. completion of English Composition I with grade of "C" or above
1. The exempted transfer students ARE NOT subject to the proficiency examination discussed below. In addition, the TOEFL may be substituted with the following:
- a. SAT Reading Test Score of 24
  - b. ACT English score of 19
  - c. Advanced Level English examinations from the United Kingdom with a score of "A", "B" or "C/A-E"
  - d. A minimum IELTS score of 5.5

- e. International Test of English Proficiency (iTEP) score of 3.6
- f. Pearson (PTE Academic) score of 44

2. Standardized Tests - Permanent residents of the U.S. who have completed less than 30 semester hours from a US institution must submit an acceptable score on the ACT or SAT examination. Students who have graduated from a US high school 5 or more years previously, or apply on the basis of the GED are exempt.

### **Early Admission Applicants**

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Early Admission applicants are students who have completed the junior year of high school and wish to enroll prior to high school graduation.

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

- 1. a 3.5 minimum high school GPA, as computed by the USA Office of Admissions;
- 2. scored at least a 28 composite on the ACT (or 1250 SAT scores);
- 3. completed the junior year of high school;
- 4. completed the Core High School Requirements listed above under Regular Admission.
- 5. and be approved by the Director of Admissions.

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

Permanent Residents who have not attended a US institution, whose native language is not English, must submit a score of 61 or above on the Test of English as a Foreign Language (TOEFL) for admission. Applicants who hold a baccalaureate or graduate degree from a regionally accredited United States institution are exempt. Students transferring from postsecondary institutions within the United States are exempt, subject to the following conditions:

- a. transfer credits total at least 24 semester hours; and
  - b. completion of English Composition I with grade of "C" or above
1. The exempted transfer students ARE NOT subject to the proficiency examination discussed below. In addition, the TOEFL may be substituted with the following:
- a. SAT Reading Test Score of 24
  - b. ACT English score of 19
  - c. Advanced Level English examinations from the United Kingdom with a score of "A", "B" or "C/A-E"
  - d. A minimum IELTS score of 5.5
  - e. International Test of English Proficiency (iTEP) score of 3.6
  - f. Pearson (PTE Academic) score of 44

2. Standardized Tests - Permanent residents of the U.S. who have completed less than 30 semester hours from a US institution must submit an acceptable score on the ACT or SAT examination. Students who have graduated from a US high school 5 or more years previously, or apply on the basis of the GED are exempt.

# Special Programs

## Accelerated College Enrollment Program (ACEP)

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Accelerated College Enrollment Program (ACEP): A limited number of high school seniors from Mobile County, and Baldwin County, Alabama, are offered the opportunity to take one free course at the University during the senior year of high school. The course can be used to satisfy degree requirements at USA, or can be transferred to other institutions.

**Academic Requirements:** Applicants must be recommended by the high school counselor, have earned at least a "B" (3.0 on a 4.0 scale) average in academic subjects, have scored at least 25 composite on the ACT (1130 SAT), completed the junior year of high school, and be approved by the Director of Admissions.

**Documents Required:** ACEP applicants must submit an official high school transcript showing grades through the junior year, official ACT or SAT scores and a letter of recommendation from the school guidance counselor. Interested students should contact USA Admissions for application deadlines and information.

If ACEP students wish to pursue a degree, they must complete and submit a new application and supporting documents to the Office of Admissions.

## College Of Medicine Early Acceptance Program (EAP)

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

Go to the [Early Acceptance](#) page for more detail.

## Physical Therapy Early Acceptance Program (PTEAP)

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

## College Of Nursing Early Acceptance Program

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

Go to our [Early Acceptance](#) page for more details

## The Honors College:

See "[Honors College](#)".

# Undergraduate Transfer Admissions

## Transfer Students

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

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

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

Applicants who have attempted fewer than 30 semester hours or 40 quarter hours of college work must submit college transcripts and high school transcripts and ACT or SAT scores.

**Permanent Residents** who have not attended a US institution, whose native language is not English, must submit a score of 61 or above on the Test of English as a Foreign Language (TOEFL) for admission. Applicants who hold a baccalaureate or graduate degree from a regionally accredited United States institution are exempt. Students transferring from postsecondary institutions within the United States are exempt, subject to the following conditions:

- a. transfer credits total at least 24 semester hours; and
  - b. completion of English Composition I with grade of "C" or above
1. The exempted transfer students ARE NOT subject to the proficiency examination discussed below. In addition, the TOEFL may be substituted with the following:
- a. SAT Reading Test Score of 24
  - b. ACT English score of 19
  - c. Advanced Level English examinations from the United Kingdom with a score of "A", "B" or "C/A-E"
  - d. A minimum IELTS score of 5.5
  - e. International Test of English Proficiency (iTEP) score of 3.6
  - f. Pearson (PTE Academic) score of 44
2. Standardized Tests - Permanent residents of the U.S. who have completed less than 30 semester hours from a US institution must submit an acceptable score on the ACT or SAT examination. Students who have graduated from a US high school 5 or more years previously, or apply on the basis of the GED are exempt.

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

1. Admissions Appeal Form, located at: <http://www.southalabama.edu/departments/admissions/appealform.html>
2. A current resume, including summary of special talents or skills
3. A personal essay describing why you want to attend USA and your career goals.
4. Letter/s of recommendation

**Transfer of Credit:** The Registrar's Office evaluates all credits to determine the number transferable to the University of South Alabama. Such transferred credit will be applied, after evaluation, to the specific program of the student. The final program evaluation requires approval by the Dean of the College in which the student is accepted or by the Dean's designated representative. Credits transferable to the University may or may not be applicable, in whole or in part, to a specific program.

Transfer students are urged to review all the requirements for a degree as specified in the Academic Policies and Procedures section of the Bulletin.

No credit is given for college-level General Education Development tests, or for courses evaluated as non-credit or remedial at this institution. No more than a combined total of 32 semester hours of credit will be allowed for credit received through the College Level Examination Program (CLEP), Advanced Placement Program (AP), credit by examination, correspondence courses, military service school courses, and other approved non-collegiate-sponsored programs as recommended by the American Council on Education.

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

A transfer student from a collegiate institution not accredited by the appropriate regional association may request an evaluation of transfer credits from the student's academic dean after completing one year (32 semester hours) of work at the University of South Alabama. No degree credit will be accepted by the College of Education and Professional Studies from any collegiate institution unless that institution has regional accreditation.

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

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## Community/Junior Colleges

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

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

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

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## Alabama Articulation Program (STARS)

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

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## Military Service Schools

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

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

<https://jst.doded.mil/official.html>

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

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## Foreign Institutions

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See "[International Student section.](#)"

# Special Category Students

## Transient Students

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

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

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

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

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

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

## Audit Students

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

**Academic Requirements:** Students are admissible if a completed application for admission and the \$35 nonrefundable processing online fee (paper fee \$45) are submitted to the Office of Admissions by the published deadlines. No other documentation is required. Audit students pay the same tuition and fees as credit students.

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

## Unclassified Applicants

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

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

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

# International Student Admissions

## Requirements For Admission

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

### Application Deadlines

All necessary documents must be received by the established deadline as indicated below for the semester the student wishes to enter. Applications completed after the deadline will be considered for the following term, unless otherwise requested by the student.

Deadlines	
Outside the United States	Inside the United States
Fall - June 15	Fall - July 15
Spring - November 1	Spring - December 1
Summer - April 1	Summer - May 1

## Undergraduate International Applicants

- I. Non-citizen Application for Admission - The Non-citizen Application for Admission must be completed and signed by the applicant. A nonrefundable \$35.00 application fee, payable through a U.S. bank, must accompany the application. Applications received without the \$35.00 processing fee will not be processed.
- II. Academic Records - Complete and certified academic records of all secondary and postsecondary education attempted must be submitted. Whenever possible, the records must be forwarded directly from the issuing institution to the University of South Alabama. Copies must be certified by an official of the government or school (e.g., Registrar or Dean). Notarized copies are not accepted.
- III. English Proficiency
  - A. TOEFL
    1. Nonimmigrant applicants whose native language is not English, must submit a score of 61 or above on the Test of English as a Foreign Language (TOEFL) for admission. Applicants who hold a baccalaureate or graduate degree from a regionally accredited United States institution are exempt. Students transferring from postsecondary institutions within the United States are exempt, subject to the following conditions:
      - a. transfer credits total at least 24 semester hours; and
      - b. completion of English Composition I with grade of "C" or above.
    2. The exempted transfer students ARE NOT subject to the proficiency examination discussed below. In addition the TOEFL may be substituted with the following:
      - a. SAT Reading Test Score of 24
      - b. ACT English score of 19
      - c. Advanced Level English examinations from the United Kingdom with a score of "A", "B" or "C/A-E"
      - d. A minimum IELTS score of 5.5.
      - e. International Test of English Proficiency (iTEP) score of 3.6
      - f. Pearson (PTE Academic) score of 44

B. English Proficiency - International students, admitted with the minimum TOEFL or IELTS score, will be required to take additional English as a Second Language courses if their IELTS Reading subscore is less than a 5.5 and if their IELTS Writing subscore is less than a 5.5 or if their TOEFL Reading subscore is less than 20 and if their Writing subscore is less than 20. Students holding J-1 visas and those holding baccalaureate or graduate degrees from regionally accredited United States postsecondary institutions are exempt.

IV. Financial Statement - Non-immigrants must provide proof that sufficient finances are available to undertake their entire course of study.

**Notification:** Students are notified of admissions decisions as soon as all required documents are received. The I-20 or DS-2019 is mailed to students with the letter of admission.

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

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

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## Graduate International Applicants

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- I. Non-citizen Application for Admission - The International Application for Admission must be completed and signed by the applicant. A nonrefundable \$35.00 application fee, payable through a U.S. Bank, must accompany the application. Applications received without the \$35.00 application fee will not be processed.
- II. Academic Records - Complete and certified academic records of all secondary and postsecondary education attempted must be submitted. Please note consolidated marksheets are not accepted. Whenever possible, the records must be forwarded directly from the issuing institution to the University of South Alabama. Copies must be certified by an official of the government or school (e.g., Registrar or Dean). Notarized copies are not accepted.
- III. English Proficiency
  - A. International students, admitted with the minimum TOEFL or IELTS score, will be required to take additional English as a Second Language courses if their IELTS Reading subscore is less than a 5.5 and if their IELTS Writing subscore is less than a 5.5 or if their TOEFL Reading subscore is less than 20 and if their Writing subscore is less than 20. Successful completion of 015 and 016 must be completed within the first 2 semesters of enrollment at the University of South Alabama.
  - B. Students holding J-1 visas and those holding baccalaureate or graduate degrees from regionally accredited United States postsecondary institutions are exempt. Permanent Residents who submit transcripts from regionally accredited United States secondary or postsecondary institutions with at least two full years of course work are also exempt.
- IV. Standardized Tests - Standardized test requirements for the various academic programs are listed in the appropriate sections of the Bulletin. All test scores must be official documents sent directly from the testing service which administered the examination.
- V. Recommendation Letters - Three original letters of recommendation are required of all nonimmigrant applicants. The letters should be written by persons familiar with the applicant's academic qualifications and ability to undertake the proposed course of study.
- VI. Financial Statement - Non immigrants must provide proof that sufficient finances are available to undertake their entire course of study. Applicants for graduate assistantships should contact the appropriate department directly for information and assistantship applications.
- VII. Narrative Statement of Purpose - A narrative Statement of Purpose written by applicant is required. Three original letters of recommendation written by persons familiar with the applicant's academic qualifications and ability to undertake the proposed course of study are also required.

**Notification:** Students are notified of the Graduate Dean's admission decision as soon as all required documents are received and the Graduate Dean has received a recommendation from the appropriate graduate program. The I-20 or DS-2019 is mailed to students with the letter of admission.

Students wishing to postpone their arrival to a later semester must notify the Office of Immigration and International Admissions in writing. Students who have previously attended USA and who did not register for the semester in which they were accepted, but who wish to register for the same graduate program in the same academic year must update their admissions through the Office of Immigration and International Admissions. First-time students who did not register for the semester for which they were accepted but who wish to register for the same graduate program in the same academic year must submit written requests to update their applications to the Office of Immigration and International Admissions. The address is given at the end of this section.

**Additional Information for all International Students Nonimmigrant and International Student Fees** - All international students with nonimmigrant visas are considered nonresidents for tuition purposes and will be assessed a nonresident fee and an international student fee each semester. Permanent residents may qualify for in-state tuition rates.

**Orientation** - New international students are required to participate in an orientation program prior to their first semester at the University. The orientation program welcomes students to the University, introduces them to staff and students, and familiarizes them with academic procedures and the community.

**Medical Insurance** - The University requires all international students on nonimmigrant visas to maintain medical insurance coverage. Students must purchase the University's international student health insurance policy at registration.

Address inquiries and questions to:

[Office of Immigration and International Admissions](#)

390 Alumni Circle

2200 Meisler Hall

University of South Alabama

Mobile, Alabama 36688-0002

(251) 460-6050

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

<http://www.southalabama.edu/departments/internationaladmissions>

# Readmission To The University

Students who have been previously enrolled in the University of South Alabama and have been absent for at least three consecutive terms should comply with the following:

## How To Apply For Readmission

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An applicant should request the appropriate application from the Office of Admissions. The readmission application, including all required credentials, should be filed with the Office of Admissions by the published deadlines found at

[http://www.southalabama.edu/departments/admissions/under\\_readmissions.html](http://www.southalabama.edu/departments/admissions/under_readmissions.html). Readmission applications do not have to pay another processing fee.

## Requirements For Readmission

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

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

Permanent Residents who have not attended a US institution, whose native language is not English, must submit a score of 61 or above on the Test of English as a Foreign Language (TOEFL) for admission. Applicants who hold a baccalaureate or graduate degree from a regionally accredited United States institution are exempt. Students transferring from postsecondary institutions within the United States are exempt, subject to the following conditions:

- a. transfer credits total at least 24 semester hours; and
  - b. completion of English Composition I with grade of "C" or above
1. The exempted transfer students ARE NOT subject to the proficiency examination discussed below. In addition, the TOEFL may be substituted with the following:
    - a. SAT Reading Test Score of 24
    - b. ACT English score of 19
    - c. Advanced Level English examinations from the United Kingdom with a score of "A", "B" or "C/A-E"
    - d. A minimum IELTS score of 5.5
    - e. International Test of English Proficiency (iTEP) score of 3.6
    - f. Pearson (PTE Academic) score of 44
  2. Standardized Tests - Permanent residents of the U.S. who have completed less than 30 semester hours from a US institution must submit an acceptable score on the ACT or SAT examination. Students who have graduated from a US high school 5 or more years previously, or apply on the basis of the GED are exempt.

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

1. Admissions Appeal Form, located at: <http://www.southalabama.edu/departments/admissions.appealform.html>
2. A current resume, including summary of special talents or skills
3. A personal essay describing why you want to attend USA and your career goals.
4. Letter/s of recommendation

5. Optional : Additional supporting documents to substantiate an appeal (including any documents from USA departments or personnel)

Please return the Admissions Appeal Form along with all supporting documents by email to the Office of Admissions at [admiss@southalabama.edu](mailto:admiss@southalabama.edu).

# New Student Orientation

[Southbound Orientation](#) provides an introduction to the academic, service, and social areas of the University of South Alabama. This mandatory program is offered at the beginning of each semester and prior to class registration. Details are sent to all new students prior to registration. Further information may be obtained from the Office of New Student Orientation, 2600 Meisler Hall, Mobile, AL 36688-0002, telephone (251) 460-7093. Re-admits do not need to attend New Student Orientation.

# Nonresident And Residency Reclassification

## Nonresident And Residency Reclassification

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Students enrolling at the University of South Alabama who come to the state of Alabama from another state [with the exception of the Service Area in Florida (Escambia and Santa Rosa counties) and Mississippi (George, Greene, Harrison, Jackson, Perry, and Stone counties)] for the purpose of attending school will be considered a "non-resident student" for tuition purposes. The Office of Admissions determines a student's residency status at the time of admission. This determination is based on the application information, transcripts, and other documents required for admission and will default to "non resident" status if any out-of-state information is received. After the initial determination of a student's residency status, the status shall continue unchanged through all registrations at the university until and unless 1) a non-resident student provides satisfactory evidence that they are a resident of Alabama as defined by this policy, or 2) a student classified as a resident is absent from Alabama with the intent to become a resident in another state. Residency status is also reviewed at the time of readmission to the university after any absence of one year (three semesters) or more. At the discretion of the institution, residency status can be reviewed at any time.

A person or, if the person is a minor, the person's supporting person(s) who moves to Alabama or to the Service Area for the primary purpose of attending college shall not be considered to have demonstrated intent to establish domicile in the Alabama or the Service Area and will not generally be considered eligible for classification as a resident student. A person or, if the person is a minor, the person's supporting person(s) who establishes domicile in Alabama or the Service Area for the sole purpose of avoiding Alabama non-resident tuition will be subject to non-resident tuition.

Non-resident students who carry a full-time academic load for the fall or spring semester will be presumed to be in Alabama or in the Service Area for the primary purpose of attending college. These students will not be considered to have demonstrated the intent to establish domicile in Alabama or the Service Area and will remain subject to non-resident tuition.

A "resident student" for **tuition purposes is one who,**

- Is not a "minor" and is a resident of the state of Alabama and has been a resident of the state for a least one year (12 consecutive months) immediately preceding the date of registration; or
- Is a "minor" whose "supporting person(s)" is a resident of the state of Alabama and has been a resident of the state for at least one year immediately preceding the date of registration; or
- Is a recipient of the Alabama G.I. Dependents' Scholarship administered through the Alabama Department of Veterans Affairs; or
- One who, at the time of registration, is not a "minor" and:
  - Is a full-time (not temporary) employee of the University of South Alabama or is the spouse of such an employee; or
  - Is employed as a graduate assistant or fellow at the University of South Alabama; or
  - Is able to verify full-time permanent employment within the state of Alabama and shall commence said employment not more than 90 days after registration (first day of classes) with the institution, or is the spouse of such an employee; or
  - Is a member or the spouse of a member of the United States military on full-time active duty stationed in Alabama under orders for duties other than attending school; or
  - Is a resident of any county within the University of South Alabama's Service Area (Florida: Escambia and Santa Rosa counties; and Mississippi: George, Greene, Harrison, Jackson, Perry, and Stone counties) and has been a resident of that county for at least one year immediately preceding the date of registration; or

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

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

### Definitions:

- **Minor Students:**

Minor Students are those students who lack the capacity to contract under the law of the State of Alabama because of their age (persons under 19 years of age or persons under 18 years of age if married) excluding those persons whose disabilities of non-age have been removed by a court of competent jurisdiction for a reason other than establishing a legal residence in Alabama.

- **Residence:**

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

- **Resident:**

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

- **Residence of a Minor Student:**

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

- **Supporting person:**

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

- **Service Area:**

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

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

## Request Reclassification

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### How Does A Non-resident Student Request Reclassification Of Residency Status For Tuition Purposes?

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

- The student has a residence in the state of Alabama which means the specific address in Alabama at which they reside; that they intend to remain there indefinitely; that they have more substantial connections with Alabama than with any other state; and that the student has established a physical presence and place that has been their true, fixed, and permanent place of habitation for the 12 consecutive months preceding the semester of registration; or
- The student is not a "minor" and is a full-time employee (not temporary) of the University of South Alabama or is the spouse of such an employee; or
- The student is able to verify full-time permanent employment within the state of Alabama and shall commence said employment not more than 90 days after registration (first day of classes) with the institution, or is the spouse of such an employee; or
- The student is a member or the spouse of a member of the United States military on full-time active duty stationed in Alabama under orders for duties other than attending school; or
- The student is a recipient of the Alabama G.I. Dependents' Scholarship administered through the Alabama Department of Veterans Affairs; or
- The student is a resident of any county within the University of South Alabama's Service Area and has been a resident of that county for at least one year immediately preceding the date of registration; or
- The student has been a member of the Alabama National Guard for a period of at least two years immediately preceding the student qualifying for resident tuition and continues to be a member of the Alabama National Guard while enrolled at the public institution of higher education; or
- The student is in a program or takes courses within an interstate consortium of colleges or universities that either offers reciprocal resident student tuition to residents of Alabama in the program or courses offered by colleges or universities not within Alabama, or is enrolled in a program or courses through an interstate consortium of colleges or universities that assesses tuition at a uniform rate for all students enrolled in that course or program; or
- The student is an accredited member of or the spouse of an accredited member of a consular staff assigned to duties in Alabama.

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

### In Determining Whether A Student Has A Residence In Alabama, The University Will Evaluate The Presence Or Absence Of Connections With The State Of Alabama Including, But Not Limited To, The Following:

- Continuous physical presence in the state for a purpose other than attending school except for temporary absences for travel, military service, temporary employment, etc.
- Payment of income tax to the State of Alabama or Service Area in the previous calendar year.

- Voter registration in the State of Alabama or Service Area; more significantly certification of voting in the State of Alabama or Service Area that initially occurred at least 12 months prior to the initial registration of the student in Alabama at a public institution of higher education.
- Evidence of employment in the State of Alabama or Service Area for the 12 consecutive months prior to the semester of registration.
- In-state address and date shown on selective service registration, driver's license, automobile title registration, hunting and fishing license, insurance policies, stock and bond registrations, last will and testament, annuities, or retirement plans.
- Ownership of personal property in the state and payment of state taxes thereon (e.g. automobile, boat, etc.) and possession of state license plates.
- Residence in the state of a spouse, parents, or children.
- Transfer of all banking services to Alabama, such as "checking and savings" accounts, safe deposit boxes, and/or investment accounts.
- Financial transactions in the state or Service Area.
- Previous periods of residency in the state continuing for 12 months or more.
- Possession of state or local licenses to do business or practice a profession in the state.
- Membership in religious, professional, business, civic, or social organizations in the state not connected to their status as a student.
- Location within the state of the high school from which the individual graduated.
- Financial independence from non-Alabama resident parents or other relatives.
- Military records, such as Leave & Earning Statements, showing an in-state address. CO Letter indicating date of Assignment in Alabama or Service Area (for Active Duty Military).
- Documentation that Alabama is home state of record for returning military personnel.

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

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

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

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

Office of the Registrar  
Meisler Hall, Suite 1100  
390 Alumni Circle  
Mobile, AL 36688  
Ph: (251) 460-6251  
[registrar@southalabama.edu](mailto:registrar@southalabama.edu)

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## Online Programs

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

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## International Student Residency Status

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In general, international students may apply for residence reclassification but must have the ability to remain indefinitely in the United States and otherwise meet the requirements of the Alabama Code and Board Rule 202. More specifically, a person must be a Permanent Resident Alien, Political Asylee, Political Refugee, or hold an A, E, G, H, I, L, O, P, R, TC, TD or TN visa to be eligible for review as an in-state resident for tuition purposes. Students who hold a B, F, J, or M visa are not eligible to establish Alabama residency unless their supporting person is an Alabama resident or is a full-time employee of a company party to an Alabama Free Trade Agreement.

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## Academic Common Market Non-Resident Tuition Remission

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

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

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

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

# Tuition And Student Fees

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

## Basic Fees:

Registration Fee (non- refundable) ..... 150.00  
0-14 hours (undergraduate)

For Undergraduate courses taken in the following colleges:	Per semester hr In-State	Per Semester hr Out-of-State
College of Arts and Sciences	313.00	626.00
College of Education and Professional Studies		
Pat Capps Covey College of Allied Health	328.00	656.00
School of Computing		
Mitchell College of Business		
College of Engineering	332.00	664.00
College of Nursing	360.00	720.00

**Note:** Undergraduate students enrolled in less than 15 hours will be assessed a \$150.00 Registration fee.

For Graduate courses taken in the following colleges:	Per semester hr In-State	Per Semester hr Out-of-State
College of Arts and Sciences	421.00	842.00
College of Education and Professional Studies		
Pat Capps Covey College of Allied Health	443.00	886.00
School of Computing		
Mitchell College of Business		
College of Engineering	448.00	896.00
College of Nursing	485.00	970.00

## Web Course Credit Hour Rate For Tuition And Fees

For Undergraduate courses taken in the following colleges:	Per semester hr In-State	Per Semester hr Out-of-State
College of Arts and Sciences	412.00	

College of Education and Professional Studies	
Pat Capps Covey College of Allied Health	426.00
School of Computing	
Mitchell College of Business	
College of Engineering	432.00
College of Nursing	459.00

For Graduate courses taken in the following colleges:	Per semester hr In-State	Per Semester hr Out-of-State
College of Arts and Sciences	500.00	
College of Education and Professional Studies		
Pat Capps Covey College of Allied Health	524.00	
School of Computing		
Mitchell College of Business		
College of Engineering	528.00	
College of Nursing	566.00	

Nonresident Fees are waived for graduate assistants.

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

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

### Estimated Costs (Example Only)

#### Full-time Commuting Students:

Course Fees of typical undergraduate student based upon 2017-2018:	Semester	Year
Taking 15 credit hrs	\$4,695.00	\$9,390.00
Registration Fee	- 0 -	- 0 -
	\$4,695.00	\$9,390.00

#### Full-time Resident Students:

Course Fees of typical undergraduate student based upon 2017-2018:	Semester	Year
Taking 15 credit hrs	\$4,695.00	\$9,390.00
Registration Fee	- 0 -	- 0 -
Delta Room for Two	1,990.00	3,980.00
Jag Meal Plan	1,755.00	3,510.00
	\$8,440.00	\$16,880.00

## Departmental Fees

These fees are charged on a semester basis to students who enroll in certain courses; see [Schedule of Classes](#) for detailed information.

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

## Miscellaneous Fees

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

Miscellaneous Fees	
Admissions	
Application Fee (non-refundable, online)	35.00
Application Fee (non-refundable, paper)	45.00
Allied Health and Nursing Resource Fee	145.00
College-Level Examination Recording Fee	10.00
Credit-by-Examination Fee (plus usual course fee)	30.00
Document FAX Fee (non-refundable)	
Domestic	10.00
International	15.00
Duplicate Diploma	25.00
Educational Testing Service Fee	15.00
Graduation Application Fee	50.00
Graduation Re-evaluation Fee	25.00
International Student Fee	100.00
Late Registration Fee (non-refundable)	100.00
Late Payment Fee (non-refundable)	50.00
Orientation Fee (one-time, non-refundable, all undergraduates)	100.00
Physical Therapy Application	50.00
Photo ID Fee (non-refundable, good for five years)	10.00
Professional Liability Coverage (per academic year, non-refundable)	
Fall	12.00
Spring	12.00
Summer	1.00
Miscellaneous Fees	
Returned Check Fee	15.00
Resource Fee (Allied Health/Nursing)	
Fall	145.00
Spring	145.00

Summer	145.00
Resource Fee (College of Medicine)	
Fall	218.00
Spring	218.00
Transcript Fee (per transcript)	8.00
Web Hybrid and Web Blended Classes	35.00

## Room And Board

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

### Residence Hall Fees - Revised June 2017

Room Type	Residence Hall	Community	Semester Room Rate* per person
<b>Rooms for Two</b>			
Rooms for Two	Delta 3-5	Delta	\$1,990.00/Sem
Rooms for Two	Epsilon 1 & 2	Epsilon	\$2,570.00/Sem
Rooms for Two	Azalea Hall (formerly New Hall)	Azalea Hall	\$2,570.00/Sem
Large Room for 2/3	Delta 3-5	Delta	\$1,990.00/Sem
<b>Suite-Style</b>			
Suite-Style for Two	Gamma 0-4	Beta/Gamma	\$1,990.00/Sem
Suite-Style for One	Gamma 0-4	Beta/Gamma	\$2,675.00/Sem
Suite-Style for One	Stokes Hall	Stokes Hall	\$2,920.00/Sem
<b>Apartment Style for Two or Four</b>			
Beta Apartment for Four	Beta 1-5	Beta/Gamma	\$1,990.00/Sem
B/G Studio Apt. for Two	Beta 1-5 & Gamma 5-9	Beta/Gamma	\$2,470.00/Sem
Gamma Apt. for Two	Gamma 5-9	Beta/Gamma	\$2,920.00/Sem
Delta Room for 2/3 with Kitchenette	Delta 6	Epsilon	\$2,350.00/Sem
<b>Private (limited availability)</b>			
Private Room	Delta 3-5	Delta	\$2,570.00/Sem
Private Room with Kitchenette	Delta 6	Epsilon	\$2,570.00/Sem
Private Room	Gamma 0-4	Beta/Gamma	\$2,675.00/Sem
Private Apartment	Beta 4 & Gamma 5-9	Beta/Gamma	\$2,920.00/Sem

### Greek Housing

For information about Greek Housing rates, please visit the [Greek Housing Community page](#).

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

### Board Plans

Information on the Board Plans is available through Dining Services, located in the Student Center, (251) 460-6296. See [Housing & Dining](#) or additional information.

## Payment Policy

These are the University of South Alabama's payment policies effective Fall Semester 2017. Payment can be made via cash, check, or money order, Visa, Mastercard, Discover or American Express card. Student payments can be made online on PAWS with your credit card or ACH web check. Payment Drop Boxes are located at Meisler Hall, the lobby of the College of Education and Professional Studies and in front of the University Bookstore. (No Cash Please.) The Office of Student Accounting is open Monday-Friday 8:00 AM - 5:00 PM.

**PLEASE SEE <http://www.southalabama.edu/departments/financialaffairs/studentaccounting/financialcalendar.html> FOR SUMMER SEMESTER PAYMENT DEADLINES.**

Students with awarded financial aid and approved participants in the USA Credit Union Tuition Payment Plan will be excluded from the **July 24, 2017** deadline for Fall Semester **2017** and **December 5, 2017** deadline for Spring Semester 2018.

### 2017 - 2018 Payment Policy Summary

A 15% payment of all tuition and fees, including housing and meals, is required by the following dates to hold class schedules:

- Fall 2017 - July 24, 2017
- Spring 2018 - December 5, 2017

Full payment is due:

- Fall 2017 - August 11, 2017 on campus payments, or online (PAWS).
- Spring 2018 - January 5, 2018 campus payments or online (PAWS).

Class cancellations will occur on the following dates:

- Fall 2017
  - 1st cancellation - July 25, 2017 if 15% of all tuition and fees, including housing and meals is not paid;
  - 2nd cancellation - August 15, 2017, if account is not paid in full.
  - 3rd cancellation - August 22, 2017
- Spring 2018
  - 1st cancellation - December 6, 2017, if 15% of all tuition and fees, including housing and meals is not paid;
  - 2nd cancellation - January 8, 2018, if account is not paid in full.
  - 3rd cancellation - January 12, 2018

Late Registration and Re-registration Periods:

Fall 2017: August 16-21, 2017

Spring 2018: January 8-11, 2018

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

**PLEASE SEE <http://www.southalabama.edu/departments/financialaffairs/studentaccounting/financialcalendar.html> FOR SUMMER SEMESTER PAYMENT DEADLINES.**

## Financial Dates And Deadlines

### Fall Semester 2017

Financial Deadlines - Fall Semester	
April 3	Registration Begins
July 24	15% of all tuition and fees, including housing and meals is due for all students registering between April 3, 2017 and July 24, 2017. Please refer to the 15% payment calculator online on PAWS.
July 25	Registration schedule cancelled if 15% payment is not received by the July 24, 2017, deadline. <b>STUDENTS WILL BE GIVEN THE OPPORTUNITY TO RE-REGISTER FOR CLASSES.</b> However, if a student's classes are cancelled, there is no guarantee the courses will remain available
August 4	Financial Aid Bookstore charges begin
August 11	Balance of tuition and fees, including housing and meals due in full
August 15	Registration schedules cancelled for students not paid in full by August 11, 2017 deadline.
August 16	Classes begin 100% refund period on dropped courses and complete withdrawals.
August 18	Deadline for electronic direct deposit (EDD) enrollment
August 18	Last day to enroll in the USA Credit Union Tuition Payment Plan for Fall Semester
August 18	Financial Aid Bookstore charges end
August 23	50% refund period begins on dropped courses and complete withdrawals.
August 24	Financial Aid refunds begin
August 29	No course refunds after this date

### Spring Semester 2018

Financial Deadlines - Spring Semester	
October 23	Registration Begins
December 5	15% of all tuition and fees, including housing and meals is due for all students registering between October 23, 2017 and December 5, 2017. Please refer to the 15% payment calculator online on PAWS.
December 6	Registration schedule cancelled if 15% payment is not received by the December 5, 2017, deadline. <b>STUDENTS WILL BE GIVEN THE OPPORTUNITY TO RE-REGISTER FOR CLASSES.</b> However, if a student's classes are cancelled, there is no guarantee the courses will remain available
January 2	Financial Aid Bookstore charges begin
January 5	Balance of tuition and fees, including housing and meals is due in full.
January 8	Classes begin 100% refund period on dropped courses and complete withdrawals.
January 8	Registration schedules cancelled for students not paid in full by January 5, 2018 deadline.
January 11	Financial Aid Bookstore charges end
January 11	Deadline for electronic direct deposit (EDD) enrollment
January 11	Last day to enroll in the USA Credit Union Tuition Payment Plan for Spring Semester

January 15	50% refund period begins on dropped courses and complete withdrawals.
January 18	Financial Aid refunds begin
January 21	No course refunds after this date

## USA Federal Credit Union Payment Plan:

The [University of South Alabama Credit Union](#) is offering USA students a low cost plan for financing 100% of tuition, fees, housing, and meal plans with equal payments over \*four months\* during the semester, subject to credit approval. A book allowance of \$750 is also offered. To qualify for this plan, a student must meet the Credit Union eligibility requirements. The last day to apply for the USA Federal Credit Union Tuition Payment Plan is August 18, 2017, for Fall Semester 2017 and January 11, 2018, for Spring Semester 2018.

The finance fee is anticipated to be 12% Annual Percentage Rate (APR), although this rate is subject to change. In order to qualify for this tuition loan, a student must join the USA Federal Credit Union by depositing \$25 into a share account. This amount will be returned to the student when the student no longer wishes to belong to the USA Credit Union.

## Financial Aid Refunds:

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

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

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

### Charging Privileges At The USA Bookstore (For Financial Aid Recipients Only):

**Students who have been awarded financial aid may now charge their books at the USA Bookstore immediately.** Students will no longer need to wait until their financial aid balance is returned to them to buy books. If a student has been awarded financial aid by USA's Office of Financial Aid and has excess funds after all tuition, fees, meals, and housing have been paid, he or she may charge up to \$1,500 (or the available balance, whichever is less) of books at the USA Bookstore. The Bookstore will have the available amount at checkout. Bookstore charges will be placed on the student's account and covered by the financial aid disbursement. **Bookstore charges will run from August 4-18, 2017 for Fall Semester 2017, January 2-11, 2018 for Spring Semester 2018.**

## University Withdrawals And Refunds

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

Withdrawal Date	Percent of Fees Refunded
First week of classes	100%
Second week of classes	50%

For complete withdrawals, other fees are also proportionately refunded, except those listed as nonrefundable. The actual dates for withdrawals are shown in the [University Calendar](#) section of this Bulletin.

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

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

Housing and meal plan charges will be refunded according to the following schedule:

Withdrawal Date	Percent of Fees Refunded
Prior to the 1st day of class	100%
1st week of classes	90%
2nd week of classes	75%
3rd week of classes	50%
4th week of classes on	no refund

## Guaranty Tuition Bond

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

## Federal Financial And Recipient Withdrawals And Refunds

### Return Of Federal Financial Aid Refunds

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

- Unsubsidized Direct Stafford loans (other than PLUS loans)
- Subsidized Direct Stafford loans
- Federal Perkins loans
- Direct PLUS loans
- Federal Pell Grants
- Federal SEOG
- Federal TEACH Grants
- Iraq and Afghanistan Service Grant

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

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

### Return Of Department Of Defense Tuition Assistance Funds

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

5- Week Course Withdrawal		8- Week Course Withdrawal	
Day 1-7	100% return	Before or during week 1	100%
Day 8	77% return	During week 2	75% return
Day 9	74% return	During weeks 3-4	50% return

Day 10	71% return	During week 5 40% return (which is 60% of course complete)	
Day 11	69% return	During weeks 6-8	0% return
Day 12	66% return		
Day 13	63% return	<b>16-week Course Withdrawal</b>	
Day 14	60% return	Before or during weeks 1-2	100% return
Day 15	57% return	During weeks 3-4	75% return
Day 16	54% return	During weeks 5-8	50% return
Day 17	51% return	During weeks 9-10	40% (60% of course is completed)
Day 18	49% return	During weeks 11-16	0% return
Day 19	46% return		
Day 20	43% return		
Day 21	40% return (60% of course is completed)		
Day 22	0% returns		

### Delinquent/Unpaid Accounts

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

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

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

### Offset Of Funds

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

### Check-Cashing Service

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

# Financial Aid

## General Information

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### Purpose

The University of South Alabama (USA) subscribes to the principle that the purpose of financial aid is to provide assistance to students who, for lack of funds, would otherwise be unable to attend college. Financial aid is awarded according to each individual's need in relation to college costs. Awards may include loans and part-time employment, and may be offered to a student singly or in various combinations. The University's financial aid staff is dedicated to the principle that each student must receive personal attention with complete confidentiality. Every effort is made to provide financial counseling by experienced, considerate personnel.

Inquiries about financial aid should be addressed to the [Office of Financial Aid](#), 390 Alumni Circle, 1200 Meisler Hall, University of South Alabama, Mobile, AL 36688-0002, telephone (800) 305-6828 or e-mail: [finaid@southalabama.edu](mailto:finaid@southalabama.edu).

### Applying For Financial Aid

Complete the Free Application for Federal Student Aid (FAFSA) at [www.fafsa.ed.gov](http://www.fafsa.ed.gov). Be sure to list the University of South Alabama in Step 6. The University's Federal school code is 001057. By listing (USA) and completing the FAFSA correctly, USA will receive the FAFSA electronically. Upon receipt of this data, notification will be sent via e-mail of additional forms needed by the Office of Financial Aid.

Additionally, students whose applications are selected for verification will be asked to submit information such as tax transcripts (the student's and parents' if applicable), and other necessary documents to support the information provided on the FAFSA. Awards will not be made until all documents are received and the information on the FAFSA has been verified.

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

### Application Deadlines

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

### Disbursement Of Financial Aid

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

Aid eligibility is determined at the end of the official Drop/Add period. Adding classes after that date will not increase a student's aid eligibility.

All aid except Federal Work Study (FWS) will be applied to institutional charges. If the financial aid does not cover costs, the student may make up the difference with a personal check or credit card. If the award is more than institutional charges, the excess funds excluding scholarships will be disbursed to the student by the Office of Student Accounting. Excess proceeds from the Federal Direct Parent Loan to Undergraduate Students (PLUS) will be refunded to the student. Students whose financial aid has not been received by the University should be prepared to meet the required costs of tuition and fees at registration.

### Admission

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

### Citizenship

For all programs, an applicant must be a citizen of the United States or in the United States for other than temporary purposes.

## Renewability

The Free Application for Federal Student Aid (FAFSA) must be filed each year. Other forms as determined by the University are required depending upon changing federal legislation, regulations, and available funds.

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

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## Grants

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### Federal Pell Grant

The Federal Pell Grant is a basic "need based" grant awarded to the neediest undergraduate students working on a first bachelor's degree. Eligibility is determined through a standard formula established by Congress, which is used to evaluate the information reported on the FAFSA. This will produce an Expected Family Contribution (EFC) number. The amount of Pell Grant that the student is eligible to receive depends on the EFC, Cost of Attendance, and enrollment status. Pell Grant is prorated for three-quarter, half time, or less-than-half time enrollment. Students must be enrolled FULL-TIME, in order to receive the full amount of the Pell Grant award. Effective Fall 2012, student's Pell Grant eligibility cannot exceed 600% which is the equivalent of 12 full time semesters. Grant awards do not have to be repaid.

### Federal Supplemental Educational Opportunity Grant (FSEOG)

The Federal Supplemental Educational Opportunity Grant (SEOG) is a "need based" grant awarded to undergraduate students who are enrolled in a first bachelor's degree program and eligible for a Pell Grant. Students with the highest need are given first priority. SEOG funds are severely limited and are awarded to eligible students until the funds are depleted.

### Alabama Student Assistance Program (ASAP)

Alabama Student Assistance Program (ASAP) is gift aid awarded to eligible Alabama residents seeking a first undergraduate degree. Students must meet general eligibility requirements including demonstrating financial need. Funds are awarded only to students who are Federal Pell Grant recipients.

The amount of ASAP awards depends on the student's need and the amount of funds allocated to the University and the availability of those funds.

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## Federal Work Study (FWS)

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The Federal Work-Study Program (FWS) is a "need based" part-time work program which allows students to earn money to help pay educational expenses. Students must indicate on their FAFSA that they are interested in Federal Work Study in order to be considered. The amount shown on the student's PAWS account is the maximum amount available to earn on the FWS program. FWS will not be available at registration for the payment of fees. FWS student employees will be paid twice per month. The maximum award allows student employees to work up to 20 hours per week. FWS funds are limited and are awarded to eligible students until funds are depleted.

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## Student Employment Program

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

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## Cooperative Education

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Full-time and part-time employment directly related to students' major fields of study is available to students having completed at least two semesters of academic work. Contact the Career Services Center for further information.

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## Off-Campus Employment

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Announcements of part-time job openings in the Mobile area are posted on the Student Job Database on the Office of Financial Aid's web site at <http://www.southalabama.edu/departments/finaid>. Students must be enrolled at USA to access the job listings.

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## Loans

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### Federal Direct Loans

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

The type of Federal Direct Loan a student may borrow is based mainly on the student's demonstrated need. Demonstrated need is the student's cost of attendance minus the expected family contribution, which is calculated from the information submitted on the FAFSA, minus other aid. The Federal Direct Subsidized Loan is awarded to undergraduate students with demonstrated need and the federal government pays the interest while the student is in school. The Federal Direct Unsubsidized Loan is awarded to students without demonstrated need and the student borrower pays the interest while in school and during the grace period; however, the student may defer the interest payment until the end of the grace period. Undergraduate students may receive a combination of both loans depending on their eligibility of need versus no-need and their dependency status. Some independent students are eligible to borrow additional unsubsidized Federal Direct Loan funds despite their demonstrated need. Students must be enrolled at least half time to be eligible to receive Federal Direct Loan Funds.

### Federal Direct Loan Limits:

#### Dependent Undergraduates:

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

#### Independent Undergraduates:

- Freshmen may borrow up to \$9,500 per year. (Not to exceed \$3,500 in Federal Direct Subsidized Loans)
- Sophomores may borrow up to \$10,500 per year. (Not to exceed \$4,500 in Federal Direct Subsidized Loans)
- Juniors and Seniors may borrow up to \$12,500 per year. (Not to exceed \$5,500 in Federal Direct Subsidized Loans)
- The maximum that all undergraduates may borrow for all years is \$57,500. (Not to exceed \$23,000 in Federal Direct Subsidized Loans)

#### Graduate Students:

- Graduate students may borrow up to \$20,500 per year in Federal Direct Unsubsidized Loans.
- The maximum that all graduate students may borrow is \$138,500.

Remember, the amount a student may borrow is limited to financial eligibility. Also, most federal student loans have loan fees that are a percentage of the total loan amount. The loan fee is deducted proportionately from each loan disbursement that is received. Information regarding loan fees and interest rates can be found at [www.studentaid.ed.gov](http://www.studentaid.ed.gov).

The minimum Federal Direct Loan payment is \$50 per month, and repayment usually begins six (6) months after students drop below half-time status.

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

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

This program allows parents to borrow up to the cost of attendance, less other financial aid. A credit check is required for all Federal Direct PLUS Loan applications. The repayment period begins on the day the loan is fully disbursed, with the first installment due to the lender within 60 days of that date. A student must be enrolled at least half-time to be eligible for the funds. Please visit [www.studentaid.ed.gov](http://www.studentaid.ed.gov) for current loan fees and interest rates.

### Federal Direct Graduate PLUS Loan

Federal Direct Graduate PLUS loans are federally sponsored loans for students attending graduate school. With a Graduate PLUS Loan, students may borrow up to the full cost of their education, less other financial aid received including Federal Direct Loans. A credit check is required for all Graduate PLUS Loan applications. A student must be enrolled at least half time to be eligible for the funds. Please visit [www.studentaid.ed.gov](http://www.studentaid.ed.gov) for current loan fees and interest rates.

### Federal Direct Student Loan Counseling

#### Entrance Counseling Interview

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

#### Exit Counseling Interview

Students who received a Federal Direct Loan or Federal Perkins Loan while attending USA must complete an online counseling session before leaving the University through graduation, withdrawal, or transfer. Students must complete the counseling session online at <http://www.studentloans.gov> for Federal Direct Loans. The Office of Student Accounting will notify all Perkins Loan recipients of exit material.

## Over Awards

### Definition

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

When over awards occur, the Office of Financial Aid is required to adjust the financial aid the student has been awarded. Students may be required to repay some of the funds they have already received.

To prevent over awards, students should take the following steps:

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

## Federal Financial Aid Recipient Withdrawals And Refunds

### Return Of Federal Financial Aid Refunds

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

- Unsubsidized Direct Stafford Loans (other than PLUS Loans)
- Subsidized Direct Stafford Loans
- Federal Perkins Loans
- Direct PLUS Loans
- Federal Pell Grants
- Federal SEOG
- Federal TEACH Grants
- Iraq and Afghanistan Service Grant

NOTE: If the student's Title IV financial aid required return is greater than the posted University refund at the time of withdrawal, the student will owe the difference to the University. The Office of Student Accounting will notify the student of the amount due.

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

For an example of the proposed Return of Title IV Funds Worksheet, please see either the Office of Student Accounting or the Office of Financial Aid located in Meisler Hall.

## TEACH

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### Teacher Education Assistance For College And Higher Education (TEACH) Grant

Conditional grants of up to \$4,000 per year to students who intend to teach in a public or private elementary or secondary school that serves students from low-income families.

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

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

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

- The Free Application for Federal Student Aid (FAFSA) must have been filed for the application year and USA must have the results of the FAFSA.
- Be a U.S. citizen or eligible non-citizen.
- Attend full-time each term (at least 12 hours for undergraduate and at least 6 hours for graduate)
- If an undergraduate student:
  - Be enrolled in teacher candidacy in an eligible USA major. Contact the Advising Office in the College of Education and Professional Studies for eligible majors.
  - Meet and maintain a cumulative USA GPA of at least a 3.25.
- If a graduate student:
  - Be enrolled in an eligible USA major. Contact the Advising Office in the College of Education and Professional Studies for eligible majors.
  - Meet and maintain a cumulative USA GPA of at least a 3.2

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

## Student Rights

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### Students Have The Right To Know

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

### Consumer Complaint Procedures

Students and prospective students should be aware that, should they have concerns or complaints related to the management or conduct of the Title IV financial assistance programs or to misleading or inappropriate advertising and promotion of the institution's educational programs, this institution has a complaint procedure. To the extent possible, students must seek a resolution of such matters through the institution's internal complaint procedure before involving others. Students with complaints should contact the Office of the Executive Director for Enrollment Services at (251) 460-6494. Should the institution not be able to resolve the problem, you may contact the Department of Education Ombudsman at 1 (202) 401-4498 or toll free at 1 (877) 557-2575.

## Student Responsibilities

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### Students Have The Responsibility To:

1. Review and consider all information about the University before enrolling;

2. Pay special attention to the application for financial aid, complete it accurately, submit it on time and to the right place;
3. Know all deadlines for applying for aid and meet them;
4. Provide all required documentation, corrections, and/or information requested by the Office of Financial Aid;
5. Notify the University of any information that has changed since the financial aid application was submitted;
6. Read, understand, and keep copies of all forms;
7. Repay any student loans borrowed;
8. Perform an entrance and exit counseling at <http://www.studentloans.gov>.
9. Notify the Office of Financial Aid of a change in name, address, or enrollment status (half-time, full-time, three-quarter-time);
10. Satisfactorily perform the work agreed upon in a Federal Work-Study (FWS) job;
11. Understand the University's refund policy.

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## Satisfactory Academic Progress Policy

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

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

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

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

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## Student Standards For Satisfactory Academic Progress (SAP)

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

**Cumulative Grade-Point Average (CGPA):** Undergraduate students must maintain a minimum CGPA of at least 2.0 on all credit hours attempted at USA. PLEASE NOTE: Undergraduate students enrolled in programs in the College of Education and Professional Studies after being admitted to Candidacy must have and maintain a minimum 2.2 CGPA for non-teacher certification programs, or a 2.5 CGPA and 2.75 program GPA for teacher certification programs.

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

1. Pace of Progression Requirements: To ensure that students earn a degree within the maximum time frame allowed, students must be passing 67% of all attempted hours (including transfer hours).
2. Maximum Time Frame: Federal financial aid funds cannot be paid to a student who exceeds 150% of the published length of the degree program (including transfer hours) in credit hours.

Examples: (1) If a student's degree is a 120 hour program:  $120 \times 150\% = 180$  attempted hours maximum time frame. The student is eligible for only the first 180 hours attempted. (2) If a student transfers and bring 70 hours credit into a 120 hour program: 120

$x 150\% = 180 - 70 = 110$  hours maximum time allowed for degree funding (transfer credits count towards credit hours attempted and earned so when the student transfers, the initial calculation would be 70/70).

### PLEASE NOTE

- Assigned grades of A, B, C, D, F and F\* are all included in the CGPA, Pace of Progression, and Maximum Time Frame components. Courses with non-assigned letter grades of S, P, U, U\*, I, X, WD, AU, UA, and N are considered in Pace of Progression and Maximum Time Frame components but are not included in the CGPA component.
- All terms of attendance are reviewed including terms when no federal financial aid funds were received.
- Students transferring to USA are assumed to be maintaining Satisfactory Academic Progress. Grades from transfer credits will not factor into the CGPA at USA but transfer credits will count as credits attempted and credits earned.
- A student may elect to declare Academic Bankruptcy, as defined in the USA Bulletin, in which none of a student's prior course work is counted towards completion of grade requirements and the computation of their institutional CGPA. Credit hours and grades earned prior to declaring Academic Bankruptcy will continue to be included in the determination of Satisfactory Academic Progress.
- Repeating classes may negatively affect federal aid eligibility. A student who remains otherwise eligible to receive federal financial aid funds under the applicable requirements, including this SAP Policy, may repeat failed classes and continue to receive federal financial aid funds. Similarly, an otherwise eligible student may repeat a previously passed course once and continue to receive federal financial aid funds. All attempts of a course, including repeat courses, are included in CGPA, Pace of Progression, and Maximum Time Frame components. Changes to a student's CGPA due to grade replacement will not be taken into account until the grade replacement is approved in accordance with the Grade Replacement Policy. Grade replacement will allow for a prior grade earned not being included in the CGPA component, if approved by the Registrar's Office; however, all attempts will still be counted in the Pace of Progression and Maximum Time Frame components.
- All remedial courses are included in CGPA, Pace of Progression, and Maximum Time Frame components.
- Students classified as pursuing a second Bachelor's degree will continue to be evaluated on Pace of Progression and Maximum Time Frame components stated above. For students who pursue a second degree at USA, a CGPA of 2.0 must be maintained. In calculating the Maximum Time Frame component, the published program length for the second degree will be reduced by the number of general education credit hour requirements earned from the first degree (generally 40 credit hours).
- For students changing programs or majors prior to completion, all credit hours and grades will continue to be included in CGPA, Pace of Progression, and Maximum Time Frame components.

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

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

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

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

- Submit a typed appeal letter to the Office of Financial Aid if the failure to maintain SAP was due to extenuating circumstances (examples : a significant injury or illness of the student or the death of an immediate family member).

- Students must attach documentation to support their appeal letter and be sure to explain what change has occurred in their situation allowing them to demonstrate SAP in the next evaluation.
- Students are strongly encouraged to submit their letter of appeal within 15 days of being notified of their aid suspension. Submitting an appeal letter does not guarantee that financial aid will be reinstated. Results of the financial aid appeal letter can be viewed in PAWS under “Academic Progress” within 14 business days of submission.
- If the appeal is approved and minimum requirements can be met in one additional term, the student will be placed on Financial Aid Probation. If it will require more than one additional term to meet SAP requirements, a student whose appeal has been approved will be placed on an Academic Plan where such a plan will make it possible for the student to meet the institution’s SAP requirements within a reasonable timeframe. The student will be eligible for federal financial aid funds during the period of Financial Aid Probation and Academic Plan. As part of any Financial Aid Probation status or Academic Plan, a student is required to complete a Financial Aid Probation Agreement which must be signed by the student and their academic advisor. If the student’s appeal is not successful, the student will not be eligible for federal aid.
- Note: Circumstances related to the typical adjustment to college life such as working while attending school, financial issues related to paying bills and car maintenance/travel to campus are not considered as extenuating for purposes of appealing suspension of federal financial aid funds.
- If a student fails to meet the terms of the Financial Aid Probation or their Academic Plan, any additional federal financial aid funds will be denied until minimum standards are met.

## USA Education/Study Abroad

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

## Scholarships

USA’s scholarship opportunities include four-year, renewable [Freshman Scholarships](#) for incoming traditional freshmen, one-year [General Scholarships](#) for new and [current students](#), [Transfer Scholarships](#), and [Departmental Scholarships](#) awarded by the various colleges and schools on campus.

Scholarships are awarded using a variety of factors including academic achievement, departmental and community involvement, employment experience, areas of study, financial need, and several others.

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

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

All incoming students must complete the application process by December 1<sup>st</sup> to ensure consideration for general and departmental scholarships. Deadlines vary.

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

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

# Scholarships For Freshman Students

## Mitchell-Moulton Scholarship Initiative

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

### Presidential Scholarships For First-Time Freshmen

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All first-time freshmen who meet the Presidential Scholarship requirements, funded by the Mitchell-Moulton Scholarship Initiative, by December 1st will be guaranteed a scholarship award. Presidential Scholarship levels can be viewed at [Freshman Scholarships](#).

For more information regarding these scholarships, please contact the Office of Enrollment Services at (251) 460-6494 or [enrollment@southalabama.edu](mailto:enrollment@southalabama.edu).

### Abraham Mitchell Business Scholars Program

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

#### Qualifications

- Minimum 28 ACT Composite (or comparable SAT scores)
- Minimum 3.5 high school grade-point average (as computed by the University of South Alabama)
- Business major
- Mobile/Baldwin Counties and State of Alabama Residents given preference

After acceptance to USA, incoming first-time freshman majoring in the Mitchell College of Business will automatically be reviewed for the Abraham Mitchell Scholarship award. A scholarship award notification will be emailed to students' JagMail account.

For more information visit the [Mitchell Scholars Program](#) website.

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

### Whiddon Honors Scholarship

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The University of South Alabama Honors College offers a curriculum of interdisciplinary excellence designed to stimulate analytical and critical thinking of exceptionally qualified and highly motivated students. The Whiddon Honors Scholarship, named to honor former president Frederick P. Whiddon and his pivotal contributions to the University, is a competitive scholarship available exclusively to students accepted into the University Honors College.

#### Qualifications

- Minimum 27 ACT Composite (or comparable SAT scores)
- Minimum 3.5 high school grade-point average (as computed by the University of South Alabama)

Applicants to USA must first apply, and be admitted, to the University during the Fall of their senior year in high school. Students may then utilize JagSPOT for both University Honors College and Whiddon Honors Scholarship Applications.

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

### Scholarships For Community College Transfer Scholarships

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Community College Transfer - \$1,500 per year for up to two years. Qualifications: Students must have completed at least 48 hours of coursework and have a cumulative GPA of 3.5 or higher earned at the two year institution as computed by the USA

Office of Admissions. Students must submit the Transfer Scholarship Application by June 15th to be considered. Awards are made in mid-summer.

Out of State Community College Transfer - \$3,000 per year for up to two years. Qualifications: Students must be classified as an out of state resident, must have completed at least 48 hours of coursework and have a cumulative GPA of 3.5 or higher earned at the two year institution as computed by the USA Office of Admissions. Students must submit the Transfer Scholarship Application by June 15th to be considered. Awards are made in mid-summer.

Phi Theta Kappa- \$2,000 per year for up to two years. Qualifications: Students must be a member of Phi Theta Kappa and have a letter of recommendation sent from their Phi Theta Kappa advisor. Students must have completed at least 48 hours of coursework and have a cumulative GPA of 3.5 or higher earned at the two year institution as computed by the USA Office of Admissions. Students must submit the Transfer Scholarship Application by June 15th to be considered. Awards are made in mid-summer.

Out of State Phi Theta Kappa- \$4,000 per year for up to two years. Qualifications: Students must be a member of Phi Theta Kappa and have a letter of recommendation sent from their Phi Theta Kappa advisor. Students must be classified as an out of state resident, must have completed at least 48 hours of coursework and have a cumulative GPA of 3.5 or higher earned at the two year institution as computed by the USA Office of Admissions. Students must submit the Transfer Scholarship Application by June 15th to be considered. Awards are made in mid-summer.

All-State Academic Team Scholarship – \$500 per year for up to two years. Students must be selected for the All-Academic Team by their community college. Students must have completed at least 48 hours of coursework and have a cumulative GPA of 3.5 or higher earned at the two year institution as computed by the USA Office of Admissions. Students must submit the Transfer Scholarship Application by June 15th to be considered. Awards are made in mid-summer.

Out of State All-State Academic Team Scholarship – \$1,000 per year for up to two years. Students must be selected for the All-Academic Team by their community college. Students must be classified as an out of state resident, must have completed at least 48 hours of coursework and have a cumulative GPA of 3.5 or higher earned at the two year institution as computed by the USA Office of Admissions. Students must submit the Transfer Scholarship Application by June 15th to be considered. Awards are made in mid-summer.

### **Current, Incoming, And Transfer Students – Other University Scholarship Opportunities**

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USA offers scholarships for its students at every academic level, many of which are based on a student's academic discipline, leadership, specific student interests. Students must fill out the General Scholarship Application within [JagSPOT](#) to be considered. The General Application allows students to be matched with potential scholarship opportunities. Awards and deadline dates vary.

You can view a complete list of scholarship opportunities at USA through the University [A-Z](#) or [Departmental](#) Scholarship Directories.

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

Office: (251) 461-1958

Email: [scholarships@southalabama.edu](mailto:scholarships@southalabama.edu)

Website: [www.southalabama.edu/scholarships](http://www.southalabama.edu/scholarships)

# Global USA

## Global USA

Global USA	(251) 460-6283
Assoc. VP for Global Engagement	Dr. Richard W. Carter
Administrative Assistant	Ms. Gloria Poché
Secretary	Ms. Sharon Leinhos

Global USA is a division of Academic Affairs, charged with leading efforts towards achieving the third goal of the University of South Alabama's strategic plan – Global Engagement. Global USA encompasses all international and continuing education offices on the University of South Alabama's main campus and our two satellite campuses, Baldwin County Fairhope Campus and the Gulf Coast Campus.

For International Students:

- Immigration compliance
- Admissions
- Student recruitment
- Support Services
- Special Events
- English Language Center

For International Outreach:

- Visiting Scholars
- Study Abroad
- Student exchange
- International Partnerships
- International Summer camps

For Domestic Outreach:

- Training programs
- Certificate programs
- Camps
- Conferences
- Adult Education
- Lecture series

## Global Outreach And International Student Services

Global Outreach and International Student Services	251-460-6283
Director	Ms. Hannah Murphy
Coordinator, International Student Services	Ms. Lauren Metheny

The Office of Global Outreach and International Student Services provides services to international students at the University of South Alabama in the following areas.

- International Student Recruitment
- International Student Orientation
- International Support Services
- International Programming and Activities
- Special International Events

## Office Of Immigration And International Admissions

Office of Immigration and International Admissions	251-460-6050
Director	Ms. Regina George
Associate Director	Ms. Heather Nix
Immigration Coordinator	Ms. Kristi Clayton
Immigration Coordinator	Mr. Maurice Chavarry, Sr.
Admissions Officer	Ms. Sara Herter
Academic Records Specialist	Ms. LaSonya Toney
Secretary	Ms. Reese Olewnik

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

### Immigration Compliance

The Office of Immigration and International Admissions is also responsible for the development and implementation of policies and procedures associated with US immigration compliance functions for foreign nationals associated with current and potential faculty/staff employment, J exchange scholars (including postdoctoral trainees, degree and non-degree students, professors and research scholars), academic/co-curricular exchange program participants and international guests.

### Admission

The Office of Immigration and International Admission processes all non-citizen applications for admission to undergraduate and graduate programs at the University of South Alabama. Inquiries about admission for non-citizens should be addressed to the Office of Immigration and International Admission, 390 Alumni Circle, Meisler Hall, Suite 2200, University of South Alabama, Mobile, Alabama 36688-0002, or e-mail at [internationaladmissions@southalabama.edu](mailto:internationaladmissions@southalabama.edu). For specific International Admissions policies and procedure, please visit the International Admissions page.

## Office Of International Education

Office of International Education	(251) 460-7053
Director of International Education	Ms. Holly Hudson
Assistant Director of International Programs	Ms. Bri Ard
International Programs Assistant	Ms. Elizabeth Calhoun
International Education Programs (IEP) Advisor	Ms. Jessica Lisenba

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

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

### Study Abroad

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

All USA students who plan to participate in a study, research, internship or work abroad opportunity must contact the Office of International Education for information on program advising and approval procedures.

## English Language Center

The English Language Center		Alpha Hall East 224 (251) 460-7185
Director	Ms. Chiméne Gecewicz, M.A.	
Student Services Coordinator	Ms. Justine Burbank	
Secretary	Ms. Polly Garner	

The English Language Center (ELC) provides intensive English instruction to individuals whose native language is not English.

The ELC offers both credit bearing and non-credit classes.

ESL 015 and ESL 016 are offered during the fall and spring semesters. Enrollment in these courses is limited to University students. Placement in ESL 015 and 016 is based on English proficiency. Students may be placed in ESL 015 or 016 based on IELTS/TOEFL sub scores. All required ESL courses must be completed with a grade of "C" or higher BEFORE the student may register for EH 101 or 102. ESL courses WILL NOT be substituted for EH 101 or 102 requirements. Credits earned in the English Language Center will not be accepted toward degree requirements within the University. However, ESL course may be counted as part of the 12-hour course load required of F-1 students and may be taken as electives by students wishing to improve their proficiency in English.

The ELC also offers five levels of non-credit classes to students who are not enrolled in a degree seeking program. These classes are in the areas of composition, grammar, oral skills and reading. Students who successfully complete the requirements of the program receive a certificate of completion.

The English Language Center ESL professionals:	
Lead Composition Teacher	Mr. Mark Basque, M.A.
Lead Grammar Teacher	Ms. Sylvia Koestner, M.A.
Lead Oral Skills and Reading Teacher	Ms. Sandra Wingate, M.A.

## Center For Continuing Education And Conference Services

Center for Continuing Education & Conference Services	Alpha Hall East 230 (251) 460-7200
Director	Marcy Matherne
Accountant	Patricia Miles
Continuing Education Specialist	Kelly Anderson
Continuing Education Specialist	Joy Aull
Continuing Education Specialist	Donna Tarasavage
Department Secretary	Alma Platt
Registration Clerk	Lisa Simon

The Center for Continuing Education and Conference Services (CCE) provides noncredit educational experiences that meet the needs of individuals and organizations in local, regional, and selected national markets by offering professional and career development through noncredit programs, camps and conferences, cultural offerings, and lecture series. CCE drives economic development by providing training solutions to serve the needs of business and industry in addition to enriching the lives of individuals who seek to challenge and stimulate their minds. Non-credit course offerings include: conversational languages, supervision and management, computer literacy and application, art, music, literature, communication, and leisure activities. CCE administers the awarding of Continuing Education Units (CEUs) which are awarded to individuals attending non-credit courses, workshops, or conferences. CCE works with customers to certify continuing education, providing transcripts for non-credit courses, conferences, institutes and workshops.

### Professional Development Seminars, Workshops, And Conferences

CCE offers programs emphasizing education for the working professional in form of seminars, workshops, conferences, and training modules. University faculty, along with field experts, actively participate in the development and instruction of these programs. CCE staff members focus on meeting the needs of our regional community partners by assisting them in building human capital.

Certificate programs are also offered for individuals seeking career development in areas such as paralegal, non-profit management, legal nurse consultant, medical coding, and photography.

### Safety And Emergency Response Training

The safety and emergency response training serves industry, government and other agencies with state-of-the-art instruction in the handling of hazardous materials and emergency spills, technical rescue and incident command. Much of the training is mandated by federal and state laws and the program follows the guidelines set forth by the Occupational Safety and Health Administration, the Environmental Protection Agency and the Department of Transportation, among others. In working directly with industry and other emergency response groups, training is offered on both an open-enrollment and contract basis that can be tailored to a client's site-specific needs.

### Special Courses

Special Courses are non-credit, short courses designed with the concept of lifelong learning in mind. Personal enrichment, career development, and general educational enhancement for community members are offered on a semester basis. Topics include arts, health and fitness, language and photography, among others.

### Odyssey USA

Odyssey USA is the University's Institute for Learning in Retirement. Housed in the Center for Continuing Education, it is a self-managed study program for mature learners. An Executive Board of elected members provides leadership for issues relating to curriculum development and operation.

### Summer Camps, Youth Programs And Special Events

The USA Camps Program is part of the Center for Continuing Education. This program provides administrative oversight of University Sanctioned and Externally Sponsored camps and youth programs. For University Sanctioned Camps, the Center

handles the camp approval process, serves as a resource for camp administration, and processes camp registrations and fee payments. For Externally Sponsored camps and youth programs, coordinates arrangements for University facilities and services.

Youth of varying ages are offered quality educational opportunities. Students may prepare for the ACT exam in review classes for Math, Science, Reading, and English. During summer session, academic and extra-curricular camps are open to students. These camps include arts, athletics and various academic focus areas.

CCE provides conference management and facilitation services to client organizations for delivery at the venue of choice. Various levels of planning, marketing, registration, onsite facilitation, financial processing, and post-conference certification are available. Conference proposals are developed specifically to meet client needs.

### Other Opportunities

The Center for Continuing Education and Conference Services facility has a computer laboratory for workshops and short courses sponsored by the University. It is also available, on a rental basis, to organizations conducting their own training.

## USA Baldwin County Campus

University of South Alabama Baldwin Campus	10 North Summit Fairhope, Alabama 36532 (251) 928-8133
Director	Dr. Cynthia L. Wilson
Business Operations	Kim Martin
Criminal Justice faculty	Michael Hollingsworth
Computer Support	Deneane O'Cain
Security	Ralph McDonald
Secretary	Julie Hamner
Custodial	Rhoda Jetson, Brenda Gordon
Maintenance	Dirk Bayer

The University of South Alabama Baldwin County (USABC) was established as a campus of the University in August, 1984, to offer higher education in one of the fastest growing and most diverse counties in Alabama. USABC offers upper-level (junior and senior) undergraduate courses, graduate courses, and non-credit programs. The campus is in downtown Fairhope. The administration building is located at 10 North Summit Street and the classroom complex is at the corner of Summit Street and St. James Place; and the College of Nursing building at 161 N. Summit Street.

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

Computer services are provided for students and faculty. Classrooms have internet access and audio-visual equipment. The administration building contains a computer laboratory and computers are available in the building's lobby for use during business and class hours. An additional computer lab is located at the Classroom Complex.

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

Printed materials for admission, academic programs, financial aid and student services are available in the administration building. Academic advising is available, by appointment, on the campus.

USABC supports the University's mission of public service by working cooperatively with community organizations. The Fairhope Film Festival is co-sponsored by USABC and is held in the USABC Performance Center, USABC co-sponsors Leadership Baldwin County which is open to adults in the county. Special events are held on the USABC campus throughout the year.

## USA Gulf Coast Campus

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### USA Gulf Coast Campus

Coordinator

19470 Oak Road West, Bldg D  
Gulf Shores, AL 36542  
(251) 968-9860

Dr. Jenny Manders

USA Gulf Coast Campus (USAGC) is located in beautiful Gulf Shores, Alabama and has been a part of USA since November, 2014. It is a 2,910 square foot facility with 6 classrooms and 2 bathrooms housed in the City's Cultural Center. There is also access to an onsite 500 seat auditorium and an onsite gymnasium and kitchen.

This unique location lends itself to classes as well as lectures, such as the Distinguished Lecture Series, concerts and special events. Summer internships with local businesses and their associated classes are being planned for this location, as well as possible international camps.

USAGC is strategically placed for the University of South Alabama to be a strong presence in continuing education and training, supporting community and the industry of South Baldwin County.

## Student Affairs & Student Affairs Services

The Division of Student Affairs is responsible for that part of the student's total educational experience which takes place outside the formal classroom program. Among its concerns are housing, student center, student activities, recreation, student organizations, programs, disciplinary actions, disabled student services, community service, personal counseling, multicultural affairs, testing services, food services, bookstore, and University Police. Through such activities as the [Student Government Association](#), the students are given a responsible voice in the governance of the University.

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

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

## Student Life And Student Center

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

### Student Center

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The newly renovated [Student Center](#) supports the University mission by providing quality programs, facilities, and services that create a community that encourages involvement, development and personal and academic growth. The Student Center is truly the center of it all on campus.

Located in the building are lounge areas, the Student ID Office, a computer lab, office that support student engagement, dining and other student life areas. Ten meeting rooms, a ballroom, and audio-visual equipment are available at no charge to student organizations, and administrative and academic departments. Individuals and outside organizations may reserve space and equipment for a fee.

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

## Campus Recreation

The [Campus Recreation Department](#) offers a wide variety of recreational opportunities for the entire University community. Campus Recreation accommodates many styles of participation, including intramural team and individual competition in a variety of sports and activities. Open recreational opportunities, fitness programs, outdoor recreation activities, aquatics, and sports clubs are also offered. Student groups may use recreational facilities and equipment for social activities approved by the Campus Recreation Department. The continuing goal of the recreation program is to provide activities that offer optimum benefits of enjoyment, health, social interaction, and sportsmanship to participants.

- Our state-of-the art [Student Recreation Center](#) is an impressive facility that contributes greatly to student life on campus. Within the Student Recreation Center, one will find a wide array of recreational and fitness facilities. The 116,000 square foot complex contains a cardio exercise room and a weight room with selectorized machines, plate loaded machines, and free weights. Also, within the Center are three basketball courts, an indoor soccer court, four racquetball courts, two multipurpose rooms for activities such as fitness classes, and a track. A 35' high rock climbing wall offers challenges and excitement to climbing enthusiasts. An outdoor heated swimming pool and an indoor heated swimming pool are included as part of the complex. There is also an outdoor heated spa. In addition, saunas are located in both the men's and women's locker rooms. After a good workout, patrons can enjoy refreshments from the smoothie bar and sit on the deck overlooking the courtyard containing beautiful heritage oak trees. For members of the Student Recreation Center who have children, there is a children's play zone.

- Located next to the Student Recreation Center is the [Outdoor Adventures](#) cabin. The Outdoor Adventures program offers a variety of activities including canoeing, kayaking and hiking. Also housed in our Outdoor Adventures cabin is our Jag Bike rental program. Students can rent a bike to use on campus on a semester basis. We offer minor repairs of personally owned bikes free of charge. Owners must provide the needed parts for repairs.
- The [Intramural Sports Complex](#) consists of six multipurpose playing fields. These lighted fields are used throughout the year for intramural games and practices. One of the fields is designated for use by sports clubs.
- The SGA Sports Complex, supervised and maintained by the [Department of Campus Recreation](#), is available for use by university members throughout the year. A pavilion, sand volleyball courts, horseshoe pits, and barbecue grills make this area a great spot for fun and entertainment.
- The Glenn Sebastian Nature Trail is available for those who like to walk or jog through the woods. This is both beautiful and educational.
- Other services offered at the Student Recreation Center include chair massage therapy, body fat and blood pressure readings.

All members of our university community are encouraged to take advantage of the wonderful opportunities for fun and fitness offered through the [Department of Campus Recreation](#). For further information, please visit our web page or call (251) 460-6065.

## Counseling And Testing Services

### Counseling/Testing Services

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[Counseling And Testing Services](#) strives to facilitate the academic, emotional, social, and career development of students. It offers individual, relationship, and group counseling for all interested students and conducts outreach educational programs. Counseling services are provided free and confidentially by a staff composed of qualified mental health counselors. Students having mental health and/or relationship problems are invited to take advantage of this campus resource.

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

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

Counseling and Testing Services is located in 326 Alpha Hall East at 555 University Blvd. For further information about any of these services, contact our office at (251) 460-7051 or go on-line to [www.southalabama.edu/departments/counseling](http://www.southalabama.edu/departments/counseling)

### Drugs And Alcohol

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

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

### Disability Services

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The University offers special services to students with disabilities. Students requesting services must submit documentation regarding the disability to the [Office of Student Disability Services](#) prior to receiving services. Reasonable accommodations are offered in accordance with Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Amendments Act of 2008. The Office of Student Disability Services is located at 5828 Old Shell Road, (251) 460-7212.

# Housing & Dining

## On-Campus Living

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A college education offers students the opportunities for advanced learning, interesting career options and meeting new people. An additional opportunity of the college experience is on-campus living where learning and personal growth take place in the community environment of the residence halls.

The University of South Alabama offers a wide range of facilities to meet the lifestyles of a diversified student body. As a student, you have a wealth of choices to choose from when it comes to on-campus housing. Whether your plans include taking classes the entire academic year or simply during the spring or summer semesters, you can find housing on-campus. Our 32 residence halls can be found on the west side of main campus divided into 6 residential communities that are home to approximately 2400 residents.

Once admitted to the University, students should apply for housing as soon as possible. The earlier you complete your housing contract the larger your selection of room choices will be. Students who complete their Academic Year housing contract by the published deadline will be eligible to self-select their own room assignment. Eligible students will be given a specific time slot (day and time) to self-assign, which is based on the date your housing contract was completed. The earlier you complete your contract, the earlier you will have access to self-assign. Visit our [Getting Started](#) page for key deadlines and more details.

## Room Types

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### Rooms For 2

Rooms for 2 feature an open concept design, which includes a bathroom.

- Epsilon 1 - 2 (*freshmen only*)
- New Hall (*freshmen only*)
- Delta 3 - 5

### Suite-Style

Suite-Style rooms feature 2 bedrooms connected by a shared bathroom-options exit for 1 or 2 students per bedroom.

- Gamma 0-4
- Stokes Hall

### Apartment Style

Apartment Style units are designed for 2 - 3 residents who share a living area, bathroom, and kitchen.

- 2 Bedroom Apt. for 2: 1 student in each bedroom (Beta 1-5 and Gamma 5-9)
- Studio Apt. for 2: 2 students in an open-concept room that includes a full kitchen (Beta 1-5 and Gamma 5-9)
- Room for 2 w/Kitchenette: Same design as a Room for Two but includes a kitchenette (Delta 6)

### Private Rooms

*Limited Availability* - Private Rooms feature an open concept design, which includes a bathroom.

## Greek Housing

The Greek Housing Community is made up of nine houses for specific social Greek organizations. Occupancy in Greek Housing is limited to members of these nine organizations. Greek Housing residents are subject to the same contract required of all University housing students.

Visit our [Room Types](#) page to learn more about each of these room types and their respective residential communities.

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## Learning Communities

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USA is committed to providing a variety of educational opportunities that will contribute to the academic success of our students. One such opportunity for all new students, including those who live on campus, is membership in a Learning Community (LC). A Learning Community is a group of students with shared interests who are enrolled in two or more classes together. Select areas of University housing are reserved for students in the same Learning Community to live and learn together with three freshman halls (Epsilon 1, Epsilon 2, and New Hall) specifically designated for this purpose.

For example, students in Engineering LCs live together in one of the Epsilon residence halls. Our University Honors freshmen students also live in Epsilon, while our Leadership scholars live in New Hall. Students interested in Language and Culture may opt for group housing in one of the Beta residence halls. This community will have exchange students from places like Germany, Spain, Australia and Japan. The rooms reserved for this community have kitchen facilities, providing students the opportunity to cook and share meals from other cultures.

All freshmen are encouraged to join a learning community. National research shows that students in a learning community report a more positive social life and higher levels of student-faculty interaction (National Survey of Student Engagement Annual Report 2007). At USA, students who join learning communities are more likely to persist to year two, and have higher academic success rates, than students not in learning communities.

Learning Communities require a separate application in addition to the housing contract and prepayment. [Click here](#) to visit the Learning Communities page where you can view a complete list of LCs, complete the [Learning Community Interest Survey](#), or learn more information.

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## Furnishings And Amenities

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Room rates include campus mail box, digital cable, Ethernet & wireless internet access, all utilities (electricity, water/sewer, heat/air, garbage service, and pest control), housing and facilities staff available 24/7, accommodation furnishings, and unlimited laundry access. All residence hall rooms are furnished with a bed frame (*adjustable height*), mattress, desk, chair, and closet or wardrobe per student. Additionally, each room comes with its own fridge or mini-fridge (*size depends on the room type*). Visit our [Room Furniture](#) page for more detailed furnishings information.

All residential communities include vending machines with drink and snack options. Also, each residential community has one or more common spaces available for student use (lounges, study rooms, TV rooms, conferences rooms, etc.). More detailed information regarding USA Housing services and amenities is available by visiting [www.southalabama.edu/housing](http://www.southalabama.edu/housing) (*review the Services section of the navigation menu*).

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## Additional Residence Hall Info

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All students living in University housing must provide proof of having received the Meningitis vaccine at the age of 16 or older. Immunization records should be provided to the USA Student Health Center. Please contact the Student Health Center with questions about this matter (251-460-7151 / [immunizations@southalabama.edu](mailto:immunizations@southalabama.edu)).

While all of our residence halls are great places to live, we understand that some students would prefer to live somewhere other than where they are assigned for various reasons. This is why we offer various opportunities for students to request a change

once they have received an assignment. Visit our [Assignment Changes](#) page to review the timelines and procedures associated with these opportunities.

Visit our [Cancellations & Withdrawals](#) page for detailed housing contract cancellation guidelines.

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## USA Dining / Meal Plans

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

### Residential Meal Plans

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

### Other Meal Plans

Other meal plan options are available for faculty, staff, and commuter students. These plans provide a discounted price over purchasing individual meals on each visit to the dining facility. In addition, faculty, staff, residential and commuter students can purchase Dining Dollars to use at any food service location on campus. Dining Dollars are added to the ID card and are deducted each time there is a food service transaction. Visit [www.southalabamadinig.com](http://www.southalabamadinig.com) and click on the Meal Plan tab to review detailed meal plan descriptions and cost.

### Catering

USA Dining is also the official caterer on campus. A full catering guide is available at <http://www.southalabamadinig.com> under the Catering tab. Written approval to use an outside caterer must be obtained in advance from the Vice President for Student Affairs.

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## Other On-Campus Housing

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The Grove is a privately-owned apartment complex located on the southwest corner of the main campus. The Grove is not managed by USA Housing. Freshmen are not allowed to live at the Grove. Students should be aware the Code of Student Conduct policies apply to all residents of The Grove. For leasing information and all questions or concerns, contact The Grove management office at (251) 341-9412 or visit their website at <http://gogrove.com/mobile/>.

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## USA Housing & Dining Contact Info

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USA Housing [housing@southalabama.edu](mailto:housing@southalabama.edu)

P: (251) 341-HOME (4663)

F: (251) 460-6143

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DLTC 100

University of South Alabama

251 Delta Loop

Mobile, AL 36688-0002

[www.southalabama.edu/housing](http://www.southalabama.edu/housing)

USA Dining

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

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

## Multicultural Student Affairs

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

## Student Affairs Services

### University Bookstore

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Located on the main campus, the USA BOOKSTORE offers a wide range of products and services both on campus and online. New and used textbooks, as well as the supply materials necessary for all courses are available. In addition, a wide variety of reading materials from classics to current best sellers are offered.

JagWEAR – An assortment of USA branded fashion sportswear and emblematic giftware.

JagTech – Apple and PC Authorized Campus Store.

Examples of many other products and services available in the USA BOOKSTORE are:

- Calculators/Electronics
- Office Products
- Student Supplies
- Test Preps/Study Aids
- Computers/Software /Laptops/Printers
- PC Repair Center
- Class Rings
- Facsimile Service
- Residence Hall Room Supplies
- Soft Drinks/Snack Foods
- Health Science Textbooks/Reference Books/Medical Diagnostic Equipment

Regular Store Hours: 8:00 a.m. – 6:00 p.m., Monday – Thursday and 8:00 a.m. – 5:00 p.m., Friday. “Rush” hours and summer hours will be posted at the USA BOOKSTORE entrance and on our website. Visit us online at: [www.southalabama.edu/bookstore](http://www.southalabama.edu/bookstore).

VISA, MasterCard, Discover, American Express, and USA JAGCASH and Financial Aid are accepted. For additional information please call (251) 460-7012, or visit our website at: <http://www.southalabama.edu/bookstore>.

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## Post Office

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The University of South Alabama Post Office is essentially a Public Contract Station operating under U.S. Postal Service guidelines and a mail room operating under the University of South Alabama guidelines and procedures.

This Post Office is staffed with University of South Alabama employees, who are familiar with all areas of postal operations and are qualified to handle most tasks. Up-to-date domestic and international manuals are maintained and used for reference purposes. Window service consists of selling postal supplies and accepting letters, flats and parcels for mailing. Departmental mail pickup and delivery service is provided by means of an established route. The Campus Mail Room processes all departmental mail, domestic and foreign, except C.O.D., which must be handled with the U.S.P.S. The Campus Post Office accepts cash and checks only.

All students who live on campus are required to have a personal mail box to receive mail. Mail is not delivered to the Residence Hall Rooms. Residence Hall students need to activate their PO Box @ the Post Office and complete a short form. For additional information please call (251) 414-8191, or visit our web site at <http://www.southalabama.edu/usamailhub>

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## Student Insurance

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

# Student Conduct

Students attending the University of South Alabama are accepted as responsible adults working with their faculty colleagues in search of knowledge. Rigid regulation of personal conduct will not be necessary since freedom as an objective of education is difficult without the actual existence of freedom.

Such freedom must be balanced by individual responsibility and respect for the rights, responsibilities, and freedom of others. Students, therefore, will be held accountable for their own decisions and actions. Failure to assume responsibility for actions that jeopardize the rights and freedoms of others or involve the integrity of the University will result in disciplinary review.

The University holds its students to high standards of academic excellence and similarly expects high standards of individual conduct. The Spirit of South Alabama was adopted by the Student Government Association as a basis for expectations from our students. Persistent violations of expected standards or established regulations will necessarily involve appropriate disciplinary action. The University reserves the right to deny admission or continued attendance to students whose decisions and actions are contrary to the purposes and procedures of the University. The Lowdown, the USA student handbook (<http://www.southalabama.edu/lowdown/>), contains the Code of Student Conduct.

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## Student Academic Conduct

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

# University Police

The University of South Alabama has its own [University Police Force](#). The University of South Alabama Police Department's mission is to partner with the university community, so that we can provide a safe environment to learn, live, work, and play.

1. Educate the University community, which includes faculty, staff, and students, on crime prevention methods and techniques and encourage them to accept appropriate responsibility for their safety and security on campus.
2. Provide purpose-driven services to all segments of the university community while aggressively striving to maximize campus safety and minimize security risk factors.
3. Encourage and provide professional development opportunities for the Police Department.

4. Enforce state and federal statues, rules and regulations to ensure the safety of university faculty, staff, students, and guests.
5. Achieve this mission in the most efficient manner possible.

# University Programs And Activities

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## Jaguar Productions

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

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

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## Educational Talent Search

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Educational Talent Search (E T S) is a federally funded program designed to encourage low income and first generation college students to consider post-secondary opportunities while they are in secondary schools. The program serves sixth (6th) through twelfth (12th) grade students. Participants must demonstrate a potential for academic success and have a desire to further their education. E T S is designed to improve academic performance, increase student motivation and facilitate transitions from one level of education to the next. The services offered are counseling techniques related to academic, career, vocational, and enrichment activities, study skills training, college preparation, financial aid and scholarship information, educational trips, and tutorial sessions. Tutorial services are conducted by students who are enrolled at the University. For more information, contact the Educational Talent Search Office, UCOM 5700, (251) 380-2620.

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## Upward Bound

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

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## Student Activities

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Over 180 professional, departmental, special interest clubs, faith-based organizations, and honor societies are active at the University. These organizations represent a wide variety of disciplines and interests and provide an opportunity for every student to get involved. Any student group seeking recognition is encouraged to pick up application forms in the [Office of Student Activities](#), Student Center, (251) 460-7003 or online at <http://www.southalabama.edu/studentactivities/>.

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## Cultural Activities

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The University and the community offer to students an opportunity to participate in a variety of cultural and recreational programs. Among them are concerts by symphonic and chamber organizations, choral groups and choirs, ballet and opera productions, theatre, art exhibits, film series, and lecture and discussion conferences. In many of these programs, students are urged to

participate as performers. Special events are scheduled on the campus, and reduced rates for students are arranged for many civic programs.

# Auxiliary Student Services

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

- JagTran
- Intercollegiate Athletics
- Student Health Services
- Student Media
- Office of veterans Affairs
- Mitchell Center
- Telecommunications Department
- Licensing
- Publication Services

## Intercollegiate Athletics

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

## JagTran

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

## Licensing

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

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

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

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

## Mitchell Center

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

## Office Of Veterans Affairs

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

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

## Publication Services

Publication Services is a full service design, copying, printing and production facility providing the University community with a high quality, cost efficient services. Publication Services handles printing of all University business system items such as business cards, forms, envelopes and letterhead. Publication Services also provides competitively priced graphic design services for complex printing projects and ensures that print projects are in compliance with required USA Brand standards. Consultation with Publication Services in the early stages of project development is highly recommended to ensure each project is developed in a timely and cost-effective manner. Publication Services is extremely creative and versatile, with a wide selection of formats and sizes available to create printed materials, signage, banners and merchandise that is tailored to your needs. For more information, visit [www.SouthAlabama.edu/Publications](http://www.SouthAlabama.edu/Publications).

## Student Health Center

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

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

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

All currently enrolled students are eligible for treatment in the SHC. The SHC accepts and processes claims for the following insurance carriers: Aetna, Blue Cross Blue Shield, Medicaid and United Healthcare. Students with coverage with any other carrier will need to pay for charges at the time of service. A claim form will be provided, so that you can file a claim with your carrier to get reimbursed for the payment. We strongly recommend that all students have health insurance. The University sponsors a United Healthcare health insurance plan that is specifically designed for USA students and is available for purchase.

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

The University of South Alabama requires that all students born after 1956 must provide proof of two doses of a measles containing vaccine (rubeola, M.R., MMR) prior to registration. One dose must have been after 1980 and at least one of the doses must have been an MMR. Additionally, all new incoming students must complete a tuberculosis screening questionnaire. Further testing may be necessary. International students must provide proof of a TB skin test and meningitis

immunization at registration. If you do not provide proof of immunization you will be put on HOLD and WILL NOT be able to register for classes. All students living in the residence halls and The Grove must provide proof of having received the Meningitis vaccine (within the last 5 years). Your completed forms may be submitted to the Student Health Center by emailing them to [immunizations@southalabama.edu](mailto:immunizations@southalabama.edu). We are no longer accepting faxed or mailed documents.

For more information, you may contact us at (251) 460-7151 or [www.southalabama.edu/studenthealth/](http://www.southalabama.edu/studenthealth/).

## Student Media

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

## Telecommunications Department

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

Telecommunications is located off USA North Drive. As you approach the traffic circle on USA North Drive, we are the first building on your right. Hours are Monday through Friday, from 8:00 a.m. to 4:45 p.m. Our information number is (251) 460-7491 or if you are on campus, dial 6-7491.

# Academic Policies & Procedures

## Undergraduate Academic Policies And Procedures

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

### General Information

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#### University Email

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

#### Academic Terms And Credit Hours

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

The University academic terms are two semesters (Fall and Spring) and three terms: a May term and two Summer terms. Semesters normally consist of fifteen weeks of class followed by a final examination week. In some programs of study, courses may be scheduled for parts of terms different from a normal semester. Usually, one semester credit hour is awarded for each 50-minute lecture class per week or 2-3 hour laboratory or studio period.

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

#### Student Classification

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

Freshman	0 - 29 semester hours
Sophomore	30 - 59 semester hours
Junior	60 - 89 semester hours
Senior	90 semester hours or more

#### Policy For Declaring An Academic Major

##### Declaring an Academic Major, Non-Transfer Students

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

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

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

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

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

### **Full Load Of Course Work In A Semester**

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

### **Registration**

Registration (making course selections and enrolling in classes) occurs prior to the beginning of each term. All students obtain registration appointment times ("time tickets") and register utilizing USA's Personal Access Web System (PAWS) at <http://paws.southalabama.edu>. (See the [University Registration Guide](#) for additional information.)

Registration is not complete until all fees have been paid and all admissions documents and examinations furnished. Failure to satisfy any of the admission or registration requirements is sufficient cause for dropping a student from all classes. Enrollment status can be found in PAWS web site at <http://paws.southalabama.edu>.

### **Course Numbering System**

#### Course Number

001-099	Remedial courses which do not carry credit toward graduation
100-199	Freshman
200-299	Sophomore
300-399	Junior
400-499	Senior
500-699	Graduate/Professional
700-799	Doctoral

### **Attendance And Absences**

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

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

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

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

### **Computer Access Requirement**

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

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# Student Academic Success

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The Office of Student Academic Success supports the mission of the University by offering, supporting, and assessing programs and services designed to improve student academic success, including but not limited to retention and graduation. This includes the First Year Advising Center, freshman learning communities, the university first year experience courses, JagSuccess, and the USA Scholars Initiative, including our Eam Back program.

## Academic Advising

Academic advising is an important component of a student's educational experience and success. Faculty, administrators, and professional staff promote academic advising as a shared responsibility with students. Academic advising serves to develop and enrich students' educational plans in ways that are consistent with their personal values, goals, and career plans. Before attending an advising appointment, students should review the university website and consider academic majors that best suit their educational and career interests. Students are assigned an advisor based on their declared major.

All degree-seeking first-year students and transfer students who have earned less than 30 hours are required to meet with an academic advisor. Additionally, first year students are required to meet with their academic advisor in both fall and spring semesters. Generally, after a student completes 30-40 hours, they will be shifted to an academic advisor in their major College or School. Students should communicate with their major advisor at least once each academic year.

Advisors are responsible for particular majors or programs; if a student changes their major, their academic advisor will also change. Students should plan to meet regularly with their academic advisor throughout their enrollment period. More frequent meetings are associated with increased academic success and progress through the curriculum.

Students who have earned less than a 2.0 cumulative GPA are required to meet with an academic advisor each semester until in good standing with the University.

Students are ultimately responsible for selecting and registering for courses, meeting course pre-requisites and graduation requirements, and adhering to University policies and procedures.

## First Year Advising Center

Students begin their relationship with their first year advisor during orientation. They are required to meet with their advisor each term and are encouraged to meet as often as needed. When students reach 30 earned credit hours, they generally will transition to an academic advisor in their major College/School. Some Colleges/Schools may require students to remain with FYAC for an additional semester.

## Learning Communities

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

## First Year Experience Courses

First year experience courses are offered at universities around the world. At USA, this course was constructed by faculty and designed to address areas where first year students need additional development. The course ranges from 2 to 3 academic credit hours (depending on College/School) and includes a peer academic leader called a JagPAL.

Currently, first year experience (FYE) courses are offered in the College of Arts and Sciences, the College of Education and Professional Studies, the College of Engineering, the Mitchell College of Business, the Pat Capps Covey College of Allied Health Professions, and the College of Nursing.

## JagSuccess

JagSuccess is our student focused academic success center. It is located at 111 Jaguar Drive, in the Academic Services Center. Any student is welcome to drop by and talk with a JagPal about course material, receive additional problem sets for practice, or discuss study skills specific to a class or test. Workshops are also available on demand to support the needs of faculty and staff. Resources may be found online at <http://www.southalabama.edu/departments/academicssuccess/>

## USA Scholars Initiative

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

## University Writing Center

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The University Writing Center, located in the Academic Services Center and Marx Library provides assistance with writing to students of any discipline, both face-to-face and online. The University Writing Center is an instructional facility that focuses on helping students improve their writing skills, rather than simply editing papers. Students may receive help with any type of writing task at any stage of the writing process, including understanding assignments, brainstorming, organization, development, and revision.

For more information, please call (251) 460-6480 or visit the Writing Center's webpage at <http://www.southalabama.edu/writing/>.

## Career Services

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USA Career Services, located in Meisler Hall, Suite 2100, assists students and alumni in all phases of the career development process. As a comprehensive career services center, the office offers services to support career and academic major exploration, co-op and internship participation, identification and preparation for employment opportunities, and graduate and professional school preparation assistance.

### Career Exploration

Career Services guides students in determining career interests and selecting appropriate academic programs to reach career goals. The appropriate selection of a major can impact a student's desire to complete a college education and a student's success in college and the workplace. Career Advisors are trained to assist students in the various aspects of career and academic development. Among the many resources available to students are:

- One-on-one advising appointments with career advising staff.
- Career Resource Center containing information on career and major exploration, job search skills, resume preparation, interviewing, employer information, and more.
- Self-assessments and career inventories.
- Jaguar Job Link On-line job posting system.
- Resources on numerous career fields including entrance requirements and projected employment outlook.
- Graduate and professional school information.

### Cooperative Education And Internship Program

The Cooperative Education (Co-op) and Internship Program enables students to combine classroom studies with paid work experience related to their major field of study. Co-op and Internships are designed to supplement classroom experience and to promote academic and professional development. Students generally complete one year of courses prior to beginning an assignment. Students receive academic recognition through a transcript notation for each term. Students do not earn academic credit hours. Employers and students appreciate this official recognition because it reflects a student's desire to obtain practical work experience while pursuing the degree.

### Program Requirements

Undergraduate students must meet general program requirements, including being classified as a full-time student upon participation in the program, completion of 12-24 credit hours depending upon the selected program option, an overall institutional GPA of 2.3 or higher for the Co-op options, and an overall institutional GPA of 2.0 or higher for the Internship option. Graduate students may participate after they are accepted into a graduate program. Program requirements may vary based upon the student's academic college. While the program is open to all academic majors, there are some majors/academic departments in which the curriculum may not support a particular work-schedule option. Students on study visas can participate in the program with prior approval from the Office of International Admissions & Student Services.

## Program Options

### Alternating Co-Op

The Alternating Co-op program option integrates multiple terms of work and academics. Students work in professional assignments directly related to their major. Students on the alternating plan rotate semesters of full-time work with semesters of full-time school. Students are required to meet and maintain an institutional GPA of 2.3 or higher and remain in good standing with the university in order to be eligible. Engineering students must also complete MA 125 and MA 126 prior to participation. Students must meet with Career Services to receive program approval prior to accepting employment.

### Parallel Co-Op

The Parallel Co-op program option allows nursing students to gain practical, relevant work experience at one of the participating area hospitals. Nursing students may apply to the Co-op program after completing the designated first semester foundation courses with at least a 2.5 GPA. Students must maintain above a 'C' in nursing courses, may not earn an 'F' in any course, and must be designated as full-time to remain eligible for participation. Students accepted into the Co-op program must meet with Career Services to complete the program orientation.

### Internship

This Internship program option allows students to participate in either a part-time or full-time work experience to complement the student's major or field of study. Students are required to meet and maintain an institutional GPA of 2.0 or higher and remain in good standing with the university in order to be eligible. The student, employer, and the university work collaboratively to structure the work plan. Students should meet with Career Services to receive program approval prior to accepting employment.

Additionally, Career Services advertises internships that are non-paid and for academic-credit only. These non-paid, academic-credit internships do not qualify for a transcript notation through the Co-op and Internship Program. These internships are approved through the student's academic department and students should work closely with the department to determine eligibility for academic credit. Students may contact Career Services to be directed to the appropriate contact in the academic department.

The Cooperative Education and Internship Program provides valuable experience and flexibility for students and employers. For more information, please contact Career Services at (251) 460-6188 or visit <http://www.southalabama.edu/departments/careerservices/coopintern.html>.

### Job Search And Graduate School Assistance

Career Services offers many services to students seeking career-related employment or those planning to pursue graduate or professional school. Jaguar Job Link, an on-line career management system, allows students to seek and apply for jobs, publish resumes, and participate in on-campus interviews. Career Services also offers advising appointments, seminars, job search and networking programs, and annual career and graduate and professional school fairs.

## Mathematics Placement Exam

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

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

Students who transfer credit for MA 110 or higher and who DO NOT plan to take any other mathematics courses are exempt from taking the Math Placement Exam. Note that MA 110 does not fulfill prerequisite requirements for most mathematics courses.

The Mathematics Placement test is a computer-based test administered in a computer lab. Calculators and other outside resources are not permitted during this exam. Students should complete the exam at least 48 hours prior to coming to campus for orientation. Students without any transfer credit for pre-requisite course(s) , will be blocked from registering for most mathematics and some statistics courses. Questions concerning the Math Placement Exam should be directed to the Department of Mathematics and Statistics (ILB 325, (251) 460-6264).

# Academic Recognition

Candidates for all honor lists must be undergraduate degree-seeking students with a clear academic status. Graduates, professional level, unclassified, auditors, transients, non-degree, or other special categories are excluded.

- The President's Scholars include all full-time students earning a 4.0 semester grade-point average.
- The Dean's List includes all full-time students earning a 3.50 semester grade-point average.
- The Dean's Honor List includes all full-time students who have completed a minimum of 30 hours at the University of South Alabama, earned a cumulative grade-point average of 3.40 or greater.
- The Dean's List for part-time students (students taking fewer than twelve hours) includes all students who are enrolled in at least six semester hours and have earned a semester grade-point average of 3.50 or greater.

All of the above lists are compiled upon completion of the processing of a particular semester's grades. Removal of "I"s, "X"s or other such symbols at a later date will not qualify the student for recognition. Grades recorded in error will be considered only if properly changed and the Dean's office is notified before publication of the lists.

## Academic Status Policy For Undergraduates

### Status Policies

#### Required Grade Point Average

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

As discussed in the section, General Requirements of Bachelor Degrees, a student must earn a minimum cumulative USA grade point average of 2.0 to graduate. (See special requirements in the College of Education and Professional Studies.)

#### Academic Probation

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

Students with grade point averages less than those listed in the table below are subject to academic suspension or dismissal.

#### Academic Suspension

Academic suspension for one regular semester results if a student at the end of any semester does not have the minimum grade point average indicated in the suspension and dismissal table following. The minimum required grade point average varies with the total number of GPA hours at the University. No student will be suspended before they have at least thirty GPA credit hours at the University.

#### Academic Dismissal

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

#### Suspension And Dismissal Table

GPA Hours	Minimum GPA
30-42	1.20
43-54	1.43

55-66	1.56
67-77	1.64
78-89	1.69
90-102	1.73
102-up	1.80

### Reinstatement Following Academic Suspension

Students reinstated following one regular term (excludes summer term) of academic suspension are readmitted on academic probation. Students in this category are subject to academic dismissal if they do not make satisfactory progress. A student is considered to be making satisfactory progress as long as he or she maintains a USA grade point average for each semester of 2.00 or above until their cumulative USA grade point average is above the minimum required grade point average for dismissal as outlined in the table above. Once a student achieves a grade point average higher than the minimum required grade point average, he or she is subject to the requirement to maintain his or her grade point average above the minimum value as listed in the table. Returning students will remain on probation until the cumulative USA grade point average is 2.0 or greater.

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

### Reinstatement Following Academic Dismissal

Students academically dismissed from USA may be considered for readmission on academic probation after a period of one calendar year has passed. Readmission requires dean's approval. Students readmitted after dismissal are subject to a second dismissal if they do not make satisfactory progress. A student is considered to be making satisfactory progress as long as he or she maintains a USA grade point average for each semester of 2.00 or above until their cumulative USA grade point average is above the minimum required grade point average for dismissal as outlined in the table above. Once a student achieves a grade point average higher than the minimum required grade point average, he or she is subject to the requirement to maintain his or her grade point average above the minimum value as listed in the table. Returning students will remain on probation until the cumulative USA grade point average is 2.0 or greater.

Students intending to seek readmission after dismissal must first file a Readmission Form with the Admission's Office by the official deadline. Readmission after academic dismissal requires approval by the academic dean.

## Academic Bankruptcy

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

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

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

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

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## Withdrawals

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Official withdrawal (dropping all courses in progress) from the University can be done through PAWS (the student on-line self-service system). Students attending with VA benefits need to check with the Veteran Affairs Office prior to withdrawing. Students with financial aid need to check with that office to determine the impact of course drops or complete withdrawals on financial aid eligibility or possible repayments. International students must get authorization from the Office of International Services prior to withdrawing. The symbol "WD" is recorded for all courses when the student completes the withdrawal within the time limits listed in the official calendar. A grade of "F\*", or "U\*" is recorded when a currently enrolled student leaves the University without completing the withdrawal.

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## Readmission To The University

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Students who were previously enrolled in courses at the University of South Alabama, and have been absent from the University of South Alabama for at least three consecutive terms should comply with the following:

### How To Apply For Readmission

An applicant should request the appropriate forms from the Admission's Office. The readmission form, including all required credentials, should be filed with the Admission's Office by the published deadlines found on the Admission's Office web site <http://www.southalabama.edu/departments/admissions/applytousa.html>.

### Requirements For Readmission

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

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## Transient Credits Earned

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A student enrolled in the University of South Alabama is not permitted to take credit work as a transient student at another institution to be applied toward a degree without prior permission from the dean of the college. The permission must be in writing, specifying which courses are acceptable and their equivalents at the University of South Alabama. A copy of this permission must be filed with the University Registrar. Students do not need transient approval if they have not been enrolled at the University for two or more consecutive terms (not including summer).

## College Course Credit Received By Testing Or Other Sources

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### English Composition I Exemption:

Students who score a minimum ACT English score of 27 or SAT verbal score of 610 will be exempt from taking English 101. Official scores should be mailed to the Office of Admissions for exemption to be granted.

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### Credit By Examination:

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

### Military Service/ROTC Credit:

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

### The Prior Learning Assessment Center:

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

### Advanced Placement (AP) Credit:

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

AP Course	USA Course	Score	Credit Hours
Studio Art: 2-D Design	ARS Elective	4	3 hrs
Studio Art: 3-D Design	ARS Elective	4	3 hrs
Studio Art-Drawing	ARS Elective	4	3 hrs
Art History	ARH 100	4	3 hrs
Biology	BLY 121/121L & BLY 122/122L	3	8 hrs
Chemistry	CH 131/131L	4	4 hrs
Chemistry	CH 131/131L & CH 132/132L	5	8 hrs
Microeconomics	ECO 215	3	3 hrs
Macroeconomics	ECO 216	3	3 hrs
Language & Composition	EH 101	4	3 hrs
Human Geography	GEO 114	3	3 hrs
American Gov't	PSC 130	4	3 hrs
Comparative Gov't	PSC 250	4	3 hrs
US History	HY 135/136	3	6 hrs
European History	HY 101/102	3	6 hrs
Calculus AB	MA 125	3	4 hrs
Calculus BC	MA 126	3	4 hrs
Statistics	ST 210	3	3 hrs
Music Theory	MUT Elective	3	3 hrs
Music Listening & Lit	MUL Elective	3	3 hrs
Physics B	PH 114/114L	4	5 hrs
Physics B	PH 114/114L & PH 115/115L	5	10 hrs
Physics C Mechanics	PH 201/201L	4	4 hrs
Physics C Electricity & Magnetism	PH 202/202L	4	4 hrs
Computer Science Principles	CS 108	3	3 hrs

Computer Science A	CSC 120	4	4 hrs
Psychology	PSY 120	3	3 hrs
<b>French:</b>			
French Language and Culture	LG 111 & LG 112	3	6 hrs
French Language and Culture	LG 111, LG 112, & LG 211	4	9 hrs
French Language and Culture	LG 111, LG 112, LG 211, & LG 212	5	12 hrs
<b>German:</b>			
German Language and Culture	LG 151 & LG 152	3	6 hrs
German Language and Culture	LG 151, LG 152, & LG 251	4	9 hrs
German Language and Culture	LG 152, LG 152, LG 251, & LG 252	5	12 hrs
<b>Latin:</b>			
Latin	LG 101 & LG 102	3	6 hrs
Latin	LG 101, LG 102, LG 201 & LG 202	4	12 hrs
Latin	LG 101, LG 102, LG 201 & LG 202	5	12 hrs
<b>Spanish:</b>			
Spanish Language and Culture	LG 131 & LG 132	3	6 hrs
Spanish Language and Culture	LG 131, LG 132, & LG 231	4	9 hrs
Spanish Language and Culture	LG 131, LG 132, LG 231, & LG 232	5	12 hrs

## International Baccalaureate Program (IB)

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

IB Discipline*	IB Exam Score	USA Credit
Art		
Social Anthropology	5	AN 100 (3 Semester Hours)
Biology	5	BLY 101 and BLY 102, or BLY 121 and BLY 122 (8 Semester Hours)
Chemistry (Standard Level)	5	CH 101 (4 Semester Hours)
Chemistry (Higher Level)	5	CH 131, CH 131L, CH 132, and CH 132L (8 Semester Hours)
Computer Science	5	Credit determined by the School of Computing
Drama	5	DRA 110 (3 Semester Hours)
Economics	5	ECO 300 (3 Semester Hours)
English	5	If student completes IB degree: EH 101 and EH 102 (6 Semester Hours) If student fails to complete IB degree: EH 101 (3 Semester Hours)
Foreign Languages	5	6 Semester Hours of credit in corresponding Freshman Language Sequence:

French: LG 111 and LG 112  
 German: LG 151 and LG 152  
 Latin: LG 101 and LG 102  
 Russian: LG 171 and LG 172  
 Spanish: LG 131 and LG 132  
 Chinese: LGS 121 and LGS 122  
 Arabic: LGS 106 and LGS 107  
 Modern Greek: LGS 141 and LGS 142  
 Japanese: LGS 101 and LGS 102

Geography	5	GEO 114 and GEO 115 (6 Semester Hours)
History (Higher Level only)	5	HY 102 (3 Semester Hours)
Information Technology in a Global Society (Standard Level)	5	Accept credit for CIS 110 or CIS 150 according to major. (3 Semester Hours Credit)
Mathematics (Standard Level)	5	MA 115 (4 Semester Hours)
Mathematics (Standard Level)	6-7	MA 115 and MA 125 (8 Semester Hours)
Mathematics (Higher Level)	5	MA 125 and ST 210 (7 Semester Hours)
Mathematics (Higher Level)	6-7	MA 125 and MA 126 (8 Semester Hours)
Music	5	MUL 235 (2 Semester Hours)
Music	6-7	MUL 235 (2 Semester Hours) and will be considered for additional credit in MUL 236 (2 Semester Hours). Students scoring 6 or 7 on this IB exam should contact Department Chair to request credit for MUL 236.
Philosophy	5	PHL 110 (3 Semester Hours)
Physics	5	PH 104 (4 semester Hours)
Psychology	5	PSY 120 (3 Semester Hours)
* All exams Standard Level unless indicated otherwise.		

### Alabama School Of Mathematics And Science And Alabama School Of Fine Arts

Students who are graduates of the Alabama School of Math and Science (ASMS) and Alabama School of Fine Arts (ASFA) that matriculate at the University of South Alabama will be granted University credit as indicated below.

ASMS/ASFA Course	USA Equivalent	Semester Hours Awarded	Conditions
<b>Subject: Studio Art</b>			
Art Foundation	ARS 123 2-D Design	3	Grade of B or higher
	ARS 124 3-D Design	3	

Drawing	ARS 121 Perceptual Drawing 1	3	Grade of B or higher
<b>Subject: Art History</b>			
AP/Honors Art History	ARH 103 Art History I	3	Grade of B or higher
	ARH 123 Art History II	3	
<b>Subject: Computer Science</b>			
Computer Science Principles II (ASFA)	CSC 108 Intro to Computer Science	3	Grade of B or higher
CSC 311 (ASMS) AP Computer Science (ASFA)	CSC 120 Intro to Problem Solving & Programming	4	Grade of B or higher
<b>Subject: Music Theory</b>			
Basic and Intermediate Theory and	MUT 112 Basic Music Theory 1	3	Grade of B or higher
Aural Awareness (Basic and Intermediate) and		3	Grade of B or higher
Sightsinging (Basic and Intermediate)		3	Grade of B or higher
Advanced and AP Theory and	MUT 113 Basic Music Theory II	3	Grade of B or higher
Aural Awareness (Advanced) and		3	Grade of B or higher
Sightsinging (Advanced)		3	Grade of B or higher
<b>Subject: Biology</b>			
AP Biology	BLY 121 General Biology I and	3	Grade of B or higher
	BLY 121L General Biology Lab	1	
AP Biology	BLY 122 General Biology II and	3	Grade of B or higher
	BLY 122L General Biology Lab	1	
<b>Subject: Theater</b>			
TH 151 Theatre Arts and TH 152 Theatre Arts II and	DRA110 Introduction to Drama	3	Grade of B or higher in all trimesters

TH 153 Theatre  
Production  
on Theatre Arts II

Acting/Directing III	DRA 120 Acting I	3	Grade of B or higher
Design Technology III	DRA 130 Stagecraft	3	Grade of B or higher
Design Technology III	DRA 132 Costume Fundamentals	3	Grade of B or higher
<b>Subject: English</b>			
AP Senior English (British Literature)	EH 215 or EH 216 Survey of British Literature I or II	3	Grade of B or higher
<b>Subject: Math/Stat</b>			
MA 201 Differential Calculus and	MA 125 MA 125 Calculus I	4	Grade of B or higher
MA 202 Integral Calculus			
MA 203 BC Calculus	MA 126 Calculus II	4	Grade of B or higher
MA 402 Linear Algebra	MA 237 Linear Algebra I	3	Grade of B or higher
MA 205 Statistics	T 210 Statistical Reasoning and Applications	3	Grade of B or higher
<b>Subject: Chemistry</b>			
AP Chemistry	CH 131 General Chemistry I	3	Grade of B or higher
	CH 131L General Chemistry I Lab	1	
<b>Subject: Physics</b>			
AP Physics B1-111	PH 114 Physics with Algebra/ Trigonometry II and PH 115L Physics with Algebra/ Trigonometry II Lab	5	Grade of A in all trimesters
	PH 115 Physics with	5	

	Algebra/ Trigonometry I and PH 114L Physics with Algebra/ Trigonometry I Lab			
AP Physics C1-111	PH 201 Calculus- based Physics I and PH 201L Calculus- based Physics I Lab	4		Grade of A in all trimesters
	PH 202 Calculus- based Physics II and PH 202L Calculus- based Physics II Lab			
<b>Subject: History</b>				
AP US History	Hy 135 United States History to 1877	3		Grade of B or higher
<b>Subject: Foreign Languages and Literatures</b>				
German 501 and German 502 and German 503	LG 151 Introductory German I and	3		Grade of B or higher in all trimesters
	LG 152 Introductory German II	3		
Spanish 401 and Spanish 402 and Spanish 403	LG 131 Introductory Spanish I and	3		Grade of B or higher in all trimesters
	LG 132 Introductory Spanish II	3		
French 401 and French 402 and French 403	LG 111 Introductory French I and	3		Grade of B or higher in all trimesters
	LG 112 Introductory French II	3		

## CLEP

A student can receive up to 30 semester hours of credit from the General Examinations and certain Subject Examinations of the College Level Examination Program (CLEP) as shown below. Official CLEP scores mailed directly from the CLEP division of the Educational Testing Service are required before credit will be awarded.

CLEP Exam USA Credit Awarded	Hours Awarded	CLEP S
American Government PSC 130	3 hrs	50
General Biology BLY 121/BLY 122	8 hrs	50
Calculus MA 125/MA 126	4 hrs	60
Precalculus	4 hrs	50

MA 115		
General Chemistry CH 131/CH 132	8 hrs	50
Intro to Psychology PSY 120	3 hrs	50
Intro to Accounting ACC 211	3 hrs	50
Intro to Business Law BUS 265	3 hrs	50
Intro to Macroeconomics ECO 216	3 hrs	50
Intro to Microeconomics ECO 215	3 hrs	50
Intro to Marketing MKT 320	3 hrs	50
Intro to Sociology SY 109	3 hrs	50
Human Growth and Development PSY 250	3 hrs	50
U.S. History I: Early Colonizations to 1877 HY 135	3 hrs	50
US History II: 1865 to Present HY 136	3 hrs	50
Western Civilization I: Ancient Near East to 1648 HY 101	3 hrs	50
Western Civilization II: 1648 to Present HY 102	3 hrs	50
College Composition EH 101/EH 102	6 hrs	50
American Literature with Essay EH 225 and EH 226	6 hrs	50
English Literature with Essay EH 215 and EH 216	6 hrs	50
Humanities-General Fine Arts and Lit Elect	6 hrs	50
College Mathematics Math Electives	8 hrs	50
Natural Sciences-General Bio & Nat Science Elect	8 hrs	50
Social Science & History Soc Science & Hist Elect	6 hrs	50
French LG 111 and LG 112	6 hrs	50-5859
LG 111, LG 112, and LG 211	9 hrs	
German LG 151 and LG 152	6 hrs	50-59
LG 111, LG 112, and LG 211	9 hrs	

Spanish  
LG 131 and LG 132  
LG 131, LG 132, and LG 231

6 hrs  
9 hrs

50-6263

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

## Double & Second Majors And Minors

### Double Majors

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Undergraduate students may elect to fulfill the requirements for two majors concurrently. To do so, the student must declare a primary major and a secondary major on the Declaration of Program form that is filed with the Registrar's Office. The student's principal academic file will be maintained in the department of the primary major. A second file should also be maintained in the department of the second major. Students who declare a double major must participate in academic advising in each major. Completion of a minor is not required of students completing two majors. Students who declare two majors from different colleges will be required to fulfill all requirements for each major and to fulfill all degree requirements, including those for general education, that apply in the college of the primary major. Students who complete requirements for two majors from different colleges will be awarded the degree granted by the college of the primary major, and transcripts will designate that both the primary and secondary majors were completed.

### Second Major

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

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

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

### Minors

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

# Examinations

## Examinations

Final examinations are held at the end of each semester.

## Credit By Examination

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

## College Level Examination Program (CLEP)

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

## 30-Hour Credit Limitation

No more than a combined total of 30 semester hours of credit will be allowed for credit received through the College Level Examination Program (CLEP), Advanced Placement Program (AP), International Baccalaureate Program (IB), credit by examination, correspondence courses, military service school courses, and other approved non-collegiate-sponsored programs, as recommended by the American Council on Education.

# Grades / Grade Point (Undergraduate)

## Grades

### Reporting Of Grades

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

### Midterm Grades

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

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

### Grades And Grade-Points (Undergraduate And Graduate)

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

Grade	Guideline
A	Excellent, 4 grade-points per semester hour
B	Good, 3 grade-points per semester hour

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

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

I	Incomplete (see below)
X	Absence from Final Exam (see below)
WD	Withdrawal in good standing
P	Course in progress (see below)
AU	Audit
UA	Unsatisfactory Audit (did not meet attendance requirements)
N	No grade or invalid grade (assigned only by the Registrar)

The symbol "I" (Incomplete) is assigned when, for reasons beyond the student's control, the student is unable to fulfill all the normal course requirements. The situation warranting an "I" must be a medical condition, an equipment problem, or other mitigating circumstance that is patently demonstrable to be beyond the student's control. This symbol is not used to provide time for completion of extra work beyond the normal course requirements for improving the student's grade, or to permit the student to avoid probation, suspension, or dismissal. The "I" symbol should not be assigned unless the amount of incomplete work can reasonably be completed in the time period allotted for an "I" grade without additional extensions. Extensions of "I" grades should only be granted in rare cases where additional and unanticipated circumstances beyond a student's control have prevented completion. The symbol "X" (Absence from Final Examination) is assigned only in cases where illness or an unforeseen emergency precludes the student's appearance at the scheduled examination. All records of the symbols "I" or "X" must be cleared by the specified deadline of the next term; if they are not, grades of "F" will be recorded by the Registrar.

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

### Change Of Grade

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

### Final Grade Grievance Policy

A student may initiate an inquiry under procedures set forth by the Undergraduate Final Course Grade Grievance Policy. A copy of this policy is available in the dean's office of each college and is published in [The Lowdown](#) (Student Handbook) and in the [Faculty Handbook](#).

## Repeated Courses

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

## Grade Replacement Policy

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

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

This policy is subject to the following conditions:

- Only USA undergraduate students qualify for this policy
- All attempts for each course are recorded on the transcript. Courses that are not used in calculating the GPA will remain on the transcript.
- Only courses taken at USA are eligible for grade replacement.
- Courses in which a B, C, D or an F was earned are eligible for grade replacement.
- A maximum of three course grades can be replaced. In each case, the student must have repeated the identical course with an improved grade relative to the course grade being replaced.
- It is possible for a student to have more than one grade removed from the GPA calculation for the same course. However each grade that is removed counts towards the maximum of three course grades that can be replaced.
- Course substitutions are not eligible for grade replacement. To be eligible, the repeated course must have the identical course number and identifier as that for the grade being replaced.
- Certain courses are not eligible for grade replacement. Courses that are not eligible include: Graduate courses, PE activity courses, internships/clinicals, health science professional courses, field experiences, research seminars, independent/directed studies, and special topics courses. Please check with your specific program for further restrictions on eligible courses.
- A course grade received as a result of academic misconduct does not qualify for grade replacement.
- Once a student graduates, a class may not be repeated to improve his/her grade point average.
- Grade replacement does not change a student's past academic standing.

## Application Procedure

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

## Adding Or Dropping Courses

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Students may drop courses, using PAWS (the student on-line self-service system), without penalty provided the withdrawal occurs within the time limits listed in the official calendar. See procedures for withdrawals below. Course drops may also be

submitted in person to the Registrar's Office. The grade of "F\*" or "U\*" is recorded for a course abandoned without an official withdrawal. Students who withdraw from a course after the last day for refunds may, with the permission of the instructor, continue to attend the course but may participate in class activities and assignments only to the extent allowed by the instructor. Students who withdraw from clinical courses or laboratory or field experiences must have permission of the department chair to continue in the course.

## Graduate Study For Advanced Undergraduates

With permission of the department chair and appropriate director of graduate studies, a student who has completed 91 semester hours with a "B" (3.0) average may register for graduate courses, provided the total load does not exceed 12 hours. This policy is extended to provide an opportunity for well-prepared undergraduates who meet two Graduate School Regular admission criteria: minimum GPA and sufficient undergraduate course work in the major subject to qualify for graduate study in the involved discipline.

The same course may not be counted both for undergraduate and graduate credit. The graduate course may only count toward a degree in graduate school if and when the student is admitted to the graduate school, provided such course was not used to satisfy requirements for the undergraduate degree, was taken no more than 5 years prior to the completion of the graduate degree, and the course is approved for credit by the graduate advisor.

## Graduation

### Application And Bulletin Choice

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#### Application For Graduation

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Students planning to graduate must make application according to the dates specified in the University Calendar. Failure to make application will result in a delay in scheduled graduation dates.

A student must file an application for graduation with the Registrar's Office two terms before expected degree completion (see University Calendar for deadlines). The degree audit/official check sheet must be approved by the chair of the major department and the academic dean.

#### Choice Of Bulletin Under Which A Student Graduates

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

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

If a student changes degree programs, the college or division may require the student to fulfill the requirements of the Bulletin in effect when the change of degree program is approved.

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

the interests of the students and the University. Enrollment of all students is subject to the conditions and policies as set forth in the Bulletin.

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## Evaluation Of Degree Requirements

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Each candidate will have one official check of remaining degree requirements following filing of the degree application for graduation which includes the payment of the \$50.00 application fee. This evaluation will be available from the student's dean. A fee of \$25.00 will be charged for any additional degree check necessitated by a student's subsequent change of Bulletin, program of studies, or failure to complete degree requirements by the prescribed term.

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## Graduation With Honors

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Undergraduate students who have at least 60 GPA hours in residence with a grade-point average of 3.50 or better at the University of South Alabama are graduated with distinction. Transfer credit hours are not included in the determination of academic honors. Academic honors are not awarded for graduate or professional degrees.

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

Students earning a grade-point average of 3.90 or higher are graduated summa cum laude.

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

Students earning a grade-point average of 3.50 but less than 3.70 are graduated cum laude.

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

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## Honors College

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Students who have completed all requirements for the University of South Alabama Honors College with an overall grade-point average of 3.5 or higher will receive special recognition at graduation. For details of the USA Honors College see [USA Honors College](#).

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## Commencement

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

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## Diplomas

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

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## Awarding Of Posthumous Degree

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A posthumous degree may be awarded to a deceased undergraduate student who had senior academic status or to a deceased graduate student near completion of his or her graduate program. Qualifying students must have been registered at the University of South Alabama within twelve months of the time of death and be in good academic standing at the University. The Dean of the student's college submits a recommendation to the Provost and Senior Vice President for Academic Affairs or Vice President for Medical Affairs for review. If approved, the recommendation will be forwarded to the Office of the President for final approval.

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

# International Academic Opportunities - Education

University of South Alabama students in all academic disciplines are encouraged to participate in a study abroad experience for credit toward their major, minor or elective credits. Academic research, practicum, internship and work abroad experience are also highly encouraged for all disciplines and all USA students. Students should check with their academic advisors and the Office of International Education for available opportunities, information on scholarships and application/approval procedures.

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### Study Abroad

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All students receiving academic credit for study or interning abroad must be enrolled in an official USA Study Abroad "course" (check with the Office of International Education for course and section numbers). This includes participation in faculty-led USA Study Abroad programs as well as other USA approved study abroad programs offered by other universities and third party program providers. To participate in a study abroad program, have an overall GPA of at least 2.25 for undergraduates. Graduate student qualifications vary by department and program. Student should see Office of International Education for "exceptional" circumstances procedures. Students with a GPA between 2.0 and 2.25 must demonstrate positive and constructive maintenance of their GPA with no decline in order to be considered for study abroad. Students should have no incomplete coursework due from the term prior to going abroad. Students experiencing academic challenges on campus should work closely with their academic advisors and the Office of International Education prior to making any plans to study abroad. Students requiring accommodations or special services should contact the USA Office of Student Disability Services and discuss such arrangements with OIE and the host program well in advance of their proposed activity abroad. All applicants for USA Study Abroad must be in good academic and non-academic standing prior to and during the proposed activities abroad. Additionally, all students who plan to study are encouraged to take a pre-departure course entitled IST 300: Global Orientation prior to going abroad. This course is an eight week, one credit hour blended format course designed to help students prepare to go abroad.

The IST 300 course is a requirement for all students who intend to participate in semester or yearlong programs, and for all Foreign Languages and literature majors.

With some planning, study abroad can be fully integrated in USA degree programs and applied to core, major, minor and elective courses. Prior knowledge of a foreign language is not required although many programs provide access to all levels of language learning (beginning to expert). All programs encourage and facilitate language and intercultural learning opportunities. Opportunities abroad last from one week (depending on the nature of the program) to a full academic year and are available for all semesters including fall, spring, summer and May term. Upon completing USA's study abroad application, including course approval form(s), students will enroll in a USA Study Abroad "course". These courses carry an administrative and registration fee of at least \$150 per program and term abroad. With this registration students are able to receive academic credit for courses taken abroad and while abroad have access to a 24/7 emergency assistance network. Additionally this registration provides access to study abroad advising and support services. Depending on the duration of the program, students may be charged

additional fee for international insurance. Students participating in USA Faculty-led programs will enroll in a discipline specific USA course that confers USA credits. Students on Faculty-led programs pay a program fee that generally includes tuition, housing abroad, in-country travel, international insurance, and other on-site expenses. All students who plan to study abroad must attend required USA Study Abroad information and pre-departure sessions. By participating in an approved program, students will retain official full time USA student status and in some instances, may apply for or retain their existing financial aid and scholarship money. Freshmen are encouraged to begin planning for study abroad upon arrival to USA. Scholarship information is available through International Education for internal University scholarships as well as for external sources, such as the Gilman Scholarship, U.S. Fulbright Awards for graduating seniors, and the National Security Education/Boren Program for Undergraduate and Graduate Students. Additionally, students eligible for the Alabama prepaid tuition (PACT) program, vocational rehab, and veteran's benefits may be able to apply these funds to their study abroad program. For more information, please visit the Office of International Education's website at [www.southalabama.edu/international](http://www.southalabama.edu/international) or [www.southalabama.edu/studyabroad](http://www.southalabama.edu/studyabroad). Students can also come to Study Abroad walk-in hours (see website for hours) or schedule an appointment with a study abroad advisor by e-mailing [intledu@southalabama.edu](mailto:intledu@southalabama.edu).

## Plagiarism And Cheating

Plagiarism and other forms of cheating are academic matters; accordingly, no credit will be given for work in which they are involved. In addition, incidents of this nature may be reported to other appropriate authorities for further disciplinary action. (See Student Academic Conduct Policy).

## Requirements For Bachelor's, Dual Bachelor's, And Second Bachelor's Degree

### Bachelor's Degree

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

#### I. General Education Requirements

##### General Education Mission

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

##### General Education Competencies And Student Learning Outcomes

###### *Communication Skills:*

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

###### *Aesthetic and Critical Interpretations:*

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

###### *Scientific Reasoning:*

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

*Quantitative Reasoning:*

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

*Social Scientific Literacy:*

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

*Historical Perspectives:*

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

## **General Education Course Requirements**

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

### **Area I. Written Composition**

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

Students must demonstrate general competence in writing by earning a "C" or better in EH 101 and a "C" or better in EH 102. Students may be exempt from the EH 101 requirement with an enhanced ACT English score of 27 or above, a recentered old SAT score of 610 or above, or a new SAT Writing and Language minimum score of 33 or above. Students scoring a minimum of 50 on the CLEP English Examination may satisfy the EH 101 or EH 102 requirement. A score of 4 or higher in the Advanced Placement Program may satisfy the EH 101 requirement. Students completing an IB degree, with an IB exam score of 5 or higher in English, may satisfy the EH 101 or EH 102 requirement. Students failing to complete IB degree, but who have an IB exam score of 5 or higher in English, may satisfy only EH 101 requirement.

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

### **Area II. Humanities And Fine Arts**

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

Courses should be broad in scope and content rather than specific and should emphasize a global perspective. Courses in the arts should emphasize history and appreciation rather than performance. Examples in the humanities and fine arts include, but are not limited to, world literature, art history, music appreciation, comparative religions, and history or origins of dance.

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

### **Area III. Natural Sciences And Mathematics**

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

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

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

#### **Area IV. History, Social, And Behavioral Sciences**

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

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

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

\*Students preparing to complete the BS degree in engineering are required to complete nine rather than 12 semester hours in the humanities and fine arts. Rather than the six hour sequence in history or literature, they must demonstrate in-depth study in a particular discipline of the humanities and fine arts or history, social and behavioral sciences through completion of six semester hours in a particular discipline.

## **II. Major Requirements**

**(Refer To The Program Section Of The Bulletin)**

### **Technology Use Requirement**

All undergraduate students must have access to and training in the use of technology to enhance learning and appropriate to meeting the objectives of individual degree programs.

Each degree program will specify how their students will meet this requirement.

### **Prerequisites**

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

### **Minimum Grade-Point Average**

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

### **Hours In Residence/Residency Requirement**

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

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

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

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## Dual Bachelor's Degree

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

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

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## Second Bachelor's Degree

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Students who have been awarded a bachelor's degree from any institution may seek a second bachelor's degree. To earn a second bachelor's degree, students must fulfill the following requirements:

1. They must complete the appropriate form(s) in the Admissions Office or Registrar's Office if a former USA student.
2. They must be enrolled in the college in which the second degree is administered.
3. They must complete a course of study, consisting of at least 30 credit hours in upper division course work in residence over and above the requirements for the first bachelor's degree, including a recognized major program.
4. They must satisfy all degree requirements of the college awarding the second degree.
5. They must comply with all other University regulations.

Students returning for a second degree in the College of Arts and Sciences must meet the requirements for a second major and meet the University requirements for a second degree. Students seeking a second degree in the area of the minor used for their first degree must have an additional minor.

## Student Records

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### Student Records

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The University of South Alabama maintains records and data relative to the individual student to facilitate the educational process of the student and to assist in the administration of student needs by the University. The University of South Alabama complies with the rights of privacy and access to the educational records of the student as set forth in the Family Educational Rights and Privacy Act (FERPA) of 1974.

The University of South Alabama has formulated the following policy in accordance with the Act:

- No information from records, files, or data directly related to a student other than that defined as "directory information" shall be disclosed or released to any individual or agency outside the University without the prior written consent of the student, except according to lawful subpoena or court orders, or except in the case of need by other educational agencies or governmental agencies. Information will be available to University personnel and faculty only for legitimate educational purposes. The student shall have the right of access to and to review the accuracy of all such information with those exceptions that are defined within this policy statement.
- Records may be released to parents of a student who is claimed as a dependent on their most recent federal income tax form, as defined by Section 152 of the Internal Revenue Code of 1986. The University is not required to disclose

information from the student's education records to any parent of a dependent student. Discretion in releasing the student's records to the parent will be exercised.

- Information about deceased students may be released to legal next of kin and or the executor of the student's estate. The request for deceased student information must be in writing accompanied by an official death certificate and any additional documentation deemed necessary by the University.
- A deceased student's educational records may also be accessed by subpoena and or court order issued by a court of competent jurisdiction. No notification of such subpoena or court order will be issued by the University.
- Directory information may be released by the University without the written consent of the student. Directory information, as defined by FERPA, includes the student's name, address, telephone number, e-mail address, photograph, date and place of birth, major, dates of enrollment, degrees conferred and dates of conferral, any graduation distinction, institutions attended prior to admission, participation in officially recognized activities and sports, and weight and height of members of University athletic teams.
- To request nondisclosure of directory information, students must complete a "Request to Prevent Disclosure of Directory Information" form in the Registrar's Office. This request will remain in effect unless changed by the student.

Additional information on FERPA may be found in the University Lowdown (student handbook) under "Student Record Policy". A complete explanation of FERPA is available in the Registrar's Office. Any complaints regarding University compliance with this law may be filed with the Family Educational Rights and Privacy Act, Department of Education, Washington, DC 20201.

The Registrar's Office follows the recommendations of the State of Alabama Records Disposition Authority and the American Association of Collegiate Registrars and Admissions Officers in the retention and disposal of student records.

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## Transcripts

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Upon the written request of the student, official transcripts are normally issued by the Registrar's Office within one to three business days. Students may also request transcripts online through the National Student Clearinghouse or via PAWs (the student on-line self-service system). The costs involved when requesting transcripts can be obtained by contacting the Registrar's Office or visiting <http://www.southalabama.edu/departments/registrar/transcripts.html>. All outstanding obligations to the University must be cleared prior to the release of transcripts. The University does not release copies of transcripts from other institutions.

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## Enrollment Certification / Degree Verification

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The Registrar's Office will provide official enrollment/degree verification upon the written request of the student.

For enrollment/degree verification related to financial aid, the University of South Alabama is a participant in the National Student Clearinghouse. The Clearinghouse is a repository for enrollment/degree status information and was established to simplify, standardize and automate the status verification and deferment process. The Clearinghouse, the University's agent, will provide student enrollment/degree information directly to the guaranty agencies, lenders, and other services.

# Graduate School

The University of South Alabama, the only major public institution of higher learning on the upper Gulf Coast, was created by act of the Alabama State Legislature in May, 1963. With Alabama's two older senior universities more than 200 miles distant, the University is strategically located in the greater Mobile area, which has a population of more than a million within a 100-mile radius. The Graduate School provides the student with opportunities for creative achievement and the advancement of knowledge. Graduate study fosters the spirit of independent investigation while creating an environment for free inquiry and intellectual challenge in advanced and specialized areas. Emphasis upon scholarship, original thinking, and the practical application of knowledge to the solution of complex problems will enable the student to make a valuable contribution to society.

All graduate work is administered by the Graduate School under the direction of the Graduate Dean who is advised by the Graduate Council. The voting members of the council are eight Full Members of the Graduate Faculty, eight Graduate Directors, one from each college, and one graduate student. Non-voting ex officio members are the Provost and Senior Vice President for Academic Affairs, the Graduate Dean, the Dean of the University Libraries, a representative of the Office of Admissions, and a representative of the Registrar's Office.

For more information, see [Graduate School](#) section in the Bulletin under Colleges and Schools.

# Honors College

The University of South Alabama Honors College offers a curriculum of interdisciplinary excellence designed to stimulate the analytical and critical thinking of exceptionally qualified and highly motivated students. To do so, the USA Honors College challenges these students with scholarly creative activities, exposes them to cultural enrichment, and requires them to engage in community service. The USA Honors College aspires to instill in students the intellectual excitement to prepare them for productive careers and citizenship.

Within the context and diversity of a midsize urban university, the Honors College provides the academic and cultural atmosphere one expects of a small, personal campus community of excellence.

Three Honors College options are available at the University of South Alabama, 1) Whiddon Research Scholars enter a four-year program resulting in a senior research thesis and the designation on the transcript and at graduation of "University Honors College;" 2) Departmental programs resulting in the designation of "Departmental Honors" on the transcript in selected majors or or 3) Focus tracks resulting in a senior capstone project and the designation of "Honors in \_\_\_\_\_".

## Program Description

The University Honors College includes honors course work and extracurricular activities throughout the four years of a student's undergraduate career. In addition to general university curriculum requirements and degree requirements of the selected major, USA Honors students also complete enriched honors core courses, honors seminars and an Honors Senior Thesis/Project. A cornerstone of the program is that each student will be assigned a faculty mentor chosen from the student's major department, or suggested by the Honors College until a major has been identified, who will direct the student through the research and scholarly experience that will culminate in an Honors Senior Thesis/Project. Mentors will be outstanding faculty of the University. Honors classes are small, limited to 15 students, and are taught by the University's most stimulating faculty.

In addition to a challenging academic curriculum, the USA Honors College offers a variety of activities that extend learning beyond the classroom, including social and cultural events and community service projects. Honors Students are encouraged to participate in international programs and off-campus internship opportunities.

Students who complete the requirements of both the USA Honors College and of the selected major with a grade-point average of 3.5 or higher (overall and in the major) will receive the designation "University Honors", "Departmental Honors" or "Honors in \_\_\_\_\_" on the transcript and the diploma, depending upon which of the three options they participate in. These requirements apply to all students accepted into the University Honors College. Students transferring from honors programs of other institutions may petition to receive credit for honors work completed elsewhere. All courses completed for honors credit will be so indicated on the student's official transcript.

## Qualifications For Consideration For The USA Honors College

High school seniors with a minimum 27 ACT Composite (or comparable SAT score) and a minimum 3.5 high school grade-point average (4.0 system) (as computed by the University of South Alabama) are invited to apply. USA students and transfer students who have completed no more than 30 semester hours with an overall grade-point average of 3.5 (4.0 system) are also eligible to apply to the program. Students without the above qualifications can submit an application package and documentation of evidence of their special qualifications for review by the Honors Admissions Committee. Transfer students applying for admission to the University Honors College should indicate any credit earned in other honors programs.

## Procedure To Apply For The USA Honors College Whiddon Scholarship

1. Complete an application for admission to the University of South Alabama and submit it to the Office of Admissions with the nonrefundable processing fee.
2. Request that your high school counselor mail an official copy of your high school transcript to the USA Office of Admissions OR request that an official transcript from your college/university registrar be sent to the USA Office of Admissions.
3. Request your official ACT or SAT results be sent to the USA Office of Admissions.
4. After admission to the university, complete and submit the University of South Alabama Honors College/Whiddon Scholarship Application Form (one application) in JagSPOT: ([https://southalabama.academicworks.com/users/sign\\_in](https://southalabama.academicworks.com/users/sign_in)). You will need your university I.D. number and university e-mail address password to sign in.
5. Arrange for two (2) letters of recommendation from individuals who can comment on your intellectual capabilities and personal characteristics such as independent thinking, motivation, creativity, and willingness to be academically challenged. Follow instructions in JagSPOT for letters of recommendation submission.

6. Complete an essay on a topic specified annually by the USA Honors College. The topic can be found in this brochure, in the Honors application, and may be requested from the Honors College Office at (251) 461-1637.
7. Participate in an interview with the Honors Admissions Committee if selected for final consideration to be admitted to the Honors College. Honors College/Whiddon Scholarship application with essay and two letters of recommendation must be submitted in JagSPOT ([https://southalabama.academicworks.com/users/sign\\_in](https://southalabama.academicworks.com/users/sign_in)) by the annual published deadline date of the 1st Friday in December.

Incomplete applications will not be considered

### **Qualifications To Maintain Status As A USA Honors Student**

University Honors Students must maintain satisfactory progress in the Honors Curriculum to remain in the Honors College. A minimum of 15 hours of enrolled credit per semester is required for scholarship recipients unless otherwise indicated in the scholarship award. Required overall grade-point averages for Honors Students are 3.0 after the freshman year, 3.25 after the sophomore year, and 3.5 after the junior year and throughout completion of the requirements for the Honors Degree. A student may be placed on honors probation for a period of one semester if the required GPA is not achieved and must attain the required GPA at the end of the probationary semester in order to return to full status in the Honors College.

Honors students are expected to participate in community and campus service projects and to attend cultural and scholarly events on campus and in the community. These activities will be facilitated by the Honors College Office and mentors. Participation may be as a group or in individually focused activities. If a student does not actively participate, then she or he may be put on Honors probation and/or removed from the Honors College.

By the junior year, each Honors Student will identify a suitable faculty mentor and will design and implement an Honors Senior Thesis/Project. The project represents a scholarly effort appropriate to the major, including a significant component of investigation and written presentation. Juniors will prepare a prospectus of their project prior to initiating the project. The two-semester Senior Thesis/Project will total 6.00 credit hours - 3.00 credit hours for each of the two semesters of the graduating senior's culminating academic year at USA. Graduating Honors seniors will present their Honors Senior Thesis/Project at a defense before their committee in a professional format suitable for the project and discipline (e.g., an exhibition, research presentation or poster, or performance). The senior thesis/project will be evaluated and graded by a committee of three faculty members and chaired by the honors project mentor and must be approved by the Dean of the Honors College in order to graduate with an Honors designation.

### **Departmental Honors College**

A second honors option is available in many departments throughout the Colleges of the University of South Alabama. This option may be particularly suitable for transfer students, or others, who have completed significant credits toward graduation before deciding to pursue an honors degree, and for whom completing the entire University Honors curriculum would not be practical. To receive a designation of "Departmental Honors," students must successfully complete an Honors Senior research thesis in their major, have at least a 3.5 GPA, and meet the specific honors requirements of their major department. These students may also elect to take Honors Seminars and participate in other University Honors College activities upon the recommendation of their major advisor. The Dean of the Honors College must approve all Departmental Honors graduation designations.

Please consult departmental sections of the Bulletin for any additional honors requirements specific to your major.

### **Other Non-Research Tracks**

In addition to the research focus track (Whiddon Scholarship), new tracks are being created for the Honors College. These tracks will have a theme and enriched experiential learning activities leading to a senior Capstone Project. A modified honors curriculum will be available appropriate to each theme. Themes will include departmental honors, health professions and global engagement. Other themes are being developed and will include other areas and topics. Students not selected for the research focused Whiddon Scholarship may be invited to participate in the Honors College as part of a non-research track. Others not wishing to be considered for the research experience can choose to be considered for track admission only. All students selected and admitted to a non-research track will receive only their Presidential Scholarship award. Switching from a research Whiddon Scholarship to a non-research track is not allowed once a student has begun matriculating. Application to a focus track does not require use of JagSPOT. An abbreviated application requiring both an essay and recommendation letters can be completed from the Honors web page. All materials are due by the first Friday of March and should be directly submitted to the Honors College office. No campus interview is required.

### **Other Honors Options**

For transfer students, or others, who have completed significant credits toward graduation, the specific curriculum requirements for the Honors Degree may be impracticable. Additionally, other non-honors students may find certain honors courses desirable while being unable to commit to the entire honors curriculum. Options available in these cases include enrollment in specific

honors courses (indicated on the transcript as honors credit) with permission of the instructor and the Honors College Dean when space is available, and/or pursuing and completing an appropriate Honors Senior Project. Students interested in these options should consult with the Honors College Dean and their major advisor.

### University Honors Curriculum Requirements

The following courses, or a substitute approved by the Honors College Dean, must be completed with a grade of "C" or better, in addition to general studies requirements and specific requirements of the major department, to graduate with University Honors recognition. Transfer students may petition to receive credit for honors courses taken elsewhere. High School AP and IBP credits may not substitute for Honors required courses.

Honors Requirements	Credit Hours
HON 101, 105 or 111, Honors Freshman Experience (Required in first semester)*	1
HON 201 or 211, Honors Sophomore Experience	1
Two (2) Upper-level Honors Seminars (Variable content)	6
HON 301 or 311, Introduction to Honors Senior Project (taken in the Junior Year)	1
**Honors Senior Thesis/Project (may count toward major)	6
*Honors Electives selected from any Honors courses (only 3 hours may be from major)	9
<b>Total</b>	<b>24</b>
* Not required of transfer students or USA students who have completed at least 15 semester hours with a 3.0 or greater GPA.	
** Student should determine early in their program the requirements in their major.	

Honors Seminars are special topics courses, and a variety are available each fall and spring semester for students to make their selection. Topics are generally not repeated or are repeated infrequently. When appropriate, Honors Seminars may be approved by an academic advisor for general studies credit, in addition to satisfying an Honors College requirement.

The Honors Electives requirements can be satisfied by taking any courses offered for Honors credit (courses with "Honors" in the title or an "H" suffix) or by "contracting" Honors credit for non-honors course work such as courses that satisfy general education requirements at USA.

### USA Education/Study Abroad

Honors College students are encouraged to participate in an international experience through study, research, internship or work abroad. Honors students should seriously consider applying for one of the many international prestigious scholarship programs such as the Goldman Sachs Global Leaders Program, Winston Churchill Foundation Scholarship, George J. Mitchell Scholarship, Rhodes Scholarship, Fulbright Student Grants, Gates Cambridge, Rotary Ambassadorial Scholarships and NSEP Boren Scholarship and Gilman Scholarship. For more information contact your Honors advisor and the Office of International Education.

### Descriptions Of All Honors (HON) Courses

# Health Pre-Professional And Pre-Law

Please navigate to the appropriate program:

- Health Pre-Professionals
- Pre-Law

## Health Pre-Professional Program

The Health Pre-professional Program at the University of South Alabama offers valuable resources to students interested in a variety of graduate professional health programs including dentistry, medicine, optometry, pharmacy studies, veterinary medicine and physician assistant studies. One-on-one advising, workshops, admission and test preparation and a clinical observations course are among the services provided for students. Pre-Health students in their first two academic years will work with Patty Davis, Associate Director of the First Year Advising Center. Students will be advised on appropriate courses and non-academic development for specific graduate health programs. Ms. Davis will work with students to develop a manageable plan for their path to a professional graduate program in the health sciences. Ms. Davis is located in the First Year Advising Center, Academic Services Building, ASB 1375.

After completion of organic chemistry I, students with a GPA of 3.0 or higher will transition to Dr. Cindy Stanfield, Director of the Health Pre-Professional Program. Dr. Stanfield will provide continued advising, information about remaining course requirements, as well as, assisting students in the application and admission testing process. Dr. Stanfield is located in the Health Sciences Building, HAHN 4004.

Requirements for health professional schools vary not only between disciplines but also between schools within a discipline. Students need to be aware of the specific requirements, which include specific course work, admissions tests, letters of evaluation, and timely completion of the application. For many schools, a committee evaluation from the Pre-health Evaluation Committee is required. Pre-health students need to start the application process for most professional schools in the junior year, including completion of the admissions exam.

Pre-health advisors work directly with pre-health students guiding them toward completing all required course work for the professional school as well as a successful application. Pre-health advising is provided as a supplement to academic advising. Therefore, all pre-health students have an advisor within the department of the student's major, to guide the student in meeting requirements for graduation with a degree within that major.

The courses listed below are generally required for all health professional schools. However, the students should discuss specific requirements with the Health Pre-Professional Advisors.

One Year of General Chemistry with Lab:  
CH 131, 131L, 132, and 132L

One Year of Organic Chemistry with Lab:  
CH 201, 201L, 202, and 202L

One Year of Biochemistry:  
BLY/CH 440/441 or MBD 321/322

One Year General Biology with Lab:  
BLY 121, 121L, 122, and 122L

One Year Algebra-based Physics with Lab (Calculus-based physics is acceptable):  
PH 114, 114L, 115, and 115L

One Year Mathematics:  
Calculus (MA 125) is recommended; some schools require calculus  
Statistics (ST 210) is required by some schools

One Year Humanities:  
Several courses meet requirements

One Year English Composition:  
EH 101, EH 102

For additional information on pre-health programs please visit the [Pre-Health](#) website.

### Contact Information

Dr. Cindy Stanfield  
Director, Health Pre-Professional Program  
HAHN 4004  
(251) 445-9280

Patty Davis  
Coordinator, Health Pre-Professional Program  
Associate Director, First Year Advising Center  
ASB 1375  
(251) 341-4017

Health Pre-Professional Web Site: <http://www.southalabama.edu/healthprofessions/>

### Major Milestones

This plan applies to all students with a "PMD" attribute.

Students can pursue any undergraduate major at the University of South Alabama and still complete pre-med requirements.

#### Pre-Medicine Sample 4-Year Plan With Milestones

Term 1	Course Description	Pre-req	Cr Hrs	Milestone Notes
CAS 100	First Yr Exp-College Success		2	MA 112
EH 101 or EH 105 H*	English Composition I		3	
MA 115•	Precal Algebra-Trigonometry	ACT Math 25	4	
CH 131/131L	General Chemistry I	ACT Math 24	4	
BLY 121/121L	General Biology I	ACT Math 24	4	
			<b>17</b>	
Term 2	Course Description	Pre-req	Cr Hrs	Milestone Notes
EH 102 or EH 105H*	English Composition II	EH 101 or test score	3	EH 101 or EH 105H*
CH 132/132L	General Chemistry II	CH 131/CH 131L	4	CH 131 and lab with a grade of C or better
BLY 122/122L	General Biology II	BLY 121/BLY 121L	4	MA 113 or MA 115 with a grade of C or better

<b>CA 110</b>	Public Speaking		3	Must have a minimum GPA of 2.8
<b>SY 109**</b>	Introductory Sociology		3	
			<b>17</b>	

<b>Term 3</b>	<b>Course Description</b>	<b>Pre-req</b>	<b>Cr Hrs</b>	<b>Milestone Notes</b>
CH 201/201L	Organic Chemistry I	CH 132/CH 132L	4	CH 132 and lab with a grade of C or better
PH 114 or PH 201 & Labs	Physics I	ACT Math 21 for PH 114; MA 125 for PH 201	5 for PH 114; 4 for PH 201	BLY 121 and lab with a grade of C or better
<b>PSY 120**</b>	Introduction to Psychology		3	
<b>History (US or West. Civ.)</b>			3	
			<b>15/14</b>	

<b>Term 4</b>	<b>Course Description</b>	<b>Pre-req</b>	<b>Cr Hrs</b>	<b>Milestone Notes</b>
CH 202/202L	Organic Chemistry II	CH 201/201L	4	CH 201 and lab with a grade of C or better
PH 115 or PH 202 & Labs	Physic II	PH 114 for PH 115; PH 201 & MA 126 for PH 202	5 for PH 115; 4 for PH 202	BLY 121 and lab with a grade of C or better
<b>ST 210</b>	Stat Reason & Application		3	Must have a minimum GPA of 3.0
<b>English Literature</b>		EH 102 or EH 105H	3	
			<b>15/14</b>	

<b>Term 5</b>	<b>Course Description</b>	<b>Pre-req</b>	<b>Cr Hrs</b>	<b>Milestone Notes</b>
BLY 440, CH 440 or	Biochemistry I	CH 202 for BLY 440 & CH 440; CH 201 for BMD 321	3	CH 202 and lab

BMD 321**			
Major Course****		3	
<b>Humanities Elective***</b>		3	
<b>Social/ Behavioral Elective***</b>		3	
Elective or minor course		3	
		<b>15</b>	

<b>Term 6</b>	<b>Course Description</b>	<b>Pre-req</b>	<b>Cr Hrs</b>	<b>Milestone Notes</b>
BLY 302 OR BMD 350**	Genetics	BLY 122 & CH 131	3	Take MCAT at end of semester or early summer
CH 441, BLY 441 or BMD 322**	Biochemistry II	CH 440; BLY 440 or BMD 321	3	Begin admissions process at beginning of summer
<b>Fine Arts Elective</b>			3	
Major****			3	
Major****			3	
			<b>15</b>	

<b>Term 7</b>	<b>Course Description</b>	<b>Pre-req</b>	<b>Cr Hrs</b>	<b>Milestone Notes</b>
<b>Humanities Elective</b>			3	
Completion of Major and Minor Courses required for the degree****			12	
			<b>15</b>	

Term 8	Course Description	Pre-req	Cr Hrs	Milestone Notes
	Completion of Major and Minor Courses required for the degree****		15	
			15	
<b>All bolded courses meet general education requirements</b>				
<p>• <b>Students with ACT Math scores 22-23 should take CH 100 and MA 112 in the first semester. MA 112 and MA 113 satisfy the MA 115 requirement. MA 125 also satisfies the math requirement. Students with ACT Math scores 21 and below should begin math courses in the summer before Fall - Year 1.</b></p>				
<p>* Students who earn an English ACT score of 27, or a written SAT score of 550, can opt out of EH 101.</p>				
<p>** Courses not required for medical school admission but highly recommended for MCAT prep. Recommended that all pre-medical students take 3 social science courses.</p>				
<p>*** Must have one history elective and one literature elective. In addition, students must choose a second history or literature to complete a two-part sequence. The literature sequence is recommended for all Pre-Health students.</p>				
<p># Two designated writing (W) courses are required with at least one course chosen from offerings in the student's major or minor. Courses carrying this required credit are identified in the University Bulletin by a (W) after the course title.</p>				
<p># The Sample 4-year plan is designed as a guide for students preparing for their course selections. This information provides only a suggested schedule. Actual course selections should be made in consultation with an advisor.</p>				

## Pre-Law Program

### Preparation For Law School

Students interested in preparing for a career in law will find outstanding opportunities at the University of South Alabama. The finest pre-law education is considered by many to be a four-year liberal arts curriculum, but law schools will accept bachelor's degrees in other areas also.

Law schools generally do not prescribe a particular major or course of undergraduate study to qualify for admission. They all stress, however, the importance of excellence in whatever course of study is pursued. Specifically, the Association of American Law Schools emphasizes excellence in attaining the following three objectives in pre-law studies:

1. Comprehension and expression in words.
2. Critical understanding of human institutions and values with which the law deals.
3. Creative power in thinking.

"Shortly stated, what the law schools seek in their entering students is not accomplishment in mere memorization but accomplishment in understanding, the capacity to think for themselves, and the ability to express their thoughts with clarity and force" (from Association of American Law Schools, Statement of Policy).

To help the student develop the best possible course of study to prepare for law school in the light of particular needs, the University of South Alabama provides a pre-Law Advisor in the Department of Political Science and Criminal Justice. Pre-Law students are urged to consult with the Advisor for detailed information concerning how best to prepare for law school and for information concerning the Law School Admission Test, now required by practically all law schools.

## Program For Pre-Dentistry, Pre-Medicine, And Pre-Optometry

This program is designed to prepare students for the rigorous demands of dental, medical, and optometry schools. The program is demanding and requires high scholastic competence and performance. Students must maintain a better than "B" record to be competitive when applying to professional schools.

Most dental, medical and optometry schools require that a bachelor degree be earned for admission. However, a few schools may accept outstanding students prior to graduation.

Students should complete the appropriate admissions test (DAT – dental, MCAT – medicine, and OAT – optometry) by the end of their junior year (or at least one year before expected matriculation into the professional school). Students should complete the application process for admission to the professional schools about a year in advance of the expected date of matriculation (usually the summer between the junior and senior year).

For information on requirements for admissions to the University of South Alabama College of Medicine, visit the web site at <http://www.usahealthsystem.com/com>.

## Program For Pre-Pharmacy Programs

Requirements for admission to pharmacy school vary considerably between schools, with schools requiring anywhere from two years of prerequisite course work to having completed a bachelor's degree. Although a bachelor's degree is not required by most pharmacy schools, students should select a program of courses that not only include pre-pharmacy requirements, but also work toward a degree. Most pharmacy schools require the PCAT (pharmacy college admission test). The student should apply for admission to the pharmacy schools of choice approximately one year in advance of the date the student plans to enter pharmacy school. Specific requirements for several pharmacy schools are available in the office of the Pre-Professional Advisor.

The Auburn University Harrison School of Pharmacy at the University of South Alabama requires a minimum of three years of coursework, which includes several upper division courses in Biology and/or Biomedical Sciences. Specific requirements can be found at the Auburn University web site <http://pharmacy.auburn.edu> or at the University of South Alabama web site <http://www.southalabama.edu/departments/academicsuccess/pre-health/>.

## Program For Pre-Veterinary Medicine

Requirements for veterinary schools vary considerably between schools, with some schools requiring three years of coursework and others requiring a bachelor's degree. Most veterinary schools require the GRE. Many veterinary programs are now also requiring a specified number of hours working with a veterinarian, either as a technician or a volunteer.

## Program For Pre-Physician Assistant

Students wishing to enter a physician assistant program will be required to take many of the same courses as other pre-health students, although specific courses vary between programs. The admission test for most physician assistant programs is the GRE; some schools accept the MCAT. For information about the Physician Assistant program at the University of South Alabama, go to Pat Capps Covey College of Allied Health section of this Bulletin or visit the web site at <http://www.southalabama.edu/alliedhealth/pa/>

# Colleges

- [College of Allied Health](#)
- [College of Arts and Sciences](#)
- [College of Business](#)
- [College of Education and Professional Studies](#)
- [College of Engineering](#)
- [College of Medicine](#)
- [College of Nursing](#)
- [School of Computing](#)
- [Graduate School](#)

# Pat Capps Covey College Of Allied Health Professions

## General Information

Allied Health Administrative Staff	(251) 445-9250
Dean	Gregory H. Frazer
Associate Dean	Susan Gordon-Hickey
Academic Advisor	James A. Hunt
Academic Advisor	Karen LaSarge
Academic Advisor	Linda Stearns

College of Allied Health web site

<http://www.southalabama.edu/colleges/alliedhealth>

The programs are designed to provide the highest quality in basic medical sciences and health professional education to meet health care needs and to contribute to new knowledge through research. Upon graduation, students are eligible to sit for their respective licensure and board examinations to enter professional practice in their chosen area.

Through University approval, and when deemed to be in the best interest of the students, the faculty of the College reserves the right to alter curricula and regulations as considered necessary.

The professional programs in Allied Health are accredited by their respective national accrediting agencies listed below:

### Accreditation

#### Program And Accrediting Agency

- **Cardiorespiratory Care:**  
Commission on Accreditation of Allied Health Educational Programs (CAAHEP) and the Commission on Accreditation for Respiratory Care (CoARC)
- **Emergency Medical Services:**  
Committee on Accreditation of Allied Health Educational Programs (CAAHEP) and the Committee on Accreditation for the EMS Professions (CoAEMSP)
- **Occupational Therapy:**  
Accreditation Council for Occupational Therapy Education (ACOTE) of the American Occupational Therapy Association (AOTA)
- **Physical Therapy:**  
Commission on Accreditation in Physical Therapy Education (CAPTE) for the American Physical Therapy Association (APTA)
- **Physician Assistant:**  
Accreditation Review Commission on Education for the Physician Assistant, Inc. (ARC-PA)
- **Radiologic Sciences:**  
Joint Review Committee on Education in Radiologic Technology (JRCERT)
- **Speech-Language Pathology and Audiology Academic Program:**  
Council on Academic Accreditation (CAA) of the American Speech-Language-Hearing Association (ASHA)

### Academic Advising

Students are encouraged to take full advantage of the academic advising services provided in the College of Allied Health Professions. The academic advisors are available throughout the academic year to assist undergraduate students and other persons seeking information about Allied Health Professions programs. The academic advisors are located in HAHN 3028,

telephone number (251) 445-9260. Undergraduate students in the professional component of their program and graduate students are advised by their respective departmental advisors.

### **Computer Access Requirement**

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All students enrolled in the Pat Capps Covey College of Allied Health Professions are required to have access to a personal computer. This access must include a current version of the Microsoft Office® software suite including Word® and Excel®, access to the University's e-mail system and access to the Internet for research purposes. Individual programs may have additional requirements specific to their curriculum.

### **General Requirements For Health Insurance, Background Checks, And Drug Screening**

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Students applying for admission to professional programs (all programs with the exception of Biomedical Sciences) will need to provide proof of health insurance coverage before being admitted in the program and every year after registration. These students will also be subjected to background checks and drug tests prior to being admitted in the professional component of the program. Drug tests may be randomly administered while in the professional component of the program. Students will be informed of these requirements in the application forms for enrollment in their programs. Specific requirements for each program are listed in the respective departments' sections. Students are responsible for becoming familiar with individual requirements and regulations specific to their programs.

### **Undergraduate Promotion Policies**

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For Professional Component undergraduate students in Cardiorespiratory Care and Radiologic Sciences, a minimum grade of "C" is required in each Professional Component course. This minimum grade of "C" reflects only the letter grade since many courses will require an 80% or 90% competency in order to be considered passing level. Students receiving less than a "C" in a professional course in Cardiorespiratory Care, and Radiologic Sciences will not be allowed to proceed in the program. Students not meeting this minimal requirement may apply for reinstatement by petitioning the respective departmental Student Evaluation and Promotions Committee. The student must petition in writing through the office of the Department Chair no later than five days prior to the beginning of the semester for which reinstatement is requested. If for any reason, a student must withdraw from the Professional Component of a program, readmission will require approval of the appropriate Department Chair and the Dean of the College.

Undergraduate students majoring in Speech and Hearing Sciences must complete each SHS course with a grade of "C" or better. "C" reflects only the letter grade since some courses will require an 80% or 90% competency level-point average in order to be considered passing level. Speech and Hearing majors are expected to maintain an overall grade-point average acceptable for admission to the graduate program.

### **Transient Course Work Credit**

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All students enrolled in the Pat Capps Covey College of Allied Health Professions must receive prior approval from both the Chair of the Department and the Dean before taking courses in their major field at another institution. Failure to obtain prior approval may result in loss of credit for the course work.

### **Admission To Professional Programs**

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The Dean of the Pat Capps Covey College of Allied Health Professions oversees the establishment and monitoring of the admission standards for the Professional degree programs. Each student must meet the admission standards of the program for which he/she is applying. However, because of limited capacities, admission is on a competitive basis. Notice of actions on applications for admission is provided by the respective departments. Any other correspondence between students and faculty members, department chairs, and/or administrative officers does not constitute nor does it imply admission to any specific program.

Application forms and other information may be obtained from each department's web site or by contacting the department directly.

## **Departments Of Instruction**

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Biomedical Sciences.....	263
Cardiorespiratory Sciences.....	274

Emergency Medical Services.....	410
Occupational Therapy.....	707
Physician Assistant Studies.....	728
Physical Therapy.....	720
Radiologic Sciences .....	765
Speech Pathology and Audiology.....	788

## Degree Requirements

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### Undergraduate

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### Graduate

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#### Minimum College Requirements For Admission To Graduate Programs

In addition to the minimum requirements set by the Graduate School, students applying to graduate programs in the Pat Capps Covey College of Allied Health Professions must take the Graduate Record Examination (GRE). The minimum GRE score required to apply for admission to each graduate program is established by the program's admissions committee. Interested students should check the specific requirements for every program.

#### Doctoral Level Degree Programs

The Pat Capps Covey College of Allied Health Professions offers a Ph.D. degree in Communication Sciences and Disorders and two professional doctoral degrees, the Doctor of Audiology (AuD) and the Doctor of Physical Therapy (DPT). The Ph.D. degree is administered through the Department of Speech Pathology and Audiology, the College, and the Graduate School. The two professional doctoral degrees are administered through the respective departments and the Pat Capps Covey College of Allied Health Professions. These professional doctoral degrees are designed to provide the knowledge and skills required to function

as entry-level practitioners and for licensure in professional fields of study. Program requirements for all doctoral programs can be found under the respective departmental information.

## Professional Doctoral Degree Requirements

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### Documents Required For Admission

All documents required for admission review such as transcripts, test scores and letters of recommendation must be official. Transcripts must be mailed from the home institution to the department. Scores from testing agencies must be sent directly to the University. These documents become the property of the University of South Alabama. Students applying for admission to the Pat Capps Covey College of Allied Health Professions Professional Doctoral degree programs must pay the specified non-refundable processing fee by the appropriate deadline. If a student decides to apply to another program, a new processing fee and application must be submitted.

### Categories Of Admission

Applicants to the Professional Doctoral programs may be admitted in one of the following categories.

Admission Categories:

1. Regular Admission Requirements:

- (a) A bachelor's degree from an accredited institution of higher education.
  - (i) Doctor of Audiology: must meet all requirements for admission as specified in the Doctor of Audiology section in this Bulletin.
  - (ii) Doctor of Physical Therapy: must meet all requirements for admission as specified in the Doctor of Physical Therapy section of this Bulletin.
- (b) A minimal grade-point average of 3.00 on all undergraduate work (A=4.00). The grade-point average used is that computed by the department.
- (c) Sufficient courses in the major to qualify for professional doctoral study in the involved discipline. A student who has course deficiencies in the discipline but who otherwise qualifies for Regular Admission will be required to complete appropriate prerequisite course work.
- (d) Recommendation of the appropriate Coordinator/Chair, the College Director of Graduate/Professional Studies and the Dean of the College.
- (e) International students must submit documentary evidence showing TOEFL test scores of at least 600 (written form), 250 (computer version) or 100 (internet based version), or bachelor's or graduate degrees earned at accredited United States institutions of higher education. Some programs may also require the Test of Written English and the Test of Spoken English.
- (f) A Graduate Record Examination (GRE) score must be officially reported to the University of South Alabama Office of Admissions. The GRE must have been taken within the last five years.
- (g) For those students who have had previous graduate work, performance at the graduate level may be taken into consideration. An earned professional degree may substitute for some admission requirements (see description under specific program).

2. Provisional Admission Requirements: Students who do not meet the requirements for Regular Admission may be admitted in the Provisional Admission category. A student in provisional status will not be allowed to enroll in courses other than those specified by their program of study. Provisional Admission requires:

- (a) A bachelor's degree from an accredited institution of higher education.
  - (i) Doctor of Audiology: must meet all requirements for admission as specified in the Doctor of Audiology section in this Bulletin.
  - (ii) Doctor of Physical Therapy: must meet all requirements for admission as specified in the Doctor of Physical Therapy section of this Bulletin.
- (b) A minimal grade-point average of 2.5 on all undergraduate work (A=4.00) or 2.75 on the last 64 hours of college work. The grade-point average used is that computed by the department.

(c) Recommendation of the appropriate Coordinator/Chair, the College Director of Graduate/Professional Studies and the Dean of the College.

(d) International students must submit documentary evidence showing TOEFL test scores of at least 600 (written form), 250 (computer version) or 100 (internet based version), or bachelor's or graduate degrees earned at accredited United States institutions of higher education. Some programs may also require the Test of Written English and the Test of Spoken English.

(e) A Graduate Record Examination (GRE) score must be officially reported to the University of South Alabama Office of Admissions. The GRE must have been taken within the last five years.

### 3. Change from Provisional to Regular Enrollment Status

(a) Provisional students will be eligible for Regular status after accruing a minimum of nine (9) semester hours of course work taken at the University of South Alabama for credit toward degree requirements, provided at least a "B" average is maintained in all such work attempted. No more than 15 semester hours of credit may be earned as a Provisional student. The Provisional student who does not have a 3.0 GPA upon completing 15 semester hours of graduate credit applied toward the degree will be academically dismissed from the program. See appropriate department section of this publication for any additional requirements. At all times, students are subject to the policies stated in the Section entitled "Academic Dismissal."

(b) Change to regular status requires approval by the appropriate Coordinator/Chair, the College Director of Graduate/Professional Studies and the Dean of the College.

### 4. Admission as a Non-Degree student

(a) Students holding baccalaureate degrees from accredited institutions of higher education who are interested in taking courses in a professional program may do so upon approval of the department Chair and the Graduate/Professional Coordinator of the College. Prerequisites for the course(s) requested must be met.

(b) Before applying for admission as a Non-Degree student, interested students should contact the Chair in the specific department. The department may limit the enrollment of Non-Degree students and/or the specific courses in which they may enroll. After admission, permission to enter each course is obtained from the Chair in the department. Non-Degree students subsequently seeking admission into one of the Professional degree programs must submit a formal application to the department. The student's record in graduate courses taken while in the Non-Degree status may be considered. A maximum of 15 semester hours of graduate credit earned while in Non-Degree status may be applied toward a Professional degree if the student is later admitted to a program of study.

## Withdrawal

A student who withdraws from the University or from a course will have "WD" recorded on his permanent record, provided the withdrawal occurs within the time limits listed in the official Academic Calendar. Withdrawal after the time limit can only be approved by the Dean of the Pat Capps Covey College of Allied Health Professions upon the recommendation of the department Chair.

## Grade Standards

The grading system for Allied Health Professional Doctoral degrees include "A", "B", "C", and "F". A minimum overall Grade Point Average (GPA) of 3.0 must be maintained throughout the program. A maximum of eight semester credits of courses with the grade of "C" may be counted toward a degree program. Students may, with approval of the departmental faculty, repeat a course in which a "C" has been earned. Any grade lower than a "C" in any course will result in academic dismissal from the program.

Students may appeal dismissal to the Department Academic Standards Committee, but reinstatement is not automatically granted and will be evaluated on a case-by-case basis.

## Change Of Grade

Grades reported for Professional degree students by instructors to the Registrar may not be changed except in case of error in records or in evaluation. Grade changes require the approval of the instructor of record, with information regarding the change provided to the department Chair, the Director of Graduate/Professional Studies, and the Dean of the Pat Capps Covey College of Allied Health Professions. Grades on record for one-calendar year may not be changed for any reason.

## Academic Dismissal-Probation Status

Any term in which a graduate student drops below an overall 3.0 GPA, the student is placed on probationary status and has a period of one semester to attain an overall 3.0 GPA or be dismissed from the program.

A student in the status of Provisional Admissions who does not have a 3.0 GPA upon completing 15 semester hours of graduate credit applied toward the degree will be academically dismissed from the program.

Students who receive more than 8 credit hours of "C" in courses that could be used for credit towards their professional degree, will be dismissed from their program. The student may request the Departmental Academic Standards Committee to be allowed to retake up to one course in order to reduce the number of hours of "C" within the 8-hour limit. If the student cannot reach this limit by retaking only one course, he/she will be dismissed from the program. If the student is allowed to remain in the program by retaking one course, any "C" grades in future courses will also result in automatic dismissal from the program.

In addition, any grade lower than a "C" will also result in academic dismissal. Students may appeal a dismissal to the Department Academic Standards Committee, but reinstatement is not automatically granted and will be evaluated on a case-by-case basis. A student who is academically dismissed from a program will not be allowed to re-apply to the same program.

### **Academic Misconduct Dismissal**

A student dismissed from a Professional Doctoral program as the result of an academic misconduct penalty will be automatically dismissed from the College and the University of South Alabama and will not be eligible to apply for readmission to that program.

### **Final Grade Grievance Policy**

A student may initiate an inquiry under procedures set forth in The Lowdown ([www.southalabama.edu/lowdown/](http://www.southalabama.edu/lowdown/)).

### **Appeal Procedure**

Students may appeal academic dismissal, academic misconduct dismissal and final grade grievance decisions under specified circumstances. Information concerning this procedure may be obtained from the office of the Dean of the College.

### **English Language Proficiency**

English is the language of instruction at the University of South Alabama. All international students, regardless of TOEFL score, are required to take the English Language Proficiency Examination administered at this University during the International Student Orientation of the first semester in which they are enrolled. Students with deficiencies in any of the various areas of command of English (oral comprehension, reading comprehension, grammatical structure, vocabulary, etc.) may have appropriate ESL courses or additional remedial work required. See appropriate section under each department.

### **Registration**

Registration (making course selections and enrolling in classes) occurs prior to the beginning of each semester. Students must register via the Web utilizing USA's PAWS (Personal Access Web System). (See the University Schedule of Classes for additional information.)

### **Transfer Credit**

A maximum of twenty-five (25) semester hours of transfer credit from regionally accredited universities may be accepted by a program. Prior approval of the Chair of the department and College Director of Graduate/Professional Studies is required. For specific information concerning Transfer Credit see appropriate section under Pat Capps Covey College of Allied Health Professions or contact the Chair of the specific program. Only courses with "A" or "B" grades are acceptable for transfer.

### **Student Responsibility**

While the Pat Capps Covey College of Allied Health Professions will endeavor to provide timely and accurate advisement, it is the responsibility of the student to know and satisfy the degree requirements of the academic program, to be aware of the University and College academic calendar and to understand and comply with University and College academic policies and procedures.

### **Application For Degree**

Each candidate for the Doctor of Audiology or Doctor of Physical Therapy degree must make application for the degree during the semester preceding the semester of graduation at the Registrar's Office. The dates are specified in the University Calendar.

# General Ed. Requirements

## General Education Requirements

A minimum of 120 hours is required for all bachelor degrees awarded by the College of Allied Health Professions. Some professional programs require more credit hours. Please refer to individual programs for specific information. Candidates for all bachelor degrees must complete the requirements of the general education curriculum, which encompasses four major areas of study:

- I. Written Composition
- II. Humanities and Fine Arts
- III. Natural Sciences and Mathematics
- IV. History, Social and Behavioral Sciences

The student should work with an academic advisor to plan his or her course of study in each of these four areas of the general education curriculum. The courses should be planned with an emphasis placed on continuity of information and compatibility with the student's major field(s) of study.

### Biomedical Sciences

#### Area I. - Written Composition (6 HRS)

EH101 (3)

EH102 (3)

#### Area II. Humanities and Fine Arts (12)

CA 110 (3)

ARH 100, ARH 103, ARH 123, ARH 101, DRA 110, or MUL 101 (3)

EH 215, EH 216, EH 225, EH 226, EH 235 or EH 236 (3)

Literature sequence\* or Humanities Elective - AFR 101, AIS 105, ARH 100, 103, 123, ARS 101, 121, 123, 124, DRA 110, EH 215, 216, 225, 226, 235, 236, Foreign Language course except 190, 290 or 390, or PHL 110, 121, 131, 231, 240, or MUL 101 (3)

\* Student must have one history elective and one literature elective to graduate. In addition, student must choose a second history or literature to complete a two-part sequence (Part I and II of same subject).

#### Area III. - Natural Sciences & Math (12 HRS)

MA 125 (4)

BLY 101/BLY 101L or BLY 121/BLY 121L (4)

BLY 102/BLY 102L or BLY 122/BLY 122L (4)

#### Area IV. - History, Social and Behavioral Sciences (12 HRS)

PSY 120 (3)

HY 101, HY 102, HY 135 or HY 136 (3)

History Sequence\* or Social Science Elective - HY 101, HY 102, HY 135, HY 136, or AN 100, AN 101, ECO 215, 216, GEO 114, GEO 115, PSC 130, PSY 250, SY 109, SY 112, AIS 115, AIS 201 (3)

Social Science Elective - SY 109 recommended for most programs, or advisor may suggest AN 100, AN 101, ECO 215, 216, GEO 114, GEO 115, PSC 130, PSY 250, SY 109, SY 112, AIS 115, or AIS 201 (3)

\* Student must have one history elective and one literature elective to graduate. In addition, student must choose a second history or literature to complete a two-part sequence (Part I and II of same subject).

### Cardiorespiratory Care

#### Area I. - Written Composition (6 HRS)

EH101 (3)

EH102 (3)

#### Area II. Humanities and Fine Arts (12)

CA 110 (3)

ARH 100, ARH 103, ARH 123, ARH 101, DRA 110, or MUL 101 (3)

EH 215, EH 216, EH 225, EH 226, EH 235 or EH 236 (3)

Literature sequence\* or Humanities Elective - AFR 101, AIS 105, ARH 100, 103, 123, ARS 101, 121, 123, 124, DRA 110, EH 215, 216, 225, 226, 235, 236, Foreign Language course except 190, 290 or 390, or PHL 110, 121, 131, 231, 240, or MUL 101 (3)

\* Student must have one history elective and one literature elective to graduate. In addition, student must choose a second history or literature to complete a two-part sequence (Part I and II of same subject).

#### Area III. - Natural Sciences & Math (11 HRS)

MA 112 (3)

CH 131/CH 131L (4)

CH 132/CH 132L (4)

#### Area IV. - History, Social and Behavioral Sciences (12 HRS)

PSY 120 (3)

HY 101, HY 102, HY 135 or HY 136 (3)

History Sequence\* or Social Science Elective - HY 101, HY 102, HY 135, HY 136, or AN 100, AN 101, ECO 215, 216, GEO 114, GEO 115, PSC 130, PSY 250, SY 109, SY 112, AIS 115, AIS 201 (3)

Social Science Elective - SY 109 recommended for most programs, or advisor may suggest AN 100, AN 101, ECO 215, 216, GEO 114, GEO 115, PSC 130, PSY 250, SY 109, SY 112, AIS 115, or AIS 201 (3)

\* Student must have one history elective and one literature elective to graduate. In addition, student must choose a second history or literature to complete a two-part sequence (Part I and II of same subject).

### Health Sciences

#### Area I. - Written Composition (6 HRS)

EH101 (3)

EH102 (3)

#### Area II. Humanities and Fine Arts (12 HRS)

CA 110 (3)

ARH 100, ARH 103, ARH 123, ARH 101, DRA 110, or MUL 101 (3)

EH 215, EH 216, EH 225, EH 226, EH 235 or EH 236 (3)

Literature sequence\* or Humanities Elective - AFR 101, AIS 105, ARH 100,103,123, ARS 101, 121, 123, 124, DRA 110, EH 215, 216, 225, 226, 235, 236, Foreign Language course except 190, 290 or 390, or PHL 110, 121, 131, 231, 240, or MUL 101 (3)

\* Student must have one history elective and one literature elective to graduate. In addition, student must choose a second history or literature to complete a two-part sequence (Part I and II of same subject).

**Area III. - Natural Sciences & Math (11 HRS)**

MA 112 (3)

BLY 101/BLY 101L or BLY 121/BLY 121L (4)

Any Lab Science (4)

**Area IV. - History, Social and Behavioral Sciences (12 HRS)**

PSY 120 (3)

HY 101, HY 102, HY 135 or HY 136 (3)

History Sequence\* or Social Science Elective - HY 101, HY 102, HY 135, HY 136, or AN 100, AN 101, ECO 215, 216, GEO 114, GEO 115, PSC 130, PSY 250, SY 109, SY 112, AIS 115, AIS 201 (3)

Social Science Elective - SY 109 recommended for most programs, or advisor may suggest AN 100, AN 101, ECO 215, 216, GEO 114, GEO 115, PSC 130, PSY 250, SY 109, SY 112, AIS 115, or AIS 201 (3)

\* Student must have one history elective and one literature elective to graduate. In addition, student must choose a second history or literature to complete a two-part sequence (Part I and II of same subject).

**Radiologic Sciences****Area I. - Written Composition (6 HRS)**

EH101 (3)

EH102 (3)

**Area II. Humanities and Fine Arts (12 HRS)**

CA 110 (3)

ARH 100, ARH 103, ARH 123, ARH 101, DRA 110, or MUL 101 (3)

EH 215, EH 216, EH 225, EH 226, EH 235 or EH 236 (3)

Literature sequence\* or Humanities Elective - AFR 101, AIS 105, ARH 100,103,123, ARS 101, 121, 123, 124, DRA 110, EH 215, 216, 225, 226, 235, 236, Foreign Language course except 190, 290 or 390, or PHL 110, 121, 131, 231, 240, or MUL 101 (3)

\* Student must have one history elective and one literature elective to graduate. In addition, student must choose a second history or literature to complete a two-part sequence (Part I and II of same subject).

**Area III. - Natural Sciences & Math (11 HRS)**

MA 112 (3)

BLY 101/BLY 101L or BLY 121/BLY 121L (4)

BLY 102/BLY 102L or BLY 122/BLY 122L (4)

**Area IV. - History, Social and Behavioral Sciences (12 HRS)**

PSY 120 (3)

HY 101, HY 102, HY 135 or HY 136 (3)

History Sequence\* or Social Science Elective - HY 101, HY 102, HY 135, HY 136, or AN 100, AN 101, ECO 215, 216, GEO 114, GEO 115, PSC 130, PSY 250, SY 109, SY 112, AIS 115, AIS 201 (3)

Social Science Elective - SY 109 recommended for most programs, or advisor may suggest AN 100, AN 101, ECO 215, 216, GEO 114, GEO 115, PSC 130, PSY 250, SY 109, SY 112, AIS 115, or AIS 201 (3)

\* Student must have one history elective and one literature elective to graduate. In addition, student must choose a second history or literature to complete a two-part sequence (Part I and II of same subject).

**Speech and Hearing Sciences****Area I. - Written Composition (6 HRS)**

EH101 (3)

EH102 (3)

**Area II. Humanities and Fine Arts (12 HRS)**

CA 110 (3)

ARH 100, ARH 103, ARH 123, ARH 101, DRA 110, or MUL 101 (3)

EH 215, EH 216, EH 225, EH 226, EH 235 or EH 236 (3)

Literature sequence\* or Humanities Elective - AFR 101, AIS 105, ARH 100,103,123, ARS 101, 121, 123, 124, DRA 110, EH 215, 216, 225, 226, 235, 236, Foreign Language course except 190, 290 or 390, or PHL 110, 121, 131, 231, 240, or MUL 101 (3)

\* Student must have one history elective and one literature elective to graduate. In addition, student must choose a second history or literature to complete a two-part sequence (Part I and II of same subject).

**Area III. - Natural Sciences & Math (7 HRS)**

MA 112 (3)

BLY 121 and BLY 121L (4)

PH 104/PH 104L (4) or PH 114/PH 114L (5)

**Area IV. - History, Social and Behavioral Sciences (12 HRS)**

PSY 120 (3)

HY 101, HY 102, HY 135 or HY 136 (3)

History Sequence\* or Social Science Elective - HY 101, HY 102, HY 135, HY 136, or AN 100, AN 101, ECO 215, 216, GEO 114, GEO 115, PSC 130, PSY 250, SY 109, SY 112, AIS 115, AIS 201 (3)

Social Science Elective - SY 109 recommended for most programs, or advisor may suggest AN 100, AN 101, ECO 215, 216, GEO 114, GEO 115, PSC 130, PSY 250, SY 109, SY 112, AIS 115, or AIS 201 (3)

\* Student must have one history elective and one literature elective to graduate. In addition, student must choose a second history or literature to complete a two-part sequence (Part I and II of same subject).

# College Of Arts And Sciences

## General Information

Arts & Sciences Administrative Staff	(251) 460-6280
Dean	Andrzej Wierzbicki
Associate Dean	Eric J. Loomis
Assistant Dean	Robert L. Coleman
Director of Academic Advising	Nancy Howell
Graduation Specialist	Kelly Taylor
Advisor	Shylonda Stewart
Manager of Instructional Support and Development	Crystal Thomas

College of Arts and Sciences web site

<http://www.southalabama.edu/colleges/artsandsci/index.html>

## College Mission Statement

The College of Arts and Sciences is the intellectual center of the University of South Alabama and is the foundation for establishing and building the quality of the University's academic programs. In the College of Arts and Sciences, students receive broad exposure to all areas of academic inquiry, as well as in-depth knowledge in their chosen field of study. The College provides every undergraduate student at the University, regardless of major, with the fundamentals of a liberal arts education to enhance students' knowledge and create an atmosphere in which students develop their own critical thinking, communication skills, and the tools with which to carry out independent inquiry. Such an education promotes a heightened sense of intellectual curiosity, an appreciation of the values and accomplishments of the sciences, arts and humanities, and a sense of awareness and responsibility for the well-being of their society.

In achieving these educational goals, the College of Arts and Sciences will:

- offer a full range of subjects in the humanities, fine arts, social sciences, mathematics, and the natural sciences
- encourage breadth of learning and training in the fundamentals of scholarship
- create and apply knowledge in the arts and sciences through dedicated research, teaching, scholarship, and creative works
- maintain a community of teachers and scholars devoted to the preservation and discovery of knowledge and its transmission to students and to the public
- encourage and support the application of knowledge in service to the University, the Mobile metropolitan area, and the wider society
- emphasize the regional uniqueness of southwest Alabama, including its cultural heritage, its natural environment, and its strategic location as a port city on the Gulf of Mexico
- prepare students to participate in the larger world beyond the region by giving them an awareness of the complexity of global issues and contexts
- prepare students for meaningful and productive careers and contribute to the development of an educated work force responsive to the needs of the region

## Departments Of Instruction

Air Force Studies.....	245
Biology.....	248

Chemistry.....	292
Communication.....	314
Earth Sciences.....	367
English.....	422
History.....	479
Interdisciplinary Programs.....	512
African-American Studies.....	242
Applied Linguistics.....	649
Forensic Science.....	438
Gender Studies.....	440
Gerontology.....	443
International Studies.....	515
Museum Studies.....	658
Marine Sciences.....	596
Mathematics and Statistics.....	618
Modern and Classical Languages and Literature.....	646
Military Science.....	641
Music.....	661
Philosophy.....	712
Physics.....	736
Political Science and Criminal Justice.....	749
Psychology.....	758
Sociology, Anthropology and Social Work.....	776
Theatre.....	806
Visual Arts.....	816

## Degree Requirements

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### Undergraduate

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The College of Arts and Sciences offers the following undergraduate degrees:

Department	Degree
<a href="#">Anthropology</a>	B.A.
<a href="#">Biology</a>	B.S.
<a href="#">Communication</a>	B.A.
<a href="#">Chemistry</a>	B.S.
<a href="#">Criminal Justice</a>	B.A.
<a href="#">English</a>	B.A.
<a href="#">Geography</a>	B.S.
<a href="#">Geology</a>	B.S.
<a href="#">History</a>	B.A.
<a href="#">International Studies</a>	B.A.
<a href="#">Mathematics and Statistics</a>	B.S.
<a href="#">Meteorology</a>	B.S.
<a href="#">Modern and Classical Languages and Literature</a>	B.A.
<a href="#">Music</a>	B.M.
<a href="#">Philosophy</a>	B.A.

Physics	B.S.
Political Science	B.A.
Psychology	B.A.
Social Work	B.S.W.
Sociology	B.A.
Theatre	B.A., B.F.A.
Visual Arts	B.A., B.F.A.

Options exist for students to earn dual degrees, double majors, or complete more than one minor. Students interested in these options should contact the Advising Center (251-460-7233) for details.

Degree requirements are to be satisfied with Arts and Sciences courses unless otherwise specified. Credits earned in the Developmental Studies Program or the Department of English as a Second Language (ESL) cannot be used to satisfy degree requirements.

At least 30 hours of course work, which represents 25% of the required 120 hours, must be at the upper division level in order to fulfill the University's residency requirement. At least 15 of the 30 upper-division hours must be in the major or concentration area. If a minor is required in the particular degree program, at least 9 (lower and/or upper-division) hours of courses in the minor must be completed at the University.

An overall grade-point-average (GPA) of 2.0 is required for graduation. In addition, a minimum GPA of 2.0 is required in the student's major or concentration area.

Majors in Arts and Sciences may be completed with a minimum of 120 semester hours unless designated otherwise.

### Technology Proficiency

Each department will designate a course that will fulfill the technology requirement.

### Mathematics Proficiency

All incoming students who do not have ACT scores and require MA 112 or higher for their major must take the Mathematics Placement Test administered in the department.

This is a new Math Placement Test, effective Fall 2011. It replaces the old Math Placement Test and has a different scoring scheme.

Calculators and other outside resources are not permitted during this exam.

Students should complete the exam at least 48 hours prior to coming to campus for orientation. If the exam is not taken, the students will be blocked from registering for all mathematics courses. To take the test, students will need their JAG number and the e-mail address provided by the USA Office of Admissions. The result of the test will be e-mailed to the student's JagMail e-mail address. Students should keep a copy of their Mathematics Placement Test results to take to their academic advisor. Students should anticipate a 48 hour lag time between the time they take the Math Placement Test and the time they register.

The only exceptions to this policy are:

- Students who have ACT scores will be placed in mathematics classes based on their Math-ACT scores as follows:
  - ACT-Math 22 or higher MA 112
  - ACT-Math 23 or higher MA 120
  - ACT-Math 23 or higher MA 267
  - ACT-Math 24 or higher MA 113
  - ACT-Math 25 or higher MA 115
  - ACT-Math 27 or higher MA 125
- Students who have been admitted as Conditional Freshmen must take the Math Placement Exam proctored in the Office of Developmental Studies (251-460-7155) during new student orientation.
- Students who transfer credit for MA 112 or higher with a grade C or better and who plan to take subsequent mathematics courses.

- Students who transfer credit for MA 110 or higher and who DO NOT plan to take any other mathematics courses. NOTE: MA 110 does not fulfill prerequisite requirements for any other mathematics or statistics course.
- Students who disagree with the course placement as determined by their ACT Math score will be allowed to take the Math Placement Test. The Test schedule is available on the Department website [www.southalabama.edu/mathstat/](http://www.southalabama.edu/mathstat/). Contact the Department of Mathematics and Statistics (251-460-6264) to register for the Math Placement Test. The test determines the most appropriate math course for which the student is qualified. A computer-based test will be given at the scheduled time in the Instructional Laboratory Building (ILB room 245 or 405). The test will be proctored and no calculators or outside resources will be allowed.

Questions concerning the Math Placement Exam should be directed to the Math/Statistics Department (251) 460-6264. The PAWS registration system will enforce the placement and course prerequisites as indicated above.

### **CAS 100: First Year Experience (2cr)**

A course for first-year students majoring in the College of Arts and Sciences that assists with maximizing the student's potential to achieve academic success and to adjust responsibility to the individual and interpersonal challenges presented by college life. Taught in small groups, the course provides an introduction to the nature of higher education and a general orientation to the functions and resources of the University.

All first-time freshmen must successfully complete CAS 100: First Year Experience as a degree requirement. Students must enroll during their first term at USA, except for summer-entry students who may enroll in CAS 100 during their first summer or fall term.

### **Bachelor Of Arts And Bachelor Of Science**

A minimum of 120 hours in prescribed and elective courses is required for the Bachelor of Arts or Bachelor of Science degrees in the College of Arts and Sciences.

Candidates for these degrees must meet the general education requirements listed below, as well as completing the requirements for a major and minor field. All Bachelor of Arts and Bachelor of Science degrees within the College of Arts and Sciences require a minor. Requirements for a major or minor are listed under the departmental headings. Major programs may require no more than 47 hours in a single discipline. A student may count no more than eight hours of directed study toward a degree. Two courses (6 semester hours) may count toward both the major and minor only after approval of the student's advisor, chair of the major department, chair of the minor department, and the dean.

### **Majors And Minors In The College Of Arts And Sciences**

Undergraduate students pursuing a Bachelor of Arts or a Bachelor of Science degree in the College of Arts and Sciences are required to have a major and a minor. The exceptions to the minor requirement are: students pursuing a Bachelor of Fine Arts degree, or a Bachelor of Music degree.

Requirements for a major are determined by the department and are listed under the departmental listing in this Bulletin. **At least 15 hours of upper-division course work in the major must be satisfactorily completed in residence at the University of South Alabama.** Courses are chosen in consultation with departmental advisors. Substitutions for stated requirements must be approved by the Chair of the department and the Dean of the college.

Requirements for a minor are determined by the department and are published in this Bulletin. **At least 9 hours of (lower and/or upper-division) course work in the minor must be satisfactorily completed in residence at the University of South Alabama.**

Students may not choose a major and a minor in the same department unless they are clearly separate disciplines that fall administratively under a single department and have been approved by the Dean. Two courses (6 semester hours) may count toward both the major and minor only after approval of the student's advisor, chair of the major department, chair of the minor department, and the Dean.

Minors available to Arts and Sciences students include: Air Force Studies, Anthropology, Argument, Applied Linguistics, Art, Art History, Biology, Classics Communication, Chemistry, Composite Sciences, Criminal Justice, Dramatic Arts, English, Foreign Languages and Literatures, Forensic Sciences, Geography, Geology, History, Interdisciplinary Studies (African-American Studies, Gender Studies, Gerontology), International Studies, Marine Science, Mathematics, Meteorology, Military Science, Music, Museum Studies, Philosophy, Physics, Political Science, Psychology, Related Sciences, Sociology, and Statistics.

Minors are also available in other colleges.

### **Double Major**

Undergraduate students pursuing a Bachelor of Arts or Bachelor of Science degree may elect to fulfill the requirements for two majors simultaneously. To do so, the student must declare a primary major and a secondary major on the Declaration of Major

form that is filed with the Registrar's Office. The student's academic file will be maintained in the department of the primary major. Students who complete the requirements for a second major are not required to complete a minor.

Students may count related courses from one major toward the fulfillment of the requirements for the other major, provided that the total number of credit hours counted toward both majors does not exceed twelve. Required courses for a major that are not in the major discipline do not count toward the twelve hour limit. At least one major must be in the College of Arts and Sciences. Written permission of the student's academic advisors, the Chair or Director of each major department or program and the Deans of all involved colleges is required for all courses double-counted.

### **Bachelor Of Fine Arts In Studio Art**

The degree requirements and admission requirements to the B.F.A. program in studio art are listed under the Department of Visual Arts.

### **Bachelor Of Fine Arts In Theatre Art**

The requirements for the B.F.A. degree in theatre arts are listed under the Department of Dramatic Arts.

### **Bachelor Of Music**

The requirements for the B.M. degree in performance and music education are listed under the Department of Music.

### **Bachelor Of Social Work**

The requirements for the B.S.W. degree in social work are listed under the Department of Sociology, Anthropology, and Social Work.

### **Programs In Other Colleges And Divisions**

Students in the College of Arts and Sciences may elect to pursue a second major or a minor in other colleges and divisions of the University.

Students seeking dual degrees or second degrees must have a course of study approved in advance by the student's advisor, department Chair, and the Dean.

### **International Programs**

The College participates in a number of international programs: summer sessions in England, and Mexico; student exchange programs and seminars in France, Germany, Russia and Greece; as well as the International University Consortium.

For further information about these programs, contact the Department of Foreign Languages and Literatures, or the Office of International Programs.

### **Teacher Certification For Arts And Sciences Students**

Students in the College of Arts and Sciences may participate in the program leading to teacher certification in middle and high school education.

See College of Education and Professional Studies for Teacher Certification Requirements.

### **Cooperative Education Program**

Students in the College of Arts and Sciences may participate in the Cooperative Education Program, which is described in a later section of the Bulletin. For further information, write to the Director, Career Services Center, University of South Alabama, Mobile, Alabama 36688-0002.

## **Graduate**

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### **Graduate Studies**

The College of Arts and Sciences offers programs leading to a Master of Arts degree in Communication, English, History, or Sociology; a Master of Public Administration degree; a Master of Science degree in Biology, Marine Sciences, Mathematics, or Psychology; a Master of Music degree in Music, a Master of Science in Environmental Toxicology, a Master of Fine Arts degree in Art, and to Doctor of Philosophy degrees in Marine Sciences and Clinical and Counseling Psychology.

## Requirements For Admission

Each applicant to a graduate program must meet the general Graduate School standards stated in the Graduate School Admission Requirements and Procedures. Individual programs may have additional requirements for admission and may be restricted because of capacity limitations. Consult departmental descriptions for additional information.

## General Ed. Requirements

A minimum of 120 hours is required for all bachelors degrees awarded by the College of Arts and Sciences. Candidates for all bachelors degrees must complete the requirements of the general education curriculum, which encompasses four major areas of study:

- I. Written Composition
- II. Humanities and Fine Arts
- III. Natural Sciences and Mathematics
- IV. History, Social and Behavioral Sciences

The student should work with an academic advisor to plan his or her course of study in each of these four areas of the general education curriculum. The courses should be planned with an emphasis placed on continuity of information and compatibility with the student's major field(s) of study.

The following section lists the specific general education requirements for each of these four areas. The requirements described below apply to all Bachelor of Arts and Bachelor of Sciences degrees awarded in the College. The general education requirements that apply to the Bachelor of Fine Arts (B.F.A.), the Bachelor of Music (B.M.), and the Bachelor of Social Work (B.S.W.) degrees are described in those sections of the Bulletin: Departments of Visual Arts (B.F.A.), Dramatic Arts (B.F.A.), Music (B.M.), Sociology, Anthropology, and Social Work (B.S.W.)

### College of Arts and Sciences General Education Requirements

#### Area I. Written Composition (6 HRS)

The written composition component of the general education curriculum is based upon the fundamental literacy in written English. The basic skills for this component are competence in university-level English composition, which includes writing well-organized, effective essays and research papers.

EH 101 EH 102 or EH 105H

Students may exempt the EH 101 requirement with an enhanced ACT English score of 27 or above; SAT score of 610 or above on the verbal portion, or a new SAT Writing/Language score of 33. Students scoring a minimum of 50 on the CLEP English Examination may satisfy the EH 101 and EH 102 requirement. A score of 4 or higher in the Advanced Placement Program may satisfy the EH 101 requirement.

NOTE: Credits earned in the Department of English as a Second Language (ESL) or Developmental Studies (DS) will not be acceptable toward meeting writing competency requirements.

All undergraduates must complete two designated writing credit (W) courses, at least one of which must be in the student's major or minor.

#### Area II. Humanities and Fine Arts (Total of 21 HRS)

The Humanities and Fine and Performing Arts requirements have five components listed below as A, B, C, D and E. The oral communication component addresses the development of skills in the oral communication of English. The Foreign Language component emphasizes an introductory level of proficiency in a foreign language. The Fine and Performing Arts component of the general education curriculum addresses the creative and aesthetic needs of individuals, helping them to achieve an appreciation of art, music, and the dramatic arts.

The Literature component of the general education curriculum focuses on American, British, and World Literature. The Humanities component of the general education curriculum focuses on the fundamental ideas, philosophy, and values of civilization. Humanities disciplines include African-American Studies, English, Foreign Languages and Literatures, and Philosophy.

1. **Oral Communication (3 HRS)**  
CA 110
2. **Foreign Language (6 HRS) One-year sequence; select from any one group:**  
LG 101 and LG 102  
LGS 106 and LGS 107

LG 111 and LG 112 or proficiency test or LG 113  
 LGS 121 and LGS 122  
 LG 131 and LG 132 or proficiency test or LG 134  
 LGS 141 and LGS 142  
 LG 151 and LG 152 or proficiency test or LG 153  
 LG 171 and LG 172 or LG 173

Students may fulfill the foreign language requirement by passing a proficiency test offered by the Department of Modern and Classical Languages at the level equivalent to the second semester of the foreign language sequence, or by passing another test (e.g., AP (Advanced Placement) or CLEP (College Level Examination Program) at the equivalent level). Students who pass a proficiency test at the level equivalent to first semester of the foreign language sequence are required to complete only the second semester and will fulfill the foreign language requirement with 3 credit hours of course work.

No more than 6 hours in any one discipline; this applies to sections C, D, and E. C.

3. **Fine and Performing Arts Component (3 HRS)**

ARH 100, ARH 103, ARH 123, ARS 101, DRA 110, MUL 101

4. **Literature Component (3 HRS)**

EH 215, EH 216, EH 225, EH 226, EH 235, EH 236

Students must complete a six semester hour sequence either in literature or in history. Note that some majors specify the sequence, and the requirements of the major should be referred to before deciding upon either a literature or history sequence. The literature sequences are: EH 215 and EH 216 or EH 225 and EH 226 or EH 235 and EH 236.

5. **Humanities and Fine Arts Component (6 HRS)**

AFR 101, AIS 105, ARH 100, ARH 103, ARH 123, ARS 101, ARS 121, ARS 123, ARS 124, CLA 110, DRA 110, EH 215, EH 216, EH 225, EH 226, EH 235, EH 236, GS 101, LG 211, LG 212, LG 231, LG 232, LG 251, LG 252, LG 271, LG 272, LGS 201, LGS 202, LGS 206, LGS 207, LGS 221, LGS 222, LGS 241, LGS 242, MUL 101, PHL 110, PHL 121, PHL 131, PHL 231, PHL 240.

**Area III. The Natural Sciences and Mathematics (14 HRS)**

The natural sciences, mathematical, and statistical component of the general education curriculum focuses on the experience of science as a rational search for understanding the natural world, and the appreciation of mathematics and statistics as valuable tools for everyday life and as intrinsically important ways of thinking.

1. **Mathematics**

Select one course:

MA 110, MA 112, MA 113, MA 115, MA 120, MA 125, MA 126, MA 227, MA 237, MA 238

2. **Natural Sciences**

Complete either option A or option B below:

Option A: Complete 3 courses with labs.

AN 121, BLY 101 or BLY 121, BLY 102 or BLY 122, CH 101, CH 103, CH 131 or CH 132, GEO 101, GEO 102, GY 111, GY 112, MAS 134, PH 101, PH 104, PH 114 or PH 201, PH 115 or PH 202

BLY 121 and BLY 122 are restricted to Arts and Sciences science majors, Allied Health science majors, Engineering majors, and Computer Science majors. Students cannot receive credit for both BLY 101 and BLY 121 or for both BLY 122 and BLY 102.

Option B: Complete 2 courses from list above and ST 210 or a math course above MA 112 except MA 201 and MA 202

**IV. History, Social & Behavioral Sciences\* (12 HRS)**

This component of the general education curriculum focuses upon developing an appreciation of the study of human behavior and its consequences, including the structure and functioning of institutions and the history of cultures. Disciplines include Anthropology, Economics, Geography, History, International Studies, Political Science, Psychology and Sociology. No more than six hours in any one discipline.

1. **History Component (3 HRS)**

HY 101, HY 102, HY 135, HY 136

Students must complete a six semester hour sequence either in literature or in history. Note that some majors specify the sequence, and the requirements of the major should be referred to before deciding upon either a literature or history sequence. The history sequences are: HY 101 and HY 102 or HY 135 and HY 136.

2. **History, Social and Behavioral Sciences Component (9 HRS)**

AIS 201, AN 100, AN 101, CA 100, CA 211, ECO 215, ECO 216, GEO 114, GEO 115, GS 101, HY 101, HY 102, HY 135, HY 136, IS 100, PSC 130, PSY 120, PSY 121, PSY 250, SY 109, SY 112

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# Mitchell College Of Business

## General Information

Mitchell College of Business	(251) 460-7167
Dean	Bob G. Wood
Associate Dean	Kelly Woodford
Assistant Dean of Graduate Studies & International	Alex Sharland

Mitchell College of Business web site  
<http://www.southalabama.edu/colleges/mcob>

The Mitchell College of Business offers the degrees of Bachelor of Science in Business Administration, Master of Accounting, Master of Business Administration, and Doctor of Business Administration. The foundation of the College is quality instruction in all undergraduate and graduate programs. Our instructional mission is to prepare our graduate and undergraduate students for professional careers in the fields of accounting, economics, finance, management, and marketing through a curriculum designed for both broad exposure to each field and in-depth coverage within a specific field of choice.

### Mission

The Mitchell College of Business provides value-added experiential business education opportunities to undergraduate, masters, and doctoral students along the Gulf Coast through innovative engagement with constituents, while advancing the area's economic and social well-being.

### Priorities

#### I. Instruction

The highest responsibility of the College is the instruction of its students and primary emphasis is placed on excellent teaching. In so doing, the College affirms its commitment to the University focus on excellence, lifelong learning and the education of the whole person. The College fulfills its instructional mission through the Bachelor of Science in Business Administration degree program for undergraduates and the Master of Business Administration, Master of Accounting, and Doctor of Business Administration programs at the graduate level.

#### II. Intellectual Contributions

The College encourages and supports faculty basic and applied scholarship as well as instructional development for the purposes of expanding knowledge, enhancing classroom instruction, and contributing to regional economic development. Scholarship is broadly defined to include investigative efforts that lead to the origination, the integration, or the application of knowledge pertinent to the various fields of business. A program of continuing scholarship is the responsibility of each faculty member. The College is responsible for using its resources to encourage, support, and reward faculty scholarship.

#### III. Service

The College's service mission is to engage in activities which support and contribute to the development of the University, community and region, and to provide a vehicle for the continuing development of faculty and staff through interaction with the College's numerous constituents. This mission is accomplished through participation in the College's external programs, and through the efforts of individual faculty and staff.

### The Professional Readiness Engagement Program

The Professional Readiness Engagement Program (PREP) is a student support initiative in the Mitchell College of Business, designed to meet the professional development needs of undergraduate students majoring in business as they transition into the workplace. PREP provides quality experiential activities, career interest exploration, and advanced educational experiences, including professional development courses, internships and mentoring experiences, and workshops to prepare MCOB students for the workforce.

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## **The Center For Real Estate And Economic Development**

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The Center for Real Estate and Economic Development provides students with educational opportunities to increase their knowledge of real estate markets and the impact of economic development on the community.

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## **The Melton Center For Entrepreneurship And Innovation**

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The Melton Center impacts the Central Gulf Coast region by stimulating and nurturing entrepreneurship and innovation. The Center leverages federal, state, and local resources to impact and expand the entrepreneurial culture at the University of South Alabama and the Central Gulf Coast region through education, engagement, and development opportunities. The activities of the Center directly support the service mission of the Mitchell College of Business to contribute to the economic development of the region.

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## **Career Services Center**

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The University Career Services Center acts as a liaison between employers and students. Business and professional firms of national significance visit the campus regularly to interview prospective graduates.

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## **Scholarships**

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The Mitchell College of Business offers prestigious scholarships to entering freshmen students from Alabama who are majoring in the Mitchell College of Business. Contact the Office of Enrollment Services, (251) 460-6494, for application procedures, deadline dates and more information about the Abraham Mitchell Business Scholarships. In addition, scholarships for eligible students in the Mitchell College of Business are made available by local and regional firms in Accounting, Management, Marketing, Real Estate, and Finance. (Refer to the Financial Aid section of this Bulletin for details.) Visit JagSPOT on the University's website to apply.

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## **Cooperative Education Program**

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The Cooperative Education Program is available to students in the Mitchell College of Business. This program offers qualifying students opportunities to work part-time while attending school as a full-time student or alternate full-time employment with course work on a rotating semester basis. For details contact the Director, Career Services Center, 2100 Meisler Hall, University of South Alabama, Mobile, Alabama 36688-0002, (251) 460-6188.

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## **Admission To The Mitchell College Of Business**

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Students may transfer from other colleges in the University to the Mitchell College of Business. Degree requirements are defined by the University Bulletin in effect for the semester of entry into the College. A student's counseling file must be available for evaluation of courses required for a degree in Business.

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## **Transfer Students**

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The Office of Student Services in the Mitchell College of Business evaluates for credit all courses transferred from other colleges and universities. Degree credit will be given only for those courses which meet the requirements for the degree program of the College. Students transferring from a community college may have a maximum of 61 semester hours accepted toward the degree program. No junior or senior-level courses listed in the curriculum of the Mitchell College of Business will be accepted from a community college for degree credit.

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## **Transient Course Credit**

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Students enrolled in the Mitchell College of Business must receive prior approval from the MCOB Dean's Office before enrolling in any courses at another institution. Approval will not be granted for dual enrollment for any semester in which the requested course is taught at USA. If the course is a major requirement, prior approval of the Department Chair is also required. Students must have earned a "C" in English 101 before transient approval is granted.

Transient course approval may be granted on one of the following conditions:

1. Students who are not residents of the area and who leave USA to return home for one or more semesters.
2. Students who move to another area prior to completing all degree requirements but who have met the residency requirements for the Mitchell College of Business.
3. Students who are scheduled to graduate and the course will not be offered at USA during the final term.

FAILURE TO OBTAIN PRIOR APPROVAL MAY RESULT IN LOSS OF TRANSFER CREDIT FOR THE COURSE WORK. The Transient Approval form may be downloaded from the MCOB website and forwarded to the Office of Student Services for consideration.

## **Student Classifications, Responsibility And Advising**

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Student classifications in MCOB are Pre-Business, Business Administration, and Declared Major. Freshmen who are admitted in the Pre-Business Classification will be restricted to enrollment in General Education classes, which can include CIS 150, BUS 101, and BUS 150. In order to advance to the Business Administration classification, students admitted in the Pre-Business classification must successfully complete any developmental studies requirements and MA 112 with a GPA of 2.0 or higher before enrolling in MCOB courses.

Students enrolling in the College, who are eligible to enroll in MA 112, are assigned to Business Administration as their major area until they have completed EH 101, EH 102, MA 120, and the 200-level Business Techniques Core listed below with a minimum grade of C in each 200-level course and have a 2.0 USA GPA. After fulfilling these requirements, students must declare a major selected from the fields of Accounting, Economics and Finance, Management, Marketing, or General Business. In Economics and Finance, Management, and Marketing, a concentration must also be declared. Those planning to declare Accounting as a major must also complete ACC 371 and ACC 331 with a C or better before declaring.

After declaring a major, students will be advised by a faculty advisor from that area. Students attending other colleges, including community colleges, who are planning to enter the Mitchell College of Business must take at least 50% of the required business credit hours and at least six (6) out of nine (9) major courses at the University of South Alabama.

Each student is responsible for meeting all requirements of the degree program. Before registering for any course, students must complete any prerequisites listed in course descriptions in this Bulletin. The Office of Student Services is available to all students for the evaluation of their degree-program record. When an exception is made in a student's program, written approval of the exception by the Associate Dean must be placed in the student's file. Failure to properly document exceptions may delay graduation.

## **Requirements For Second Major In Business**

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Undergraduate students enrolled in the Mitchell College of Business who plan to add a second major to their curriculum must meet all requirements for the second major. Concentration courses included in the first major cannot be counted toward the second major requirements.

## **Dual Majors Across Colleges**

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Students not enrolled in the Mitchell College of Business and interested in a dual major in business must meet with an adviser in the Office of Student Services for information.

## **Requirements For A Minor In Business**

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Undergraduate students enrolled in the Mitchell College of Business who plan to add a minor to their curriculum must meet all requirements for the minor. Two concentration courses in the minor will be counted as business electives to fulfill the major degree requirements.

# **Departments Of Instruction**

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Accounting.....	239
Economics & Finance.....	384
Management (and General Business).....	590
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# Degree Requirements

## Undergraduate

Student classifications in MCOB are Pre-Business, Business Administration, and Declared Major. Freshmen who are admitted in the Pre-Business Classification will be restricted to enrollment in General Education classes, which can include CIS 150, BUS 101, and BUS 150. In order to advance to the Business Administration classification, students admitted in the Pre-Business classification must successfully complete any developmental studies requirements and MA 112 with a GPA of 2.0 or higher before enrolling in MCOB courses.

Students enrolling in the College, who are eligible to enroll in MA 112, are assigned to Business Administration as their major until they have completed EH 101, EH 102, MA 120, and the 200-level Business Techniques Core listed below with a minimum grade of C in each 200-level business core course and have a 2.0 USA GPA. After fulfilling these requirements, students must declare a major selected from the fields of Accounting, Economics and Finance, Management, Marketing, or General Business. In Economics and Finance, Management, and Marketing, a concentration must also be declared. Those planning to declare Accounting as a major must also complete ACC 371 and ACC 331 with a C or better before declaring.

**Each student enrolled in the Mitchell College of Business must complete at least six of the following Basic Business Techniques Core with a C or better before enrolling in any course of the MCOB 300 or 400 series:**

ACC 211 Principles of Accounting I

ACC 212 Principles of Accounting II

BUS 245 Applied Business Statistics I

BUS 255 Applied Business Statistics II

BUS 265 Legal Environment of Business I

CIS 250 Computer Information Systems II

ECO 215 Principles of Microeconomics

ECO 216 Principles of Macroeconomics

EH 101 Composition I

EH 102 Composition II

MA 120 Calculus and Its Applications

After declaring a major, students will be advised by a faculty advisor from that area. Students attending other colleges, including community colleges, who are planning to enter the Mitchell College of Business must take at least 50% of the required business credit hours and at least six (6) out of nine (9) major courses at the University of South Alabama.

Each student is responsible for meeting all requirements of the degree program. Before registering for any course, students must complete any prerequisites listed in course descriptions in this Bulletin. The Office of Student Services is available to all students for the evaluation of their degree-program record. When an exception is made in a student's program, written approval of the exception by the Associate Dean must be placed in the student's file. Failure to properly document exceptions may delay graduation.

### Requirements For A Second Major In Business

Undergraduate students enrolled in the Mitchell College of Business who plan to add a second major to their curriculum must meet all requirements for the second major. Courses included in the first major cannot be counted toward the second major requirements.

### Dual Major Across Colleges

Students not enrolled in the Mitchell College of Business and interested in a dual major in business must meet with an adviser in the Office of Student Services for information.

## All Course Requirements For The Bachelor Of Science In Business Administration Degree

All students enrolled in the Mitchell College of Business are required to take specified Business courses and courses in other Colleges of the University. Additionally, a major field of study must be selected in Accounting, Economics and Finance, Management, Marketing, or General Business. The General Business major is delivered online.

To graduate, students complete a minimum of 122 semester hours with an overall institution grade-point average of 2.0 (38 hours of general education requirements and 84 hours of business courses). In addition, a grade of at least C is required in each of the Basic Business Techniques courses and a 2.0 GPA is required in the 300-level business core courses, and a 2.0 grade-point average is required for all courses counted in the Major.

All students enrolling in the Mitchell College of Business must complete at least fifty percent of all business credit hours and at least six of the nine courses counted toward the major at the University of South Alabama.

All students must petition for graduation according to University requirements explained elsewhere in this Bulletin.

Requirements for a degree in the Mitchell College of Business are detailed below. The sequence, as outlined, is intended as an example schedule only. Freshman and sophomore students may take general education lower division courses in any combination which meets prerequisite requirements. Each student must comply with Course Prerequisite Requirements as listed in the course description sections of the current University Bulletin.

Bachelor of Science in Business Administration Curriculum		
	Course Title	Credit Hours
English Composition Requirements Semester Hours		
EH 101	English Composition I *	3
EH 102	English Composition II *	3
General Education Requirements		
MA 120	Calculus and Its Applications *	3
EH (215 & 216, 225 & 226, or 235 & 236)		6
Fine and performing Arts (ARS 101, DRA 110, MUL 101, ARH 100, or ARH 103)		3
Humanities & Fine Arts (Select 1 from: ARS 101, DRA, 110, LG 111, 112, 131, 132, 151, 152, 171, 172, MUL 101, PHL 110, 131, ARH 100,103, or 123)		3
History (HY 101, 102, 135, or 136)		3
Behavioral Sciences (CA 211, PSY 120, SY 109, or AN 100)		3
Science Requirements		
Natural Science with lab (Select 2 from BLY 101 or 121, BLY 102 or 122, CH 101, 103, 131, 132, GEO 101, GEO 102, GY 111, 112, PH 101, 104, PH 114 or 201, PH 115 or 202)		8
Freshman Core/Non-Business Electives (3 Hours Required)		3

BUS 150 Introduction to Business and Management \*\*

\*\*BUS 150 is required of all incoming freshman. Transfer students without BUS 150 should select one non-business elective.

200-Level Business Core (A grade of C or better is required for each course.)

ACC 211	Accounting Principles I*	3
ACC 212	Accounting Principles II*	3
BUS 245	Applied Business Statistics I*	3
BUS 255	Applied Business Statistics II*	3
BUS 265	Legal Environment of Business I*	3
CIS 250	Advanced Computer Applications*	3
ECO 215	Principles of Microeconomics*	3
ECO 216	Principles of Macroeconomics*	3

\* Courses which must be completed before student can declare a major.

300-Level Business Core (2.0 Average is required in this area)

BUS 305	Information Systems & Technology	3
FIN 315	Business Finance	3
MGT 300	Management Theory & Practice	3
MGT 305	Organizational Communication (W)	3
MGT 325	Operations Management	3
MKT 320	Principles of Marketing	3

Major Courses - (2.0 GPA is required in this area) 27 hours - 6 of the 9 must be taken at USA

Business Electives 6

Professional Readiness Engagement Courses

BUS 101	Professional Experience I	1
BUS 201	Professional Experience II	1
BUS 301	Professional Experience III	1

Transfer students enroll in BUS 302 Professional Experience 3

Students will enroll in one business experience course based on the student's major. Internship ACC 496, ECO 496, FIN 496, MGT 496, MKT 496 3

Business Policy Requirement

MGT 485	Business Policy in a Global Economy (W)	3
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MGT 486	Undergraduate Comp Exam (MGT 485 Co-Req.)	0
TOTAL BUSINESS CURRICULUM		122

## General Ed. Requirements

All students enrolled in the Mitchell College of Business are required to take specified business courses and courses in other Colleges of the University. Additionally, a major field of study must be selected in Accounting, Economics and Finance, Management, Marketing, or General Business.

To graduate, you must have a minimum of 122 semester hours with an overall institution grade-point average of 2.0. In addition, a minimum grade of "C" is required in the 200 – level Basic Business Techniques courses and a 2.0 GPA is required for the 300 – level Business Core Courses, and a 2.0 GPA is required for all courses counted in the Major.

All students enrolling in the Mitchell College of Business must complete at least fifty percent of all business credit hours and at least six of the nine courses counted toward the major at the University of South Alabama.

All students must petition for graduation according to University requirements explained elsewhere in this Bulletin.

General education requirements for a degree in the Mitchell College of Business are detailed below. Freshman and sophomore students may take lower division courses in any combination which meets prerequisite requirements. Each student must comply with Course Prerequisite Requirements as listed in the course description sections of the current University Bulletin.

### Bachelor Of Science In Business Administration General Education Requirements

All students seeking degrees in the Mitchell College of Business must complete the following general education courses to fulfill degree requirements. Required business courses are listed on College's Degree Requirements page and on each department's page.

#### Mitchell College of Business General Education Requirements

##### Area I. Written Composition (6 HRS)

EH 101 (3)

EH 102 (3)

##### Area II. Humanities and Fine Arts (12 HRS)

EH 215-216, 225-226, or 235-236 (3)

2nd Literature course of sequence (3)

ARS 101, DRA 110, MUL 101, ARH 100, or ARH 103 (3)

Select 1 from: ARS 101, DRA, 110, LG 111, 112, 131, 132, 151, 152, 171, 172, MUL 101, PHL 110, 131, ARH 100,103, or 123 (3)

##### Area III. The Natural Sciences and Mathematics (11 HRS)

MA 120\* (3)

Natural Science with lab (4)

Select 2 from BLY 101 or 121, BLY 102 or 122, CH 101, 103, 131, 132 GEO 101, GEO 102, GY 111, 112, PH 101, 104, PH 114 or 201, PH 115 or 202 (4)

\*Courses which must be completed before student can declare a major.

##### IV. History, Social & Behavioral Sciences (6 HRS)

HY 101, 102, 135, or 136 (3)

PSY 120, SY 109, AN 100, or CA 211 (3)

## Minors

### Minors In The Mitchell College Of Business

Students in other colleges may elect, with the approval of their department chair, a minor in the Mitchell College of Business. A 2.0 GPA is required for the courses applied toward the minor. Students must complete at least 50% of the courses counted towards the minor at the University of South Alabama. Courses used for a first business minor may not be used for a second business minor.

#### Economics Minor

A minimum of 18 semester hours in Economics including:

ECO 215 Principles of Microeconomics

ECO 216 Principles of Macroeconomics

ECO 315 or ECO 316 Intermediate Microeconomics or Intermediate Macroeconomics

Plus nine semester hours of other upper-level Economic Electives numbered 301 or above.

#### Entrepreneurship Minor

#### Finance Minor

#### General Business Minor

#### General Management Minor

#### Marketing Minor

A minimum of 18 semester hours including:

MGT 345 Innovation and Creativity

MGT 355 Legal and Financial Aspects of Entrepreneurship

MGT 365 New Venture Creation

MGT 483 Social Entrepreneurship.

Plus six semester hours of elective courses, choose two: MGT 300 Management Theory and Practice, MKT 320 Principles of Marketing, MGT 347 Franchising, MGT 356 Strategic Issues in Family Business, MKT 350 Internet Marketing (Prerequisite is MKT 320), MKT 381 Sales Management and Personal Selling (Prerequisite is MKT 320), MGT 462 Negotiation and Dispute Resolution.

A minimum of 18 semester hours including:

ECO 215 Principles of Microeconomics

ACC 211 Principles of Accounting I

FIN 315 Business Finance (Prerequisites are ECO 215, ACC 211, BUS 245 or equivalent, MA 120 or equivalent)

FIN 420 Investments (Prerequisite is FIN 315)

Plus six semester hours of other upper-level finance courses at the level of FIN 300 or above.

A minimum of 18 semester hours including:

ACC 211 Principles of Accounting I

ECO 215 Principles of Microeconomics

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MGT 300 Management Theory and Practice

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MKT 320 Principles of Marketing

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Plus three semester hours of Management Electives and three semester hours of Business Elective, numbered 300 or above for which the student meets the prerequisites.

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A minimum of 18 semester hours including:

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MGT 300 Management Theory and Practice

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MGT 340 Organizational Behavior

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MGT 305 Organizational Communication

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MGT 351 Human Resource Management

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Plus six semester hours of Management Electives, numbered 300 or above for which the student meets the prerequisites.

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A minimum of 18 semester hours including:

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MKT 320 Principles of Marketing

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MKT 374 Buyer Behavior

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MKT 380 Integrated Marketing Communications

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Plus nine semester hours of other upper-level Marketing Electives numbered 300 or above.

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# College Of Education And Professional Studies

## General Information

Administrative Staff	(251) 380-2738
Dean	Andrea Moore Kent
Associate Dean	Andre Green
Director of Field Services	Jennifer Simpson
Director of Academic Advising and Teacher Certification	Josh Wooden
Director of Academic Assessment	

College of Education and Professional Studies Website  
<http://www.southalabama.edu/colleges/ceps>

### Mission, Vision, And Goals

The mission of the College of Education and Professional Studies is to provide the highest level of leadership in furthering education, life-long learning, and well-being for all citizens of Alabama as members of a global community. In fulfilling this mission, we envision becoming an exemplar for preparing high quality professionals who are committed to maximizing the potential of every citizen to participate fully in a global society. To realize this vision, we have set the following goals:

- To raise academic quality and enhance the learning environment
- To maximize the quality of student life
- To embrace diversity
- To enhance visibility, collaboration, and civic engagement
- To strengthen financial resources
- To ensure appropriate planning and assessment
- To promote research and scholarship

### International Education

As part of its mission, the College of Education and Professional Studies is committed to broadening students' understanding of different cultures and preparing them for the global community in which we live. We believe that an international academic experience, in which students immerse themselves in a different culture and apply what they have learned in their USA classes, can enhance their cross-cultural competence and improve their interpersonal skills. While abroad, students develop a greater understanding and a deeper appreciation of the complexity of educational, cultural, political, environmental, economic, and social issues worldwide that promote the knowledge and skills needed to interact effectively in today's global society. Students are encouraged to explore the full range of international opportunities for directed study, teaching internships, collaborative research, and service learning projects available in the College and in other programs across campus.

Interested students should contact the College's Office of Student Advising (<http://www.southalabama.edu/colleges/ceps/advising.html>) or the USA Office of International Education (<http://www.southalabama.edu/ie>) to explore options available to students majoring in programs in the College.

### Accreditation And Approvals

The College of Education and Professional Studies at the University of South Alabama is accredited by the National Council for Accreditation of Teacher Education (NCATE), 2010 Massachusetts Ave., NW, Suite 500, Washington, DC 20036; phone (202) 466-7496. This accreditation covers initial teacher preparation programs and advanced educator preparation programs.

Additionally, teacher and support personnel certification programs are approved by the Alabama State Board of Education.

The Clinical Mental Health Counseling program at the University of South Alabama is accredited by the Council for Accreditation of Counseling and Related Educational Programs (CACREP) beginning in July of 2013.

The Combined-Integrated Clinical & Counseling Psychology Ph.D. program is accredited by the American Psychological Association Commission on Accreditation.

### Choice Of Bulletin

If a student does not attend the College for a period of one (1) calendar year or longer, he/she will be required to fulfill the requirements of the program as specified by the Bulletin in effect during the year of his/her return as a student.

Students requesting to change their program, major, or concentration must meet the requirements as specified by the Bulletin in effect at the time of the change.

### Computer Access Requirement

College of Education and Professional Studies Computing Policy

In addition to the University Access Requirement the College of Education and Professional Studies requires all students who are pursuing a degree in designated programs to own or have access to a personal portable laptop computer or equivalent device and accessories that conform to the College's current minimum standards. See <http://www.southalabama.edu/colleges/ceps/resources/computerpolicy.pdf> for details.

### Fingerprint/Background Check Requirement

Beginning fall term 2011 proof of a clear ALSDE background check (Suitability Letter) will be required to complete any course in a teacher education program which contains a field experience/placement in a K-12 school.

In addition, proof of clear background check may also be required prior to enrollment in any course which contains a field experience in a Non Teacher Cert program.

## Departments Of Instruction

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Counseling and Instructional Sciences.....	341
Health, Kinesiology, and Sport.....	453
Hospitality and Tourism Management.....	486
Integrative Studies.....	504
Leadership and Teacher Education.....	529

## Degree Requirements

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### Undergraduate

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#### Programs

The College of Education and Professional Studies, working in cooperation with the Administrative staff and with other colleges of the University, recognizes and accepts the responsibility for identifying, recruiting, and preparing students who will be capable of providing education in a dynamic society. It accepts the further responsibility of insuring that every student preparing to teach will have the advantage of continuous counseling. Planned observation and participation are regular parts of the students program throughout the preparation period.

The College of Education and Professional Studies has five major objectives: to prepare professional educators for meeting the educational needs of children, youth, and adults; to prepare support personnel for meeting the educational needs of the schools; to assist schools with the improvement of instructional programs; to prepare students in professional areas other than teaching; and to conduct research to expand, enhance, and evaluate instructional programs and personnel.

Undergraduate preparation is offered in elementary education, middle and high-school education, special education, and Instructional Design and Performance Improvement. Offerings in educational psychology, foundations of education, health, physical education and leisure studies, safety education, and other areas of general appeal are available to students in the University.

## Student Portfolio Assessment

The College of Education and Professional Studies uses student portfolio assessment as a part of program requirements and assessment of student learning outcomes.

Students majoring in the College of Education and Professional Studies are required to purchase the License to use the portfolio beginning with the first College of Education and Professional Studies course containing teacher education standards taken and will continue to use the software throughout their program of study.

## Undergraduate Residency Requirement For Teacher Certification Programs

In addition to the University Residency Requirements, a student seeking a degree in the College of Education and Professional Studies that leads to teacher certification must complete 25 percent of the credit hours required for the degree from the last 45 semester hours and a minimum of 32 hours of upper level course work in the major discipline as a student at the University of South Alabama.

## The Teacher Education Program

The Teacher Education Program begins with selective recruitment, gives careful attention to each phase of the preparation program, and assists in the proper placement and adjustment of teachers and other educational personnel. Follow-up studies of graduates are made in an effort to assist them, to gain knowledge of their effectiveness on the job, and to secure data vital to future planning and development. Programs for the preparation of teachers are built on a liberal arts foundation. Those preparing for teaching positions in the secondary schools pursue a composite teaching specialization in the College of Education and Professional Studies, and a content area in the College of Arts and Sciences. Those preparing to teach in elementary school concentrate on subject matter relevant to the elementary school curriculum while completing general requirements in the liberal arts. Those preparing for a teaching specialization which extends from nursery through twelfth grade pursue a broad program appropriate to elementary and secondary schools. All groups complete their undergraduate programs with suitable professional preparation.

## Undergraduate Program Options Within The College

The College of Education and Professional Studies offers teaching and non-teaching programs. Teaching programs are presented first and predominate among all programs offered.

Various teaching program options are available at the Class B (Bachelor of Science degree) level in the College.

## Course Fees

All undergraduate three semester hour courses in the CEPS, except the PE activity courses, internships and practicum, have a special computer fee. Internships have an internship fee, and some PE activity courses have special fees as noted in other sections of this Bulletin.

## Minimum Professional Studies Requirements

Because professional studies requirements vary from program to program, the student is referred to the appropriate departmental section in this Bulletin. However, a candidate may not enroll in more than five professional studies courses before the candidate has met all criteria for unconditional admission to a teacher education program. The candidate may repeat any of the five courses in which he or she received a grade of "C" or below. A student who changes from non-teacher certification to a teacher certification program must comply with this standard. A student who violates this standard is in jeopardy of losing academic credit.

## Requirements For Admission To Candidacy In Teacher Education Programs

Student should make a written application for admission to a teacher education program during the semester preceding the completion of 60 semester hours of credit. Courses in progress during the semester the student makes the application for candidacy may be used as a part of meeting the regulations.

Admission to a program in teacher education requires that:

1. The student
  - (a) declare teaching specializations,
  - (b) take any necessary tests
  - (c) submit any needed evaluations, and
  - (d) be available for necessary interviews.
2. The student's application must be submitted to the College of Education and Professional Studies Advising Center by the published deadline of the semester in which the student is eligible to be admitted.

3. Transfer students must complete twelve semester hours of work at the University of South Alabama to be eligible for candidacy consideration.
4. The student's application receives approval from the Undergraduate Candidacy Committee.

### **Criteria For Admission To Teacher Education Candidacy**

1. Completion of 60 semester hours of course work, 48 of which must be in general studies.
2. A minimum overall grade-point average of 2.75 on all work attempted at the University of South Alabama and a minimum program grade-point average of 2.75 (including transfer work).
3. A minimum grade point average of 2.75 in professional studies (including transfer work), no grade below "C" is acceptable.
4. A minimum grade-point average of 2.75 in area(s) of teaching specialization(s) (including transfer work).
5. Completion of EH 101, 102, CA 110, EDM 310, EPY 351 including successful completion of the e-portfolio assessment of standards in completed courses. Secondary Education, Health Education, and Physical Education and SPE Collaborative 6-12 must also complete EDU 400.
6. Satisfactory performance on Core Academic Skills for Educators tests of mathematics, reading, and writing. If passed prior to 9/1/2017, the AECTP basic skills tests are acceptable until 9/1/2022.
7. K-6 Teacher Education majors must pass at least two of the four subtests of the Elementary Ed:Multiple Subjects Praxis II. Students in Teacher Candidacy must pass all subtests of the Multiple Subjects Praxis II to register for Tier III classes.
8. Completion of The Dispositions Survey and satisfactory completion of a departmental interview designed to provide information on the applicant's personality, dispositions, interests, and aptitudes consistent with the requirements for the successful teaching.
9. Proof of clear (ALSDE) background check, and professional liability insurance.
10. Sufficient physical ability and emotional stability to perform successfully as a teacher. (NOTE: These factors might be covered in the departmental interview.)
11. Recommendation of advisor and department chair.
12. Department/program may have additional candidacy requirements.

\*\*Completion of the minimum requirements does not guarantee admission to Teacher Candidacy.\*\*  
See departmental section of the bulletin.

### **Requirements For Admission To Student Teaching**

Admission to student teaching requires that the applicant:

1. Submit an application for student teaching to the Office of Field Services through the advisor February 15 for fall placements and September 15 for spring placements.
2. Receive approval of the application from the Director, Office of Field Services.
3. All students must comply with the College of Education and Professional Studies Policies and Procedures, which are on file in the Office of Field Services and in the Office of the Dean.
4. A student may not enroll in any other course during the hours assigned for student teaching except by approval and for one course only.
5. Student Teaching Assignments: All student teaching placements and nontraditional fifth-year teaching field internships will be coordinated by the Office of Field Services. All student teaching placements will be made in the Greater Mobile area to facilitate the supervision of students by University of South Alabama faculty or other personnel so designated by the chair of the department in which that student is enrolled.

### **Criteria For Admission To Student Teaching**

1. Be admitted to Teacher Candidacy and senior standing.
2. A minimum overall grade point average of 2.75 at the University of South Alabama.
3. A minimum program grade point average of 2.75 (including transfer work).
4. A minimum grade point average of 2.75 in professional studies (including transfer work). No grade below a "C" is acceptable.
5. Completion of a minimum of three-fourths of teaching specialization(s) with a minimum grade point average of 2.75 (including transfer work).
6. Completion of all program prerequisite courses.
7. Continued satisfactory progress in meeting requirements for admission to the program of teacher education.
8. Recommended for Student Teaching by assigned faculty advisor.

9. Satisfactory performance on the Core Academic Skills for Educators tests of mathematics, reading, and writing. If passed prior to 9/1/2017, the AECTP basic skills tests are acceptable until 9/1/2022.
10. Satisfactory score on the required Praxis II test(s).
11. Completion of any departmental prerequisites.
12. Proof of clear (SDE suitability letter) background check and professional liability insurance.
13. Completion of field experience requirement, hours vary with program.
14. Department/program may have additional admission requirements.

See departmental section of the bulletin.

### **Retention**

To remain in the teacher education program, each student shall make satisfactory progress as determined by continuous evaluation. A student shall be removed from candidacy when any of the minimum required program GPA's drop below 2.75, or, the USA transcript GPA drops below 2.75 or if a D or F or U grade is received in a candidacy course. Violations of the Alabama Educators Code of Ethics is grounds for dismissal from the program or delay in advancing through the program. Failure to receive or maintain a clear background check is grounds for dismissal from the program.

### **Minimum Completion Requirements For Certification Programs**

Successful completion of the following minimum requirements may qualify the student for Class B Certification. Currently in Alabama this certificate is valid for five years.

1. Satisfactory completion of a program approved by the State Board of Education with a minimum overall grade-point average of 2.75 on all work attempted at the University of South Alabama and a minimum program grade-point average of 2.75 (including transfer work), a minimum grade point average of 2.75 in professional teacher education with no grade below "C" (including transfer work), and a minimum grade-point average of 2.75 in area(s) of teaching specialization(s) (including transfer work).
2. Demonstrated readiness to teach through on-the-job performance as a student teacher as determined by an evaluation plan approved by the State Board of Education.
3. Satisfactory completion of the student teaching experience.
4. A minimum of 25 percent of the credit hours required for the degree from last 45 semester hours and a minimum of 32 semester hours of upper level course work in the major discipline must be earned in residence at The University of South Alabama.
5. A community college graduate can transfer no more than 50% of the credits used toward the degree with a maximum of 64 semester hours toward the Bachelor of Science degree requirements.
6. Satisfactory performance on the specified Standards as determined by the e-portfolio assessment.
7. Satisfactory performance on all requirements of the Alabama Educator Certification Assessment Program (AECAP).
  - (a) Core Academic Skills for Educators tests of mathematics, reading, and writing. If passed prior to 9/1/2017, the AECTP basic skills tests are acceptable until 9/1/2022.
  - (b) Praxis II test(s)
  - (c) Effective September 1, 2018, a performance assessment (edTPA) administered by Pearson will be required for initial certification in a teaching field or area of instructional support.
8. Bachelor's degree from a regionally accredited institution.
9. Course work used to meet certification requirements (B, A, AA) may not be used to meet a different level requirement.
10. Secondary Education programs require an academic major in Arts & Sciences.
11. Remedial or developmental studies courses may not be used to meet program requirements.

### **Recommendation For Certification**

The Dean of the College of Education and Professional Studies is responsible for recommending qualified University of South Alabama students seeking teacher certification. Only those students who have completed requirements of the University and of the Alabama State Department of Education will be recommended for Class B Professional Teaching Certificate. The State Department of Education and Teacher Certification do not recognize minors in teacher education programs.

### **Warranty Statement**

Consistent with the policies of the Alabama State Department of Education, the College of Education and Professional Studies at the University of South Alabama warrants its graduates (State Approved Program Competencies) under the following conditions:

Warranties will be provided to USA graduates who receive their initial professional certification through the college and are employed by a public school district in Alabama in their area of specialization. The College of Education and Professional Studies shall provide assistance at no cost to such individuals who were recommended for certification by the College of Education and Professional Studies and are deemed to be unsatisfactory based on performance evaluations established/approved by the Alabama State Board of Education and recommended by the Local Education Agency within two years after program completion.

### **Transfer Credit From Non-Accredited Institutions**

No degree credit will be accepted by the College of Education and Professional Studies from any collegiate institution unless that institution has regional accreditation and prepares teachers on the same degree level of certification. Course work from institutions in foreign countries require an official (WES or IEE) evaluation to determine if the course may be used for programs leading to Teacher Certification.

### **Persons With Degrees Other Than In Education**

Persons holding degrees other than in Education may apply for study in an approved program leading to professional certification; they will be required to complete their approved programs outlined in this Bulletin to qualify for Alabama certification.

### **Worksheets Available For All Programs**

Course of Study sheets are available online at (<http://www.southalabama.edu/colleges/ceps/programs.html>). Each student will have access to his/her degree audit via PAWS.

### **Approvals And Services**

Upon satisfactory completion of an approved program of study and upon recommendation of the Dean and Certification Officer of the College of Education and Professional Studies, a professional certificate will be issued by the appropriate State Department of Education only if the student is eligible and applies. Presently, many State Departments of Education have reciprocal agreements for issuing certificates to graduates of NCATE-accredited institutions.

### **Certification In More Than One Teaching Field**

Students enrolled in the College of Education and Professional Studies desiring to complete certification requirements in more than one teaching field will complete the curriculum in each field including general studies, professional studies in teacher education (including the internship), and teaching specialization. Courses used for one level of certification may not be used again for a higher level certificate.

### **The Teacher Education Exit Examination, The Electronic Portfolio Assessment, The Core Academic Skills For Educators Tests, Praxis II Exam(S), And EdTPA**

Students under the current Alabama state standards must pass satisfactorily the assessments mentioned above if they are to be recommended to be certified by the Alabama State Department of Education. Test dates are announced in advance. Application information for the Core Academic Skills for Educators and Praxis II Test(s) may be obtained from the Student Services Office, UCOM 3020 or Advising Center, UCOM 3360. Information pertaining to the exit examination may be obtained in the student's major department.

### **Graduation Average**

A minimum grade-point average of 2.2 in the major/specialization (including transfer work) and a grade-point average of 2.2 on all work undertaken in residence at the University of South Alabama are required for the Bachelor of Science degree. In addition, students seeking teacher certification must have a minimum overall grade-point average of 2.75 on all work attempted at the University of South Alabama and a minimum program grade-point average of 2.75 (including transfer work), a minimum grade-point average of 2.75 in professional teacher education with no grade below "C" (including transfer work), and a minimum grade-point average of 2.75 in area(s) of teaching specialization(s) (including transfer work).

### **Grade-Point Average (GPA) Deficiency (Over All)**

If additional course work is required to fulfill the GPA requirement, only course work in the humanities, social sciences, science, mathematics, or the teaching field(s)/ specialization(s) may be used. Physical Education activity courses may not be used to improve a deficient GPA. Previous course work with a grade of C or below may be repeated.

### **Directed/Independent Studies**

No more than two (2) Directed/Independent Study courses may be used for degree and/or certification requirements, including use in improving the grade-point average. For students with a minor, no more than 12 hours can count toward major or professional studies.

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## Graduate

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### Programs

The College of Education and Professional Studies offers the Master of Education degree leading to Alabama Class A Certification in Early Childhood Education, Elementary Education, English for Speakers of Other Languages, Health Education, Instructional Leadership, Library Media, Physical Education, Reading Specialist, School Counseling, Secondary Education, Special Education, and Visual Arts, and the Master of Science degree in Clinical Mental Health Counseling, Educational Media and Technology, Exercise Science, Health, Instructional Design and Development, and Sport Management.

The College of Education and Professional Studies offers the following Alternative Master of Education degree programs leading to the Alabama Class A Certificate, or equivalent, to persons who have earned a non-education baccalaureate degree from an accredited institution of higher education: Early Childhood Education, Elementary Education, English for Speakers of Other Languages, Foreign Languages, Secondary Education, Special Education and Visual Arts.

In addition to the traditional master's degree and the alternative master's degree, the Leadership and Teacher Education department offers a class "B" certification program with the master of education degree. See academic advisor or advising sheets for specific details.

The College of Education and Professional Studies offers an Educational Specialist degree leading to AA Certification, in Alabama, in the following areas: Early Childhood Education, Elementary education, Instructional Leadership, Reading Specialist, Secondary Education, Special Education and Teacher Leader.

The College of Education and Professional Studies offers a Doctor of Philosophy degree program in Instructional Design and Development and a Doctor of Education degree program in Educational Leadership.

Furthermore, a combined-integrated Doctor of Philosophy Degree in Clinical and Counseling Psychology is offered jointly with the Department of Psychology in the College of Arts and Sciences.

### Course Fees

All graduate three semester hour courses in the CEPS, except internships, practicum and pre-practicum experiences have a special computer fee.

### General Information

#### Requirements for Admission/Readmission

Each applicant to a graduate program must meet the general Graduate School Standards stated in the "Graduate School Admission Requirements and Procedures" section of this Bulletin. Individual programs may have additional requirements for admission and may be restricted because of capacity limitations. Consult departmental or program descriptions for additional information. Readmission to some programs in Education (e.g., Educational Administration, Doctoral Program, and some AA/Ed.S. and M.Ed. Programs) require review by program faculty.

### Academic Regulations

1. All degree programs require a minimum of 30 semester hours of approved course work at the 500-level or above.
2. A minimum overall 3.25 GPA on all work attempted in the specific Master's Degree programs as well as an overall 3.25 GPA on all work attempted (Educational Administration M.Ed. and certification option - 3.25) and a 3.5 GPA for Educational Specialist Degree programs is required for graduation.
3. All requirements for a Master's Degree or Educational Specialist Degree must be completed within seven calendar years from the date of matriculation.

### Student Responsibilities

1. Students admitted on a provisional basis will be eligible for regular admission when or before they complete nine hours of approved graduate course work with a minimum grade-point average of 3.0. Some programs do not admit students in provisional status.
2. Students are responsible to apply for Graduation. See University Calendar for deadline dates.
3. Apply for the Written Comprehensive Examination. This should be done by the end of the first week of class in the semester student wishes to sit for the examination.

### Teacher Certification

Master of Education degree programs require that students have the appropriate valid State of Alabama Class B Professional Certificate. Sixth-year programs require that students have the appropriate State of Alabama Class A Professional Certificate.

Coursework used to meet Class B certification requirements may not be used to meet Class A certification requirements. Coursework used to meet Class A certification requirements may not be used to meet Class AA certification requirements.

### **Renew/Reinstate State Certification**

Students in need of coursework to renew or reinstate certificates can be admitted as non-degree graduate students. However, they may not hold this status for more than two semesters. Courses taken as a non-degree graduate student may be counted toward subsequent degrees after the successful completion of nine (9) semester hours in a declared major. The student is responsible for checking with the State Department of Education to ensure that the course(s) will meet renewal or reinstatement requirements.

### **Graduate Assistantships**

Masters level assistantships are awarded on an annual basis and are granted for the fall and spring semesters. The stipend for the two semesters is \$6,000 and waiver of up to 10 hours of tuition. Fees are paid by the student. In return, twenty clock hours of work during business hours are required per week. The awards are made generally in the summer for the next academic year.

Doctoral level assistantships are awarded on an annual basis and are granted for the fall, spring, and summer semesters. The stipend for the three semesters is \$11,000 and waiver of up to 10 hours of tuition. Fees are paid by the student. In return, twenty clock hours of work during business hours are required per week. The awards are made generally during the summer for the next academic year.

Application forms can be secured by a request addressed to Director, Graduate Studies, College of Education and Professional Studies.

### **Transferred Work - Degree**

(After completion of nine semester hours on USA campus)

For master's programs, graduate credit from a regionally accredited institution may be transferred to the University of South Alabama. The appropriateness of courses for transfer will be determined by the candidate's department. A minimum grade of "B" is required for each course. Courses completed more than seven years prior to graduation may not be used to meet degree requirements. Graduate Transfer Credit Recommendation forms are available in UCOM 3020 or on the web. The institution must have been accredited at the time of students' study for a student to transfer credit.

### **Certification Transfer Courses**

(Prior to completion of the first semester at USA)

Students with a previous master's degree, seeking Class A level certification without obtaining a second master's degree and wish to count course work from a previous master's degree must seek approval during the first semester of enrollment in the new certification program. The form for this process is Transfer Credit Evaluation - Certification Courses and is located on the web (<http://www.southalabama.edu/colleges/ceps/gradschool/>). No previously taken course will count in the new certification program without this approval. Courses approved in this manner may count for the certification, but not a second master's degree.

### **Master Of Education Degree Program**

The programs for the Master of Education degree in the College of Education and Professional Studies provide for a major in each area. Both thesis and non-thesis degree options are available to the graduate student. Each degree area specifies courses that support the major area. Supporting courses are developed for the particular demands of the individual degree areas. The programs may lead to the Alabama Class A Certificate, or equivalent.

### **Requirements For Admission**

The following criteria supplement the Graduate School criteria (see Categories of Admission in the general section of this Bulletin).

#### **Regular Admission**

1. Sufficient courses in the major area to qualify for graduate study in the involved discipline.
2. An appropriate advanced degree may be used in lieu of other requirements for Regular Standing.
3. A completed application and application fee for admission to the Graduate School.
4. All graduate programs in the College of Education and Professional Studies require nationally normed tests. These official test scores must be sent by the agency to Office of the Registrar. To insure correct test selection, contact the Office of Graduate Studies at (251) 380-2000.
5. Official transcripts from all institutions attended.
6. If entering a certification program, a copy of a valid Alabama Teaching Certificate in the appropriate teaching field or instructional support area.

7. Two recommendation forms or letters of recommendation addressing the prospective student's scholarship and professional abilities. (See program for preferred format.)
8. For programs requiring proof of teaching experience, {(e.g., Instructional Leadership (3 years), Library Media (2 years), Reading Specialist add-on (2 years), School Counseling – Traditional (2 years))}a Supplemental Experience Form is required.
9. See departments for any other or more specific requirements.

### **Provisional Admission**

See Categories of Admission in the general section of this Bulletin for criteria for Provisional Admission and requirements for a provisional student to be changed to Regular Standing. Some programs including certification programs do not admit students provisionally. Please contact the Office of Graduate Studies (251.380.2630) in the College of Education and Professional Studies for more information.

### **Master Of Science Degree Programs**

The programs for the Master of Science degree program in the College of Education and Professional Studies provide for a major in each area. Both thesis and non-thesis degree options are available to the graduate student. Each degree area provides for areas of study that support the major area. These are developed for the particular demands of the individual degree areas. Supporting areas of study draw upon other divisions of the University, as well as the College of Education and Professional Studies, to give greater depth and breadth to the major. Courses in the supporting area are elected by the student after consultation with the advisor.

### **Requirements For Admission**

Students are admitted each semester. The following criteria supplement the Graduate School criteria (see Categories of Admission in the general section of this Bulletin).

### **Regular Admission**

1. Sufficient courses in the major area to qualify for graduate study in the involved discipline.
2. An appropriate advanced degree may be used in lieu of other requirements for Regular Standing.
3. A completed application and application fee for admission to the Graduate School.
4. Official test scores must be sent from the testing agency to the Office of the Registrar. All Master of Science programs require the GRE or MAT for admission.
5. Official transcripts from all institutions attended.
6. Submission of resume with chronology of professional employment.
7. Two letters of recommendation, preferably from outside the academic department, attesting to the prospective student's scholarship and/or professional abilities.
8. See departments for any other or more specific requirements.

### **Provisional Admissions**

See Categories of Admission in the general section of the Bulletin for criteria for Provisional Admission and requirements for a provisional student to be changed to Regular Standing. Some programs do not admit students in provisional status.

### **Alternative Master Of Education Degree Programs**

Alternative Master of Education degree programs are available in selected areas to persons who have earned a non-education baccalaureate degree from a regionally accredited institution of higher education. The program provides for a major concentration in an area of teacher certification. Each certification area specifies courses that support the particular demands of the individual certification areas. The programs lead to the Alabama Class A Certificate.

The following Alternative Master of Education degree programs are offered: Art Education, Early Childhood Education, English for Speakers of Other Languages, Elementary Education, Secondary Education, and Special Education.

In addition to the traditional master's degree and the alternative master's degree, the Leadership and Teacher Education department offers a class "B" certification program with the master of education degree. See academic advisor or advising sheets for specific details.

### **Requirements For Admission**

Students are admitted each semester. Students must meet the criteria for Provisional or Regular Standing in the Graduate School described in Categories of Admission in the general section of this Bulletin and the Master of Education Requirements for Admissions section listed above, as well as the following program criteria:

1. A grade-point average of at least 2.75 (A=4.0) documented on the official transcript from the degree-granting regionally accredited institution.
2. Evidence of having earned as many hours of credit in the subject to be taught as are required in an undergraduate teacher education program. (Minimum 32 semester hours/19 semester hours upper level.) Social science, general science and English language arts composite programs require at least one course in each area of the composite program. For example general science composite program requires course work in biology, chemistry, earth and space science, and physics. Passing score on the appropriate Praxis II test may meet this requirement.
3. Elementary and Early Childhood Education and Special Education require completion of 12 hours of course work in each of the following areas prior to admission to the program: mathematics, social sciences, general sciences, and English language arts (with a grade of "C" or higher in each course). Passing score on the appropriate Praxis II test may meet this requirement.
4. Official test scores must be sent by the testing agency to the Registrar. In addition to the admission requirements listed above for all Master of Education programs, some Alternative Master's programs may accept a passing score on the appropriate Praxis II test in lieu of the GRE or MAT.
5. Satisfactory performance on the Core Academic Skills for Educators tests of mathematics, reading, and writing. If passed prior to 9/1/2017, the AECTP basic skills tests are acceptable until 9/1/2022. Test scores are sent directly to the Office of Student Services in the College of Education and Professional Studies.
6. All Alternative Master's programs require SPE 500 or the equivalent.
7. Proof of clear ALSDE background check.
8. See department for additional prerequisites or admission requirements.

### **Completion Of A Teacher Education Program**

#### Master of Education Programs

Satisfactory performance on the following minimum requirements and completion of the required master's degree curriculum qualifies the student for Class A Certification.

#### A. Program for Teachers:

1. A minimum grade-point average of 3.25 on all work attempted in the graduate program.
2. Successful completion of a written comprehensive examination including the teaching field, humanistic and behavioral studies, curriculum and teaching, and evaluation of teaching and learning.
3. Successful completion of an internship required for: Alternative Master's programs, Reading Specialist, and other initial teacher certification programs.
4. Satisfactory performance on the appropriate Praxis II test, edTPA (Alternative Master's programs), and the electronic portfolio are required for a recommendation for certification.

#### B. Programs for Instructional Support Personnel:

1. A minimum grade-point average of 3.25 on all work attempted in the graduate program (3.25 in Instructional Leadership).
2. A satisfactory score on a comprehensive written examination covering content of the program.
3. Satisfactory performance of the responsibilities of the specialist in an internship.
4. The curriculum in each area of specialization must be taken in work approved for graduate students.
5. Satisfactory performance on the appropriate Praxis II test and the electronic portfolio are required for a recommendation for certification.

### **Examinations**

Two types of examinations are available. See departmental sections for departmental option(s).

#### **Type I Comprehensive Examination Written or Oral**

This examination is written or oral, or both, at the option of the faculty of the student's major department, and is in the candidate's field(s) of concentration. The examination is conducted by a committee of at least three members appointed by the chair of the department in which the student has majored. This examination shall not exceed three hours. Comprehensive examinations are scheduled once each semester. The student is responsible for ascertaining the date and time of the examination. Student must be in good standing, i.e. not on academic probation in order to take the exam.

The comprehensive examination is taken during the semester in which students complete during their degree requirements or a subsequent semester. The examination is given at least two weeks before the end of the semester, and the result is reported to the Director of Graduate Studies, College of Education and Professional Studies.

Application for the comprehensive examination can be obtained from <http://www.southalabama.edu/colleges/ceps/gradschool/resources/compsapp.pdf>. Submission deadlines for the application are available at <http://www.southalabama.edu/colleges/ceps/gradschool/>. The result of this examination is reported to the Director of Graduate Studies College of Education and Professional Studies by the Chairperson of the department.

Comprehensive examinations may be repeated at the discretion of the graduate student's department. In no case may the comprehensive examination be repeated more than twice. A student will be dismissed from the program after two unsuccessful attempts to pass the examination. Specific recommendations for additional work, following failure of the comprehensive examination, will be at the discretion of the department involved.

### **Type II Comprehensive Examination Performance**

This examination requires a performance either as part of a culminating seminar, internship, field study, or practicum review. Successful completion of this examination is determined by the faculty of the department of the student's major.

The result of this examination is reported to the Director of Graduate Studies, College of Education and Professional Studies, by the chair of the department. The student should consult with an advisor for entering this phase of graduate work.

If a thesis is submitted, an oral examination on the thesis, not to exceed one hour, is required. The examination is conducted by the candidate's Thesis Committee. Approval by a majority of the examination committee is required.

## **Educational Specialist Degree Program For The Instructional Specialist**

The Educational Specialist degree program for the Instructional Specialist leading to AA Certification, in Alabama, is available in the following areas: Early Childhood Education, Elementary Education, Instructional Leadership, Secondary Education, Special Education, Reading Education, and Teacher Leadership.

### **Admission To The Program**

1. The requirements for admission to the program are as follows:
2. The applicant shall have a valid Alabama Class A certificate in the same teaching field or instructional support area in which the sixth-year program is sought (with the exception of Teacher Leader);
3. The applicant shall have a Master's degree from a regionally accredited institution; and
4. The applicant shall have at least two years' successful experience as a teacher in the area of specialization in which the sixth-year program is sought, except for Instructional Leadership, which requires three years of acceptable experience. A Supplemental Experience Form is required as proof of teaching experience.
5. A two to three page narrative, typed and double spaced, stating the applicant's reasons for pursuing an Educational Specialist Degree.
6. Two letters of recommendation.
7. Official Graduate Record Exam (GRE) scores including the Analytical writing section.
8. Submission of resume with chronology of professional employment.
9. The Instructional Leadership program requires an admission portfolio with specific content and format. Please refer to the department section for additional information.

Application forms can be requested from the Director of Admissions, University of South Alabama, Mobile, Alabama 36688-0002.

Transferred Work (After completion of nine semester hours on USA campus)

Graduate credit from a regionally accredited institution having a sixth-year program may be transferred to the University of South Alabama for the program. Only graduate credit earned following the completion of a Master's degree may be transferred. The appropriateness of courses for transfer will be determined by the candidate's department. Courses more than seven years old may not be used to meet degree requirements. Graduate Transfer Credit Recommendation forms are available in UCOM 3020 or on the web.

### **Description Of The Program**

The Program for the Instructional Specialist is organized around the following program components.

#### **A. Core Courses**

Core courses are designed to insure that each candidate possess required basic knowledge and competencies. The Core Courses are IDE 615 or IDE 620, EDU/IDE 640, EDU/IDE 650, and EDU/IDE 692, and Departmental 699.

#### **B. Area of Certification**

In addition to the core courses, each candidate will complete an area of specialization from among the following available in the program: Early Childhood Education, Elementary Education; Instructional Leadership, Reading Specialist, Secondary Education; Special Education or Teacher Leader. The specializations are designed to provide candidates

with an in-depth study of instructional concerns and skills appropriate to specific student groups and areas of study in the school curriculum.

C. Research Project Seminar (EDU/IDE 692)

The Research Project Seminar is designed for the purposes of selecting and developing a field project proposal. The proposal, in turn, provides the basis for the Field Project. Successful completion of the core courses is prerequisite to the enrollment in the research project seminar.

D. Research Project (Departmental 699)

The field project, as the culminating experience in the Instructional Specialist Program, provides an opportunity for the candidate to synthesize and apply the various program components in a selected instructional setting. The research project may carry three semester hours of credit. The candidate must reach suitable agreements with the appropriate public school system. A project report in standard form is required. Students must enroll in the Department 699 course each semester until the project is completed. A grade of "B" or higher in IDE 692 is a prerequisite.

Educational Specialist Degree Programs

Successful completion of the required curriculum and the following minimum requirements qualifies the student for Class AA Certification recommendation.

A. Programs for Teachers:

1. A minimum grade-point average of 3.5 on all work attempted.
2. Successful completion of a written comprehensive examination covering the content of the program.
3. Satisfactory performance as a teacher.

B. Programs for Instructional Support Personnel:

1. A minimum grade-point average of 3.5 on all work attempted.
2. Successful completion of a written comprehensive examination covering the content of the program.
3. Two years satisfactory performance in the area of specialization or three years for Educational Administration.

### **Doctor Of Philosophy Program In Instructional Design And Development**

The College of Education and Professional Studies offers a Doctor of Philosophy degree in Instructional Design and Development. The purpose of the program is to produce graduates who will discover, advance, and disseminate knowledge in the field of instructional design and development. See Department of Professional Studies for details.

### **Doctor Of Education Program In Educational Leadership**

The College of Education and Professional Studies offers a Doctor of Education degree with two concentrations. One area of focus is for K-12 practitioners, the other for aspiring Higher Education administrators. The purpose of the program is to provide educational leaders with the knowledge and skills to connect research, theory, and practice in leading high performing organizations.

The Doctorate in Educational Leadership is 30 hours beyond the Specialist degree in Educational Leadership or 60 hours beyond the Master's. Applicants to the K-12 track must hold an "A" certificate in Instructional leadership or its equivalent.

The deadline for submission of admission materials is March 15th. A cohort model is utilized with new cohorts beginning each summer semester. For information, contact the Department of Leadership and Teacher Education.

## **General Ed. Requirements**

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Required electives in the Major to total 64 hrs.

\*As a part of the General Studies Curriculum, students must complete a 6 semester hour sequence in Literature or History.

K-6 Teacher Education (Elementary Education, Early Childhood Education, and Special Education) majors must complete 12 semester hours (as specified on the advising sheets or in PAWS) in each of the following four disciplines: English Language Arts, mathematics, social sciences and natural sciences (with a grade of C or higher in each course). In addition, K-6 Teacher Education majors must include BLY 101 + lab and two laboratory science courses from BLY, CH, GY, or PH representing two areas.

See Departmental Advising Sheets for Specific Course Requirements.

**College of Education and Professional Studies General Education Requirements**

## Area I. Written Composition (6 HRS)

EH 101 (3)

EH 102 (3)

## Area II - Humanities and Fine Arts (12 HRS)

## CA 110 (3)

1 course from: ARS 101; MUL 101; DRA 110; ARH 100, ARH 103, ARH 123 (3)

1 course from \*EH 215, EH 216, EH 225, EH 226, EH 235, EH 236 (3)

1 course from EH 215, EH 216, EH 225, EH 226, EH 235, EH 236; AFR 101; AIS 105; PHL 110, PHL 121, PHL 131, PHL 231, PHL 240; LG 111-272; ARS 101; MUL 101; DRA 110; ARH 100, ARH 103, ARH 123 (3)

\*Students must complete a six semester hour sequence in either literature or history. A sequence in literature is required for secondary-English/language arts.

## Area III - Natural Sciences and Math (11 HRS)

1 course from MA 110, MA 112, MA 113, MA 115 (3)

2 courses from BLY 101, BLY 102; GY 111, GY 112; CH 101, CH 103, CH 131, CH 132, CH 141; GEO 101, GEO 102; PH 101, PH 104, PH 114, PH 115, PH 201, PH 202 (8)

## Area IV - History, Social and Behavioral Sciences (12 HRS)

1 course from \*HY 101, HY 102, HY 135, HY 136 (3)

3 courses from \*\*HY 101, HY 102, HY 135, HY 136; AN 100, AN 101; GEO 114, GEO 115; SY 109, 112; PSC 130; PSY 120, PSY 250; ECO 215, ECO 216 (9)

\*Students must complete a six semester hour sequence in either literature or history. A sequence in history is required for secondary-social studies

## Area V - College Requirements (7 HRS)

1 course PE 100 and 1 course from PE 101-PE 157 (4)

1 course EPY 251 (teacher education majors take EPY 351) (3)

# College Of Engineering

## General Information

College of Engineering Administrative Staff	(251) 460-6140
Dean	John Steadman
Associate Dean, Undergraduate Affairs	Thomas G. Thomas, Jr.
Associate Dean, Research and Graduate Affairs	Clive Woods
Director of Graduate Studies and Programs Chair, Doctoral/Science in Systems Engineering	Robert Cloutier
Assistant Professor	Henry Lester
Instructor	Richard Kramer
Instructor	Sumit Arora

College of Engineering web site

<http://www.southalabama.edu/colleges/engineering/>

**Degree Programs Offered** - The College of Engineering offers programs of study leading to the following degrees:

- Bachelor of Science in Chemical Engineering
- Bachelor of Science in Civil Engineering
- Bachelor of Science in Computer Engineering
- Bachelor of Science in Electrical Engineering
- Bachelor of Science in Mechanical Engineering
- Master of Science in Chemical Engineering
- Master of Science in Civil Engineering
- Master of Science in Electrical Engineering
- Master of Science in Mechanical Engineering
- Doctor of Science in Systems Engineering

### Mission Statement

The mission of the College of Engineering is to provide students with quality accessible undergraduate and graduate engineering education, to prepare graduates for professional careers and lifelong learning, to promote the creation and dissemination of knowledge, to serve society through professional practice and community outreach and to act as a catalyst for economic and technological development of the Gulf Coast region, the State of Alabama and the Nation.

### Honors Program In Engineering

To receive a designation of "Departmental Honors" students must have at least a 3.5 GPA at the time of graduation and complete a Honors Senior Project in their major. The Honors Senior Project requirement may be satisfied in either of two ways.

1. By completing an Honors Senior Project course that requires completion of a research project under the guidance of a faculty mentor.
2. By completing a special honors design project as part of the capstone engineering design requirement under the guidance of a faculty mentor.

It is required that there be both a written report and oral presentation of the results of the Honors Senior Project.

Students participating in "Departmental Honors" may also elect to take University Honors Seminar and participate in other University Honors Activities upon recommendation of their major advisor.

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## Undergraduate Admission

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All students, whether domestic or international, are strongly encouraged to submit standardized test scores, either ACT or SAT.

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## Computer Ownership Policy

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College of Engineering undergraduate students will be required to own a personal laptop computer that conforms to the current college minimum standards by the time they enter engineering level courses. This is a one machine per student requirement. For more information, consult the Laptop Policy at [www.southalabama.edu/colleges/engineering/currentstudents/academicpolicies.html](http://www.southalabama.edu/colleges/engineering/currentstudents/academicpolicies.html).

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## Requirements For Minors In Disciplines Other Than Engineering

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Engineering students may complete a minor in disciplines other than engineering. Students desiring to do so must complete the published requirements for that discipline.

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## Choice Of Bulletin For Undergraduate Degree Requirements

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After an absence of one calendar year or when transferring into an engineering program, students must use the Bulletin in effect at the time of readmission or transfer, or a later version. No student may use a Bulletin older than six years from the date of graduation.

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## Cooperative Education Program

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The College of Engineering also offers an attractive five year cooperative Education Program. This program allows the student to gain valuable engineering experience as he or she pursues his or her degree. The freshman year is spent as a full time student at the university. During the sophomore and junior years the student alternates working full time with an excellent salary for one semester and taking full time course work the next semester. The student returns to school full time for the senior year.

This program offers many advantages for the student. Interested students should consult with either the Career Services Center or the College of Engineering

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## Master's Program

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The College of Engineering offers programs leading to degrees of Master of Science in Chemical, Civil, Electrical and Mechanical Engineering.

The programs of study are designed to provide knowledge of modern engineering concepts and practices; to prepare the graduate for the practice of engineering at a higher level of proficiency than attainable with the bachelor's degree; and to prepare the graduate for further study toward the doctoral degree should the graduate so desire. The programs comprise course work and directed theoretical and experimental inquiry in thesis or project research.

Three plans of study are offered. The thesis option, the project option, and the course work only option. The thesis differs from the project in that the thesis is usually oriented toward original engineering research whereas the project is usually oriented toward engineering applications. The course work only option, while available to all graduate students, is particularly attractive to full time employed engineers that are interested in augmenting and enhancing their engineering skills as part time students. Courses are available in the evening to accommodate employed students.

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## Admission To Graduate Programs

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The following criteria supplement the Graduate School criteria (see Categories of Admission) and are required for admission to all College of Engineering Master's Programs:

- I. Regular Admission
  - A. A B.S. degree in engineering in a relevant field from an ABET accredited program.
  - B. A grade-point average of 3.0 or greater (A=4.0) on all undergraduate work.
  - C. A minimum GRE Quantitative score of 151 and a minimum GRE Verbal score of 141.
  - D. For international students, a minimum score of 550 on the written Test of English as a Foreign Language (TOEFL) or a 79 score on the Internet-based TOEFL exam, or a minimum score of Band 6.5 on the International English Language Testing System (IELTS) test is required.
- II. Provisional Admission

- A. A B.S. degree in engineering or in a field acceptable to the departmental Graduate Admissions Committee is required. Depending on the student's background additional undergraduate preparatory courses may be required. These courses will not count toward the Master's degree.
- B. A minimum grade-point average of 2.5 (A=4.0) on all undergraduate work including a minimum grade-point average of 2.5 over the last 64 course hours of undergraduate work is required. Alternatively, a minimum grade-point average of 2.75 over the last 64 course hours of undergraduate work is required.
- C. For international students, a minimum score of 525 on the written Test of English as a Foreign Language (TOEFL) or a 71 score on the Internet-based TOEFL exam, or a minimum score of Band 6.0 on the International English Language Testing System (IELTS) test is required.

### III. Non-degree Admission

- A. Non-degree admissions are accepted in accordance with Graduate School requirements. Each applicant will be reviewed by the Admissions Committee of the appropriate department which may reserve the right to evaluate additional credentials, such as, but not limited to, course work taken, letters of recommendation, etc. At the beginning of the first semester, international students, except those who have earned a bachelor's or graduate degree at an accredited United States institution of higher learning, are given a foreign language test by the University. Students with deficiencies in English skills as assessed by the test will be required to take and successfully complete special English Communication ESL courses tailored to Engineering. These courses will be in addition to other requirements for the degree

*The above are minimum requirements for admission. Specific requirements for admission differ for each department. For details, see the Master of Science in Chemical Engineering, Master of Science in Civil Engineering, Master of Science in Electrical Engineering and Master of Science in Mechanical Engineering program requirements.*

### **Change Of Status From Provisional To Regular Standing Within The Master's Programs**

The following requirements are in addition to the Graduate School requirements for change of status:

Students required to complete additional undergraduate course work in partial fulfillment of the requirements to advance from Provisional Admission to Regular Admission must obtain a minimum grade-point average of at least 3.00 on the total of all such required courses with a grade of at least "C" in each course.

### **Doctor Of Science In Systems Engineering**

The Doctor of Science (D.Sc.) in systems engineering offers the students a holistic approach to the design and understanding complex systems. NASA defines systems engineering as "a holistic, integrative discipline, wherein the contributions of structural engineers, electrical engineers, mechanism designers, power engineers, human factors engineers, and many more disciplines are evaluated and balanced, one against another, to produce a coherent whole that is not dominated by the perspective of a single discipline." The main objectives of the D.Sc. program are to 1) provide our graduates with the ability to approach all systems (engineered, environmental, coastal, etc.) with the ability to understand the entire system lifecycle in a manner that meets the needs of industry, and 2) prepare our graduates for leadership positions requiring applied research and critical thinking. This program is appropriate for students who want to pursue research-based careers in industry, government, or academia. The program requires coursework across multiple engineering disciplines, and specific, validated systems research resulting in a publicly defended doctoral thesis.

### **Requirements For Admission: (With Master's Degree)**

In addition to meeting Graduate School requirements, the requirements for admission to the D.Sc. Program are as follows:

1. A written statement of the applicant's professional goals and commitment to completing the degree requirements. (Statement of Purpose).
2. Three letters of recommendation from individuals familiar with the student's academic and technical abilities.
3. An M.S. degree in a discipline related to engineering (e.g. civil, computer, chemical, electrical, industrial, mechanical).
4. A grade point average of 3.0 or greater (on a scale of 4.0) on all graduate coursework.
5. A minimum score of 151 in the Verbal portion and a minimum score of 151 in the Quantitative portion of the Graduate Record Examination (GRE). If the applicant has a current P.E. license, or has an M.S. degree in a discipline related to engineering (e.g. civil, computer, chemical, electrical, industrial, mechanical), they may petition the D.Sc. acceptance committee to waive the GRE requirement.
6. For international students whose native language is not English, a minimum score of 79 on the Internet-based TOEFL, 213 on the computer-based TOEFL, or a minimum score of band 6.5 on the IELTS is required.
7. Transcripts from all colleges and universities attended.

## Requirements For Regular Admission (With Bachelor'S Degree)

Those students who have not obtained a Master's degree yet may also apply to the D.Sc. program. The admission requirements are as follows:

In addition to meeting Graduate School requirements, the requirements for acceptance without a Master's degree are as follows:

1. A B.S. degree in a discipline related to engineering (e.g. civil, computer, chemical, electrical, industrial, mechanical, etc.). [The D.Sc. admission committee reserves the right to review the coursework at the B.S. level before making an admission decision, particularly if the degree is from a non-US university or a university with non-accredited programs]
2. A grade point average of 3.5 or greater (on a scale of 4.0) on all undergraduate coursework. If the student has performed graduate level work, this will be considered separately, and will not be used to recalculate the required 3.5 undergraduate GPA.
3. A grade of B or higher for all graduate courses to be considered as transfer credits from previous institutions attended. Only graduate credits that have not been applied to another degree can be considered for transfer.
4. Transcripts from all colleges and universities attended.
5. A minimum score of 151 in the Verbal portion and a minimum score of 151 in the Quantitative portion of the Graduate Record Examination (GRE). If the applicant has a current P.E. License, they may petition the D.Sc. acceptance committee to waive the GRE requirement.
6. For international students whose native language is not English, a minimum score of 79 on the Internet-based TOEFL, 213 on the computer-based TOEFL, or a minimum score of band 6.5 on the IELTS is required.

## Departments Of Instruction

Chemical and Biomolecular Engineering.....	282
Civil, Coastal, and Environmental Engineering.....	299
Electrical and Computer Engineering.....	388
Mechanical Engineering.....	630
Systems Engineering.....	803

## Degree Requirements

### Undergraduate

Admission to the University of South Alabama constitutes admission to the College of Engineering for those students wishing to major in engineering. Incoming students should specify a particular discipline in the College as a major as soon as practical in order to receive proper counseling and pursue their engineering course work. Transfer students must declare a major and have all transfer credit evaluated by the Admissions Office. The department chair will approve transfer credit for engineering degree credit except where substitutions are involved; substitutions require the approval of the dean. Transfer students are encouraged to have departmental evaluations accomplished prior to their first registration for classes.

Entering freshmen students not adequately prepared to enter the degree program may be required to take additional preparatory course work. Such preparatory work will not be counted toward the major degree program.

Students must have the prerequisites for the courses in which they enroll; students who enroll without prerequisites are subject to administrative withdrawal. Prerequisites are satisfied by courses taken either at South Alabama or by acceptable transfer credit. Students not exempted from EH 101 will be required to take it as a prerequisite to EH 102.

Today's society is permeated by an extensive technology that affects the lives of everyone. The engineering function in this modern society-while basically unchanged from the goal of using natural resources for the betterment of mankind-has more far-reaching and immediate consequences than ever before through the social, economic, environmental, and political reactions that follow technological developments.

The engineering profession has recognized that to fulfill the social as well as technical responsibilities incumbent upon today's engineer, engineering graduates must not only be technically competent, but must also be as broadly educated as possible within the allotted educational time period. To this end, the College of Engineering strives to prepare its students ultimately to

assume their responsibilities by providing technically sound programs of instruction that incorporate a strong component in the humanities and social sciences. Graduates are prepared to take industrial positions, to assume positions with government, or to pursue graduate studies.

Engineering students may also qualify as premedical students should they desire to apply for admission to medical school. Students interested in medical careers should consult with the Dean of the College of Medicine.

### Professional Component Standing For Undergraduate Programs

It is important that students make adequate progress in departmental majors within the College of Engineering, so each department establishes a list of courses that must be satisfactorily completed with a minimum grade before the student is allowed to proceed with more advanced courses. Professional Component Standing (PCS) within a department indicates that these courses have been satisfactorily completed. Six courses are required for PCS in every department, so they are collectively required for every student. The PCS requirements for all College of Engineering students are shown in the following table:

College of Engineering PCS Requirements			
Course Number	Course Title	Credit Hours	Minimum Grade
EH 101	English Composition I	3	C
EH 102	English Composition II	3	C
CH 131	General Chemistry I + Lab	4	C
MA 125	Calculus I	4	C
MA 126	Calculus II	4	C
PH 201	Calculus-Based Physics I + Lab	4	C

In addition, all departments in the College of Engineering require Departmental Professional Component Standing for most 300- and 400-level courses. PCS is awarded by the appropriate department chair when the student completes the College of Engineering PCS requirements and the departmental PCS requirements. See the departmental policy statements for additional details.

### Requirements For A Bachelor Degree

To become a candidate for a Bachelor of Science degree in one of the five major disciplines within the College of Engineering, the student must satisfy the general requirements of the University as set forth in "Academic Policies and Procedures," and must have satisfactorily completed the program of instruction specified by the major department. In addition to these requirements, the Engineering student must have at least a GPA of 2.00 or C-level competency in all subjects taken in the student's major department at the University of South Alabama.

Engineering students are required to take and make a "good faith" effort to pass the Fundamentals of Engineering (FE) examination prior to their anticipated date of graduation. Students should be aware of the deadline established by the National Council of Examiners for Engineering and Surveying (NCEES) for submission of examination application materials. Failure to meet the deadline could result in delayed graduation.

A transfer student must complete at least 25 percent of the credit hours required for the degree from upper-division courses with at least 16 hours in the upper level of the student's major department at the University of South Alabama.

Engineering students with less than 15 credit hours are required to take EG 101. Requirements for EG 201 can be waived by the student's advisor once it is demonstrated that a particular student has been exposed to material covered in this course and most likely is not going to be benefited by such a course. An appropriate math, science or engineering course must be substituted if the student does not take EG 101.

## Graduate

### Requirements For A Masters Degree

The thesis option includes 6 hours of credit for the thesis. The project option includes 3 hours of credit for the project. The course work option requires credit only for graduate courses. Specific degree requirements differ for each department. For details, see the Master of Science in Chemical Engineering, Master of Science in Civil Engineering, Master of Science in Electrical Engineering and Master of Science in Mechanical Engineering program descriptions.

Required study includes coursework in a specific engineering discipline and course work in supporting areas. Supporting areas include mathematics, natural sciences, basic medical sciences, computer sciences, statistics, and business, as well as engineering.

All students pursuing a thesis or project option are required to take a one semester hour course in research integrity as part of their engineering course work requirements. A maximum of six hours of directed study may be counted toward the degree. A maximum of six hours of thesis may be counted toward the degree.

All students must satisfactorily complete a comprehensive examination. Students failing this examination may try a second time not sooner than 12 weeks after the first attempt. Students failing the second time will be academically dismissed from the program. The thesis or project candidate must present a satisfactory oral defense of the written report. Should the student present an unsatisfactory defense, a second attempt will be allowed no sooner than 12 weeks after the first attempt. A second unsatisfactory defense will result in dismissal from the program.

An engineering senior at the University of South Alabama who has completed 96 semester hours with a GPA of 3.00 or better may, with approval of the Director of Graduate Studies, enroll in graduate engineering courses in accordance with Graduate School policies. See Graduate Study For Advanced Undergraduates.

## Doctor Of Science (D.Sc.) Program In Systems Engineering

### Degree Requirements:

Degree requirements for the D.Sc. Program in Systems Engineering include a minimum of 67 graduate credit hours, up to 30 credit hours of which may come from an M.S. degree with the approval of the student's committee. Only courses with a grade of A or B are eligible for transfer. A minimum of 36 graduate credit hours must be taken at the University of South Alabama. In addition to meeting graduate school requirements, the following requirements must be met:

1. Completion of fifteen (15) credit hours of core systems engineering courses. These include three required courses - SE 601 - Systems Engineering Fundamentals, SE 602 - Risk and Failure Analysis, SE 603 - Integration, Test and Evaluation. In addition, two more electives in the Systems Engineering subject area approved by the student's committee will be required.
2. Completion of EG 501 Research Integrity and Ethics, prior to registering for dissertation hours.
3. Successful completion of doctoral qualifying examination.
4. Completion of eighteen (18) dissertation credit hours.
5. Successful completion of written dissertation and oral defense of dissertation.

## General Ed. Requirements

Engineering students must comply with the University's general education requirements. In the area of Humanities and Fine Arts, engineering students are required to take a total of at least 9 semester hours with a minimum of 3 semester hours in literature and a minimum of 3 semester hours in the arts with the remaining hours from the Humanities and Fine Arts. In the area of History, Social, and Behavioral Sciences, engineering students are required to take at least 9 semester hours with a minimum of 3 semester hours in history and a minimum of 3 semester hours from among the other disciplines in the social and behavioral sciences.

### General Education Requirements

#### Area I. Written Composition (6 HRS)

EH 101 (3)

EH 102 or EH 105H (3)

#### Area II. Humanities and Fine Arts (Total of 21 HRS)

##### Fine Arts elective ARH 100, 103, 123

ARS 101

DRA 110

MUL 101

##### Literature elective

EH 215, 216, 225, 226, 235, 236

**Humanities elective AFR 101**

AIS 105

CA 110 (3)\*\*

LG 111, 112, 211, 212

LG 131, 132, 231, 232

LG 171, 172, 271, 272

LG 151, 152, 251, 252

LGS 101, 102, 201, 202

LGS 106, 107, 206, 207

LGS 121, 122, 221, 222

LGS 141, 142, 241, 242

PHL 110, 121, 131, 231, 240

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**Area III. Natural Sciences and Mathematics (14 HRS)**

CH 131, 131L

PH 201

MA 125

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

History

HY 101, 102, 135, 136

Behavioral and Social Sciences AIS 201

AN 100, 101

CA 100, 211

ECO 215, 216

GEO 114, 115

GS 101

IS 100

PSC 130

PSY 120, 121, 250

SY 109, 112

\*Must complete 3 hours in literature and 3 hours in fine arts.

\*\*Civil, Computer, Electrical and Mechanical Engineering majors are required to take CA 110 to fulfill the humanities requirement.

\*\*\*Must complete 3 hours in history and at least 3 hours in social and behavioral sciences.

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# College Of Medicine

## General Information

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College of Medicine Administrative Staff	(251) 460-6280
Dean	John V. Marymont, MD, MBA
Director of Graduate Studies	Mark Taylor, Ph.D.

College Of Medicine web site  
<http://www.usahealthsystem.com/comadmissions>

## Departments Of Instruction

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- Biochemistry & Molecular Biology
- Comparative Medicine
- Microbiology & Immunology
- Pharmacology
- Physiology & Cell Biology
- Interdisciplinary Basic Medical Science
- Biomedical Engineering

## Degree Requirements

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### Graduate

The Interdisciplinary Graduate Program in Basic Medical Sciences at the University of South Alabama College of Medicine awards the Ph.D. degree in Basic Medical Science and is designed for students interested in careers in biomedical investigation. Students receive specialized research training in one of the following tracks:

- Biomedical Engineering
- Cancer Biology
- Cell & Molecular Biology
- Infectious Disease and Host Defense
- Lung Biology
- Vascular Biology

## General Ed. Requirements

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### Requirements For Admission

The requirements for admission to the Interdisciplinary Graduate Program for the Doctor of Philosophy degree in Basic Medical Sciences are:

1. The applicant shall possess, by the time of matriculation, a baccalaureate degree or the equivalent from an accredited college or university.

2. Two semesters or three quarters of undergraduate work are recommended in each of the following: physics, general chemistry, organic chemistry, biology, English composition, and mathematics (including calculus and statistics).
3. A grade-point average of at least 3.0 for all undergraduate and graduate work, on a 4.0 scale.
4. Satisfactory standing at the last educational institution attended.
5. Satisfactory scores on all standardized achievement examinations. The Graduate Record Examination is required. In addition, foreign applicants must present evidence of competence and fluency in spoken and written English with a TOEFL score of at least 95-100.

Matriculation is contingent upon review and recommendation by the Admissions Committee of the Graduate Program in Basic Medical Sciences.

## Procedures For Admission

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Applications for the Basic Medical Sciences Interdisciplinary Graduate Program are accepted for matriculation in the Fall Semester. Matriculation in the Summer Semester is possible in limited circumstances. The Basic Medical Sciences Graduate Program does not accept students on a "non-degree" or "provisional" basis.

Applications for admission (U.S. citizens) are available through the Office of Admissions, 2500 Meisler Hall, University of South Alabama, Mobile, Alabama, 36688-0002. Foreign applicants should apply through the Office of International Services at 2200 Meisler Hall, University of South Alabama, Mobile, Alabama, 36688-0002. Application materials can be accessed through the university's web site: <https://applynow.southalabama.edu/Datatel.erecruiting.Web.External/Pages/Welcome.aspx>.

Information for the graduate program can be obtained on-line <http://www.usahealthsystem.com/> (click on admissions) or by contacting the Director of the Interdisciplinary Graduate Program in Basic Medical Sciences, 5851 USA Drive North, MSB 2366, College of Medicine, University of South Alabama, Mobile, Alabama 36688-0002; Telephone: (251) 460-6153; FAX: (251) 460-6071; E-mail: [lflagge@southalabama.edu](mailto:lflagge@southalabama.edu).

To be considered for review by the Admissions Committee, an applicant must submit the following:

1. A completed application form.
2. A certified transcript from each college or university attended.
3. An official report of all scores on standardized achievement examinations (GRE, TOEFL).
4. Supplemental materials required for the program in Basic Medical Sciences must be submitted directly to the Graduate Office for the Basic Medical Sciences Interdisciplinary Graduate Program at 5851 University Drive North, MSB 2366, College of Medicine, University of South Alabama, Mobile, Alabama, 36688-0002. Supplemental materials include:
  - a. Three letters of recommendation from instructors, advisors, or other persons qualified to evaluate the student's academic performance and potential in graduate school.
  - b. A personal statement

All other documents for admission review (transcripts, test scores and letters of recommendation) must be official, and become the property of the University of South Alabama.

## Program

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### Required Course Work

Students will matriculate into the first year interdisciplinary core curriculum for the Ph.D. Program in Basic Medical Sciences without the necessity to choose an advanced program prior to entry. In year one, students complete IDL 576, IDL 577, IDL 580, IDL 581, GIS 501, and three research rotations. The purpose of rotations is to acquaint the students with various research problems under investigation and aid in the selection of a major professor in their area of specialization.

By the end of the first year, each student selects a major professor and matriculates into an advanced program. Advanced curricula are determined by the program, in conjunction with the student's Dissertation Committee. Students will develop communication skills by presentation of formal lectures and seminars and the completion and approval of a written research proposal.

### Dissertation Committee

Typically, by the end of one and a half years of study, the student will consult with their major professor, departmental Chair, and the Director of the Graduate Program to select at least four additional graduate faculty members to serve on the Dissertation Committee. At least two members should be from outside the student's major department or program. In special situations, one member may be selected from another institution with the recommendation of the departmental Chair, the Director of the

Graduate Program, and approval of the Dean of the Graduate School. The student shall convene the first committee meeting no later than six months following the selection of the Dissertation Committee.

The purpose and duties of the Dissertation Committee are:

1. To establish a suitable academic and research training program for each student.
2. To counsel the student in professional development.
3. To administer and judge a written and oral qualifying exam plus a closed and open defense of the dissertation at the end of a student's training program.
4. To assist the student in receiving superior scientific training and obtaining opportunities for postdoctoral training and/or employment upon graduation.

The student, in consultation with the major professor, shall prepare and submit a two page research project description to the Dissertation Committee no later than the end of one and a half years of study. This document must be reviewed and approved by the Dissertation Committee.

The Dissertation Committee shall meet with the student at six-month intervals to review progress. At each meeting, the student shall submit a one or two-page progress report and make an oral presentation of the progress being made on the project in an orderly and professional manner and discuss any significant problems which have arisen with a view toward gaining constructive criticism from the committee. At the conclusion of each of these reviews, the Dissertation Committee shall meet in executive session to discuss the acceptability of the student's progress. Documentation of the committee meeting and the student's progress report shall be submitted to the Graduate Office after each meeting.

A student whose progress is found to be unsatisfactory by a majority of the committee members at two such successive meetings shall be placed on probation. If the student's progress is then found to continue to be unsatisfactory, the Director of the Graduate Program (in consultation with the Dissertation Committee, the Student Evaluation and Promotions Committee (SPEC), and the departmental Chair in the student's area of specialization) may take necessary action up to and including a recommendation to the Dean of the Graduate School for academic dismissal of the student.

Changes in the composition of an established Dissertation Committee may be initiated by the student with the consent of the Chair of the Dissertation Committee. Changes in committee composition must be recommended by the Chair of the student's program of study and the Director of the Graduate Program, and approved by the Dean of the Graduate School.

### **Qualifying Examination**

The Qualifying Examination, composed of separate written and oral examinations, will be completed no later than the end of the third year in the program. The written component will focus on the student's approved research project and be prepared in the form of a hypothesis-driven research grant proposal. The written document must be approved by the Examination Committee (the student's Dissertation Advisory Committee and one outside member of the Graduate Faculty appointed by the Department Chair or Program Director who serves as its Chair) prior to scheduling of an oral examination. The student's oral defense of the written proposal and their knowledge of the underlying basic medical science discipline will comprise the oral component of the Qualifying Exam. Should the student fail one or both components of the Qualifying Exam, the student will be allowed to retake that component of the exam once more.

### **Candidacy**

The approved research proposal must be filed in the Graduate Office and will be submitted as the formal Research Proposal to the Graduate School within one month of the student's successful completion of the Qualifying Examination. The Research Proposal must also be approved by the Dean of the Graduate School. Upon satisfactory completion of the Qualifying Exam and acceptance of the Research Proposal, the student will be admitted to candidacy for the Ph.D. Students will not be permitted to register for Dissertation Research (799) until the candidacy requirement is satisfied.

### **Academic Standards**

To remain in good academic standing in the Interdisciplinary Graduate Program in Basic Medical Sciences, a student must maintain a cumulative grade-point average of 3.0. If the cumulative GPA falls below 3.0, the Graduate School will place the student on academic probation. The student must return to good academic standing within two semesters from the time of being placed on probation. When it becomes evident that it is impossible to remove the probationary status, the Director will recommend dismissal from the Graduate Program.

At the request of the Director of the Graduate Program, SPEC will review student progress and could recommend dismissal on the basis of unsatisfactory performance on preliminary/qualifying examinations, unsatisfactory research progress, scientific

misconduct or failure to meet other requirements of the Ph.D. program in a timely manner. When appropriate, SPEC will meet with the student prior to formulating a recommendation to the Director of the Graduate Program.

## Student Appeals

Any student wishing to appeal a SPEC recommendation for dismissal must present their case at a meeting of the SPEC which may also be attended by a student advocate (e.g. Department Chair, Program Director or other designated member of the College of Medicine Graduate Faculty). The student advocate can speak on the student's behalf during this meeting. Following the appeal hearing, SPEC will render a decision in a closed session. A majority vote of committee members present is required. Any recommendation regarding the appeal will be forwarded to the Director of the Graduate Program and Dean of the College of Medicine. Following administrative review, the Dean will communicate the recommendations to the Dean of the Graduate School.

In the event that a student is dissatisfied with the appeals decision rendered by SPEC, he or she can initiate an "administrative appeals procedure" as stipulated in the University Undergraduate/Graduate Bulletin. In the case of administrative appeal, the Dean will serve as the final arbitrator for the College of Medicine.

## Degree Requirements

In addition to the requirements set by the Graduate School, the following requirements must be completed for the Ph.D. degree in the Basic Medical Sciences: completion of the core and advanced curricula, a minimum overall 3.0 grade-point average on all work attempted for credit, qualifying examination, a completed dissertation approved by the student's major professor and a majority of the Dissertation Committee, and closed and open defenses of the research presented in the dissertation.

All requirements for the Ph.D. degree should normally be completed within four to five years from the date of matriculation, and must be completed within seven years. A student who has not satisfactorily completed a dissertation in a seven-year period must apply for a defined extension to complete the degree. This request must be approved by the major professor, the Chair of the department, the Basic Medical Sciences Graduate Program Executive Committee, the Director of the Graduate Program, and the Dean of the Graduate School.

If the student does not complete the degree requirements in the defined extension period, the Director of the Graduate Program, with the advice of the Graduate Executive Committee, may recommend to the Dean of the Graduate School appropriate action up to and including dismissal.

Additional information is available by contacting Department Chairs or Track Coordinators.

Departments	Chair	Phone
Biochemistry and Molecular Biology	William Gerthoffer	(251) 460-6402
Comparative Medicine	Jonathan Scammell	(251) 460-6239
Microbiology and Immunology	David Wood	(251) 460-7108
Pharmacology	Mark Gillespie	(251) 460-6497
Physiology and Cell Biology	Troy Stevens	(251) 460-7004

Tracks	Coordinator	Phone
Biomedical Engineering	Silas Leavesley	(251) 460-6168
Cancer Biology	Ming Tan	(251) 445-9853
Cell & Molecular Biology	Ronald Balczon	(251) 460-6776
Infectious Disease & Host Defese	Paul Brett	(251) 414-8179
Lung Biology	Mary Townsley	(251) 460-6815
Vascular Biology	David Weber	(251) 460-6840

# College Of Nursing

## General Information

College of Nursing Administrative Staff		(251) 445-9400
Dean	Debra C. Davis	
Senior Associate Dean for Academic Affairs	Rosemary Rhodes	
Interim Associate Dean for Research/Development	Sharon Fruh	
Associate Dean Baldwin County	Rosemary Rhodes	
Associate Dean for Academic Affairs	Heather Hall	
Assistant Dean for Clinical Affairs	Tracey Taylor	
Director of Special Projects & Evaluation	Jennifer Styron	
Professors	L. Chilton, D.C. Davis, C. Dolan, S. Fruh, J. Gunn, H. Hall, J. Harris, M. Jacobs, A. King, R. Rhodes, A. Smith, E. VandeWaa, J. Varner	
Associate Professors	H. Brown, K. Bydalek, V. Dearmon, K. Hamilton, T. Harlan, A. Hedger, A. Hill, T. Huey, J. McMillan, L. Minchew, C. Myers, S. Williams-Evans, T. Wright	
Assistant Professors	J. Anderson, M. Bolton, H. Breazeale, C. Butler, A. Calvert Campbell, C. Cheese, D. Copeland, A. Crow, N. Curtis, L. Dailey, A. Davis, C. Elkins, K. Erdlitz, C. Estabrook, J. Farmer, E. Fuller, A. Goodnough, A. Gilligan, R. Graves, L. Hammonds, S. Harlan, S. Harris, A. Hill, H. Horton, P. Huffman, P. Johnson, L. Jones, B. Lang, S. Lawrence, C. Lewis, J. Lollar, A. Marass, T. McMullan, K. McMurtrey, T. Meyer, J. Miller, K. Miller, B. Moore, E. Moore, M. Nadler, K. Pancione, T. Platt, M. Raber, B. Riley, S. Roberts, A. Rudd, E. Sawyer, A. Shing, S. Smith, J. Styron, D. Swanzy, K. Stauter, W. Stuart, T. Taylor, R. Thomas, C. Thompson-Ferrell, A. Townsend, N. Turnham, M. Varnado, N. Walls, S. Whitworth, S.G. Williams, A. Younce	
Senior Instructors	S. Bertolla, C. Herf, M. Meyer, S. Bihan	
Instructors	T. Bowen, C. Baughn, J. Cockrell, A. Davis, M. Guy, D. Hutto, K. Jordan, C. Lynch, K. Norris, S. Scott, T. Sikes-Doggett, T. Sturdivant, T. Sturm, S. Waweru, B. Woodmansee	
Department Chair, Adult Health Nursing	Valorie Dearmon	
Department Chair, Community/Mental Health Nursing	Todd Harlan	
Department Chair, Maternal/Child Health Nursing	Jackie Lollar	
Academic Advisors	Jennifer Bouvier, Leigh Holland, Brennen Mallet, Camry McCants, Brenda Mosley, Mary Phillips, Kristyn Seawell	

College of Nursing web site  
<http://www.southalabama.edu/colleges/con/>

The College of Nursing is dedicated to the education of professional nurses who provide the highest quality health care to the communities they serve. The practice of nursing is both an art and a science; the focus of nursing is the diagnosis and treatment of human responses to actual or potential health problems.

The College of Nursing has two locations, one is on the USA main campus, and the other is on the USA Baldwin County campus in downtown Fairhope. The resources of the University, the USA Hospitals and clinics, and the numerous clinical agencies provide excellent opportunities for students to acquire the knowledge and skills essential for professional nursing.

### **Mission**

The mission of the College of Nursing is to provide quality innovative educational programs to a diverse student body, to participate in research and scholarly activities, and to provide service to the University, the profession, and the public. The College accomplishes this by providing a caring, engaging environment for the empowerment of student learning potential, the professional development of faculty, and the promotion of the nursing profession.

### **Goals**

1. Cultivate a caring, innovative, and engaging environment to facilitate teaching, learning, scholarship, and service.
2. Deliver innovative quality nursing programs that meet the needs of a diverse student body and other communities of interest.
3. Promote the discovery, communication, and preservation of knowledge through scholarly activities and leadership.
4. Provide service to the University, the profession, and the public.
5. Develop community partnerships to promote nursing and the enhancement of the health care delivery system using interprofessional approaches.

### **Accreditation**

The baccalaureate program is approved by the Alabama Board of Nursing and the baccalaureate, master's, doctor of nursing practice and post-graduate APRN certificate programs are accredited by the Commission on Collegiate Nursing Education (One Dupont Circle, NW, Suite 530, Washington, D.C. 20036-1120: Telephone (202)877-6791.

### **Application Procedures**

Application forms are available on the College of Nursing's web site. A (\$50.00 for BSN; \$100.00 for MSN, DNP, or Post-Graduate Certificate) non-refundable application fee must be submitted with the application. Money orders or personal checks (\$20.00 fee on returned checks) are acceptable for BSN applicants. MSN, DNP, and Post-Graduate Certificate applicants must submit payment electronically and are required to complete a primary application in Nursing CAS at [www.Nursingcas.org](http://www.Nursingcas.org). Fall semester admission applications should be submitted by March 15 for the BSN program and February 15 for the MSN and DNP programs.

Spring semester admission applications should be submitted by July 15 for the BSN, MSN, DNP, and Post-Graduate Certificate programs. Summer semester admission applications should be submitted by January 15 for the BSN and by November 15 for the MSN and Post-Graduate Certificate program.

Applications received at other times will be considered on a space available basis for RN-BSN track only.

Students who choose not to attend during the term in which they are accepted, are not permitted to roll admission status to another semester. Students who wish to be considered for a future semester must reapply, pay another application fee, and compete with other applicants without guarantee of acceptance. Students who drop out of the program for two or more consecutive semesters must apply for readmission through the Office of the Registrar. Readmission is not automatic.

Students not accepted during a certain term who choose to roll their application to the following semester will not be assessed another application processing fee. Students who choose to roll their application a second time, or if the length of time between applications is greater than one semester, then an application processing fee will be collected in order for the application to be considered for the given term.

### **Student Responsibility**

While the University of South Alabama will endeavor to provide timely and accurate advisement, it is the responsibility of the student to know and satisfy the degree requirements of the academic program, to be aware of the University calendar, <http://www.southalabama.edu/academiccalendar/index.html> and to understand and comply with University academic policies and procedures.

### **Degrees Offered**

The College of Nursing offers the Bachelor of Science in Nursing (BSN) degree, the Master of Science in Nursing (MSN) degree, and the Doctor of Nursing Practice (DNP) degree.

## Certificates Offered

Post-Graduate Certificates are awarded to students completing planned programs of study in a nursing specialty area and subspecialty areas.

## Departments Of Instruction

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Nursing..... 688

## Degree Requirements

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### Undergraduate

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#### Bachelor Of Science In Nursing Program (BSN)

The BSN program prepares graduates for professional nursing practice. Upon completion of the program graduates are eligible to apply for the National Council Licensure Examination (NCLEX) to become licensed as a Registered Nurse.

The BSN program is offered in a traditional four- year format with nursing courses concentrated in the junior and senior years. The BSN program is also offered in an accelerated format and there is a special track for Associate Degree and diploma- prepared nurses.

#### BSN Program Learning Outcomes

Upon completion of the Baccalaureate Program, graduates should be able to:

1. Deliver professional nursing care for diverse populations across the lifespan to optimize health care outcomes.
2. Apply theory and evidence from contemporary nursing science and related disciplines as a basis for clinical reasoning, management, and evaluation of professional nursing care.
3. Model responsibility and accountability for one's personal and delegated nursing care and lifelong learning to ensure excellence in nursing practice.
4. Translate evidence into professional nursing practice to individualize patient care designed to improve care outcomes.
5. Select principles of leadership and management that guide nursing, influence health policy, and transform health care delivery systems.
6. Collaborate with inter-professional health care teams and consumers in delivering and advocating for safe and effective use of health care resources.
7. Integrate professional nursing values in meeting current and emerging health needs in a dynamic, global society.
8. Evaluate effective use of technology and information management to provide patient-centered care across the lifespan in a variety of environments.

#### College Of Nursing Early Acceptance Program (CONEAP)

The College of Nursing has an early acceptance program for highly qualified high school seniors and students who have completed their freshman year at USA. Students selected for the early acceptance program and who fulfill all program requirements are guaranteed admission to the upper division professional component of the nursing curriculum. To be considered for the CONEAP, high school seniors must complete all application procedures, have earned a minimum high school grade-point average of 3.5 based on a 4.0 system as computed by USA, submit an ACT score of at least 25 composite (or 1100 SAT), and must have demonstrated leadership qualities and motivation toward the study of nursing. Students who are admitted to the CONEAP must complete all Pre-Professional Nursing courses at USA; their curriculum includes core requirements and prerequisites for the upper division nursing program. Students participating in the College of Nursing's Early Acceptance Program must maintain an overall GPA of 3.2 on all required prerequisite courses must be continuously enrolled a minimum of 12 credit hours each semester (does not include summer terms) and making acceptable progress toward completing the pre-professional component of the curriculum to be admitted to the professional component of the program. All application documents must be submitted by the end of the senior year in high school to be considered. Applications received at other times will be considered on a space available basis. For questions and applications, contact USA Admissions, 2500 Meisler Hall, Mobile, Alabama 36688-0002 or call (800) 872-5247 or (251) 460-6141.

A second opportunity for participation in the CONEAP is available to students who have completed their freshman year of pre-nursing prerequisite courses at USA and have achieved an overall GPA of 3.2 or above (as computed by the USA Registrar's Office). Additional requirements are that the student has completed the following courses at USA: BLY 101 with Lab, MA 110 or 112, and CH 101 with Lab and is approved by the Associate Dean for Academic Affairs for the College of Nursing. To remain in the CONEAP, the student must maintain a 3.2 GPA throughout all pre-nursing prerequisite course work and all final grades must be a C or better. Application documents will be accepted at the end of the spring term of the freshman year up until the beginning of the fall term of the sophomore year.

### Curriculum Model For Bachelor Of Science In Nursing Degree (Fall Semester Entry) Total Credits 122

#### Prerequisite Pre-Professional Component

Freshman Year		Credit Hours
First Semester		13
EH 101	3 hrs	
BLY 101 & BLY 101L	4 hrs	
CIS 150	3 hrs	
History Elective*	3 hrs	
Second Semester		16
EH 102	3 hrs	
CH 101 & CH 101L	4 hrs	
HY/Soc/Beh Sc Elective	3 hrs	
CA 110	3 hrs	
MA 110 or MA 112	3 hrs	
*Must have a 2 semester sequence in either History or Literature.		

#### Professional Component

Sophomore Year		Credit Hours
First Semester		16
BMD 114	4 hrs	
BMD 210 or BLY 213	3 hrs	
Literature Elective*	3 hrs	
Economics	3 hrs	
Fine Arts	3 hrs	
Second Semester		16
BMD 115	4 hrs	
ST 210, BUS 245, ST 305, or PSY 220	3 hrs	
PSY 120	3 hrs	
2nd HY or 2nd LIT	3 hrs	
HUM or HY Elective	3 hrs	
*Must have a 2 semester sequence in either History or Literature.		

## Professional Component

Junior Year		Credit Hours
First Semester		13
NU 325	Health Assessment	3 hrs
NU 327	Pathophysiological Basis of Nursing	3 hrs
HSC 342	Administration of Medication	1 hr
HSC 343	Pharmacology	3 hrs
NU 311	Clinical Nursing Skills	3 hrs
Second Semester		12
CMN 350	Psychiatric Mental/Health Nursing	2 hrs
CMN 351	Psychiatric Mental/Health Nursing Clinical	2 hrs
NU 300	Foundations of Professional Nursing	5 hrs
NU 301	Foundations of Professional Nursing Clinical	3 hrs
Third Semester		11
NU 304	Evidence-Based Practice	3 hrs
MCN 347	Childbearing/Child Rearing Nursing	4 hrs
MCN 348	Childbearing/Child Rearing Nursing Clinical	4 hrs
Senior Year		Credit Hours
First Semester		13
AHN 447	Adult-Gerontological Nursing	5 hrs
AHN 448	Adult-Gerontological Nursing Clinical	4 hrs
CMN 420	Community Health Nursing	3 hrs
CMN 421	Community Health Nursing Clinical	1 hr
Second Semester		12
NU 412	Nursing Decision Making & Delegation	4 hrs
NU 414	Issues/Trends in Healthcare	3 hrs
NU 460	Professional Nursing Practicum	5 hrs

### RN To BSN Pathway For Associate Degree And Diploma Nurses

The College of Nursing has a Pathway designed especially for registered nurses pursuing the Bachelor of Science in Nursing Degree. The college also offers a Pathway for diploma and associate degree RNs who want the MSN degree (see MSN section). Once prerequisites are completed (see prerequisite professional component section on the BSN curriculum model), the professional component of the nursing curriculum can be completed in one calendar year. Courses are offered online and practice integration requirements can be completed in the student's home community if approved by faculty. Thirty-six hours of nursing credit are awarded the semester students graduate.

### Curriculum Model For The Registered Nurse RN-BSN Pathway

The following courses comprise the RN-BSN Pathway. Students are admitted to the professional component after completing all prerequisite courses (see courses listed in the Freshman and Sophomore years in the curriculum model for the Bachelor of Science in Nursing Degree).

## Prerequisite Pre-Professional Component

Professional Component for RN-BSN Pathway		Credit Hours
Total USA Nursing credits		31
First Semester		12
NU 410 Concepts of Professional Nursing	6 hrs	
NU 425 Health Assessment	3 hrs	
NU 422 Healthcare Leadership/Collaboration	3 hrs	
Second Semester		10
NU 427 Pathophysiology and Genomics	3 hrs	
CMN 411 Nursing in Community Systems	4 hrs	
NU 404 Evidence-Based Practice & Informatics	3 hrs	
Third Semester		9
NU 461 Integration of Professional Practice	4 hrs	
NU 415 Seminar in Issues and Trends	3 hrs	
NU Elective	2 hrs	

**Admission Criteria For The BSN**

The College of Nursing Admissions Committee and the Dean of the College reserve the right to select applicants best qualified for and most likely to succeed in the study of nursing.

Enrollment into the pre-professional component as a nursing major does not assure the student admission to the Professional Component. Enrollment in the Professional Component is limited and competitive. Students are admitted without regard to race, color, creed, national origin, sex, or qualified disability. Students must be in good standing with all academic institutions/nursing programs that they have attended in order to be admitted to the BSN program:

The following are required to be considered for admission to the BSN program.

1. Submission of a completed application with a \$50 fee.
2. Minimum GPA of 2.75 on all prerequisite courses and in good standing within the University.
3. Minimum University GPA of 2.5.
4. Minimum grade of "C" in all pre-professional courses.
5. Submission of health data forms and evidence of health insurance.
6. Evidence of CPR certification.
7. Admission will be contingent on a negative drug screen and results of an acceptable background check.
8. Interview - applicants may be invited for a personal interview. Verbal and written communication skills will be assessed during the interview.

In addition to the items listed above, registered nurses applying for admission to the RN-BSN track must show evidence of completion of an approved diploma or associate degree in nursing and a current, unrestricted RN license. Nurses with any restriction on their license, including participating in a voluntary disciplinary alternative program, cannot be admitted.

**Progression Requirements**

Students will progress in nursing courses according to the established sequence. The College will recommend for promotion only those students who, in the judgment of the faculty, satisfy the requirements of health, conduct, scholastic achievement, and aptitude for nursing. Students continually in adjustment difficulties may be dismissed from the nursing program.

Once students are admitted to the professional component of the BSN curriculum, the program must be completed within 5 years. If a student's progression is interrupted for any reason, it is the student's responsibility to contact the Office of Student Services and apply for readmission. Students are readmitted on a space-available basis. Any alteration in usual progression may lengthen the student's program. In keeping with dynamic changes in health care and nursing, the curriculum may undergo

change. Changes in curricula and/or admission requirements will be published as far in advance as possible. Advisors are available to assist students in adapting to those changes and planning their course of study accordingly. A dosage calculation test is required prior to promotion to NU 300/301, MCN 347/348, and AHN 447/448. A score of 100% on one of two attempts must be achieved to pass. (Not required of RN to BSN students.)

### **Academic Standards For The BSN Program**

In accordance with University policy, students may not use the Grade Replacement Policy to replace professional nursing courses. A grade of "C" or higher is required for all professional nursing courses. A student may repeat only one professional nursing course in the curriculum. A second "D," "F," or "U" will result in academic dismissal from the nursing program. The number of times a student may withdraw failing is limited to two. A third withdrawal failing will result in academic dismissal from the College of Nursing. A student achieving a grade of less than "C" in a course in combination with two withdrawal failings from the College of Nursing will also be dismissed. Successful completion of a dosage calculation exam is required each term prior to promotion in clinical courses. All students are required to take a midcurricular exam. Students who do not successfully pass this exam are required to complete a 3-hour directed study, prior to progressing in the curriculum. Students are also required to complete an exit exam as part of course requirements. If the student is unsuccessful on the exit exam, a grade of "u" will be given for the course and student must retake the course the next term. (Registered nursing students are exempt from the dosage calculation, midcurricular and exit examinations.) A minimum GPA of 2.0 at the University of South Alabama is required to continue in the program and for graduation. Failure to comply with legal, moral, and legislative standards required for licensure to practice as a registered nurse merits immediate dismissal from the program.

### **Accelerated BSN/MSN Pathway**

The College of Nursing has a special Accelerated BSN/MSN Pathway for academically-qualified and highly-motivated individuals that have a bachelor's degree in another field. The preprofessional component, as listed below, must be completed prior to admission to the professional component. The professional component of the curriculum, which normally takes 5 semesters to complete, can be completed in 12 months of full-time study. The curriculum and contact hours are the same as required for the traditionally-taught BSN degree offered by the College, except that the course schedule is accelerated and is not confined by the traditional academic calendar. Students in the first 12 months of the Accelerated BSN/MSN Pathway follow the same promotion/progression policies as the students in the traditionally-taught BSN. Students having difficulty maintaining the pace of the program may request a transfer to the traditional program if they are in good academic standing. At the end of the 12-months of study, students are awarded the BSN degree and are prepared for the RN licensure (NCLEX) examination. During the first 12 months of the accelerated BSN/MSN Pathway, students complete 3 courses that are taught at the graduate level. These 3 courses "bridge" undergraduate and graduate knowledge in pharmacology, pathophysiology, and health assessment. Two of these courses may be applied towards a graduate degree if grades received in the course comply with graduate progression policies.

Students then begin the specialty component of the curriculum to prepare for a career in informatics, nurse executive administration, as a clinical nurse leader, or clinical nurse specialist in adult/gerontological nursing. Students who wish to pursue nurse practitioner preparation must obtain a minimum of 2 years of clinical experience before beginning clinical nurse practitioner specialty courses. Courses for the specialty component of the curriculum are offered online. Clinical requirements are completed in faculty-facilitated preceptorships.

### **Requirements For Admission To The Accelerated BSN/MSN Pathway**

Admission is selective and competitive. The curriculum is intensive and fast paced. The College of Nursing reserves the right to select students determined to be the best qualified and most likely to succeed in this challenging graduate program in nursing.

1. Graduate of a baccalaureate program with a minimum 3.0 GPA on a 4.0 scale.
2. Applicants must have completed all prerequisite course work as listed below with a minimum GPA of 3.0 ("A"=4.0) and no grade less than a "C."  
Prerequisite Courses  
EH 101  
EH 102  
Biology with Lab  
Anatomy and Physiology I and Lab  
Anatomy and Physiology II and Lab  
Microbiology or Infectious Disease  
Chemistry and Lab  
Statistics  
Finite Math or Precalculus Algebra (or higher)  
General Psychology
3. Submission of completed application by March 15 for Fall and July 15 for Spring.

4. Payment of \$50.00 non-refundable application fee.
5. Submission of Health Data Forms and evidence of health insurance.
6. Admission will be contingent on a negative drug screen and results of an acceptable background check.
7. Submission of a resume.
8. Interview - after initial review of applications, a limited number of applicants may be invited for a personal interview. Verbal and written communication skills will be assessed during the interview.

<b>Professional Component: Accelerated BSN Curriculum Example (Spring Admission)</b>		<b>Credit Hours</b>
First Semester		12
NU 530 Accelerated MSN Advanced Health Assessment	4 hrs	
NU 531 Advanced Pathophysiology	4 hrs	
NU 532 Advanced Pharmacology	4 hrs	
First Semester 1 (3 weeks)		4
NU311 Clinical Nursing Skills	3 hrs	
HSC 342 Administration of Medication	1 hr	
First Semester 2 (3 weeks)		4
CMN 350 Psychiatric Mental/Health Nursing	2 hrs	
CMN 351 Psychiatric Mental/Health Nursing Clinical	2 hrs	
First Semester 3 (7 weeks)		8
NU 300 Foundations of Professional Nursing	5 hrs	
NU 301 Foundation of Professional Nursing Clinical	3 hrs	
Total Semester Credits		28
Second Semester		3
NU 304 Evidence-Based Practice	3 hrs	
Second Semester 1 (7 weeks)		8
MCN 347 Childbearing/Child Rearing Nursing	4 hrs	
MCN 348 Childbearing/Child Rearing Nursing Clinical	4 hrs	
Total Semester Credits		11
Third Semester		3
NU 414 Issues/Trends in Healthcare	3 hrs	
Third Semester 1 (7 weeks)		9
AHN 447 Adult-Gerontological Nursing	5 hrs	
AHN 448 Adult-Gerontological Nursing Clinical	4 hrs	
Third Semester 2 (3 weeks)		4
CMN 420 Community Health Nursing	3 hrs	
CMN 421 Community Health Nursing Clinical	1 hr	
Third Semester 3 (7 weeks)		9
NU 412 Nursing Decision Making & Delegation	4 hrs	

NU 460 Professional Nursing Practicum

5 hrs

Total Semester Credits

25

### Additional Information For Accelerated BSN/MSN

Students are admitted as undergraduates during the foundation component of the curriculum (first 12 months). During the first twelve months of the program, tuition is charged at the undergraduate rate for undergraduate courses and at the graduate rate for the three graduate level bridge courses. Financial aid is restricted to the types and amounts for which an undergraduate student is eligible.

Upon satisfactory completion of the foundation component of the curriculum, the student will complete all necessary paperwork for reclassification as a graduate student and will continue through the remainder of the program. During this phase of the curriculum, financial aid is restricted to the types and amounts for which a graduate student is eligible.

## Graduate

### Master Of Science In Nursing Program (MSN)

Organized within the graduate school at the University, the College of Nursing has several pathway, specialization, and sub-specialization options within the MSN program. In addition to admitting baccalaureate-prepared registered nurses, the college offers an accelerated BSN/MSN track for non-nurses (see Bachelor of Science in Nursing section), a pathway for associate degree or diploma-prepared nurses who have a baccalaureate degree in a field other than nursing, a special pathway for highly qualified associate degree and diploma nurses who do not hold a baccalaureate degree, and tracks for MSN-prepared nurses who are interested in certification in a new specialty area.

### Areas Of Specialization

Several concentration areas are offered to meet the career goals of students. Students may prepare as a clinical nurse leader or for advanced nursing practice in one of nine nurse practitioner roles or the clinical nurse specialist role. Available NP include Family Nursing, Dual Role (Family NP/Adult-Gerontological Acute Care NP), Psychiatric Family Nursing, Pediatric Acute Care Nursing, Pediatric Primary Care Nursing, Women's Health Nursing, Neonatal Nursing, Adult-Gerontological Primary Care Nursing, and Adult-Gerontological Acute Care Nursing. Clinical Nurse Specialist is available in Adult-Gerontological Nursing. Concentrations are also available for students pursuing careers in Executive Nursing Administration and Nursing Informatics. Sub-specializations are available in Cardiovascular, Oncology, Palliative Care, Nursing Education, and Clinical Lipidology.

### Graduate Assistantships

A limited number of graduate assistantships are available to students in full-time status. Additional information and an application can be obtained by contacting the College of Nursing graduate office.

### Master Of Science In Nursing Program Learning Outcomes

Upon completion of the Master of Science in Nursing Program, graduates should be able to:

1. Integrate advanced knowledge and theories from nursing and related disciplines into a specialized area of advanced nursing practice.
2. Demonstrate competence in advanced nursing roles to meet current and emerging health needs of a global changing society.
3. Use scientific inquiry to identify problems and individualize patient care designed to improve care outcomes.
4. Apply advanced knowledge of leadership and management to influence health policy to transform care delivery systems.
5. Contribute to the focus and direction of the nursing profession.

### MSN Curricula For BSN Prepared Registered Nurses

Option I Executive Nursing Administration		Credit Hours
Core Courses		9
NU 607 Scientific Underpinnings of Advanced Nursing Practicum	3 hrs	
NU 610 Healthcare Policy and Finance	3 hrs	

NU 613 Organizational & Systems Leadership	3 hrs	
Research Courses		3
NU 608 Evidence-Based Practice and Quality Improvement in Healthcare	3 hrs	
Support Courses		6
NU 562 Administrative Concepts & Resource Management Field Study	3 hrs	
NU 539 Introduction to Nursing Informatics	3 hrs	
Specialty Courses		19
NU 565 Nursing Administration Finance	3 hrs	
NU 566 Nursing Administration Field Study	3 hrs	
NU 561 Nursing Administration Concepts & Theory	3 hrs	
NU 567 Nursing Administration Internship	4 hrs	
NU 568 Nursing Administration Seminar	3 hrs	
HSC 571 Managing Health Care Personnel	3 hrs	
Total Credits		37

<b>Option II Nurse Practitioner</b>		<b>Credit Hours</b>
Core Courses		9
NU 607 Scientific Underpinnings of Advanced Nursing Practice	3 hrs	
NU 610 Healthcare Policy and Finance	3 hrs	
NU 613 Organizational & Systems Leadership	3 hrs	
Research Courses		3
NU 608 Evidence-Based Practice and Quality Improvement in Health Care	3 hrs	
Support Courses		9
NU 545 Physiological-pathological Basis of Advanced Nursing	3 hrs	
NU 518 Advanced Nursing Assessment	3 hrs	
NU 578 Pharmacology for Advanced Practice Nurses	3 hrs	
Specialty Courses - Select One Track		
Adult-Gerontological Primary Care NP		24
AHN 588 Introduction to Adult-Geron Primary Care NP	2 hrs	
AHN 581 Health Promotion/Disease Prevention & Issues for Adult-Geron Primary Care NP	2 hrs	
AHN 591 Adult-Geron Primary Care NP I	2 hrs	

AHN 592 Adult-Geron Primary Care NP Practicum I	4 hrs	
AHN 593 Adult-Geron Primary Care NP II	3 hrs	
AHN 594 Adult-Geron Primary Care NP Practicum II	2 hrs	
AHN 595 Adult-Geron Primary Care NP III	2 hrs	
AHN 596 Adult-Geron Primary Care NP Practicum III	4 hrs	
HSC 601 Intro to Interprofessional Education	1 hr	
HSC 602 Team Building	1 hr	
HSC 603 Assessment of Vulnerable Populations	1 hr	
Adult-Gerontological Acute Care NP		24
AHN 568 Introduction Adult-Geron Acute Care NP	3 hrs	
AHN 571 Health Promotion/Disease Prevention & Issues for Adult-Geron Acute Care NP	2 hrs	
AHN 572 Adult-Geron Acute Care NP I	3 hrs	
AHN 573 Adult-Geron Acute Care NP Practicum I	4 hrs	
AHN 574 Adult-Geron Acute Care NP II	3 hrs	
AHN 575 Adult-Geron Acute Care NP Practicum II	2 hrs	
AHN 577 Adult-Geron Acute Care NP III	3 hrs	
AHN 576 Adult-Geron Acute Care NP Practicum III	4 hrs	
Psychiatric Family NP		24
CMN 548 Introduction to Psychiatric Family NP	3 hrs	
CMN 551 Health Promotion/Disease prevention & Issues for Family Psychiatric NP	2 hrs	
CMN 552 Family Psychiatric NP I	3 hrs	
CMN 553 Family Psychiatric NP Practicum I	4 hrs	
CMN 554 Family Psychiatric NP II	3 hrs	
CMN 555 Family Psychiatric NP Practicum II	2 hrs	
CMN 557 Family Psychiatric NP II	3 hrs	
CMN 556 Family Psychiatric NP Practicum III	4 hrs	
Family NP		24
CMN 568 Introduction to Family NP	3 hrs	
CMN 571 Health Promotion/Disease Prevention & Issues for Family NP	2 hrs	
CMN 572 Family NP I	3 hrs	
CMN 573 Family NP Practicum I	4 hrs	
CMN 574 Family NP II	3 hrs	
CMN 575 Family NP Practicum II	2 hrs	
CMN 577 Family NP III	3 hrs	
CMN 576 Family NP Practicum III	4 hrs	

Women's Health NP	24
MCN 538 Introduction to Women's Health NP	3 hrs
MCN 541 Health Promotion/Disease Prevention & Issues for Women's Health NP Nursing	2 hrs
MCN 542 Women's Health NP I	3 hrs
MCN 543 Women's Health NP Practicum I	4 hrs
MCN 544 Women's Health NP II	3 hrs
MCN 545 Women's Health NP Practicum II	2 hrs
MCN 547 Women's Health NP III	3 hrs
MCN 546 Women's Health NP Practicum III	4 hrs
Pediatric Acute Care NP	24
MCN 558 Introduction to Pediatric Acute Care NP	3 hrs
MCN 571 Health Promotion/Disease Prevention in Neonatal and Acute Care Pediatric NP	2 hrs
MCN 562 Pediatric Acute Care NP I	3 hrs
MCN 563 Pediatric Acute Care NP Practicum I	4 hrs
MCN 564 Pediatric Acute Care NP II	3 hrs
MCN 565 Pediatric Acute Care NP Practicum II	2 hrs
MCN 566 Pediatric Acute Care NP Practicum III	4 hrs
MCN 567 Pediatric Acute Care NP III	3 hrs
Pediatric Primary NP	24
MCN 548 Introduction to Pediatric Health NP	3 hrs
MCN 551 Health Promotion/Disease Prevention in Pediatric Health NP	2 hrs
MCN 552 Pediatric Health NP I	3 hrs
MCN 553 Pediatric Health NP Practicum I	4 hrs
MCN 554 Pediatric Health NP Nursing II	3 hrs
MCN 555 Pediatric Health NP Practicum II	2 hrs
MCN 556 Pediatric Health NP Practicum III	4 hrs
MCN 557 Pediatric Health NP III	3 hrs
Neonatal NP	24
MCN 568 Introduction to Neonatal NP	3 hrs
MCN 571 Health Promotion/Disease Prevention in Neonatal and Acute Care Pediatric NP	2 hrs
MCN 572 Neonatal NP I	3 hrs
MCN 573 Neonatal NP Practicum I	4 hrs
MCN 574 Neonatal NP II	3 hrs
MCN 575 Neonatal NP Practicum II	2 hrs
MCN 576 Neonatal NP Practicum III	4 hrs

MCN 577 Neonatal NP III	3 hrs	
Dual Role (Family NP/Adult/Geron Acute Care NP)		36
AHN 538 Health Promotion/Disease Prevention & Issues	2 hrs	
AHN 549 Family Primary Care NP Practicum I	4 hrs	
AHN 548 Family Primary Care NP I	4 hrs	
AHN 551 Family Primary Care NP Practicum II	5 hrs	
AHN 550 Family Primary Care NP II	4 hrs	
AHN 553 Adult-Geron Acute Care NP Practicum I	4 hrs	
AHN 552 Adult-Geron Acute Care NP I	4 hrs	
AHN 555 Adult-Geron Acute Care NP Practicum II	5 hrs	
AHN 554 Adult-Geron Acute Care NP II	4 hrs	
Total Credits		45-57

<b>Option III Clinical Nurse Specialist (Adult-Gerontological)</b>		<b>Credit Hours</b>
Core Courses		9
NU 607 Scientific Underpinnings of Advanced Nursing Practice	3 hrs	
NU 610 Healthcare Policy and Finance	3 hrs	
NU 613 Organizational & Systems Leadership	3 hrs	
Research Courses		3
NU 608 Evidence-Based Practice and Quality Improvement in Health Care	3 hrs	
Support Courses		9
NU 518 Advanced Nursing Assessment	3 hrs	
NU 578 Pharmacology for Advanced Practice Nurses	3 hrs	
NU 545 Physiological-pathological Basis of Advanced Nursing	3 hrs	
Specialty Courses		15
NU 515 Clinical Concepts & CNS Role I	2 hrs	
NU 516 Clinical Concepts & CNS Role II	3 hrs	
AHN 516 Adult-Geron CNS Practicum I	2 hrs	
AHN 517 Adult-Geron CNS Practicum II	4 hrs	
NU 517 Clinical Concepts & CNS Role III	3 hrs	
AHN 518 Adult-Geron CNS Practicum III	3 hrs	
Total Credits		38

<b>Option IV Clinical Nurse Leader</b>		<b>Credit Hours</b>
Core Courses		9

NU 607 Scientific Underpinnings of Advanced Nursing Practice	3 hrs	
NU 610 Healthcare Policy and Finance	3 hrs	
NU 613 Organizational & Systems Leadership	3 hrs	
Research Courses		3
NU 608 Evidence-Based Practice and Quality Improvement in Health Care	3 hrs	
Support Courses		9
NU 518 Advanced Nursing Assessment	3 hrs	
NU 578 Pharmacology for Advanced Practice Nurses	3 hrs	
NU 545 Physiological-pathological Basis of Advanced Nursing	3 hrs	
Specialty Courses		15
NU 535 Clinical Nurse Leader Role & Competencies	3 hrs	
NU 536 Clinical Nurse Leader Practicum	5 hrs	
NU 537 Clinical Nurse Leader Synthesis	3 hrs	
NU 538 Clinical Nurse Leader Practicum II	4 hrs	
Total Credits		36

<b>Option V Nursing Informatics</b>		<b>Credit Hours</b>
Core Courses		9
NU 607 Scientific Underpinnings of Advanced Nursing Practice	3 hrs	
NU 610 Healthcare Policy and Finance	3 hrs	
NU 613 Organizational & Systems leadership	3 hrs	
Research Courses		3
NU 608 Evidence-Based Practice and Quality Improvement in Health Care	3 hrs	
Support Courses		12
NU 565 Nursing Administration Finance	3 hrs	
ISC 555 Health Data Management and Decision Support Systems	3 hrs	
ISC 550 Health Data Security and Computer	3 hrs	
NU 562 Administrative Concepts & Resource Management Field Study	3 hrs	
Specialty Courses		13
NU 539 Introduction to Nursing Informatics	3 hrs	
NU 558 Seminar in Nursing Informatics	3 hrs	
NU 556 Informatics and Quality of Care Improvement	3 hrs	
NU 559 Clinical Informatics Practicum II	2 hrs	

NU 557 Clinical Informatics Practicum I 2 hrs

Total Credits	37
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Subspecialties: The following can be added to the above pathways as designated.

Cardiovascular - students who are in Adult-Gerontological Acute Care NP and Dual Role specialty can add these 8 credits.

Oncology - students who are in an Adult-Gerontological Primary Care NP, Adult-Gerontological Acute Care NP, Dual Role specialty, Clinical Nurse Specialist-Adult-Gerontological Health, Family NP, Psychiatric (Family) NP or Women's Health NP can add these 11 credits.

Palliative Care - students who are in an Adult-Gerontological Primary Care NP, Adult-Gerontological Acute Care NP, Clinical Nurse Specialist - Adult-Gerontological Health, or Family NP can add these 9 credits.

Nurse Educator - any student can add these 11 credits to their curriculum.

Clinical Lipidology - students who are in Adult-Gerontological Acute Care NP, Adult- Gerontological Primary Care NP, Family NP, Women's Health NP, Clinical Nurse Specialist-Adult-Gerontological Health, or Dual Role specialty can add these 8 credits.

Cardiovascular Option		Credit Hours
Cardiovascular Option		8
AHN 630	Dysrhythmias and the Heart	2 hrs
AHN 631	Foundations of Cardiac Care	2 hrs
AHN 632	Diagnosis and Management of Acute Cardiovascular Disorders	2 hrs
AHN 633	Dig/Management Complex Cardiovascular Disorders	2 hrs

Oncology Option		Credit Hours
Oncology Option		11
AHN 621	Foundations of Cancer Biology	2 hrs
AHN 622	Cancer Genetics	2 hrs
AHN 623	Comp/Alt Therapy Supp Car Oncology	2 hrs
AHN 624	Advanced Care Oncology Pat/Fam/Comm	2 hrs
AHN 625	Advanced Science in Oncology Nursing	1 hr
AHN 626	Advancing the Science in Oncology Nursing	2 hrs

Palliative Care Option		Credit Hours
Palliative Care Option		9
AHN 530	Foundations of Palliative Care and the Advanced Practice Role	2 hrs
AHN 531	Advanced Palliative Care and End of Life	2 hrs
AHN 532	Advanced Chronic Illness Care	2 hrs
AHN 533	Advanced Palliative Care Practicum	3 hrs

<b>Nurse Educator Option</b>		<b>Credit Hours</b>
Nurse Educator Option		11
NU 620	Instructional Design and Technology for Nurse Educators	3 hrs
NU 621	Curriculum and Outcomes Evaluation in Nursing Education	3 hrs
NU 622	Current Topics in Nursing Education	2 hrs
NU 623	Nursing Education Role Synthesis Practicum	3 hrs

  

<b>Clinical Lipidology Option</b>		<b>Credit Hours</b>
Clinical Lipidology Option		8
HSC 595	Evidence Based Lipid Practice	2 hrs
HSC 596	Advanced Vascular Biology	2 hrs
HSC 597	Advanced Pharmacology for Complex Dyslipidemia	2 hrs
HSC 598	Diagnosis and Management of Complex Dyslipidemia	2 hrs

### Requirements For Admission To The MSN Pathway For BSN-Prepared RN's

Admission to the program is limited and selective. All documents required for admission review must be official. Transcripts must be mailed from the home institution to the Nursing Centralized Application System (NursingCAS). These documents become the property of the NursingCAS and will not be returned to the applicant. Students applying for admission must pay a non-refundable \$100.00 processing fee and submit a supplemental application by the deadline date, in addition to primary application requirements for the NursingCAS.

Application forms and other information may be obtained from the College of Nursing's web site <http://www.southalabama.edu/nursing/msn.html> or by contacting the college directly at College of Nursing, University of South Alabama, Mobile, Alabama 36688; [congrad@southalabama.edu](mailto:congrad@southalabama.edu); Telephone: (251) 445-9400. Applications are accepted year round, and must adhere to the following application deadlines: February 15 - Fall Admission, July 15 - Spring Admission, and November 15 - Summer Admission. Students are admitted to a specialty option and may not change their specialty without prior permission. Students must be in good standing with all academic institutions/nursing programs that they have attended in order to be admitted to the MSN program.

#### Regular Admission

1. Graduate of an approved bachelors program with a major in nursing.
2. Current registered nurse licensure with no restrictions. Nurses with any restrictions on their license, including participation in a voluntary, disciplinary, alternative program, cannot be admitted.
3. A grade-point average of 3.0 on all undergraduate work (A=4.00).
4. Submission of a resume which documents clinical experience. (Note: Prior to enrolling in nurse practitioner clinical course, students are required to have at least 2 years of experience in an area appropriate to the specialty track.)
5. After acceptance into the program, admission is contingent upon a negative drug screen, results of an acceptable background check, submission of Health Data Forms, evidence of Health Insurance, and completion of Certified Profile Medical Records Manager. Instructions provided in acceptance letter.

Note: An earned graduate degree from any accredited institution of higher education may qualify the applicant for regular standing.

#### Provisional Admission

1. Graduate of an approved bachelors program with a major in nursing.

2. Current registered nurse licensure with no restrictions. Nurses with any restrictions on their license, including participation in a voluntary, disciplinary, alternative program, cannot be admitted.
3. A minimal grade-point average of 2.75 on all undergraduate work (A=4.00).
4. Submission of a resume which documents clinical experience. (Note: Prior to enrolling in a nurse practitioner clinical course, students are required to have at least 2 years of experience in an area appropriate to the specialty.)
5. After acceptance into the program, admission is contingent upon a negative drug screen, results of an acceptable background check, submission of Health Data Forms, evidence of Health Insurance, and completion of Certified Profile Medical Records

Manager. Instructions provided in acceptance letter.

(Note: Prior to enrolling in a nurse practitioner clinical course, students are required to have at least 2 years of experience in an area appropriate to the specialty.)

### **Non-Degree Admission**

1. Hold a bachelor's degree from accredited institution.
2. Current registered nurse licensure with no restrictions. Nurses with any restrictions on their license, including participation in a voluntary disciplinary alternative program, cannot be admitted.
3. A minimal grade-point average of 2.75 on all undergraduate work (A=4.00).

Enrollment in selective courses may not be available to non-degree students due to class size or required prerequisite.

### **Progression Requirements For The MSN Pathway For BSN-prepared RN's**

A maximum of two (2) courses with a grade "C" can be counted towards a degree; however, only one (1) "C" is permitted in support or specialization courses. If a second "C" or lower is earned in a support or specialization course, the course in which the second "C" or lower is obtained, must be repeated. Any combination of three (3) courses with grades of "C" or less (C, D, U, F), including "C" grades which have been repeated, will result in academic dismissal from the graduate program. Two courses with a grade "D" or "F" will result in academic dismissal from the graduate program. Failure to comply with legal, moral, and legislative standards required for licensure to practice as a registered nurse merits immediate dismissal from the program.

If a student's progression is interrupted for any reason, it is the student's responsibility to contact the Associate Dean for Academic Affairs. Because of limited spaces in the advanced clinical courses, any alteration in progression may lengthen the student's program.

### **Degree Requirements For The MSN Pathway For BSN-prepared RN's**

The MSN program must be completed within 5 years of matriculation. A minimum of 45 semester credits are required for the MSN degree with preparation in a nurse practitioner track. Minimum credits for preparation in Executive Nursing Administration and Nursing Informatics require 37 semester credits; Clinical Nurse Leader and Clinical Nurse Specialist. require 36 semester credits.

### **Post-graduate Certificate Program**

The Post-Graduate Certificate Program is designed for registered nurses with a graduate degree in nursing who seek academic preparation in a new specialty or subspecialty area of advanced practice nursing. Post-graduate certificate students can select any of the specialty options offered by the program. Each certificate program is designed to be in compliance with national certification requirements including required support courses, didactic specialty courses, and clinical hours.

### **Post-graduate Certificate Program Learning Outcomes**

Upon completion of the Post-Graduate Certificate Program, graduates should be able to:

1. Integrate advanced knowledge and theories from nursing and related disciplines into a specialized area of advanced nursing practice.
2. Demonstrate competence in advanced nursing roles to meet current and emerging health needs of a specific population or system.
3. Use scientific inquiry to identify problems within an organization or specific patient population to improve care outcomes.
4. Apply advanced knowledge of leadership and management to transform care delivery systems in a specialized area of advanced nursing practice.
5. Contribute to the focus and direction of the nursing profession within a specialized area of advanced nursing practice.

Admission to the program is limited and selective. All documents required for admission review must be official. Transcripts must be mailed from the home institution to the NursingCAS. These documents become the property of the NursingCAS and will not be returned to the applicant. Students applying for admission must pay a non-refundable \$100.00 processing fee and submit a supplemental application by the deadline date in addition to primary application requirements for the NursingCAS.

Application forms and other information may be obtained from the College of Nursing's web site <http://www.southalabama.edu/nursing/msn.html> or by contacting the college directly at College of Nursing, University of South Alabama, Mobile, Alabama 36688; [congrad@southalabama.edu](mailto:congrad@southalabama.edu); Telephone: (251) 445-9400. Applications are accepted three times a year, and must adhere to the February 15, July 15, and November 15 application deadlines.

### **Requirements For Admission To The Post Graduate Certificate Program**

1. Graduate of an approved master's or doctoral program with a major in nursing.
2. Current registered nurse licensure with no restrictions. Nurses with any restrictions on their license, including participation in a voluntary disciplinary alternative program, cannot be admitted.
3. A grade-point average of 3.0 on all graduate work (A=4.00). Enrollment in selective courses may not be available to non-degree students due to class size or required prerequisite.
4. Submission of a resume which documents clinical experience. (Note: Prior to enrolling in nurse practitioner clinical course, students are required to have at least 2 years of experience in an area appropriate to the specialty track.)
5. After acceptance into the program, admission is contingent upon a negative drug screen, results of an acceptable background check, submission of Health Data Forms, evidence of Health Insurance, and completion of Certified Profile Medical Records Manager. Instructions provided in acceptance letter.

### **Progression Requirements For The Post-graduate Certificate**

Students follow the progression policies for the MSN Pathway for BSN prepared RN's.

### **Program Completion Requirements For The Post Graduate Certificate Pathway**

Students are required to complete all specialty courses and any support courses not previously completed. Post-Graduate certificate students are not required to complete graduate core or research courses (see the previous section on MSN Curriculum for the BSN-prepared RN for a listing of courses for each specialty area).

### **RN - MSN Pathway For RN's With A Non-nursing Baccalaureate Degree**

This pathway is available to persons who are registered nurses and have a baccalaureate degree from an accredited institution in a discipline other than nursing.

Admission to the program is limited and selective. All documents required for admission review must be official. Transcripts must be mailed from the home institution to the NursingCAS. These documents become the property of the NursingCAS and will not be returned to the applicant. Students applying for admission must pay a non-refundable \$100.00 processing fee and submit a supplemental application by the deadline date in addition to primary application requirements for the NursingCAS.

Application forms and other information may be obtained from the College of Nursing's web site <http://www.southalabama.edu/nursing/msn.html> or by contacting the college directly at College of Nursing, University of South Alabama, Mobile, Alabama 36688; [congrad@southalabama.edu](mailto:congrad@southalabama.edu); Telephone: (251) 445-9400. Applications are accepted year round, and must adhere to the following application deadlines: February 15 - Fall Admission, July 15 - Spring Admission, and November 15 - Summer Admission.

### **Requirements For Admission To The RN - MSN Pathway For RN's With A Non-nursing Baccalaureate Degree**

Students are admitted to this pathway as Provisional Admission; the admissions criteria are the same as for Provisional Admission to the MSN track for BSN-prepared RN's listed above except for #1 (bachelor's degree in nursing).

### **Progression Requirements For RN - MSN Pathway For Nurses With Non-nursing Baccalaureate Degrees**

The following nursing courses must be completed with a GPA of at least 2.75 prior to enrolling in graduate nursing specialty courses: NU 410, CMN 411, NU 404, NU 425 or NU 530. Students who have earned a GPA of less than 2.5 will be academically dismissed from the Graduate School. Students in the RN to MSN track follow the same progression as students in the regular MSN program.

### **Program Completion Requirements For RN - MSN For Registered Nurses With Non-nursing Baccalaureate Degrees**

Students in the RN - MSN pathway follow the same degree requirements and progression policies as students in the MSN track for BSN prepared RN's with the addition of the above listed courses.

### **RN-BSN/MSN Pathway For RN's Who Do Not Hold A Baccalaureate Degree**

The College of Nursing has a special program to facilitate associate and diploma-prepared registered nurses attain the Master of Science in Nursing degree.

Upon completion of the first phase of the program, students will be awarded a BSN degree. Upon completion of the second phase of the program, the student will earn the MSN degree.

### **Requirements For Admission To The RN - BSN/MSN Pathway For Registered Nurses Who Do Not Hold A Baccalaureate Degree**

Students admitted to this track will be licensed, registered nurses and will have completed all prerequisite course work for the BSN degree (see BSN curriculum section), have at least 90 semester hours of college credits with an overall "B" average, and have met all admission criteria.

In the first phase of the program, students will be classified as an undergraduate student and any financial aid is restricted to the types and amounts for which undergraduate students are eligible. Late applications will be accepted for the first phase of the program. During this phase, students will enroll in both undergraduate level and graduate level bridge courses. Students will be charged undergraduate course tuition for undergraduate courses and graduate course tuition for graduate level courses. At the end of this phase, the BSN degree must be awarded.

Prior to beginning the second phase of the program, the MSN specialty students must submit the NursingCAS application by the posted deadline. Financial aid is restricted to the types and amounts for which a graduate student is eligible. At the end of phase two, the MSN degree will be awarded.

### **Progression Requirements For The RN - BSN/MSN Pathway For Registered Nurses Who Do Not Hold A Baccalaureate Degree**

Students must maintain an overall GPA of 3.0 on all work attempted in the program and must complete the degree requirements for the BSN prior to enrolling in the MSN phase of the program. A maximum of two (2) courses with a grade of "C" can be counted toward a degree; however, only one "C" is permitted in the graduate level specialization courses or in the following bridge courses: NU 530 Health Assessment, NU 531 Advanced Pathophysiology. If a second "C" is earned in these courses, the course in which the second "C" is obtained must be repeated. Any combination of three (3) courses with grades of "C" or less, including "C" grades of repeated courses, will result in dismissal from the program.

### **Program Completion Requirements For The RN - BSN/MSN Pathway For Registered Nurses Who Do Not Hold A Baccalaureate Degree**

Students in this pathway complete the following 31 credit curriculum for the BSN phase of the program. Undergraduate courses - NU 410, CMN 411, NU 404, NU 415, NU 422 and NU 461.; Graduate Level Bridge Courses - NU 530 and NU 531.

The Master of Science in Nursing phase of the program consist of core courses, research courses, support courses, and specialty courses for each track. See curriculum below:

<b>Option I Executive Nursing Administration</b>		<b>Credit Hours</b>
Graduate Core Courses		9
NU 607 Scientific Underpinnings of Advanced Nursing Practice	3 hrs	
NU 610 Healthcare Policy and Finance	3 hrs	
NU 613 Organizational & Systems Leadership	3 hrs	
Research Courses		3
NU 608 Evidence-Based practice and Quality Improvement in Health Care	3 hrs	
Support Courses		6
NU 562 Administrative Concepts & Resource Management Field Study	3 hrs	
NU 539 Introduction to Nursing Informatics	3 hrs	

Specialty Courses		19
NU 565 Nursing Administration Finance	3 hrs	
NU 566 Nursing Administration Field Study	3 hrs	
NU 561 Nursing Administration Concepts & Theory	3 hrs	
NU 567 Nursing Administration Internship	4 hrs	
NU 568 Nursing Administration Seminar	3 hrs	
HSC 571 Managing Health Care Personnel	3 hrs	
Total Credits		37

<b>Option II Nursing Informatics</b>		<b>Credit Hours</b>
Graduate Core Courses		9
NU 607 Scientific Underpinnings of Advanced Nursing Practice	3 hrs	
NU 610 Healthcare Policy and Finance	3 hrs	
NU 613 Organizational & Systems Leadership	3 hrs	
Research Courses		3
NU 608 Evidence-Based Practice and Quality Improvement in Health Care	3 hrs	
Support Courses		12
NU 565 Nursing Administration Finance	3 hrs	
ISC 555 Health Data Management and Decision Support Systems	3 hrs	
ISC 550 health Data Security and Computer	3 hrs	
NU 562 Administrative Concepts & Resource Management Field Study	3 hrs	
Total Credits		37

<b>Option III Clinical Nurse Specialist (Adult-Gerontological Health)</b>		<b>Credit Hours</b>
Graduate Core Courses		9
NU 607 Scientific Underpinnings of Advanced Nursing Practice	3 hrs	
NU 610 Healthcare Policy and Finance	3 hrs	
NU 613 Organizational & Systems Leadership	3 hrs	
Research Courses		3
NU 608 Evidence-Based Practice and Quality Improvement in Health Care	3 hrs	
Support Courses		3
NU 578 Pharmacology for Advanced Practice Nurses	3 hrs	
Specialty Courses		17

NU 515 Clinical Concepts & CNS Role I	2 hrs	
NU 516 Clinical Concepts & CNS Role II	3 hrs	
AHN 516 Adult-Geron CNS Practicum I	2 hrs	
AHN 517 Adult-Geron CNS Practicum II	4 hrs	
NU 517 Clinical Concepts & CNS Role III	3 hrs	
AHN 518 Adult-Geron CNS Practicum III	3 hrs	
<b>Total Credits</b>		<b>32</b>

<b>Option IV Clinical Nurse Leader</b>		<b>Credit Hours</b>
<b>Graduate Core Courses</b>		<b>9</b>
NU 607 Scientific Underpinnings of Advanced Nursing Practice	3 hrs	
NU 610 Healthcare Policy and Finance	3 hrs	
NU 613 Organizational & Systems Leadership	3 hrs	
<b>Research Courses</b>		<b>3</b>
NU 608 Evidence-Based Practice and Quality Improvement in Health Care	3 hrs	
<b>Support Courses</b>		<b>3</b>
NU 578 Pharmacology for Advanced Practice Nurses	3 hrs	
<b>Specialty Courses</b>		<b>15</b>
NU 535 Clinical Nurse leader Role & Competencies	3 hrs	
NU 536 Clinical Nurse leader Practicum	5 hrs	
NU 537 Clinical Nurse Leader Synthesis	3 hrs	
NU 538 Clinical Nurse Leader Practicum II	4 hrs	
<b>Total Credits</b>		<b>30</b>

<b>Option V Nurse Practitioner</b>		<b>Credit Hours</b>
<b>Graduate Core Courses</b>		<b>9</b>
NU 607 Scientific Underpinnings of Advanced Nursing Practice	3 hrs	
NU 610 Healthcare Policy and Finance	3 hrs	
NU 613 Organizational & Systems Leadership	3 hrs	
<b>Research Courses</b>		<b>3</b>
NU 608 Evidence-Based Practice and Quality Improvement in Health Care	3 hrs	
<b>Support Courses</b>		<b>3</b>
NU 578 Pharmacology for Advanced Practice Nurse	3 hrs	
<b>Specialty Courses</b>		
Adult-Gerontological Primary Care NP		<b>24</b>

AHN 588 Introduction to Adult-Geron Primary Care NP	2 hrs	
AHN 581 Health Promotion/Disease Prevention & Issues for Adult-Geron Primary Care NP	2 hrs	
AHN 591 Adult-Geron Primary Care NP I	2 hrs	
AHN 592 Adult-Geron Primary Care NP Practicum I	4 hrs	
AHN 593 Adult-Geron Primary Care NP II	3 hrs	
AHN 594 Adult-Geron Primary Care NP Practicum II	2 hrs	
AHN 595 Adult-Geron Primary Care NP III	2 hrs	
AHN 596 Adult-Geron Primary Care NP Practicum III	4 hrs	
HSC 601 Intro to Interprofessional Education	1 hr	
HSC 602 Team Building	1 hr	
HSC 603 Assessment of Vulnerable Populations	1 hr	
Adult-Gerontological Acute Care NP		24
AHN 568 Introduction to Adult-Geron Acute Care NP	3 hrs	
AHN 571 Health Promotion/Disease Prevention & Issues for Adult-Geron Acute Care NP	2 hrs	
AHN 572 Adult-Geron Acute Care NP I	3 hrs	
AHN 573 Adult-Geron Acute Care NP Practicum I	4 hrs	
AHN 574 Adult-Geron Acute Care NP II	3 hrs	
AHN 575 Adult-Geron Acute Care NP Practicum II	2 hrs	
AHN 577 Adult-Geron Acute Care NP III	3 hrs	
AHN 576 Adult-Geron Acute Care NP Practicum III	4 hrs	
Psychiatric (Family) NP		24
CMN 548 Introduction to Family Psychiatric NP	3 hrs	
CMN 551 Health Promotion/Disease Prevention & Issues for Family Psychiatric NP	2 hrs	
CMN 552 Family Psychiatric NP I	3 hrs	
CMN 553 Family Psychiatric NP Practicum I	4 hrs	
CMN 554 Family Psychiatric NP II	3 hrs	
CMN 555 Family Psychiatric NP Practicum II	2 hrs	
CMN 557 Family Psychiatric NP III	2 hrs	
CMN 556 Family Psychiatric NP Practicum III	4 hrs	
Family NP		24
CMN 568 Introduction to Family NP	3 hrs	
CMN 571 Health Promotion/Disease prevention & Issues for Family NP	2 hrs	
CMN 572 Family NP I	3 hrs	

CMN 573 Family NP Practicum I	4 hrs	
CMN 574 Family NP II	3 hrs	
CMN 575 Family NP Practicum II	2 hrs	
CMN 577 Family NP III	3 hrs	
CMN 576 Family NP Practicum III	4 hrs	
Women's Health NP		24
MCN 538 Introduction to Women's Health NP	3 hrs	
MCN 541 Health Promotion/Disease Prevention & Issues for Women's Health NP Nursing	2 hrs	
MCN 542 Women's Health NP I	3 hrs	
MCN 543 Women's Health NP Practicum I	4 hrs	
MCN 544 Women's Health NP II	3 hrs	
MCN 545 Women's Health NP Practicum II	2 hrs	
MCN 546 Women's Health NP Practicum III	4 hrs	
MCN 547 Women's Health NP III	3 hrs	
Pediatric Acute Care NP		24
MCN 558 Introduction to Pediatric Acute Care NP	3 hrs	
MCN 571 Health Promotion/Disease Prevention in Neonatal and Acute Care Pediatric NP	2 hrs	
MCN 562 Pediatric Acute Care NP I	3 hrs	
MCN 563 Pediatric Acute Care NP Practicum I	4 hrs	
MCN 564 Pediatric Acute Care NP II	3 hrs	
MCN 565 Pediatric Acute Care NP Practicum II	2 hrs	
MCN 566 Pediatric Acute Care NP Practicum III	4 hrs	
MCN 567 Pediatric Acute Care NP III	3 hrs	
Pediatric Primary Care NP		24
MCN 548 Introduction to Pediatric Health NP I	3 hrs	
MCN 551 Health Promotion/Disease Prevention in Pediatric Health NP	2 hrs	
MCN 552 Pediatric Health NP I	3 hrs	
MCN 553 Pediatric Health NP Practicum I	4 hrs	
MCN 554 Pediatric Health NP II	3 hrs	
MCN 555 Pediatric Health NP Practicum II	2 hrs	
MCN 556 Pediatric Health NP Practicum III	4 hrs	
MCN 557 Pediatric Health NP III	3 hrs	
Neonatal NP		24
MCN 568 Introduction to Neonatal NP	3 hrs	
MCN 571 Health Promotion/Disease Prevention in Neonatal and Acute Care Pediatric NP	2 hrs	

MCN 572 Neonatal NP I	3 hrs
MCN 573 Neonatal NP Practicum I	4 hrs
MCN 574 Neonatal NP II	3 hrs
MCN 575 Neonatal NP Practicum II	2 hrs
MCN 576 Neonatal NP Practicum III	4 hrs
MCN 577 Neonatal NP III	3 hrs
Dual Role (Family NP/Adult/Geron Acute Care NP)	36
AHN 538 Health Promotion/Disease Prevention & Issues	2 hrs
AHN 549 Family Primary Care NP Practicum I	4 hrs
AHN 548 Family Primary Care NP I	4 hrs
AHN 551 Family Primary Care NP Practicum II	5 hrs
AHN 550 Family Primary Care NP II	4 hrs
AHN 553 Adult-Geron Acute Care NP Practicum I	4 hrs
AHN 552 Adult-Geron Acute Care NP I	4 hrs
AHN 555 Adult-Geron Acute Care NP Practicum II	5 hrs
AHN 554 Adult-Geron Acute Care NP II	4 hrs
Total Credits	39-51

### Accelerated BSN/MSN Track

See BSN section.

Subspecialties: The following can be added to the above pathways as designated.

Cardiovascular - students who are in Adult-Gerontological Acute Care NP and Dual Role specialty can add these 8 credits.

Oncology - students who are in an Adult-Gerontological Primary Care NP, Adult-Gerontological Acute Care NP, Dual Role specialty, Clinical Nurse Specialist-Adult-Gerontological Health, Family NP, Psychiatric (Family) NP or Women's Health NP can add these 11 credits.

Palliative Care - students who are in an Adult-Gerontological Primary Care NP, Adult-Gerontological Acute Care NP, Clinical Nurse Specialist - Adult-Gerontological Health, or Family NP can add these 9 credits.

Nurse Educator - any student can add these 11 credits to their curriculum.

Clinical Lipidology - students who are in Adult-Gerontological Acute Care NP, Adult- Gerontological Primary Care NP, Family NP, Women's Health NP, Clinical Nurse Specialist-Adult-Gerontological Health, or Dual Role specialty can add these 8 credits.

Cardiovascular Option (8 credits)	Credit Hours
AHN 630 Dysrhythmias and the Heart	2
AHN 631 Foundations of Cardiac Care	2
AHN 632 Diagnosis and Management of Acute Cardiovascular Disorders	2
AHN 633 Dig/Management Complex Cardiovascular Disorders	2
Oncology Option (11 credits)	Credit Hours
AHN 621 Foundations of Cancer Biology	2

AHN 622 Cancer Genetics	2
AHN 623 Comp/Alt Therapy Supp Car Oncology	2
AHN 624 Advanced Care Oncology Pat/Fam/Comm	2
AHN 625 Advanced Science in Oncology Nursing	1
AHN 626 Advancing the Science in Oncology Nursing	2

<b>Palliative Care Option (9 credits)</b>		<b>Credit Hours</b>
AHN 530 Foundations of Palliative Care and the Advanced Practice Role		2
AHN 531 Advanced palliative Care and End of Life		2
AHN 532 Advanced Chronic Illness Care		2
AHN 533 Advanced palliative Care Practicum		3

<b>Nurse Educator Option (11 credits)</b>		<b>Credit Hours</b>
NU 620 Instructional Design and Technology for Nurse Educators		3
NU 621 Current & Outcomes Evaluation Nursing Education		3
NU 622 Nursing Education Role Synthesis		2
NU 623 Nursing Education Synthesis Practicum		3

<b>Clinical Lipidology Option (8 credits)</b>		<b>Credit Hours</b>
HSC 595 Evidence Based Lipid Practice		2
HSC 596 Advanced Vascular Biology		2
HSC 597 Advanced Pharmacology for Complex Dyslipidemia		2
HSC 598 Diagnosis and Management of Complex Dyslipidemia		2

## Doctor Of Nursing Practice Degree Program

The Doctor of Nursing Practice (DNP) is a professional degree and prepares graduates to provide the most advanced level of nursing care for individuals and communities. This includes the direct care of individual patients, management of care for individuals and populations, administration of health care and nursing systems, and the development and implementation of health policy. The program is designed to be in compliance with the Essentials for Doctor of Nursing Practice programs as put forth by the American Association of Colleges of Nursing.

The College of Nursing has several pathway, specialization, and subspecialization options within the DNP program. The pathways include the Master of Science in Nursing to DNP for Advanced Nursing Practice roles, Master of Science in Nursing to DNP adding a new advanced practice certification area, Master of Science in Nursing to DNP Bridge Pathway for Clinical Nurse Leaders, and the BSN to DNP.

## Areas Of Specialization

Several concentration areas are offered to meet the career goals of students. Available Nurse Practitioner options include Adult-Gerontological Acute Care Nursing, Adult-Gerontological Primary Care Nursing, Dual Role (Family Nursing/Adult-Gerontological Acute Care Nursing), Family Nursing, Psychiatric (Family) Nursing, Neonatal Nursing, Pediatric Acute Care Nursing, Pediatric Primary Care Nursing, Women's Health Nursing. Clinical Nurse Specialist is available in Adult-Gerontological Nursing. Concentrations are also available for students pursuing careers in Executive Nursing Administration, Bridge CNL to Executive Nursing Administration, and Nursing Informatics. Subspecializations are available in Cardiovascular, Oncology, Palliative Care, Nursing Education, and Clinical Lipidology.

## Doctor Of Nursing Practice Program Learning Outcomes

Upon completion of the Doctor of Nursing Practice program, graduates should be able to:

1. Assume organizational and system leadership in the analysis, delivery, and management of nursing care.
2. Implement the highest level of advanced nursing care to produce high-quality, cost-effective outcomes for diverse patient outcomes.
3. Use theories, concepts, and analytic methodologies to design, implement, and evaluate practice by applying evidence to transform nursing systems.
4. Contribute to the knowledge of best-practices and dissemination of outcomes through professional writing and presentations.
5. Develop practice standards based on the integration of ethics and evidence-based nursing care.

## Requirements For Admission To The Master Of Science In Nursing DNP Pathway

Admission to the program is limited and selective. Application forms and other information may be obtained from the College of Nursing's web site at <http://www.southalabama.edu/colleges/con/dnp/dnpapplic.html> or by contacting the college directly at College of Nursing, University of South Alabama, Mobile, Alabama 36688; [condnp@southalabama.edu](mailto:condnp@southalabama.edu); Telephone: (251) 445-9400.

To be considered for admission to the DNP program, the applicant must meet the following requirements:

1. Citizen or Permanent Resident of the United States of America.
2. Master of Science in Nursing degree with preparation in an area of advanced practice nursing offered by the USA College of Nursing as listed under the DNP areas of specialization.
3. Current registered nurse licensure with no restrictions. Nurses with any restrictions on their license, including participation in a voluntary disciplinary alternative program, cannot be admitted.
4. Completion of Primary and Supplemental Applications:
  - a. Primary Application submitted through Nursing Centralized Application System (NursingCAS) at [www.NursingCAS.org](http://www.NursingCAS.org). Official transcripts of all college and university studies, regardless of the outcome of enrollment, must be sent directly from the home institution to the NursingCAS. These documents become the property of the NursingCAS and will not be returned to the applicant. Applicants are responsible for any fees required by NursingCAS for their services. Applications are accepted twice a year and must adhere to the following application deadlines: February 15 - Fall Admission and July 15 - Spring Admission.
  - b. Supplemental Application submitted directly to the DNP Office at the USA College of Nursing. This application requires a non-refundable processing fee of \$100.00, a Personal Goal Statement, and a resume/CV documenting clinical experience. Note: Prior to enrolling in nurse practitioner clinical courses, students are required to have at least 2 years of experience in an area appropriate to their specialty.
5. Structured phone interview with graduate nursing faculty members may be required.
6. Students are admitted to a specialty track and may not change their track without permission.
7. Students must be in good standing with all academic institutions/nursing programs that they have attended in order to be admitted to the DNP program.

## Requirements For Admission To The BSN-DNP Pathway

The admissions criteria is the same as the MSN to DNP Pathway except applicants to the BSN-DNP program must have an overall undergraduate GPA no less than 3.0 as calculated by NursingCAS.

Upon admission to the program, all students must submit Health Data Forms, and evidence of Health Insurance. All students are admitted pending the results of a drug screen and background check. Admission will be withdrawn for students who test positive on the drug screen as per the College of Nursing policy or whose background check would prevent the student from completing residency requirements. Students who sit out of the program for three consecutive semesters must apply for readmission through the Registrar's Office and repeat their drug screening and background check.

## Progression Policy For Students In The Master Of Science In Nursing To DNP For Advanced Practice Roles

Students must maintain an overall GPA of 3.0 to remain in the program. Only one grade of "C" can be earned in the MSN to DNP program. A student earning a second "C" or lower will be academically dismissed from the program. A student earning a grade of "D" or "F" in the program will be academically dismissed. Any term in which a graduate student drops below a 3.0 Program GPA, the student is placed on probationary status and has a period of two terms to attain a 3.0 Program GPA or be

dismissed. The outcome of the DNP Project Planning and Development course is "pass/fail." Students failing the course twice will be academically dismissed. A student who has been academically dismissed is not eligible for readmission to the DNP program.

### **DNP Residency Coursework Policy**

The DNP Residency Coursework includes the DNP Project Planning and Development, Residency I, Residency II, and Residency III. These courses must be taken in consecutive semesters in the following sequence: DNP Project Planning and Development, Residency I, Residency II, and Residency III. Students will be required to retake courses, if they are not taken in consecutive semesters. The outcome of the DNP Project Planning and Development course is "pass/fail." Students failing the course twice will be academically dismissed.

### **Progression Policy For Students In The Master Of Science In Nursing To DNP Adding A New Certification Area, Master Of Science In Nursing To DNP Bridge Program For CNL, And BSN To DNP**

Students must maintain an overall GPA of 3.0 to remain in the program. Students in these programs can have a maximum of two Cs. A maximum of two (2) courses with a grade of "C" can be counted towards a degree; however, only one (1) "C" is permitted in support or specialization courses. If a second "C" or lower is earned in a support or specialization course, the course in which the second "C" or lower is obtained must be repeated. A student earning a third "C" or lower will be academically dismissed from the program. A student earning two grades of "D" or "F" in the program will be academically dismissed. The outcome of the DNP Project Planning and Development course is "pass/fail." Students failing the course twice will be academically dismissed. Any term in which a graduate student drops below a 3.0 Program GPA, the student is placed on probationary status and has a period of two terms to attain a 3.0 Program GPA or be dismissed. A student who has been academically dismissed is not eligible for readmission to the DNP program and is not eligible for admission to the MSN program. When adding a new certification area, students will earn a post-graduate certificate in the process of completion of the DNP. The post-graduate certificate coursework must be completed within 2 years from the semester the specialty option coursework begins. The retooling to a new specialty plus the MSN to DNP program must be completed in seven years of matriculation.

Students in the Doctor of Nursing Practice program may initiate a grade appeal under procedures set forth by the Final Course Grade Grievance Policy. A copy of this policy is available in the Dean's Office or on the University's web site in the Lowdown at <http://www.southalabama.edu/departments/studentaffairs/lowdown/>.

A student dismissed from the program as the result of an academic misconduct penalty will not be eligible for readmission to the DNP program. Students in the Doctor of Nursing Practice program may initiate an appeal of a charge of Academic Misconduct under procedures set forth by the Academic Standards Policy. A copy of this policy is available in the Deans Office or on the University's web site under the Lowdown at <http://www.southalabama.edu/departments/studentaffairs/lowdown/>.

Students are expected to complete the DNP project requirements while enrolled in the Residency courses. Students who do not complete the DNP project during the Residency courses will receive a grade for the course based on faculty evaluation of the student's work on the project. Students receiving an acceptable grade ("C" or higher, except that the grade is not the second "C" received in the curriculum) will be required to enroll in a three hour directed study every semester until the project is completed.

If a student's progression is interrupted for any reason, it is the student's responsibility to contact the Associate Dean for Academic Affairs through their Academic Advisor. Because of limited space in the advanced clinical courses, any alteration in progression may lengthen the student's program.

### **Application For Degree For Master Of Science In Nursing To DNP For Advanced Nursing Practice Role And MSN To DNP Bridge Program For CNL**

Each candidate for the Doctor of Nursing practice degree must submit an application for the degree the semester preceding their anticipated graduation through the Registrar's Office. See the University Calendar for specific deadlines.

### **Application For Degree For Master Of Science In Nursing To DNP Adding A New Certification Area**

The MSN to DNP adding a new certification area will only apply to graduate with the DNP degree. The Post-Graduate Certificate will be awarded through the College of Nursing upon the completion of all certificate requirements.

### **Application For Degree For BSN To DNP**

Students in the BSN-DNP program will apply for two separate graduations. Applications should be submitted to the Registrar's Office the semester before the anticipated graduation. Each candidate must make application for the Master of Science in Nursing degree upon completion of the degree requirements. Upon completion of requirements for the Doctor of Nursing practice degree, each candidate must submit an application for that degree. The student's curriculum schedule indicates the semester in which each degree should be awarded. See the University Calendar for specific application deadlines.

### Master Of Science In Nursing To DNP Curriculum For Advanced Nursing Practice

The DNP curriculum consists of 36 credits for the student holding a Master of Science in Nursing degree with preparation in an area of advanced practice nursing. Students who graduated with an MSN from the University of South Alabama College of Nursing and completed the following courses NU 607, NU 608, NU 610, and NU 613 during the MSN coursework may complete the DNP program with an additional 24 credits if the previous coursework is within the seven year limit. The MSN to DNP program can be completed in three semesters of full-time study. Full-time study is defined as six or more credits per semester. Permission to take more than 12 credits per semester must be obtained from the Associate Dean of Academic Affairs. Part-time study is also available.

The program must be completed in five years of matriculation for the MSN to DNP program.

Course work for the MSN to DNP program is offered completely online. Students are not required to come to campus during the MSN to DNP program. Electives can be taken but are not required. The program does not require a thesis or dissertation; however, students are required to complete a major synthesis project that results in a quality improvement change and has a substantial effect on health care outcomes. Residency requirements for the synthesis project can be completed in the student's home region with an approved mentor.

MSN to DNP Courses	Credit Hours
Clinical Prevention and Population Health	3
Scientific Underpinnings of Advanced Nursing Practice	3
Data Management and Decision Making in Complex Health Care Systems	3
Evidence-Based Practice and Quality Improvement in Health Care Systems	3
Organizational and Systems Leadership	3
Quality Improvement and Outcomes Assessment	3
Healthcare Policy and Finance	3
Translating Evidence into Practice Systems	3
Project Planning and Development	3
Residency I	3
Residency II	3
Residency III	3

### Master Of Science In Nursing To DNP Adding A New Certification Area Curriculum

Option I Adult/Gerontological Acute Care Nurse Practitioner	Credit Hours
Core Courses	18
NU 607 Scientific Underpinnings of Advanced Nursing Practice	3 hrs
NU 610 Healthcare Policy and Finance	3 hrs
NU 613 Organizational & Systems Leadership	3 hrs
NU 612 Clinical Prevention and Population Health	3 hrs
NU 616 Data management & Decision Making in Complex Health Care Systems	3 hrs
NU 615 Quality Improvement Outcomes Assessment	3 hrs
Research Courses	6

NU 608 Evidence-Based Practice and Quality Improvement in Health Care	3 hrs	
NU 611 Translating Evidence Into Practice Systems	3 hrs	
<b>Specialty Courses</b>		<b>33</b>
AHN 568 Introduction to Adult-Geron Acute Care NP	3 hrs	
AHN 571 Health Promotion/Disease Prevention & Issues for Adult-Geron Acute Care NP	2 hrs	
AHN 572 Adult-Geron Acute Care NP I	3 hrs	
AHN 573 Adult-Geron Acute Care NP Practicum I	4 hrs	
AHN 574 Adult-Geron Acute Care NP II	3 hrs	
AHN 575 Adult-Geron Acute Care NP Practicum II	2 hrs	
AHN 576 Adult-Geron Acute Care NP III	3 hrs	
AHN 577 Adult-Geron Acute Care NP Practicum III	3 hrs	
AHN 604 Adult-Geron Acute Care NP Project Planning & Development	3 hrs	
AHN 617 Adult-Geron Acute Care NP Residency I	3 hrs	
AHN 618 Adult-Geron Acute Care NP Residency II	3 hrs	
AHN 619 Adult-Geron Acute Care NP Residency III	3 hrs	
<b>Total Credits</b>		<b>60</b>

<b>Option II Adult Gerontological Primary Care Nurse Practitioner</b>		<b>Credit Hours</b>
<b>Core Courses</b>		<b>18</b>
NU 607 Scientific Underpinnings of Advanced Nursing Practice	3 hrs	
NU 610 Healthcare Policy and Finance	3 hrs	
NU 613 Organizational & Systems Leadership	3 hrs	
NU 612 Clinical Prevention and Population Health	3 hrs	
NU 616 Data management & Decision Making in Complex Health Care Systems	3 hrs	
NU 615 Quality Improvement Outcomes Assessment	3 hrs	
<b>Research Courses</b>		<b>6</b>
NU 608 Evidence-Based Practice and Quality Improvement in Health Care	3 hrs	
NU 611 Translating Evidence Into Practice Systems	3 hrs	
<b>Specialty Courses</b>		<b>36</b>
AHN 581 Health Promotion/Disease Prevention & Issues for Adult-Geron Primary Care NP	2 hrs	
AHN 588 Introduction to Adult-Geron Primary Care NP	2 hrs	

AHN 591 Adult-Geron Primary Care NP I	2 hrs
AHN 592 Adult-Geron Primary Care NP Practicum I	4 hrs
AHN 593 Adult-Geron Primary Care NP II	3 hrs
AHN 594 Adult-Geron Primary Care NP Practicum II	2 hrs
AHN 595 Adult-Geron Primary Care NP III	2 hrs
AHN 596 Adult-Geron Primary Care NP Practicum III	4 hrs
AHN 693 Adult-Geron Primary Care NP Project Planning & Development	3 hrs
AHN 694 Adult-Geron Primary Care NP Residency I	3 hrs
AHN 695 Adult-Geron Primary Care NP Residency II	3 hrs
AHN 696 Adult-Geron Primary Care NP Residency III	3 hrs
HSC 601 Intro to Interprofessional Education	1 hr
HSC 602 Team Building	1 hr
HSC 603 Assessment of Vulnerable Populations	1 hr
<b>Total Credits</b>	<b>60</b>

<b>Option III Dual Role (Family NP/Adult-Gerontological Acute Care NP)</b>		<b>Credit Hours</b>
<b>Core Courses</b>		<b>18</b>
NU 607 Scientific Underpinnings of Advanced Nursing Practice	3 hrs	
NU 610 Healthcare Policy and Finance	3 hrs	
NU 613 Organizational & Systems Leadership	3 hrs	
NU 612 Clinical Prevention and Population Health	3 hrs	
NU 616 Data Management & Decision Making in Complex Health Care Systems	3 hrs	
NU 615 Quality Improvement Outcomes Assessment	3 hrs	
<b>Research Courses</b>	<b>6</b>	
NU 608 Evidence-Based Practice and Quality Improvement in Health Care	3 hrs	
NU 611 Translating Evidence Into Practice Systems	3 hrs	
<b>Specialty Courses</b>	<b>48</b>	
AHN 538 Health Promotion/Disease Prevention & Issues	2 hrs	
AHN 548 Family Primary Care NP I	4 hrs	
AHN 549 Family Primary Care NP Practicum I	4 hrs	
AHN 550 Family Primary Care NP II	4 hrs	
AHN 551 Family Primary Care NP Practicum II	5 hrs	

AHN 552 Adult-Geron Acute Care NP I	4 hrs
AHN 553 Adult-Geron Acute Care NP Practicum I	4 hrs
AHN 554 Adult-Geron Acute Care NP II	4 hrs
AHN 555 Adult-Geron Acute Care NP Practicum II	5 hrs
AHN 604 Adult-Geron Acute Care NP Project Planning & Development or CMN 680 Family NP Project Planning & Development	3 hrs 3 hrs
AHN 617 Adult-Gerontological Acute Care Residency I or CMN 681 Family NP Residency 1	3 hrs 3 hrs
AHN 618 Adult-Gerontological Acute Care Residency II or CMN 682 Family NP Residency II	3 hrs 3 hrs
AHN 619 Adult-Geron Acute Care Nurse Practitioner Residency III or CMN 683 Family NP Residency III	3 hrs 3 hrs
<b>Total Credits</b>	<b>72</b>

<b>Option IV Family Nurse Practitioner</b>		<b>Credit Hours</b>
<b>Core Courses</b>		<b>18</b>
NU 607 Scientific Underpinnings of Advanced Nursing Practice	3 hrs	
NU 610 Healthcare Policy and Finance	3 hrs	
NU 613 Organizational & Systems Leadership	3 hrs	
NU 612 Clinical Prevention and Population Health	3 hrs	
NU 616 Data Management & Decision Making in Complex Health Care Systems	3 hrs	
NU 615 Quality Improvement Outcomes Assessment	3 hrs	
<b>Research Courses</b>	<b>6</b>	
NU 608 Evidence-Based Practice and Quality Improvement in Health Care	3 hrs	
NU 611 Translating Evidence Into Practice Systems	3 hrs	
<b>Specialty Courses</b>	<b>36</b>	
CMN 568 Introduction to Family NP	3 hrs	
CMN 571 Health Promotion/Disease Prevention & Issues for Family NP	2 hrs	
CMN 572 Family NP I	3 hrs	
CMN 573 Family NP Practicum I	4 hrs	
CMN 574 Family NP II	3 hrs	
CMN 575 Family NP Practicum II	2 hrs	

CMN 576 Family NP III	3 hrs	
CMN 577 Family NP Practicum III	4 hrs	
CMN 680 Family NP Project Planning & Development	3 hrs	
CMN 681 Family NP Residency I	3 hrs	
CMN 682 Family NP Residency II	3 hrs	
CMN 683 Family NP Residency III	3 hrs	
<b>Total Credits</b>		<b>60</b>

<b>Option V Pediatric Acute Care Nurse Practitioner</b>		<b>Credit Hours</b>
<b>Core Courses</b>		<b>18</b>
NU 607 Scientific Underpinnings of Advanced Nursing Practice	3 hrs	
NU 613 Organizational & Systems Leadership	3 hrs	
NU 612 Clinical Prevention and Population Health	3 hrs	
NU 616 Data Management & Decision Making in Complex Health Care Systems	3 hrs	
NU 615 Quality Improvement Outcomes Assessment	3 hrs	
<b>Research Courses</b>		<b>6</b>
NU 608 Evidence-Based Practice and Quality Improvement in Health Care	3 hrs	
NU 611 Translating Evidence Into Practice Systems	3 hrs	
<b>Specialty Courses</b>		<b>36</b>
MCN 558 Introduction to Pediatric Acute Care NP	3 hrs	
MCN 571 Health Promotion and Disease Prevention in Neonatal and Acute Care Pediatric NP	2 hrs	
MCN 562 Pediatric Acute Care NP I	3 hrs	
MCN 563 Pediatric Acute Care NP Practicum I	4 hrs	
MCN 564 Pediatric Acute Care NP II	3 hrs	
MCN 565 Pediatric Acute Care NP Practicum II	2 hrs	
MCN 566 Pediatric Acute Care NP Practicum II	4 hrs	
MCN 567 Pediatric Acute Care NP III	3 hrs	
MCN 604 Pediatric Acute Care Project Planning & Development	3 hrs	
MCN 617 Pediatric Acute Care NP Residency I	3 hrs	
MCN 618 Pediatric Acute Care NP Residency II	3 hrs	
MCN 619 Pediatric Acute Care NP Residency III	3 hrs	
<b>Total Credits</b>		<b>60</b>

<b>Option VI Pediatric Primary Care Nurse Practitioner</b>		<b>Credit Hours</b>
Core Courses		18
NU 607	Scientific Underpinnings of Advanced Nursing Practice	3 hrs
NU 610	Healthcare Policy and Finance	3 hrs
NU 613	Organization & Systems Leadership	3 hrs
NU 612	Clinical Prevention and Population Health	3 hrs
NU 616	Data management & Decision Making in Complex Health Care Systems	3 hrs
NU 615	Quality Improvement Outcomes Assessment	3 hrs
Research Courses		6
NU 608	Evidence-Based Practice and Quality Improvement in Health Care	3 hrs
NU 611	Translating Evidence Into Practice Systems	3 hrs
Specialty Courses		36
MCN 548	Introduction to Pediatric Health NP I	3 hrs
MCN 551	Health Promotion/Disease Prevention in Pediatric Health NP	2 hrs
MCN 552	Pediatric Health NP I	3 hrs
MCN 553	Pediatric Health NP Practicum I	4 hrs
MCN 554	Pediatric Health NP II	3 hrs
MCN 555	Pediatric Health NP Practicum II	2 hrs
MCN 556	Pediatric Health NP Practicum III	4 hrs
MCN 557	Pediatric Health NP III	3 hrs
MCN 654	Pediatric Primary Care NP Project Planning & Development	3 hrs
MCN 655	Pediatric Primary Care NP Residency I	3 hrs
MCN 656	Pediatric Primary Care NP Residency II	3 hrs
MCN 657	Pediatric Primary Care NP Residency III	3 hrs
Total Credits		60

<b>Option VII Family Psychiatric-Mental Health Nurse Practitioner</b>		<b>Credit Hours</b>
Core Courses		18
NU 607	Scientific Underpinnings of Advanced Nursing Practice	3 hrs
NU 610	Healthcare Policy and Finance	3 hrs
NU 613	Organizational & Systems Leadership	3 hrs
NU 612	Clinical Prevention and Population Health	3 hrs

NU 616 Data Management & Decision Making in Complex Health Care Systems	3 hrs	
NU 615 Quality Improvement Outcomes Assessment	3 hrs	
<b>Research Courses</b>		<b>6</b>
NU 608 Evidence-Based Practice and Quality Improvement in Health Care	3 hrs	
NU 611 Translating Evidence Into Practice Systems	3 hrs	
<b>Specialty Courses</b>		<b>36</b>
CMN 548 Introduction to Family Psychiatric NP I	3 hrs	
CMN 551 Health Promotion/Disease Prevention & Issues for Family Psychiatric NP	2 hrs	
CMN 552 Family Psychiatric NP I	3 hrs	
CMN 553 Family Psychiatric NP Practicum I	4 hrs	
CMN 554 Family Psychiatric NP II	4 hrs	
CMN 555 Family Psychiatric NP Practicum II	2 hrs	
CMN 556 Family Psychiatric NP III	3 hrs	
CMN 557 Family Psychiatric NP Practicum III	4 hrs	
CMN 604 Family Psych NP Project Planning & Development	3 hrs	
CMN 617 Family Psych NP Residency I	3 hrs	
CMN 618 Family Psych NP Residency II	3 hrs	
CMN 619 Family Psych NP Residency III	3 hrs	
<b>Total Credits</b>		<b>60</b>

<b>Option VIII Women's Health Nurse Practitioner</b>		<b>Credit Hours</b>
<b>Core Courses</b>		<b>18</b>
NU 607 Scientific Underpinnings of Advanced Nursing Practice	3 hrs	
NU 610 Healthcare Policy and Finance	3 hrs	
NU 613 organizational & Systems Leadership	3 hrs	
NU 612 Clinical Prevention and Population Health	3 hrs	
NU 616 Data Management & Decision Making in Complex Health Care Systems	3 hrs	
NU 615 Quality Improvement Outcomes Assessment	3 hrs	
<b>Research Courses</b>		<b>6</b>
NU 608 Evidence-Based Practice and Quality Improvement in Health Care	3 hrs	
NU 611 Translating Evidence Into Practice Systems	3 hrs	
<b>Specialty Courses</b>		<b>36</b>
MCN 538 Introduction to Women's Health NP	3 hrs	

MCN 541 Health Promotion/Disease Prevention & Issues for Women's Health NP Nursing	2 hrs	
MCN 542 Women's Health NP I	3 hrs	
MCN 543 Women's Health NP Practicum I	4 hrs	
MCN 544 Women's Health NP II	3 hrs	
MCN 545 Women's Health NP Practicum II	2 hrs	
MCN 546 Women's Health NP Practicum III	4 hrs	
MCN 547 Women's Health NP III	3 hrs	
MCN 644 Women's Health NP Project Planning & Development	3 hrs	
MCN 645 Women's Health NP Residency I	3 hrs	
MCN 646 Women's Health NP Residency II	3 hrs	
MCN 647 Women's Health NP Residency III	3 hrs	
<b>Total Credits</b>		<b>60</b>

<b>Option IX Neonatal Nurse Practitioner</b>		<b>Credit Hours</b>
<b>Core Courses</b>		<b>18</b>
NU 607 Scientific Underpinnings of Advanced Nursing Practice	3 hrs	
NU 610 Healthcare Policy and Finance	3 hrs	
NU 613 Organizational & Systems Leadership	3 hrs	
NU 612 Clinical Prevention and Population Health	3 hrs	
NU 616 Data Management & Decision Making in Complex Health Care Systems	3 hrs	
NU 615 Quality Improvement Outcomes Assessment	3 hrs	
<b>Research Courses</b>		<b>6</b>
NU 608 Evidence-Based practice and Quality Improvement in Health Care	3 hrs	
NU 611 Translating Evidence Into Practice Systems	3 hrs	
<b>Specialty Courses</b>		<b>36</b>
MCN 568 Introduction to Neonatal NP I	3 hrs	
MCN 571 Health Promotion/Disease Prevention in Neonatal and Acute Care Pediatric NP	2 hrs	
MCN 572 Neonatal NP Practicum I	3 hrs	
MCN 573 Neonatal NP Practicum I	4 hrs	
MCN 574 Neonatal NP II	3 hrs	
MCN 575 Neonatal NP Practicum II	2 hrs	
MCN 576 Neonatal NP Practicum III	4 hrs	
MCN 577 Neonatal NP III	3 hrs	
MCN 674 Neonatal Project Planning	3 hrs	

## &amp; Development

MCN 675 Neonatal Residency I	3 hrs	
MCN 676 Neonatal Residency II	3 hrs	
MCN 677 Neonatal Residency III	3 hrs	
Total Credits		60

**Option X Clinical Nurse Specialist - Adult-Gerontological Health****Credit Hours**

Core Courses		18
NU 607 Scientific Underpinnings of Advanced Nursing	3 hrs	
NU 616 Data Management & Decision Making in Complex Health Care Systems	3 hrs	
NU 615 Quality Improvement Outcomes Assessment	3 hrs	
Research Courses		6
NU 608 Evidence-Based Practice and Quality Improvement in Health Care	3 hrs	
NU 611 Translating Evidence Into Practice Systems	3 hrs	
Specialty Courses		29
NU 515 Clinical Concepts & CNS Role I	2 hrs	
AHN 516 Adult-Geron CNS Practicum I	2 hrs	
NU 516 Clinical Concepts & CNS Role II	3 hrs	
AHN 517 Adult-Geron CNS Practicum II	4 hrs	
NU 517 Clinical Concepts & CNS Role III	3 hrs	
AHN 518 Adult-Geron CNS Practicum III	3 hrs	
AHN 634 Adult-Geron CNS Project Planning & Development	3 hrs	
AHN 635 Adult-Geron CNS Residency I	3 hrs	
AHN 636 Adult-Geron CNS Residency II	3 hrs	
AHN 637 Adult-Geron CNS Residency III	3 hrs	
Total Credits		53

**Option XI Executive Nursing Administration****Credit Hours**

Core Courses		18
NU 607 Scientific Underpinnings of Advanced Nursing Practice	3 hrs	
NU 610 Healthcare Policy and Finance	3 hrs	
NU 613 Organizational & Systems Leadership	3 hrs	
NU 612 Clinical Prevention and Population Health	3 hrs	
NU 616 Data Management & Decision Making in Complex Health Care Systems	3 hrs	

NU 615 Quality Improvement Outcomes Assessment	3 hrs	
Research Courses		6
NU 608 Evidence-Based Practice and Quality Improvement in Health Care	3 hrs	
NU 611 Translating Evidence Into Practice Systems	3 hrs	
Support Courses		6
NU 562 Administrative Concepts & Resource Management Field Study	3 hrs	
NU 539 Introduction to Nursing Informatics	3 hrs	
Specialty Courses		31
NU 561 Nursing Administration Concepts & Theory	3 hrs	
NU 565 Nursing Administration Finance	3 hrs	
NU 566 Nursing Administration Field Study	3 hrs	
NU 567 Nursing Administration Internship	4 hrs	
NU 568 Nursing Administration Seminar	3 hrs	
HSC 571 Managing Health Care Personnel	3 hrs	
NU 661 Nursing Administration Project Planning & Development	3 hrs	
NU 662 Nursing Administration Residency I	3 hrs	
NU 663 Nursing Administration Residency II	3 hrs	
NU 664 Nursing Administration III	3 hrs	
Total Credits		61

<b>Option XII Nursing Informatics</b>		<b>Credit Hours</b>
Core Courses		18
NU 607 Scientific Underpinnings of Advanced Nursing Practice	3 hrs	
NU 610 Healthcare Policy and Finance	3 hrs	
NU 613 organizational & Systems Leadership	3 hrs	
NU 612 Clinical Prevention and Population Health	3 hrs	
NU 616 Data management & Decision Making in Complex Health Care Systems	3 hrs	
NU 615 Quality Improvement Outcomes Assessment	3 hrs	
Research Courses		6
NU 608 Evidence-Based practice and Quality Improvement in Health Care	3 hrs	
NU 611 Translating Evidence Into Practice Systems	3 hrs	
Support Courses		12
NU 562 Administrative Concepts & Resource Management Field Study	3 hrs	

NU 565 Nursing Administration Finance	3 hrs
ISC 550 Health Data Security and Computer	3 hrs
ISC 555 Health Data Management and Decision Support Systems	3 hrs
<b>Specialty Courses</b>	<b>25</b>
NU 539 Introduction to Nursing Informatics	3 hrs
NU 556 Informatics and Quality of Care Improvement	3 hrs
NU 557 Clinical Informatics Practicum I	2 hrs
NU 558 Seminar in Nursing Informatics	3 hrs
NU 559 Clinical Informatics Practicum II	2 hrs
NU 656 Informatics Project Planning & Development	3 hrs
NU 657 Informatics Residency I	3 hrs
NU 658 Informatics Residency II	3 hrs
NU 659 Informatics Residency III	3 hrs
<b>Total Credits</b>	<b>61</b>

### Master Of Science Nursing To DNP Bridge Pathway For CNL To Executive Nursing Administration

<b>Option I Clinical Nurse Leader</b>	<b>Credit Hours</b>
<b>Bridge Courses</b>	<b>6</b>
NU 565 Nursing Administration Finance	3 hrs
NU 560 Administration and Management for Advanced Nursing Practice	3 hrs
<b>Core Course</b>	<b>18</b>
NU 607 Scientific Underpinnings of Advanced Nursing Practice	3 hrs
NU 610 Healthcare Policy and Finance	3 hrs
NU 612 Clinical Prevention and Population Health	3 hrs
NU 613 Organizational & Systems Leadership	3 hrs
NU 615 Quality Improvement Outcomes Assessment	3 hrs
NU 616 Data Management & Decision Making in Complex Health Care Systems	3 hrs
<b>Research Courses</b>	<b>6</b>
NU 608 Evidence-Based Practice and Quality Improvement in Health Care	3 hrs
NU 611 Translating Evidence Into Practice Systems	3 hrs
<b>Specialty Courses</b>	<b>12</b>
NU Administration Project Planning & Development	3 hrs
NU 662 Nursing Administration Residency I	3 hrs

NU 663 Nursing Administration Residency II	3 hrs	
NU 664 Nursing Administration Residency III	3 hrs	
Total Credits		42

### BSN To DNP Curriculum

The BSN to DNP curriculum consist of 69 to 87 credits. The program can be completed in 9 semesters of full-time study or in twelve semesters of part-time study. Full-time study is defined as six or more credits per semester. Permission to take more than 12 credits per semester must be obtained from the Associate Dean of Academic Affairs prior to the student enrolling. The program must be completed within 7 years of matriculation.

Course work is offered online and students are required to come to campus one time when they begin the clinical portion of their specialty program for an intensive classroom and evaluation sessions. Specialty tracks within the College of Nursing's graduate program require a practice component. Although faculty assists students in locating a site and preceptor if it is indicated. Students who are unsuccessful in being accepted by an agency in their home community may have to travel to another area to complete practice requirements or withdraw from the program. Please review the list of clinical affiliations found under the "Current Student" tab on the College of Nursing Web Site at <http://www.southalabama.edu/colleges/con/students/index.html>. If there is not a clinical site listed near you or you are interested in a site not listed, negotiations should be initiated as soon as you begin the program through the Specialty Coordinator for your specialty.

The program does not require a thesis or dissertation; however, students are required to complete a major synthesis project that results in a quality improvement change and has a substantial effect on health care outcomes. Residency requirements for the synthesis project can be completed in the student's home region with an approved mentor.

### BSN To DNP Curriculum For BSN-prepared Registered Nurses

Option I Adult/Gerontological Acute Care Nurse Practitioner		Credit Hours
Core Courses		18
NU 607 Scientific Underpinnings of Advanced Nursing Practice	3 hrs	
NU 610 Healthcare Policy and Finance	3 hrs	
NU 613 Organizational & Systems Leadership	3 hrs	
NU 612 Clinical Prevention and Population Health	3 hrs	
NU 616 Data Management & Decision Making in Complex Health Care Systems	3 hrs	
NU 615 Quality Improvement Outcomes Assessment	3 hrs	
Research Courses		6
NU 608 Evidence-Based Practice and Quality Improvement in Health Care	3 hrs	
NU 611 Translating Evidence Into Practice Systems	3 hrs	
Support Courses		9
NU 518 Advanced Nursing Assessment	3 hrs	
NU 545 Physiological-Pathological Basis of Advanced Nursing	3 hrs	
NU 578 Pharmacology for Advanced Practice Nurses	3 hrs	
Specialty Courses		33
AHN 568 Introduction to Adult-Geron Acute Care NP	3 hrs	

AHN 571 Health Promotion/Disease Prevention & Issues for Adult-Geron Acute Care NP	2 hrs	
AHN 572 Adult-Geron Acute Care NP I	3 hrs	
AHN 573 Adult-Geron Acute Care NP Practicum I	4 hrs	
AHN 574 Adult-Geron Acute Care NP II	3 hrs	
AHN 575 Adult-Geron Acute Care NP Practicum II	2 hrs	
AHN 576 Adult-Geron Acute Care NP III	3 hrs	
AHN 577 Adult-Geron Acute Care NP Practicum III	4 hrs	
AHN 604 Adult-Geron Acute Care NP Project Planning & Development	3 hrs	
AHN 617 Adult-Geron Acute Care NP Residency I	3 hrs	
AHN 618 Adult-Geron Acute Care NP Residency II	3	
AHN 619 Adult-Geron Acute Care NP Residency III	3 hrs	
<b>Total Credits</b>		<b>66</b>

<b>Option II Adult-Gerontological Primary Care Nurse Practitioner</b>		<b>Credit Hours</b>
<b>Core Courses</b>		<b>18</b>
NU 607 Scientific Underpinnings of Advanced Nursing Practice	3 hrs	
NU 610 Healthcare Policy and Finance	3 hrs	
NU 613 Organizational & Systems Leadership	3 hrs	
NU 612 Clinical Prevention and Population Health	3 hrs	
NU 616 Data Management & Decision Making in Complex Health Care Systems	3 hrs	
NU 615 Quality Improvement Outcomes Assessment	3 hrs	
<b>Research Courses</b>		<b>6</b>
NU 608 Evidence-Based Practice and Quality Improvement in Health Care	3 hrs	
NU 611 Translating Evidence Into Practice Systems	3 hrs	
<b>Support Courses</b>		<b>9</b>
NU 518 Advanced Nursing Assessment	3 hrs	
NU 545 Physiological-pathological Basis of Advanced Nursing	3 hrs	
NU 578 Pharmacology for Advanced practice Nurses	3 hrs	
<b>Specialty Courses</b>		<b>36</b>
AHN 581 Health Promotion/Disease Prevention & Issues for Adult-Geron Primary Care NP	2 hrs	
AHN 588 Introduction to Adult-Geron Primary Care NP	2 hrs	
AHN 591 Adult-Geron Primary Care NP I	2 hrs	

AHN 592 Adult-Geron Primary Car NP Practicum I	4 hrs	
AHN 593 Adult-Geron Primary Care NP II	3 hrs	
AHN 594 Adult-Geron Primary Care NP Practicum II	2 hrs	
AHN 595 Adult-Geron Primary Care NP III	2 hrs	
AHN 596 Adult-Geron Primary Care NP Practicum III	4 hrs	
AHN 693 Adult-Geron Primary Care NP Project Planning & Development	3 hrs	
AHN 694 Adult-Geron Primary Care NP Residency I	3 hrs	
AHN 695 Adult-Geron Primary Care NP Residency II	3 hrs	
AHN 696 Adult-Geron Primary Care NP Residency III	3 hrs	
HSC 601 Intro to Interprofessional Education	1 hr	
HSC 602 Team Building	1 hr	
HSC 603 Assessment of Vulnerable Populations	1 hr	
<b>Total Credits</b>		<b>69</b>

<b>Option III Dual Role (Family NP/Adult-Gerontological Acute Care NP)</b>		<b>Credit Hours</b>
<b>Core Courses</b>		<b>18</b>
NU 607 Scientific Underpinnings of Advanced Nursing Practice	3 hrs	
NU 610 Healthcare Policy and Finance	3 hrs	
NU 613 Organizational & Systems Leadership	3 hrs	
NU 612 Clinical Prevention and Population Health	3 hrs	
NU 616 Data Management & Decision Making in Complex Health Care Systems	3 hrs	
NU 615 Quality Improvement Outcomes Assessment	3 hrs	
<b>Research Courses</b>		<b>6</b>
NU 608 Evidence-Based Practice and Quality Improvement in Health Care	3 hrs	
NU 611 Translating Evidence Into Practice Systems	3 hrs	
<b>Support Courses</b>		<b>9</b>
NU 518 Advanced Nursing Assessment	3 hrs	
NU 545 Physiological-pathological Basis of Advanced Nursing	3 hrs	
NU 578 Pharmacology for Advanced Practice Nurses	3 hrs	
<b>Specialty Courses</b>		<b>48</b>
AHN 538 Health Promotion/Disease Prevention & Issues	2 hrs	
AHN 548 Family Primary Care NP I	4 hrs	

AHN 549 Family Primary Care NP Practicum I	4 hrs
AHN 550 Family Primary Care NP II	4 hrs
AHN 551 Family Primary Care NP Practicum II	5 hrs
AHN 552 Adult-Geron Acute Care NP I	4 hrs
AHN 553 Adult-Geron Acute Care NP Practicum I	4 hrs
AHN 554 Adult-Geron Acute Care NP II	4 hrs
AHN 555 Adult-Geron Acute Care NP Practicum II	5 hrs
AHN 604 Adult-Geron Acute Care NP Project Planning & Development	3 hrs
Or	
CMN 680 Family Project Planning & Development	3 hrs
AHN 617 Adult-Geron Acute Care NP Residency I	3 hr
Or	
CMN 681 Family NP Residency I	3 hrs
AHN 618 Adult-Geron Acute Care NP Residency II	3 hrs
Or	
CMN 682 Family NP Residency II	3hrs
AHN 619 Adult-Geron Acute Care NP Residency III	3 hrs
Or	
CMN 683 Family NP Residency III	3 hrs
<b>Total Credits</b>	<b>81</b>

<b>Option IV Family Nurse Practitioner</b>		<b>Credit Hours</b>
<b>Core Courses</b>		<b>18</b>
NU 607 Scientific Underpinnings of Advanced Nursing Practice	3 hrs	
NU 610 Healthcare Policy and Finance	3 hrs	
NU 613 Organizational & Systems Leadership	3 hrs	
NU 612 Clinical Prevention and Population Health	3 hrs	
NU 616 Data management & Decision Making in Complex Health Care Systems	3 hrs	
NU 615 Quality Improvement Outcomes Assessment	3 hrs	
<b>Research Courses</b>		<b>6</b>

NU 608 Evidence-Based practice and Quality Improvement in Health Care	3 hrs	
NU 611 Translating Evidence Into Practice Systems	3 hrs	
Support Courses		9
NU 518 Advanced Nursing Assessment	3 hrs	
NU 545 Physiological-pathological Basis of Advanced Nursing	3 hrs	
NU 578 Pharmacology for Advanced Practice Nurses	3 hrs	
Specialty Courses		36
CMN 568 Introduction to Family NP	3 hrs	
CMN 571 Health Promotion/Disease Prevention & Issues for Family NP	2 hrs	
CMN 572 Family NP I	3 hrs	
CMN 573 Family NP Practicum I	4 hrs	
CMN 574 Family NP II	3 hrs	
CMN 575 Family NP Practicum II	2 hrs	
CMN 576 Family NP III	3 hrs	
CMN 577 Family NP Practicum III	4 hrs	
CMN 680 Family NP Project Planning & Development	3 hrs	
CMN 681 Family NP Residency I	3 hrs	
CMN 682 Family NP Residency II	3 hrs	
CMN 683 Family NP Residency III	3 hrs	
Total Credits		69
<b>Option V Pediatric Acute Care Nurse Practitioner</b>		<b>Credit Hours</b>
Core Courses		18
NU 607 Scientific Underpinnings of Advanced Nursing Practice	3 hrs	
NU 610 Healthcare Policy and Finance	3 hrs	
NU 613 Organizational & Systems Leadership	3 hrs	
NU 612 Clinical Prevention and Population Health	3 hrs	
NU 616 Data management & Decision Making in Complex Health Care Systems	3 hrs	
NU 615 Quality Improvement Outcomes Assessment	3 hrs	
Research Courses		6
NU 608 Evidence-Based Practice and Quality Improvement in Health Care	3 hrs	
NU 611 Translating Evidence Into Practice Systems	3 hrs	
Support Courses		9

NU 518 Advanced Nursing Assessment	3 hrs	
NU 545 Physiological-pathological Basis of Advanced Nursing	3 hrs	
NU 578 Pharmacology for Advanced Practice Nurses	3 hrs	
<b>Specialty Courses</b>		<b>36</b>
MCN 558 Introduction to Acute Care Pediatric NP	3 hrs	
MCN 571 Health Promotion/disease Prevention in Neonatal and Acute Care Pediatric NP	2 hrs	
MCN 562 Acute Care Pediatric NP I	3 hrs	
MCN 563 Acute Care Pediatric NP Practicum I	4 hrs	
MCN 564 Acute Care Pediatric NP II	3 hrs	
MCN 565 Acute Care Pediatric NP Practicum II	2 hrs	
MCN 566 Acute Care Pediatric NP Practicum III	4 hrs	
MCN 567 Acute Care Pediatric Care NP III	3 hrs	
MCN 604 Pediatric Acute Care Project Planning & Development	3 hrs	
MCN 617 Pediatric Acute Care NP Residency	3 hrs	
MCN 618 Pediatric Acute Care NP Residency II	3 hrs	
MCN 619 Pediatric Acute Care NP Residency III	3 hrs	
<b>Total Credits</b>		<b>69</b>

<b>Option VI Pediatric Primary Care Nurse Practitioner</b>		<b>Credit Hours</b>
<b>Core Courses</b>		<b>18</b>
NU 607 Scientific Underpinnings of Advanced Nursing Practice	3 hrs	
NU 610 Healthcare Policy and Finance	3 hrs	
NU 613 Organizational & Systems Leadership	3 hrs	
NU 612 Clinical Prevention and Population Health	3 hrs	
NU 616 Data Management & Decision Making in Complex Health Care Systems	3 hrs	
NU 615 Quality Improvement Outcomes Assessment	3 hrs	
<b>Research Courses</b>		<b>6</b>
NU 608 Evidence-Based Practice and Quality Improvement in Health Care	3 hrs	
NU 611 Translating Evidence Into Practice Systems	3 hrs	
<b>Support Courses</b>		<b>9</b>
NU 518 Advanced Nursing Assessment	3 hrs	
NU 545 Physiological-pathological Basis of Advanced Nursing	3 hrs	

NU 578 Pharmacology for Advanced Practice Nurses	3 hrs	
Specialty Courses		36
MCN 548 Introduction to Pediatric Health NP	3 hrs	
MCN 551 Health Promotion and Disease Prevention in Pediatric Health NP	2 hrs	
MCN 552 Pediatric Health NP I	3 hrs	
MCN 553 Pediatric Health NP Practicum I	4 hrs	
MCN 554 Pediatric Health NP II	3 hrs	
MCN 555 Pediatric Health NP Practicum II	2 hrs	
MCN 556 Pediatric Health NP Practicum III	4 hrs	
MCN 557 Pediatric Health NP III	3 hrs	
MCN 654 Pediatric Primary Care NP Project Planning & Development	3 hrs	
MCN 655 Pediatric Primary Care NP Residency I	3 hrs	
MCN 656 Pediatric Primary Care NP Residency II	3 hrs	
MCN 657 Pediatric Primary Care NP Residency III	3 hrs	
Total Credits		69

<b>Option VII Family Psychiatric-Mental Health Nurse Practitioner</b>		<b>Credit Hours</b>
Core Courses		18
NU 607 Scientific Underpinnings of Advanced Nursing Practice	3 hrs	
NU 610 Healthcare Policy and Finance	3 hrs	
NU 613 Organizational & Systems Leadership	3 hrs	
NU 612 Clinical Prevention and Population Health	3 hrs	
NU 616 Data Management & Decision Making in Complex Health Care Systems	3 hrs	
NU 615 Quality Improvement Outcomes Assessment	3 hrs	
Research Courses		6
NU 608 Evidence-Based Practice and Quality Improvement in Health Care	3 hrs	
NU 611 Translating Evidence Into Practice Systems	3 hrs	
Support Courses		9
NU 518 Advanced Nursing Assessment	3 hrs	
NU 545 Physiological-pathological Basis of Advanced Nursing	3 hrs	
NU 578 Pharmacology for Advanced Practice Nurses	3 hrs	
Specialty Courses		36
CMN 548 Introduction to Family Psychiatric NP	3 hrs	

CMN 551 Health Promotion/Disease Prevention & Issues for Family Psychiatric NP	2 hrs	
CMN 552 Family Psychiatric NP I	3 hrs	
CMN 553 Family Psychiatric NP Practicum I	4 hrs	
CMN 554 Family Psychiatric NP II	3 hrs	
CMN 555 Family Psychiatric NP Practicum II	2 hrs	
CMN 556 Family Psychiatric NP III	3 hrs	
CMN 557 Family Psychiatric NP Practicum III	4 hrs	
CMN 604 Family Psych NP Project Planning & Development	3 hrs	
CMN 617 Family Psych NP Residency I	3 hrs	
CMN 618 Family Psych NP Residency II	3 hrs	
CMN 619 Family Psych NP Residency III	3 hrs	
<b>Total Credits</b>		<b>69</b>

<b>Option VIII Women's Health Nurse Practitioner</b>		<b>Credit Hours</b>
<b>Core Courses</b>		<b>18</b>
NU 607 Scientific Underpinnings of Advanced Nursing Practice	3 hrs	
NU 610 Healthcare Policy and Finance	3 hrs	
NU 613 Organizational & Systems Leadership	3 hrs	
NU 612 Clinical Prevention and Population Health	3 hrs	
NU 616 Data Management & Decision Making in Complex Health Care Systems	3 hrs	
NU 615 Quality Improvement Outcomes Assessment	3 hrs	
<b>Research Courses</b>		<b>6</b>
NU 608 Evidence-Based Practice and Quality Improvement in Health Care	3 hrs	
NU 611 Translating Evidence Into Practice Systems	3 hrs	
<b>Support Courses</b>		<b>9</b>
NU 518 Advanced Nursing Assessment	3 hrs	
NU 545 Physiological-pathological Basis of Advanced Nursing	3 hrs	
NU 578 Pharmacology for Advanced Practice Nurses	3 hrs	
<b>Specialty Courses</b>		<b>36</b>
MCN 538 Introduction to Women's Health NP	3 hrs	
MCN 541 Health Promotion/Disease Prevention & Issues for Women's Health NP Nursing	2 hrs	
MCN 542 Women's Health NP I	3 hrs	
MCN 543 Women's Health NP Practicum I	4 hrs	

MCN 544 Women's Health NP II	3 hrs
MCN 545 Women's Health NP Practicum II	2 hrs
MCN 546 Women's Health NP Practicum III	4 hrs
MCN 547 Women's Health NP III	3 hrs
MCN 644 Women's Health NP Project Planning & Development	3 hrs
MCN 645 Women's Health NP Residency I	3 hrs
MCN 646 Women's Health NP Residency II	3 hrs
MCN 647 Women's Health NP Residency III	3 hrs
<b>Total Credits</b>	<b>69</b>

<b>Option IX Neonatal Nurse Practitioner</b>		<b>Credit Hours</b>
<b>Core Courses</b>		<b>18</b>
NU 607 Scientific Underpinnings of Advanced Nursing Practice	3 hrs	
NU 610 Healthcare Policy and Finance	3 hrs	
NU 613 Organizational & Systems Leadership	3 hrs	
NU 612 Clinical Prevention and Population Health	3 hrs	
NU 616 Data Management & Decision Making in Complex Health Care Systems	3 hrs	
NU 615 Quality Improvement Outcomes Assessment	3 hrs	
<b>Research Courses</b>		<b>6</b>
NU 608 Evidence-Based Practice and Quality Improvement in Health Care	3 hrs	
NU 611 Translating Evidence Into Practice Systems	3 hrs	
<b>Support Courses</b>		<b>9</b>
NU 518 Advanced Nursing Assessment	3 hrs	
NU 545 Physiological-pathological Basis of Advanced Nursing	3 hrs	
NU 578 Pharmacology for Advanced Practice Nurses	3 hrs	
<b>Specialty Courses</b>		<b>36</b>
MCN 568 Introduction to Neonatal NP	3 hrs	
MCN 571 Health Promotion and Disease Prevention in Neonatal and Acute Care Pediatric NP	2 hrs	
MCN 572 Neonatal NP I	3 hrs	
MCN 573 Neonatal NP Practicum I	4 hrs	
MCN 574 Neonatal NP II	3 hrs	
MCN 575 Neonatal NP Practicum II	2 hrs	
MCN 576 Neonatal NP Practicum III	4 hrs	
MCN 577 Neonatal NP III	3 hrs	

MCN 674 Neonatal NP Project Planning & Development	3 hrs	
MCN 675 Neonatal NP Residency I	3 hrs	
MCN 676 Neonatal NP Residency II	3 hrs	
MCN 677 Neonatal NP Residency III	3 hrs	
<b>Total Credits</b>		<b>69</b>

<b>Option X Clinical Nurse Specialist Adult-Gerontological Health</b>		<b>Credit Hours</b>
<b>Core Courses</b>		<b>18</b>
NU 607 Scientific Underpinnings of Advanced Nursing Practice	3 hrs	
NU 610 Healthcare Policy and Finance	3 hrs	
NU 613 Organizational & Systems Leadership	3 hrs	
NU 612 Clinical Prevention and Population Health	3 hrs	
NU 616 Data Management & Decision Making in Complex Health Care Systems	3 hrs	
NU 615 Quality Improvement Outcomes Assessment	3 hrs	
<b>Research Courses</b>		<b>6</b>
NU 608 Evidence-Based Practice and Quality Improvement in Health Care	3 hrs	
NU 611 Translating Evidence Into Practice Systems	3 hrs	
<b>Support Courses</b>		<b>9</b>
NU 518 Advanced Nursing Assessment	3 hrs	
NU 545 Physiological-pathological Basis of Advanced Nursing	3 hrs	
NU 578 Pharmacology for Advanced Practice Nurses	3 hrs	
<b>Specialty Courses</b>		<b>27</b>
NU 515 Clinical Concepts & CNS Role I	2 hrs	
AHN 516 Adult-Geron CNS Practicum I	2 hrs	
NU 516 Clinical Concepts & CNS Role II	3 hrs	
AHN 517 Adult-Geron CNS Practicum II	4 hrs	
NU 517 Clinical Concepts & CNS Role III	3 hrs	
AHN 518 Adult-Geron CNS Practicum III	3 hrs	
AHN 634 Adult-Geron CNS Project Planning & Development	3 hrs	
AHN 635 Adult-Geron CNS Residency I	3 hrs	
AHN 636 Adult-Geron CNS Residency II	3 hrs	
AHN 637 Adult-Geron CNS Residency III	3 hrs	
<b>Total Credits</b>		<b>62</b>

<b>Option XI Executive Nursing Administration</b>		<b>Credit Hours</b>
Core Courses		18
NU 607	Scientific Underpinnings of Advanced Nursing Practice	3 hrs
NU 610	Healthcare Policy and Finance	3 hrs
NU 613	Organizational & Systems Leadership	3 hrs
NU 612	Clinical Prevention and Population Health	3 hrs
NU 616	Data Management & Decision Making in Complex Health Care Systems	3 hrs
NU 615	Quality Improvement Outcomes Assessment	3 hrs
Research Courses		6
NU 608	Evidence-Based Practice and Quality Improvement in Health Care	3 hrs
NU 611	Translating Evidence Into Practice Systems	3 hrs
Support Courses		6
NU 562	Administrative Concepts & Resource Management Field Study	3 hrs
NU 539	Introduction to Nursing Informatics	3 hrs
Specialty Courses		31
NU 561	Nursing Administration Concepts & Theory	3 hrs
NU 565	Nursing Administration Finance	3 hrs
NU 566	Nursing Administration Field Study	3 hrs
NU 567	Nursing Administration Internship	4 hrs
NU 568	Nursing Administration Seminar	3 hrs
HSC 571	Managing Health Care Personnel	3 hrs
NU 661	Nursing Administration Project Planning & Development	3 hrs
NU 662	Nursing Administration Residency I	3 hrs
NU 663	Nursing Administration Residency II	3 hrs
NU 664	Nursing Administration Residency III	3 hrs
Total Credits		61
<b>Option XII Nursing Informatics</b>		<b>Credit Hours</b>
Core Courses		18
NU 607	Scientific Underpinnings of Advanced Nursing Practice	3 hrs
NU 610	Healthcare Policy and Finance	3 hrs
NU 613	Organizational & Systems Leadership	3 hrs

NU 612 Clinical Prevention and Population Health	3 hrs
NU 616 Data management & Decision Making in Complex Health Care Systems	3 hrs
NU 615 Quality Improvement Outcomes Assessment	3 hrs
<b>Research Courses</b>	<b>6</b>
NU 608 Evidence-Based Practice and Quality Improvement in Health Care	3 hrs
NU 611 Translating Evidence Into Practice Systems	3 hrs
<b>Support Courses</b>	<b>12</b>
NU 562 Administrative Concepts & Resource Management Field Study	3 hrs
NU 565 Nursing Administration Finance	3 hrs
ISC 550 Health Data Security and Computer	3 hrs
ISC 555 Health Data Management and Decision Support Systems	3 hrs
<b>Specialty Courses</b>	<b>25</b>
NU 539 Introduction to Nursing Informatics	3 hrs
NU 556 Informatics and Quality of Care Improvement	3 hrs
NU 557 Clinical Informatics Practicum I	2 hrs
NU 558 Seminar in Nursing Informatics	3 hrs
NU 559 Clinical Informatics Practicum II	2 hrs
NU 656 Informatics Project Planning & Development	3 hrs
NU 657 Informatics Residency I	3 hrs
NU 658 Informatics Residency I	3 hrs
NU 659 Informatics Residency III	3 hrs
<b>Total Credits</b>	<b>61</b>

Subspecialties: The following can be added to the above pathways as designated.

Cardiovascular - students who are in Adult-Gerontological Acute Care NP and Dual Role specialty can add these 8 credits.

Oncology - students who are in an Adult-Gerontological Primary Care NP, Adult-Gerontological Acute Care NP, Dual Role specialty, Clinical Nurse Specialist-Adult-Gerontological Health, Family NP, Psychiatric (Family) NP or Women's Health NP can add these 11 credits.

Palliative Care - students who are in an Adult-Gerontological Primary Care NP, Adult-Gerontological Acute Care NP, Clinical Nurse Specialist - Adult-Gerontological Health, or Family NP can add these 9 credits.

Nurse Educator - any student can add these 11 credits to their curriculum.

Clinical Lipidology - students who are in Adult-Gerontological Acute Care NP, Adult- Gerontological Primary Care NP, Family NP, Women's Health NP, Clinical Nurse Specialist-Adult-Gerontological Health, or Dual Role specialty can add these 8 credits.

	<b>Credit Hours</b>
<b>Cardiovascular Option (8 credits)</b>	
AHN 630 Dysrhythmias and the Heart	2
AHN 631 Foundations of Cardiac Care	2

AHN 632 Diagnosis and Management of Acute Cardiovascular Disorders	2
AHN 633 Dig/Management Complex Cardiovascular Disorders	2
<b>Oncology Option (11 credits)</b>	
AHN 621 Foundations of Cancer Biology	2
AHN 622 Cancer Genetics	2
AHN 623 Comp/Alt Therapy Supp Car Oncology	2
AHN 624 Advanced Care Oncology Pat/Fam/Comm	2
AHN 625 Advanced Science in Oncology Nursing	1
AHN 626 Advancing the Science in Oncology Nursing	2
<b>Palliative Care Option (9 credits)</b>	
AHN 530 Foundations of Palliative Care and the Advanced Practice Role	2
AHN 531 Advanced Palliative Care and End of Life	2
AHN 532 Advanced Chronic Illness Care	2
AHN 533 Advanced Palliative Care Practicum	3
<b>Nurse Educator Option (11 credits)</b>	
NU 620 Instructional Design and Technology for Nurse Educators	3
NU 621 Current & Outcomes Evaluation Nursing Education	3
NU 622 Nursing Education Role Synthesis	2
NU 623 Nursing Education Synthesis Practicum	3
<b>Clinical Lipidology Option (8 credits)</b>	
HSC 595 Evidence Based Lipid Practice	2
HSC 596 Advanced Vascular Biology	2
HSC 597 Advanced Pharmacology for Complex Dyslipidemia	2
HSC 598 Diagnosis and Management of Complex Dyslipidemia	2

### Graduate Assistantships

A limited number of graduate assistantships are available to students in full-time status. Additional information and an application can be obtained from the Scholarships Web Page on the USA College of Nursing Web Site at <http://www.southalabama.edu/nursing/camputmscholarship.html>.

### Descriptions Of All Nursing Courses:

- [Nursing \(NU\)](#)
- [Adult Health Nursing \(AHN\)](#)
- [Community/Mental Health Nursing \(CMN\)](#)
- [Maternal/Child Nursing \(MCN\)](#)
- [Health Sciences \(HSC\)](#)

# General Ed. Requirements

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## College of Nursing General Education Requirements

### Area I. Written Composition (6 HRS)

EH 101 English Composition (3)

EH 102 English Composition (3)

### Area II. Humanities and Fine Arts (Total of 12 HRS)

Fine Arts elective (Intro Music, Drama, Art HY or surveys) (3)

Literature elective\* (American, British, or World) (3)

CA 110- Public Speaking (3)

Humanities elective (3)

(Choose from literature, philosophy, foreign language, music, art, drama, communication, or religion)

### Area III. The Natural Sciences and Mathematics (11 HRS)

BLY 101 Life Sciences with Lab or higher (4)

MA 110 or MA 112 Pre-calculus (3)

CH 101 Chemistry with Lab or higher (4)

### IV. History, Social & Behavioral Sciences\* (12 HRS)

PSY 120 Intro to Psychology (3)

History elective\* (US, West Civ) (3)

History/Social/Behavioral SC elective (3)

History/Social/Behavioral SC elective (3)

(Choose from psychology, sociology, history, political science, geography, anthropology, or economics)

### V. Major Requirements (20 hours)

BLY 213 Microbiology (or BMD 210 Infectious Disease) (3)

BMD 114 Human Anatomy & Physiology I and Lab (4)

BMD 115 Human Anatomy & Physiology II and Lab (4)

ST 210 Statistics or BUS 245 Applied Bus. Stats (3)

CIS 150 Intro to Computer Applications elective (3)

Economics elective (Micro or Macro) (3)

# Graduate School

## General Information

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### Admission Requirements And Procedures

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The Dean of the Graduate School, advised by the Graduate Council, establishes and monitors the standards under which students are admitted for study in degree programs under its jurisdiction.

Each student must be qualified for admission to the Graduate School. However, the fact of qualification does not guarantee admission. Admission may be restricted because of capacity limitations. Official notice of actions on applications for admission is provided by the Office of Admissions. Any other correspondence between student and faculty members, department chairs, and/or administrative officers does not constitute nor does it imply admission to the Graduate School.

Application forms and other materials are available online at <http://www.southalabama.edu/departments/admissions/graduatestudents/index.html>.

The Admissions office contact information: 2500 Meisler Hall, University of South Alabama, Mobile, Alabama 36688-0002, telephone (251)460-6141 or toll-free telephone number (800)872-5247. The e-mail address is [admiss@southalabama.edu](mailto:admiss@southalabama.edu).

International students should contact the Office of International Services, 2200 Meisler Hall, University of South Alabama, Mobile, Alabama 36688-0002, telephone (251)460-6050, for application information.

Specific information regarding academic programs may be obtained by contacting the Director of Graduate Studies in the appropriate colleges.

### Deadlines For Applications

Final deadlines for all applications and supporting documents for new graduate students are as follows: July 15 for Fall Semester, December 1 for Spring Semester, and May 1 for Summer Semester. New graduate students who do not register for the semester in which they were accepted must update their admission in writing by the deadline if they wish to enroll in a future semester.

A former USA graduate student who has not taken a graduate course within a seven-year period, or a graduate student who wishes to change degree program, student type, or student level must apply through the Office of Admissions. Deadlines are stated above.

Deadlines for applications and supporting documents for new international students are usually at least one month earlier than the deadlines for U.S. citizens. Refer to the "International Students" section for details.

Not all programs admit students each semester and some programs set earlier application deadlines. Please see appropriate section of this publication for exceptions.

Students who were admitted into the Graduate School and did not register for the semester in which they were accepted, but who wish to register for the same graduate program in the same academic year must submit an update form to the Office of Admissions to reactivate their file. This form can be requested from the Office of Admissions. If a student has attended another institution in the interim, all official transcripts must be sent to the Office of Admissions and their file will be re-evaluated for acceptance into the graduate school.

Please note: The College of Education and Professional Studies and the College of Nursing re-evaluates files each semester and acceptance is only valid for the semester in which they apply. Acceptance is not valid for an academic year in programs within these two colleges.

USA graduate students who have failed to attend for three consecutive semesters must file for readmissions with the Admissions Office by the published deadlines found on the Graduate Readmission website [http://www.southalabama.edu/graduatemajors/graduateschool/grad\\_readmissions.htm](http://www.southalabama.edu/graduatemajors/graduateschool/grad_readmissions.htm) If a student has been absent from first enrollment in a Master's program for more than 7 years or from a doctoral program for more than 10 years, the student must apply through the Office of Admissions. Please note some programs may have shorter time limits.

### Documents Required For Admission

All documents required for admission review (transcripts, test scores or letters of recommendation) must be official, i.e., mailed from the home institution or testing agency directly to the Office of Admissions, and become the property of the University of

South Alabama. Students applying for admission to the Graduate School must pay a \$35 non-refundable processing fee by the appropriate deadline. If a student changes programs, a new processing fee and application must be submitted.

### Categories Of Admission

Each program has specific requirements for admission that may exceed the requirements listed as follows for admission to the Graduate School. Persons interested in applying for admission to a specific program should consult the appropriate program's Requirements for Admission.

Applicants to the Graduate school may be admitted in one of the following categories.

1. Regular Admission - Regular admission requires the following:
  - A. A bachelor's degree from an accredited institution of higher education.
  - B. A minimal grade-point average of 3.00 on all undergraduate work ("A"=4.00). The grade-point average used is that computed by the Office of Admissions.
  - C. Sufficient courses in the major subject to qualify for graduate study in the involved discipline. A student who has a deficiency in courses in the discipline but who otherwise qualifies for Regular Admission will be required to complete appropriate prerequisite course work.
  - D. Recommendation of the appropriate Coordinator/Chair, Director of Graduate Studies and approval by the Graduate Dean.
  - E. International students must submit documentary evidence showing TOEFL test scores of 525 or above (197 on computer based test) or 71 on internet based test, or a minimum score of 6 on the IELTS test, or minimum iTEP score of 3.7 or minimum PTE academic score of 48 or a bachelor's or graduate degree earned at an accredited United States institution of higher education. Please note some programs may require higher scores to prove English proficiency.
  - F. Most graduate programs require standardized test scores for admission. See the individual program descriptions elsewhere in this Bulletin for details.  
For those students who have had previous graduate work, performance at the graduate level may be taken into consideration as well as undergraduate performance. An earned advanced degree may substitute for some admission requirements (see description of specific program).
2. Provisional Admission - Students who do not meet the requirements for Regular Admission may be admitted to the Provisional Admission category. A student in provisional status will not be allowed to enroll in courses other than those specified by their program of study. Provisional Admission requires:
  - A. A bachelor's degree from an institution of higher education. In the event that the degree is from a non-accredited institution, the individual graduate program will determine if the quality and content of the degree meets the admission standards of the program.
  - B. A minimal grade-point average of 2.5 on all undergraduate work ("A"=4.00) or 2.75 on the last 64 hours of college work. The grade-point average used is computed by the Office of Admissions. Graduate Directors or Coordinators of each graduate program may recommend consideration of other factors in the review of an application, as indicated in the paragraph following item F below.
  - C. Recommendation of the appropriate Coordinator/Chair, Director of Graduate Studies, the Dean of the College/School, and the Graduate Dean.
  - D. International students must submit documentary evidence showing TOEFL Test Scores of 525 or above (197 on computer based test or 71 on internet based test), or a bachelor's or graduate degree earned at an accredited United States institution of higher education.
  - E. Most graduate programs require standardized test scores for admission. See the individual program descriptions elsewhere in this Bulletin for details.
  - F. An applicant may also be considered for provisional admission if he or she meets EITHER the GPA requirement for regular admission (GPA 3.0) OR the entrance examination score requirement for regular admission as defined by the individual graduate programs.  
For those students who have had previous graduate work, performance at the graduate level may be taken into consideration as well as undergraduate performance. An earned advanced degree may substitute for some admission requirements (see description of specific program).
  - a. Provisional students will be eligible for Regular status after accruing a minimum of nine (9) semester hours of course work taken at the University of South Alabama for graduate credit toward degree requirements, provided at least a "B" average is maintained in all such work attempted. No more than 15 semester hours of graduate credit earned as a Provisional Admission student may be approved for change of status to Regular Admission. The Provisional student who does not have the required "B" average upon completing 15 semester hours of graduate credit that is part of the student's graduate program, will be dismissed from the graduate program and the Graduate School. See

appropriate college or school and/or department section of this publication for any additional requirements. At all times, students are subject to the policy stated in the Academic Standards Section entitled "Academic Dismissal."

b. Approval by the appropriate Director/ Coordinator of Graduate Studies, and Dean of the College/School.

3. Non-Degree Admission - Students holding baccalaureate degrees from accredited institutions of higher education who are not interested in earning graduate degrees or who need to complete prerequisites for particular degree programs may enroll as Non-Degree graduate students. A suitable background for the courses to be taken is expected. A minimum grade point average of 2.5 on all undergraduate work ("A" = 4.0) is required to enroll as a Non-Degree graduate student. Some graduate programs may impose additional requirements.

Because of limited class size and resources, academic units may limit the enrollment of Non-Degree students. After admission, permission to enter each course is obtained from the Graduate Director/Coordinator in the appropriate college, school and/or department.

International students must submit documentary evidence showing TOEFL test scores of 525 or above (197 on computer based test or 71 on internet based test), or bachelor's or graduate degrees earned at accredited United States institutions of higher education.

Non-Degree students subsequently seeking admission into one of the graduate degree programs of the University must submit a formal application through the Office of Admissions to the Graduate Director/ Coordinator of the appropriate college, school and/or department. Students may be subject to further conditions, such as the completion of necessary undergraduate background courses. The student's record in graduate courses taken while in the Non-Degree status may be considered. Students may be able to transfer courses toward a graduate degree program (see section on Transfer Credit).

Non-Degree graduate students are subject to the Graduate School Dismissal Policy. For dismissal purposes, program GPA will be calculated based on all credits earned while in non-degree graduate status.

### **Dual Masters Degrees**

A student may enroll in and pursue two master's degrees simultaneously. The student must apply to and be accepted in each of the two programs individually. One program has to be designated as primary and the other as a secondary degree program. All requirements for each degree have to be met, including the requirement for time to degree. A maximum of nine (9) credit hours may be counted towards both degrees if approved by each of the two degree programs. Although the start date of the two programs does not have to be the same date, the two degrees will be awarded on the same date after completion of both degrees. All requirements for the two degrees must be completed within seven calendar years of admission to the first graduate program.

### **Transient Enrollment**

Students in good standing in the graduate school of other universities may enroll in the Graduate School of the University of South Alabama, provided they have the written permission of the Dean of the Graduate School of the University of South Alabama. Enrollment as a transient student in no way implies future admission as a degree or non-degree graduate student. Students who wish to remain in transient status for more than one semester must submit the University's Transient Student Form and a readmission form (available from the Admissions Office) each semester prior to the deadline (see "Readmission to the University").

### **Graduate Study For Advanced Undergraduates**

With permission of the department chair and appropriate director of graduate studies, a student who has completed 90 semester hours with a "B" (3.0) average may register for graduate courses. Each course can be applied to an undergraduate degree or perhaps a future graduate degree. The same course cannot be applied to both an undergraduate and a graduate degree. Up to 12 graduate credit hours may be transferred to a future graduate degree at USA. If and when a student has applied to and been admitted into graduate school, courses can be evaluated for transfer provided they were not taken any more than seven years ago.

### **Admission To Candidacy Required By College Of Education And Professional Studies**

Admission to Graduate School does not imply admission of a student to Candidacy for a graduate degree in the College of Education and Professional Studies. The student is referred to the "Admission to Candidacy" section in the College of Education and Professional Studies for further information.

### **Assistantships And Fellowships**

Information concerning assistantships and fellowships may be obtained from the college or department concerned or online at <http://www.southalabama.edu/graduatemajors/graduateschool/information.html>. A completed graduate assistantship/fellowship application which includes three (3) letters of recommendation and transcripts must be submitted. Provisionally admitted students may be considered for a graduate assistantship/fellowship as long as they maintain a 3.0 GPA. Tuition granted for a graduate assistantship/ fellowship may not be applied to courses outside of the degree program.

## Computer Access Requirement

All students enrolled at the University of South Alabama are required to have access to a personal computer. This may be achieved by individual ownership, access to a family machine when residing at home, sharing with a roommate or other suitable arrangements. University public PC laboratories are not sufficient. This access must include a current version of the Microsoft® Office® software suite including Word® and Excel®, access to the University's e-mail system and access to the Internet for research purposes. Individual programs may have additional requirements specific to their curriculum.

## GRADUATE SCHOOL ACADEMIC STANDARDS

### Applicability

All students enrolled in graduate courses or graduate programs are subject to Graduate School Academic Standards and Procedures. This includes those students who are in graduate programs and graduate certificate programs, non-degree graduate students, and transient graduate students.

### Withdrawals

A student who withdraws from the University or from a course will have WD recorded on his permanent record, provided the withdrawal occurs within the time limits listed in the official Calendar. Withdrawal after the time limits can only be approved by the Dean of the Graduate School upon the recommendation of the appropriate director of graduate studies. (See Withdrawals.)

### Grade Standards

Courses for which the grade of "D" is assigned may not be counted toward a degree program. A maximum of two courses with the grade of "C" may be counted toward a degree program. However, some programs accept no grades of "C"; see specific program.

### Examinations

Final examinations are held at the end of each semester.

### Grades And Grade-Points (Undergraduate And Graduate)

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

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

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

I	Incomplete (see below)
X	Absence from Final Exam (see below)
WD	Withdrawal in good standing
P	Course in progress (see below)
AU	Audit
UA	Unsatisfactory Audit (did not meet attendance requirements)

N	No grade or invalid grade (assigned only by the Registrar)
MS	Mid-term satisfactory

The symbol "I" (Incomplete) is assigned when, for reasons beyond the student's control, the student is unable to fulfill all the normal course requirements. The situation warranting an "I" must be a medical condition, an equipment problem, or other mitigating circumstance that is patently demonstrable to be beyond the student's control. This symbol is not used to provide time for completion of extra work beyond the normal course requirements for improving the student's grade, or to permit the student to avoid probation, suspension, or dismissal. The "I" symbol should not be assigned unless the amount of incomplete work can reasonably be completed in the time period allotted for an "I" grade without additional extensions. Extensions of "I" grades should only be granted in rare cases where additional and unanticipated circumstances beyond a student's control have prevented completion. The symbol "X" (Absence from Final Examination) is assigned only in cases where illness or an unforeseen emergency precludes the student's appearance at the scheduled examination. All records of the symbols "I" or "X" must be cleared by the specified deadline of the next term; if they are not, grades of "F" will be recorded by the Registrar.

The symbol "P" (In Progress) is assigned only in a limited number of approved courses which require more than one term for completion. P grades remain in effect until they are changed to a letter grade, or until the time limits for a graduate degree have expired.

A student whose work is unsatisfactory for any reason shall receive a final grade of "F" for the course.

### Change Of Grade

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

### Dismissals

#### 1. Academic Dismissal

- The Dean of the Graduate School has authority to dismiss graduate students from the Graduate School.
- Any term in which a graduate student drops below a 3.0 Program GPA, the student is placed on probationary status and has a period of two terms to attain a 3.0 Program GPA or be dismissed.
- A student will be dismissed from the Graduate School after two unsuccessful attempts to pass the comprehensive examination or the Qualifying Exam.  
A student in the status of Provisional Admissions who does not have a "B" (3.0) average upon completing 15 semester hours of graduate credit, that is part of the student's graduate program, will be dismissed from the graduate program and the Graduate School.
- A student who has been academically dismissed is eligible to reapply to the Graduate School subject to the approval of the director of graduate studies of the specific new program and the Dean of the Graduate School. This is not intended to include the program from which the student has been dismissed.

#### 2. Non-Academic Dismissal

- A student dismissed from a graduate program as the result of an academic misconduct penalty will be automatically dismissed from the Graduate School and the University of South Alabama and will not be eligible to apply for readmission.

### Final Grade Grievance Policy

A student may initiate an inquiry under procedures set forth by the Graduate School Final Course Grade Grievance Policy. A copy of this policy is available in the dean's office of each college and in the Graduate Dean's Office.

### Appeal Procedure

A graduate student having a grievance against another individual or group in the university community is referred to the General Grievance Policy published in the Lowdown. Also available is the Sexual Offence Policy for students. Other USA policies affecting students are also published in the Lowdown.

## English Language Proficiency

English is the language of instruction at the University of South Alabama. Any remedial work in English language skill, which may be found needed after a student has been admitted to the Graduate School (Provisional Admission or Regular Admission), may be specified and requested by the director of the graduate program in which the student is enrolled.

## Graduate Certificate Programs

Students enrolled in graduate certificate programs are subject to the same academic standard policy as degree seeking students.

## Academic Procedures

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### Registration

Registration (making course selections and enrolling in classes) occurs prior to the beginning of each semester. Students must register via the web utilizing USA's PAWS (Personal Access Web System). (See the University Schedule of Classes for additional information.)

### Full Load Of Course Work In A Semester

A full load is six to ten credit hours. Permission to take more than ten credit hours must be obtained within the college/department.

### Transfer Credit

#### 1. Transfer credit to masters programs

A maximum of twelve (12) semester hours of approved transfer credit from another institution is allowed for a master's degree, when a student has at least 9 hours of USA graduate work and in regular status. Transfer credit from regionally accredited universities may be accepted by certain programs. In the event that the university is non-accredited, the individual USA graduate program will determine if the quality and content of the course meets the standards of the program. Students may also transfer a maximum of twelve (12) semester hours of appropriate courses taken while at USA while in a non-degree graduate status or taken while in another program. Only courses that have not been applied to another degree may be transferred. Transfer credits will only be processed after a student has at least nine hours of USA graduate credit in a program and has attained regular status. Approval of the program's graduate coordinator, the college director of graduate studies, and the Graduate Dean is required. Only courses with "A", "B", or "S" grades are acceptable for transfer. The University of South Alabama does not award graduate credit for prior portfolio-based experiential learning.

#### 2. Transfer credit to doctoral programs

A maximum of one half of the minimum hours required for the degree is normally allowed as transfer credit. Exceptions are allowed under unusual circumstances, but in no case will the number of transfer credit hours exceed two thirds of the minimum hours required for the degree. Transfer credit from regionally accredited universities may be accepted by certain programs. In the event that the university is non-accredited, the individual USA graduate program will determine if the quality and content of the course meets the standards of the program. Students may also transfer appropriate courses taken while at USA while in non-degree graduate status or taken while in another graduate program. Some programs will allow graduate courses applied to certain master's degrees to be transferred in and also count towards the doctoral degree, subject to the limits of maximum transfer credit hours. The University of South Alabama does not award graduate credit for prior portfolio-based experiential learning.

Transfer credits will only be processed after a student has at least nine hours of USA graduate credit in a program and has attained regular status. Approval of the program's graduate coordinator, the college director of graduate studies, and the Vice President of Academic Affairs or Health Sciences as appropriate is required. Only courses with "A", "B", or "S" grades are acceptable for transfer.

### Change Of Program

A student wishing to change from one graduate program to another must apply to the new program through the Office of Admissions. If the new program is a related program within the same college, the student should first consult the Director of Graduate Studies of the appropriate college.

### Application For Degree

Each candidate for the Master's, Specialist's, or doctoral degree must make application for the degree during the semester preceding the semester of graduation, in the Registrar's Office. The dates are specified in the University Calendar.

## Student Responsibility

While the University of South Alabama will endeavor to provide timely and accurate advisement, it is the responsibility of the student to know and satisfy the degree requirements of the academic program, to be aware of the University calendar and to understand and comply with University academic policies and procedures.

## Thesis And Dissertations

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### Guidelines For Theses And Dissertations

1. Students who intend to write a thesis or dissertation should consult early in their programs with the department chair or program director/coordinator for a list of Members of the Graduate Faculty from which to select an advisor to supervise and direct their research.
2. If the Member of the Graduate Faculty selected by the student consents to serve as an advisor, then the advisor and student initiate a recommendation for a thesis/dissertation committee using GS Form 4.
3. A Master's thesis committee must include a minimum of three members of the Graduate Faculty and a dissertation committee must include at least four members of the Graduate Faculty. Master's thesis committees may be chaired by Associate or Full Members of the Graduate Faculty. Dissertation committees must include at least one Full Member of the Graduate Faculty who is the committee chair and normally the student's advisor/major professor. Both thesis and dissertation committees must have at least one member from outside the student's department or program. Administratively appointed graduate faculty members may serve on thesis/dissertation committees for a specified student. Two thirds of the committee must be USA Associate or Full Members of the Graduate Faculty.
4. The Dean of the Graduate School is the appointing authority for thesis and dissertation committees. Once the Graduate Dean has appointed the committee, the student prepares a thesis or dissertation prospectus under the direction of the committee.
5. "A Guide for Preparing Theses and Dissertations", accessed at <http://www.southalabama.edu/graduateprograms/ThesisDissertationGuide.pdf>, is the guide for preparation of the prospectus and the thesis or dissertation.
6. Once a thesis or dissertation committee is appointed by the Dean of the Graduate School, the student may then enroll for 599 Thesis or 799 Dissertation credit with permission of the thesis/ dissertation committee chair (advisor or major professor).
7. To be considered for approval by the Dean of the Graduate School, an acceptable thesis or dissertation must be submitted to the Graduate School office by the first submission deadline announced in the University Calendar.

### Standards For Theses And Dissertations

1. A thesis/dissertation should demonstrate that the student has the capacity for original research, facility in the use of the English language, the ability to review appropriate background material, formulate and address (a) significant question(s), obtain, collate, and analyze appropriate data and draw logical conclusions therefrom, and integrate in a meaningful way the new knowledge into the greater body of existing knowledge and state its significance. The final thesis/dissertation must be acceptable to the major professor, a majority of the thesis/dissertation committee, the chair of the student's department, the college/school director of graduate studies and the Dean of the graduate school.
2. The thesis or dissertation must be an original research and/or creative project. This document will demonstrate the student's ability to:
  - A. Select a topic and delineate a problem that can be studied in terms of time, equipment needs and experimental population available to the faculty sponsor.
  - B. Search the literature for relevant studies on the topic of choice.
  - C. Organize and analyze the information that is available, using logical and/or statistical analysis appropriate for the project.
  - D. Present the results orally and in a written form to the satisfaction of the thesis/dissertation committee and the Graduate Faculty.
  - E. Present a final document as the Thesis or Dissertation to the Graduate School Office in an acceptable form and by the procedures outlined in the Guide for Preparing Theses and Dissertations, University of South Alabama.
3. All theses/dissertations should meet current standards relative to responsible conduct of research.

## GRADUATE CERTIFICATE PROGRAM REQUIREMENTS

A graduate certificate program is a related cluster of credit bearing graduate courses that constitutes a coherent body of study within a discipline or set of related disciplines.

1. Admissions follows the same graduate schools standards and procedures as used for admission to a master's level graduate program. The individual graduate certificate program may impose more restrictive standards as necessary for the purposes of the specific program.
2. The curriculum is defined by the individual graduate certificate program per university standards and procedures. See: [http://www.southalabama.edu/departments/academicaffairs/resources/policies/guidelinesforcertificateprogramsJuly11\\_11.pdf](http://www.southalabama.edu/departments/academicaffairs/resources/policies/guidelinesforcertificateprogramsJuly11_11.pdf)
3. Upon approval by the department and Graduate School, a student may transfer from another institution to a USA graduate certificate program the lower amount of: a maximum of fifty percent of the required graduate credit hours composing the certificate or 12 credit hours. Transfer credit must meet the guidelines established for master's level programs.
4. Graduate School academic standards policy applies to certificate programs.
5. Completion of a graduate certificate does not guarantee admission into a graduate degree program. Credit hours earned in a certificate program may or may not be used in a future graduate degree program.
6. The graduate certificate program must be completed within four years.

## Degree Requirements

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### Research Integrity And Professional Ethics

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Graduate level instruction in research integrity and professional ethics is required in all graduate programs.

#### Requirements For The Master's Degree

1. A minimum of 30 semester hours of credit in a program approved by the major department and the Dean of the Graduate School is required. The following limitations apply:
  - A. No more than 18 hours of dual-listed courses (400- and 500-level listing for the same course) may be counted toward meeting the minimum hours required for a degree. Graduate students will only receive graduate credit for the 500 level version of dual-listed courses.
  - B. A maximum of twelve (12) semester hours of graduate credit obtained at another accredited institution may be approved for transfer to the University of South Alabama. The credit is approved only after completion of a minimum of nine (9) semester hours of graduate credit at the University of South Alabama and the student must be in regular status. Transfer credit must have the recommendation of the major department and appropriate director of graduate studies and the approval of the Dean of the Graduate School. Only grades of "A", "B", or "S" or the equivalent may be accepted as transfer credit. Grade equivalency must be verified by the appropriate director of graduate studies. Course work completed more than seven years prior to the date for graduation may not be counted for degree credit. Students must meet all degree residency requirements.
  - C. A course applied toward credit for a degree at this institution, or elsewhere, will not be acceptable as credit toward a second degree, except in approved dual-master's programs where a maximum of nine (9) hours may be counted in both programs.
2. A minimum overall 3.0 grade-point average on all work attempted in the student's specific program of study as well as an overall 3.0 grade-point average on all work attempted while enrolled in the current program of study is required. Courses for which the grade of "D" is assigned may not be counted toward a degree program. A maximum of two courses with the grade of "C" may be counted toward a degree program; however, some programs accept no grades of "C" (see specific program).
3. A minimum of 21 semester hours of degree program credit in residence at the University of South Alabama is required.
4. All requirements for a master's degree must be completed within seven calendar years from admission as a graduate student at the University of South Alabama. Under extraordinary circumstances, an appeal may be made to the Graduate Dean for a time extension. Some degree programs may set shorter time limits.
5. Each student will be evaluated to ensure achievement of program outcomes. This evaluation may be in the form of a comprehensive exam or other measurement tools. If unsatisfactory, after corrective action, the evaluation may be repeated once. For details see specific programs.
6. Submission of a standardized test score may be required. For details, see specific programs.
7. A foreign language may be required. For details see specific programs. International students should note that English may not be offered as a foreign language. The foreign language requirement must be fulfilled, normally no later than two semesters before graduation, in one of two ways:

- A. Undergraduate course work in one acceptable foreign language which demonstrates successful completion of at least the second-year intermediate level (a course offered in the sixth quarter or fourth semester of an undergraduate sequence begun at the introductory level) with a minimum grade-point of 2.5 in all work attempted in the foreign language. The course work must have been completed within seven calendar years before the date of graduation from the relevant program. Course work may be taken as a graduate student with no graduate credit.
  - B. A satisfactory performance on an examination conducted at the University of South Alabama requiring a written translation from the foreign language into English, which examination will last no more than two hours and allow the use of a dictionary. The examination is offered only to matriculated students and must be passed no more than seven calendar years before the date of graduation from the relevant program. The text set for translation will be related to the student's subject area. Programs requiring a foreign language are invited to make recommendations regarding appropriate material to the Department of Foreign Languages and Literatures, which will appoint from its faculty a specialist to be the examiner and to schedule, prepare, administer, and evaluate the examination. The examiner will evaluate the translation as satisfactory or not satisfactory.
8. Thesis
- A. A program may require or allow a candidate for the Master's degree to prepare a thesis. A maximum of nine (9) semester hours of 599 thesis credit may be counted toward meeting the minimum hours required for a degree; some programs may allow fewer than nine hours (see specific program), but no fewer than three (3) hours.
  - B. A letter grade is assigned for each semester a student is enrolled in a thesis or dissertation credit hour course.
  - C. A student on a thesis option program will be required to prepare a thesis prospectus.
  - D. An oral defense of the thesis is required.
  - E. The student must be enrolled in at least one hour of thesis during the semester in which the student completes their graduate degree. Normally, thesis students should be enrolled in 599 continuously from inception of the project until final approval of the thesis by the Dean of the Graduate School. Students who are not on campus or using University resources during the semester of their graduation may appeal to the Graduate Dean for an exception to this policy.
  - F. See Guidelines for Theses and Dissertations and Standards for Theses and Dissertations.

### **Requirements For The Educational Specialist Degree**

See appropriate section under College of Education and Professional Studies.

### **Requirements For The Doctoral Degree**

1. The specific requirements for the doctoral degree in the Basic Medical Sciences, in Clinical and Counseling Psychology, in Communication Sciences and Disorders, in Education, in Instructional Design and Development, in Business, in Engineering, and in Marine Sciences vary among the specialties. Each program leading to the completion of a doctoral degree has specific requirements regarding courses, seminars, laboratory studies, directed studies, workshops, and research. In general, a minimum of 60 credits of graduate work will be required for the doctoral degree. Transfer of graduate credit from regionally accredited universities may be accepted by certain programs. Prior approval of the college director of graduate studies is required. Only courses with "A" or "B" grades are acceptable for transfer. The quality of the student's program and performance are emphasized and are considered as important as the fulfillment of requirements. Completion of original research, and writing and defending a dissertation are requirements for the doctoral degree.
2. Students who are candidates for the doctoral degree must be enrolled for Research Dissertation during the semester in which the open defense of the dissertation is completed, and must be enrolled in at least one hour of Research and Dissertation during the semester in which the student completes their graduate degree. Students who are not on campus or using University resources during the semester of their graduation may appeal to the Graduate Dean for an exception to this policy.
3. All requirements for a doctoral degree must be completed within ten calendar years from admission to a doctoral program at the University of South Alabama. Under extraordinary circumstances, an appeal may be made to the Graduate Dean for a time extension. Some degree programs may set shorter time limits.

## **Programs By College**

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### **Degrees Offered**

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The Graduate School offers twenty different graduate degrees (Au.D., M.A., M.Ac., M.B.A., M.D., M.S.N., M.Ed., MFA, M.P.A., M.H.S., M.S., M.S.S.H., M.S.C.E., M.S.CHE., M.S.E.E., M.S.M.E., M.S.C.I.S., Ed.S., Ed.D., D.Sc., D.BA., Ph.D., DNP and thirty-

eight programs, within numerous areas of concentration. For specific admission and degree requirements, in addition to those of the Graduate School, see the department or college section of your interest.

## Graduate Programs

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The following graduate degree programs are offered through the Graduate School of the University. More details are available under Colleges and Schools listings elsewhere in this Bulletin. Navigate to Degrees and Programs for a complete listing of graduate [programs](#) and [certificates](#).

### The Pat Capps Covey College Of Allied Health Professions

- Master of Science in Speech - Language Pathology
- Master of Science in Occupational Therapy
- Master of Health Sciences in Physician Assistant Studies
- Doctor of Philosophy in Communication Sciences and Disorders
- Doctor of Audiology
- Doctor of Physical Therapy

### College Of Arts And Sciences

- Master of Arts in Communication, English, History, and Sociology
- Master of Fine Arts
- Master of Public Administration
- Master of Music
- Master of Science in Biological Sciences, Marine Conservation and Resource Management, Marine Sciences, Mathematics, Psychology
- Doctor of Philosophy in Marine Sciences.

### Mitchell College Of Business

- Master of Accounting
  - Master of Business Administration
- These programs are given in the evenings and are designed for those individuals presently engaged in managerial or technical positions with business, industry, or government.
- A limited residence Doctor of Business Administration is also offered.

### The School Of Computing

- Master of Science in Computer Science and Information Sciences
- Ph.D. in Computing

### The College Of Education And Professional Studies

- Master of Education
- Master of Science
- The Educational Specialist
- Education Doctorate
- Doctor of Philosophy

### The College Of Engineering

- Master of Science in Chemical Engineering
- Master of Science in Civil Engineering
- Master of Science in Electrical and Computer Engineering
- Master of Science in Mechanical Engineering
- Doctor of Science in Systems Engineering

### The College Of Medicine

- Doctor of Philosophy degree in Basic Medical Sciences. The objective of the program is to produce graduates with training and knowledge in basic human biology with an in-depth knowledge of one of the basic medical sciences (Biochemistry)

and Molecular Biology, Microbiology and Immunology, Molecular and Cellular Pharmacology, Physiology, Cell Biology and Neuroscience). A combined program leading to the awarding of both the Ph.D. and M.D. degree is available to highly qualified applicants.

### The College Of Nursing

- Master of Science in Nursing
- Doctor of Nursing Practice

### Interdisciplinary Graduate Program

- [Master of Science in Environmental Toxicology](#)
- [Doctor of Philosophy in Clinical and Counseling Psychology](#)

### USA Education/Study Abroad

- Graduate students are encouraged to incorporate international experiences in their academic program through participation in study, research, internship and work abroad experiences. For more information please contact your academic advisor and the [Office of International Education](#).

## Certificate Programs

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### Education

- See appropriate sections under College of Education and Professional Studies

### Gerontology

- See appropriate sections under Program in Gerontology.

## Interdisciplinary Programs

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### Graduate Interdisciplinary Programs

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# School Of Computing

## General Information

School of Computing	(251) 460-6390
Dean	Alec F. Yasinsac

School of Computing web site  
<http://www.southalabama.edu/colleges/soc>

### Mission Statement

The mission of the School of Computing is to prepare graduates who are professionally competent, motivated to lifelong learning, and demonstrate ethical behavior in the computing sciences; to provide an atmosphere for faculty to demonstrate research and teaching excellence; and to provide service in the computing sciences to our community and discipline.

### Accreditation

The Bachelor of Science in Computer Science, Information Systems, and Information Technology programs are accredited by the Computing Accreditation Commission of ABET, <http://www.abet.org>. For a quick understanding of what accreditation is and why an accredited program should be chosen, go to <http://www.abet.org/why-accreditation-matters/>.

### National Center Of Academic Excellence In Information Assurance Education

The University of South Alabama was first awarded a National Center of Academic Excellence in Information Assurance Education (CAE/IAE) designation in June 2011 and was re-designated as a National Center of Academic Excellence in Information Assurance / Cyber Defense Education by the National Security Agency and the U.S. Department of Homeland Security in 2014 through 2021. This designation is awarded to institutions after a rigorous review for programs that have demonstrated their commitment to academic excellence in Information Assurance education. Student wishing to comply with USA's CAE/IA-CD curriculum in conjunction with their specialization must complete all required courses and must choose courses designated as IA in the specialization wherever an optional choice is presented.

## Departments Of Instruction

Computer Science (CSC).....	328
Information Systems & Technology (CIST).....	491
Computing Ph.D. (CIS and CIST).....	335

## Degree Requirements

### Undergraduate

#### Admission To The Degree Programs And Courses

In order to be admitted as an undergraduate major in the School of Computing, a student must be "calculus ready". For a major in Computer Science, "calculus ready" means that the student is eligible to enroll in MA 125 (Calculus I). For a major in either Information Systems or Information Technology, "calculus ready" means that the student is eligible to enroll in MA 120, (Calculus and Its Applications).

#### General Requirements For The Bachelor Of Science Degrees In The School Of Computing

Majors in the School of Computing must complete requirements for one of the five Bachelor of Science Programs offered: Computer Science, Health Informatics, Information Systems, or Information Technology.

All undergraduate students in the School of Computing must comply with the University's general education requirements, (See Academic Policies and Procedures). Although these requirements are not specifically organized according to the four general education areas, each of the bachelor of science programs in the School of Computing, incorporates general education requirements within the published programs.

In addition to an overall grade-point average of 2.0, all courses in the major, prerequisites for courses in the major and required supporting courses for the major, must be passed with a minimum grade of "C." Any course taken at the University of South Alabama with a grade of "D" or "F" may be retaken only at the University of South Alabama.

Any courses taken at another institution to meet degree requirements must have prior approval of the School of Computing Dean. Failure to obtain prior approval may result in loss of transfer credit for the course work.

### **Laptop Ownership Policy**

All students enrolling in any undergraduate or graduate courses offered by the School of Computing except for CIS 101, CIS 110, CIS 150, CIS 210, CIS 211, CIS 227 and CIS 250 are required to own a personal laptop computer system that conforms to the current School's minimum published standards. This is a one-student one-machine requirement. Students must register their laptops with the School of Computing Office in Shelby Hall Room 2303 during the first week of the semester.

For more information consult the Laptop Policy at <http://www.southalabama.edu/colleges/soc>.

### **Transfer Students**

Transfer students must complete at least eighteen (18) credit hours of courses at the 300-level or above of courses in their chosen program of study in the School of Computing. All undergraduate transfer students are required to satisfactorily complete CIS 300, Information Technology in Society at the University of South Alabama.

### **Five-year Combined Bachelors And Masters Degree Programs**

Qualified students may enroll in a program that results in both a bachelors degree and a masters degree. Students in this program will normally complete a B.S. degree in one of the four programs in the School of Computing in four (4) years and complete the M.S. Degree in one (1) additional calendar year. Admission to the program is competitive. Students must apply in the second semester of their junior year. The minimum gpa requirement is 3.0. Financial aid is available to qualified students admitted to the program.

### **Choice Of Bulletin Under Which A Student Graduates**

Majors in the School of Computing may choose any bulletin from their entry date to their time of graduation. This applies for entering freshmen and transfer students. Students at the University of South Alabama changing their choice of major in the School of Computing, changing their major in another college to a major in one of the programs in the School of Computing or who interrupt their program of study for more than one calendar year are considered new students with respect to bulletin selection.

## **Graduate**

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### **Requirements For Admission**

Students are admitted each semester. Applicants who have earned an undergraduate or graduate degree from an accredited institution of higher education and who satisfy the admission criteria for the Graduate School (see <http://southalabama.edu/departments/admissions/graduatestudents/index.html>) may qualify for admission to the School of Computing Graduate Program. The School of Computing rarely accepts Non-Degree admissions to the Master of Science in Computer and Information Sciences.

- Applicants whose highest degree is a graduate degree from an accredited institution of higher education will not be required to provide GRE scores since these applicants may qualify for Regular Admission based upon their previous graduate work.
- Applicants whose highest degree is an undergraduate degree from an accredited institution of higher education must provide official scores on the Verbal, Quantitative, and Analytical Writing sections of the GRE Revised General Test in addition to the Graduate School requirements for Regular or Provisional Admission.

Applications and Graduate Bulletins are available from the Admissions website, or the Director of Admissions, Meisler Hall, Suite 2500, University of South Alabama, Mobile, AL 36688-0002. Telephone (251) 460-6141 or (800) 872-5247.

Final admission decisions are made based upon an evaluation of the applicant's complete file which consists of all official academic transcripts; undergraduate grade-point average; GRE scores (when required); three (3) letters of reference regarding the applicant's ability to succeed in the Master of Science program in Computer and Information Sciences; the applicant's statement of purpose; TOEFL or IELTS scores (for international applicants); and program enrollment and availability.

## General Requirements For The MSCIS Program

The Master of Science in Computer and Information Sciences degree program is designed for students and professionals wishing to further their knowledge and expertise in computing. There are two major areas of specializations within the degree program:

1. COMPUTER SCIENCE (CSC) for students interested in the theoretical aspects of the discipline with an emphasis on the construction of system software or the development of scientific applications using software engineering principles. For more information about the Master of Science in CIS, Computer Science specialization, go to <http://soc.southalabama.edu/index.php/department/cs>.
2. INFORMATION SYSTEMS (ISC) for students interested in business and organizational applications and information systems management. For more information about the Master of Science in CIS, Information Systems specialization, go to <http://soc.southalabama.edu/index.php/department/ist>.

## Full Load Of Coursework Per Semester

Permission of the School of Computing Director of Graduate Studies is required to take more than 10 semester hours.

## International Students' Special Requirements

International students must submit documentary evidence showing IELTS test scores of at least 6.0 or TOEFL test scores of at least 525 on the paper version, 197 on the computer version, or 71 on the internet version or an equivalent level of competence as exhibited by a bachelor's degree from an accredited university in the United States. The School of Computing reserves the right to exclude students with more than five course failures.

## Choice Of Bulletin Under Which A Student Graduates

Students entering the SoC masters program may choose any bulletin from their entry date to their time of graduation. This applies for new students and transfer students. Students at the University of South Alabama changing their graduate specialization in School of Computing, changing their major to School of Computing, or who interrupt their program for more than one calendar year are considered new students with respect to bulletin selection.

## Courses Taken Outside The School Of Computing

No more than four graduate courses, maximum of twelve (12) semester hours taken outside of the School of Computing may be applied toward the degree. Only grades of "A" or "B" may be accepted. Transfer credit is approved only after completion of a minimum of nine (9) semester hours of graduate credit towards the degree. A formal request for transfer credits must be made to the coordinator of the student's specialization area (CSC or ISC). Any such transfer courses must be approved by the SoC Director of Graduate Studies and may not have been used to fulfill the requirements of another graduate degree.

## Scheduling Of Courses

The graduate program courses are scheduled to accommodate full-time students (normally two or three courses per semester) and part-time students (one course per semester). Special topics, directed study, and thesis courses are available as needed.

## Time Limitation

All requirements for the Master of Science in Computer and Information Sciences degree must be completed within seven (7) calendar years from the date of matriculation as a School of Computing graduate student. The seven calendar year constraint also applies to all accepted transfer courses.

## Professional Participation

Masters students are expected to take an active part in at least one (1) professional computing organization. They are expected to be aware of the social impact of computing and adhere to the ACM/AITP code of ethics. For more information consult Current Student Information, Websites of Interest at <http://www.southalabama.edu/colleges/soc>.

## Graduate Assistantships And Fellowships

A limited number of graduate assistantships are available on a competitive basis and are awarded on the recommendation of the School of Computing. Applications are available online at: <http://www.southalabama.edu/departments/eforms/graduateschool/GSForm12.pdf>.

## Comprehensive Examination

All School of Computing masters students must complete a comprehensive examination for the CORE courses in their Specialization (Computer Science or Information Systems). The comprehensive examination may be repeated no more than

twice. A written examination is required of students who choose the Course Only Concentration and an oral examination is required of students who complete the Thesis Concentration.

The School of Computing Comprehensive Examination Policies and Procedures document and the Comprehensive Examination Application form are available at <http://www.southalabama.edu/colleges/soc>.

### Graduate School Standards

For all other graduate policies and procedures not specifically stated for the Master of Science in Computer and Information Sciences degree program, see [Computer Science Master's program](#).

## General Ed. Requirements

### Computer Science (CSC)

#### Area I. Written Composition (12 HRS)

EH 101\* (3)

EH 102 or EH 105 (3)

CA 275 (3)

EH 372 (3)

#### Area II. Humanities and Fine Arts (12 HRS)

CA110 (3)

ARS 101, DRA 110, MUL 101, ARH 100, ARH 103, or ARH 123 (3)

EH 215, EH 216, EH 225, EH 226, EH 235, EH 236 (3)

One additional course (3 semester hours) from Art, Drama, Foreign Languages, Music, Philosophy and Literature.

Two courses must be either a Literature sequence from (EH 215-216, EH 225-226, EH 235-236) OR a History sequence from (HY 101-102, HY 135-136). (3)

#### Area III. The Natural Sciences and Mathematics (22 HRS)

1. GEd Natural Sciences - Twelve (12)

8 credit hours of natural sciences, which must include laboratory experiences, are required. Completion of one of the following sequences is required.

PH 201, 201L, 202, 202L; CH 131, 131L, 132, 132L; GY 111, 111L, 112, 112L; BLY 121, 121L, 122, 122L (8)

Four (4) credit hours of any approved 4 natural science courses and the associated laboratory experience

2. GEd Mathematics and Statistics – Twenty (20) credit hours, with a minimum grade of “C” in each course, are required as follows:

MA 125 (4)

MA 126 (4)

MA 267 or MA 367 (3)

ST 315 (3)

2 additional courses from the approved math minor courses. (6)

#### IV. History, Social & Behavioral Sciences (12 HRS)

GEEd one course from HY 101, HY 102, HY 135, or HY 136 (3)

GEEd three additional courses (9 semester hours) from the following approved areas: Anthropology, Economics, Geography, History, Political Science, Psychology, and Sociology.

Two courses must be either a Literature sequence from (EH 215-216, EH 225-226, EH 235-236) OR a History sequence from (HY 101-102, HY 135-136). (9)

**Health Informatics (HI)****Area I. Written Composition (9 HRS)**

EH 101 (3)

EH 102 (3)

CA 275 (3)

**Area II. Humanities and Fine Arts (12 HRS)**

CA110 (3)

ARS 101, DRA 110, MUL 101, ARH 100, ARH 103, or ARH 123 (3)

EH 215, EH 216, EH 225, EH 226, EH 235, EH 236 (3)

One additional course (3 semester hours) from Art, Drama, Foreign Languages, Music, Philosophy and Literature.

Two courses must be either a Literature sequence from (EH 215-216, EH 225-226, EH 235-236) OR a History sequence from (HY 101-102, HY 135-136). (3)

**Area III. The Natural Sciences and Mathematics (17 HRS)**

Approved areas are Physics, Chemistry, Geology, Biology, and Geography 101 and 101L, Geography 102 and 102L or MAS. Mathematics and Statistics - Nine(9) credit hours are required as follows:

1. MA 112 or higher (3) (minimum grade of C)
2. BUS 245 or ST 210 (3)
3. BUS 255 or ST 310 (3)

**IV. History, Social & Behavioral Sciences (12 HRS)**

1. PSY 120 (3)
2. One course from HY 101, HY 102, HY 135, or HY 136 (3)
3. Two additional courses (6 semester hours) from the following approved areas: Anthropology, Criminal Justice, Economics, Geography, History, Political Science, Psychology, and Sociology.  
Two courses must be either a Literature sequence from (EH 215-216, EH 225-226, EH 235-236) OR a History sequence from (HY 101-102, HY 135-136) (6)

**Information Systems (ISC)****Area I. Written Composition (15 HRS)**

EH 101\* (3)

EH 102 or EH 105 (3)

CA 275 (3)

EH 372 (3) OR EH 373 (3)

**Area II. Humanities and Fine Arts (12 HRS)**

CA110 (3)

ARS 101, DRA 110, MUL 101, ARH 100, ARH 103, or ARH 123 (3)

EH 215, EH 216, EH 225, EH 226, EH 235, EH 236 (3)

One additional course (3 semester hours) from Art, Drama, Foreign Languages, Music, Philosophy and Literature.

Two courses must be either a Literature sequence from (EH 215-216, EH 225-226, EH 235-236) OR a History sequence from (HY 101-102, HY 135-136). (3)

**Area III. The Natural Sciences and Mathematics (17 HRS)**

1. Natural Sciences Eight (8) credit hours of natural sciences, which must include laboratory experiences, are required. Approved areas are Physics, Chemistry, Geology, Biology, and Geography 101 and 101L, Geography 102 and 102L or Marine Sciences 134 and 134L.

Natural Sciences (Must include associated lab) Approved areas: PH, CH, GY, BLY, GEO

2. Mathematics and Statistics - Nine(9) credit hours, with a minimum grade of "C" in each course, are required as follows:

One course from MA 120, MA 125, or MA 267 **(3)**

One course from BUS 245, ST 210 **(3)**

one course from BUS 255, ST 310, ST 340 **(3)**

#### IV. History, Social & Behavioral Sciences (12 HRS)

1. One course from HY 101, HY 102, HY 135, or HY 136 **(3)**
2. ECO 215 **(3) (minimum grade of C)**
3. Two additional courses (6 semester hours) from the following approved areas: Anthropology, Economics, Geography, History, Political Science, Psychology, and Sociology.  
Two courses must be either a Literature sequence from (EH 215-216, EH 225-226, EH 235-236) OR a History sequence from (HY 101-102, HY 135-136) **(6)**

#### Information Technology (ITE)

##### Area I. Written Composition (15 HRS)

EH 101 **(3)**

EH 102 or EH 105 **(3)**

CA 275 **(3)**

EH 372 **(3) OR** EH 373 **(3)**

##### Area II. Humanities and Fine Arts (12 HRS)

CA110 **(3)**

ARS 101, DRA 110, MUL 101, ARH 100, ARH 103, or ARH 123 **(3)**

EH 215, EH 216, EH 225, EH 226, EH 235, EH 236 **(3)**

One additional course (3 semester hours) from Art, Drama, Foreign Languages, Music, Philosophy and Literature.

Two courses must be either a Literature sequence from (EH 215-216, EH 225-226, EH 235-236) OR a History sequence from (HY 101-102, HY 135-136). **(3)**

##### Area III. The Natural Sciences and Mathematics (17 HRS)

1. Natural Sciences Eight (8) credit hours of natural sciences, which must include laboratory experiences, are required. Approved areas are Physics, Chemistry, Geology, Biology, and Geography 101 and 101L, Geography 102 and 102L or MAS 134 and MAS 134L.
2. Mathematics and Statistics - Nine(9) credit hours, with a minimum grade of "C" in each course, are required as follows:

One course from MA 120, MA 125, or MA 267 **(3)**

One course from BUS 245, ST 210 **(3)**

one course from BUS 255, ST 310, ST 340 **(3)**

#### IV. History, Social & Behavioral Sciences (12 HRS)

One course from HY 101, HY 102, HY 135, or HY 136 **(3)**

Three additional courses (6 semester hours) from the following approved areas: Anthropology, Economics, Geography, History, Political Science, Psychology, and Sociology.

Two courses must be either a Literature sequence from (EH 215-216, EH 225-226, EH 235-236) OR a History sequence from (HY 101-102, HY 135-136) **(6)**

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Cardiorespiratory Care (BS)	276
Chemical Engineering (BS)	284
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Civil Engineering (BS)	302
Communication (BA) - Communication Studies Concentration	316
Communication (BA) - Digital Cinema & Television Concentration	317
Communication (BA) - Journalism Concentration	318
Communication (BA) - Strategic Communication Concentration	319
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Computer Science (BS)	330
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Studio Art (BFA) - Painting Concentration	831
Studio Art (BFA) - Photography Concentration	833
Studio Art (BFA) - Printmaking Concentration	835
Studio Art (BFA) - Sculpture Concentration	837
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## Degrees & Programs

# Accounting

## Department Information

Department of Accounting	(251) 460-6144
Chair	James Hardin
Professor Emeriti	A. Jeannette Sylvestre, Mark A. Segal
Professors	Grant, Hardin, Noland
Associate Professor	Hsu
Assistant Professors	Prescott, Vann
Instructors	DeRoy, Madden, Rich

Department of Accounting web site

<http://www.southalabama.edu/colleges/mcob/accounting/index.html>

### Department Of Accounting Mission

Our mission is to provide value-added accounting education, conduct research that improves accounting practice and instructional development, and provide service to the profession, university, and Gulf Coast Region constituencies. Our graduates should have the requisite accounting and information technology skills to become the future ethical leaders of the accounting profession.

## Areas Of Study

### Degrees, Programs, Or Concentrations

Accounting (BSBA)..... 241

## Courses

### Course Listing

Accounting..... 845

## Faculty

DEROY, TIFFANY L.  
Instructor  
BSBA, University of South Alabama  
MAC, University of South Alabama

GRANT, CHARLES T.  
Professor  
BS, University of Alabama  
MPAC, University of Texas- Austin  
PHD, Florida State University

HARDIN, JAMES R.  
Professor  
BSBA, Appalachian State University  
MA, Appalachian State University  
PHD, University of Mississippi

HSU, KO-CHENG  
Associate Professor  
BS, Illinois State University  
MS, Illinois State University  
MS, Iowa State University  
PHD, University of Memphis

MADDEN, ELLEN K.  
Senior Instructor  
BA, Birmingham-Southern College  
MBA, Spring Hill College

NOLAND, THOMAS G.  
Professor  
BA, University of Kentucky  
MS, Georgia Inst of Tech - Main  
PHD, University of Mississippi

PRESCOTT, GREGORY L.  
Assistant Professor  
BS, Troy University-Main  
MAC, University of South Alabama  
DBA, Kennesaw State University

RICH, JAMES C.  
Assistant Professor  
BBA, Campbellsville University  
MBA, Troy University-Main

VANN, CAROL E.  
Assistant Professor  
BSBA, University of Southern Miss  
MPAC, University of Southern Miss  
PHD, University of Memphis

# Accounting (BSBA)

## Degree Requirements

### Accounting – Undergraduate Degree Requirements

To graduate, students complete a minimum of 122 semester hours with an overall institution grade-point average (GPA) of 2.0 (38 hours of general education requirements and 84 hours of business courses). In addition, a grade of at least C is required in each of the Basic Business Techniques courses and a 2.0 GPA is required in the 300-level business core courses, and a 2.0 GPA is required for all courses counted in the Accounting Major, which include the following:

Accounting (BSBA)	Course Title	Credit Hours
ACC 331*	Taxation of Individuals	3
ACC 341	Accounting Information Systems	3
ACC 371*	Financial Accounting I	3
ACC 372	Financial Accounting II	3
ACC 381	Cost Accounting	3
ACC 416	International and Advanced Accounting	3
ACC 451	Auditing	3
Choose two electives from the following:		6
ACC 432	Taxation of Partnerships and Corporations	
ACC 452	Advanced Auditing	
ACC 461	Accounting of Governmental and NFPE	
<b>Total credit hours in Accounting</b>		<b>27</b>

### Transient Course Credit

All students majoring in Accounting must receive prior approval from the Chair of the Department before taking courses in the major field at another institution. Failure to obtain prior approval may result in loss of transfer credit for the course work.

Only equivalent courses with grades of "C" or above from a college of business that is accredited by AACSB International will be accepted.

# African American Studies

## Department Information

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The minor in African American Studies provides an interdisciplinary investigation of the experiences, conditions, origins, accomplishments, and contributions of people of African ancestry in the United States. Students may deepen their appreciation and understanding of African Americans by studying their earlier history in Africa, their transition to the New World, and their diasporic experiences in other parts of the world. The African American Studies Program is comprised of eighteen courses offered through seven departments of instruction within the College of Arts and Sciences.

The minor in African American Studies takes advantage of those characteristics of the African American experience that make it uniquely valuable for serious academic study and teaching, for it exposes students to the diversity and unity of the African American experience as well as to the similarities and differences among the cultures of Africa.

## Areas Of Study

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### Degrees, Programs, Or Concentrations

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Minor in African American Studies..... 243

## Courses

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### Course Listing

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Museum Studies.....	1070

# Minor In African American Studies

## Degree Requirements

If a minor is required in your degree program, at least 9 (lower and/or upper-division) hours of courses in the minor must be completed at the University.

### Core Requirements

1. AFR 101, Introduction to African American Studies (three semester hours). This course is to be taken immediately after the African American Studies minor is declared.
2. At least one humanities and one social science course selected from the offerings below.
3. The election of additional courses to bring the total credits to at least 21 hours.

#### African American Studies Course Offerings

AFR 101 (Required)

#### Humanities Courses

EH 242

EH 390

EH 468

EH 477

EH 492

PHL 331

#### Social Science Courses

HY 362

HY 377

HY 485

SY 315

HY 479

HY 477

PSY 270

SY 435

HY 435

HY 478

SY 220

SY 445

GS 290

GS 492

OSC 340

#### Other

ARH 250

ARH 343

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AIS 320

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A description of these courses may be found under the appropriate departments.

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# Air Force Studies

## Department Information

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Department of Air Force Studies web site

<http://www.southalabama.edu/colleges/artsandsci/afrotc/>

Air Force ROTC offers students a course of study leading to a commission as a second lieutenant. Designed to complement individual academic majors, AFROTC courses can be applied toward minor requirements. Cadets enrolled in the program represent a broad cross section of the student body. The student/cadet has an opportunity to explore and evaluate Air Force career opportunities while earning a college degree. Completion of the AFROTC curriculum is the initial step in the education of the professional officer and provides a firm understanding of basic aerospace doctrine and the Air Force missions, organization, and operation.

The Air Force ROTC program consists of two phases: the General Military Course (GMC) and the Professional Officer Course (POC). Each phase requires four (4) semesters of study.

### General Military Course (The Basic Course)

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Students may enroll in the General Military Course with no military obligation. The GMC courses deal primarily with the various Air Force organizations and their missions, as well as the history of the Air Force. Communication skills are also emphasized.

### Professional Officer Course (The Advanced Course)

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Enrollment in the POC is limited to those students who have applied and been accepted for the course. Selection is based on interest in the Air Force together with academic records, observed leadership abilities, physical fitness, and SAT/ACT scores. Application is normally made while a member of the GMC. Individuals entering the POC must have two academic years remaining in college as full-time students at the undergraduate and/or graduate level. Upon completion, all POC students are obligated to accept a commission and enter the active-duty Air Force.

Junior-year materials emphasize student involvement in learning and practicing management and leadership techniques. Leadership and management skills as they apply to a Junior officer in the Air Force are emphasized, and communication skills are stressed throughout the entire AFROTC curriculum. The senior-year course deals extensively with the political, economic, and social factors relating to the formulation and implementation of national security policy.

Cadets receive a nontaxable allowance monthly while on contract (normally during the two academic years in the POC). This stipend is in addition to any other scholarship benefits.

### Field Training Course

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All students must complete one field training course, conducted at an active Air Force base during the summer months. The program requires a four-week course to be completed, normally, between the sophomore and junior years.

When attending field training, a student is furnished transportation or payment for travel plus pay at the current rate of approximately \$600 per month. Uniforms and free medical care are furnished while at field training.

### AFROTC College Scholarship Program

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The Professor of Air Force Studies (PAS) can nominate qualified freshmen, sophomores, and juniors to compete for three and two-year scholarships. The scholarship entitlement pays full tuition and fees at USA, a textbook allotment, and the monthly allowance mentioned above. Scholarship consideration is predicated on student ability, performance, and potential needs of the Air Force. Interested students need to contact the Department of Air Force Studies.

Three and four-year scholarships are also available to high school students. High school students interested in applying should call the Department of Air Force Studies at (251)460-7211 or write the Department of Air Force Studies (AFROTC), University of South Alabama, SRH 156, Mobile, AL 36688-0002.

Also, you can apply via the Internet at <http://www.afrotc.com>.

## Air Force ROTC Uniforms

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Students in Air Force ROTC will be issued uniforms to wear to class and leadership laboratory. They must be turned in upon completion of the year or when the cadet drops or is dropped from the program.

## Courses Of Instruction

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The GMC course is normally completed during the freshman and sophomore years. This basic course consists of four semesters of study with one hour of classroom work and two hours of leadership laboratory per week. The POC consists of four semesters of study, and this advanced course leads to a commission in the United States Air Force. Three classroom hours and two hours of Leadership Laboratory are required weekly. Students interested in this program should contact the Professor of the Air Force Studies.

## Areas Of Study

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### Degrees, Programs, Or Concentrations

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## Faculty

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LAMONT, SCOTT W.  
Professor  
BS, Texas State Univ - San Marcos  
MS, University of Denver  
MA, University of CO- Colorado Sp

# Minor In Air Force Studies

## Degree Requirements

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**If a minor is required in your degree program, at least 9 (lower and/or upper-division) hours of courses in the minor must be completed at the University.**

Completion of the 16 hours of Arts and Sciences course work included in the GMC (Basic Course) and the POC (Advanced Course) are required for a minor in Air Force Studies. In addition, students must complete all commissioning requirements.

# Biology

## Department Information

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Department of Biology web site

<http://www.southalabama.edu/biology>

### Undergraduate Studies

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The program of the Department of Biology is designed to contribute to a scientific background as part of a liberal education. The department offers a diversified, broadly based program, which can be designed to satisfy many areas of study. Our multitrack major can provide the traditional student with a well-rounded background in biology, or students may select courses to prepare them for a particular area of study. The multitrack curriculum can prepare students for graduate study, pre-health professional fields (such as medicine or dentistry), marine biology, or environmental science. The department has persons trained to advise in each of these areas. A list of advisors for a specific track or area of study can be obtained from the departmental office.

All first-time freshmen must successfully complete CAS 100: First Year Experience as a degree requirement. Students must enroll during their first term at USA, except for summer-entry students, who must enroll in the fall semester following entry.

Biology majors are required to take CIS 150, BLY 304 or ST 210 to fulfill the technology proficiency requirement, which was formerly known as the computer proficiency requirement.

Effective for fall, 2016, Major Milestones are used in all concentrations of the Biology Bachelor of Science major to help students stay on track for timely graduation. Each regular semester in the Biology major is a tracking term. To remain on track, students must complete the milestone requirements for each tracking term. These requirements are viewable on the Major Milestone tab above.

Major milestone requirements apply only to full-time, degree-seeking students who first entered Fall 2016 or later. Milestone requirements do not apply to transfer students in the Biology program.

The sample academic plan viewable on the Major Milestone tab above is designed to ensure graduation in the Biology major in four years. Several academic plans are available -- consult with your academic advisor for the plan that is the best fit for you. For specific course requirements, refer to the program requirements above and the General Education requirements of the College of Arts and Sciences.

## Areas Of Study

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## Faculty

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AXSMITH, BRIAN J.

Professor

BS, Millersville U of Pennsylvania

PHD, University of Kansas

BORCHERT, GLEN M.

Assistant Professor

BS, University of Tennessee-Martin

PHD, University of Iowa

BORDEN, JOEL A.

Instructor

BS, Jacksonville State University

MS, University of South Alabama

CHIARI, YLENIA

Assistant Professor

PHD, Univ of Konstanz

DELANEY TUCKER, CYNTHIA L.

Senior Instructor

BS, University of West Florida

MS, University of South Alabama

GLABERMAN, SCOTT R.

Assistant Professor

BA, Tufts University

MS, Yale University

PHD, Yale University

HAMIL, TRAY W.

Instructor

BS, Univ of Alabama-Birmingham

MS, University of South Alabama

KROETZ, MARY B.

Assistant Professor

BS, Marquette University

PHD, Yale University

LITTLEFIELD, RYAN S.

Assistant Professor

BA, Johns Hopkins University

PHD, Scripps Research Institute

MAJOR, CLINTON S.

Senior Instructor

BA, College Of The Atlantic

MS, University of Maine

MAJOR, KELLY M.

Professor

BA, Elmira College

PHD, University of Maine

MATA, JUAN L.

Associate Professor

BS, Univ of Costa Rica

MS, Univ of Costa Rica

PHD, University of Tennessee-Knox

MCCREADIE, JOHN W.

Professor

BS, University of Guelph

MS, Memorial Univ of Newfoundland

PHD, Memorial Univ of Newfoundland

NI CHADHAIN, SINEAD M.

Assistant Professor

BS, University of Scranton

PHD, University of Delaware

O'BRIEN, JOHN J.

Assistant Professor

AB, Stanford University

PHD, University of CA-Santa Bar

SHERMAN, TIMOTHY D.

Professor

BS, Arkansas Tech University

PHD, Texas A & M University

# Biology (MS)

## Degree Requirements

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### Graduate Studies

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The Master of Science degree in Biology is designed to provide qualified students the opportunity to further their knowledge in areas of biology, as indicated by course offerings and research interests of the faculty.

### Requirements For Admission

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Students are admitted each semester.

The following criteria supplement the Graduate School criteria (see Categories of Admission):

#### Regular Admission

1. Undergraduate major in Biology, Botany, or Zoology with a minimum GPA of 2.8 (on a 4-point scale) in all biological courses taken.
2. One year of freshman chemistry and at least one semester of organic chemistry.
3. One year of physics or geology.
4. Mathematics at least through calculus or statistics.
5. Graduate Record Examination (GRE) score of at least 300 on the Verbal and Quantitative portions, with at least a score of 150 on Verbal. (An MCAT score of 24 may be substituted for the GRE by persons intending to enter a cellular/molecular area.)
6. Students who do not speak English as their native language must submit a minimum TOEFL score of 600.
7. Three letters of reference.
8. A letter from the student indicating their research interests.
9. A willing mentor from Biology (in this regard the student should contact the Graduate Coordinator before applying to the program).

#### Provisional Admission

1. Undergraduate major or minor (or equivalent) in Biology, Botany, or Zoology.
2. A minimum undergraduate GPA of 2.5 (on a 4-point scale), with a minimum of 2.8 on all biological courses taken.
3. Submission of GRE (or MCAT) score as outlined above, but without minimum score requirements, and a minimum TOEFL score of 600.
4. Three letters of reference.
5. A letter from the student indicating their research interests.
6. A willing mentor from Biology (in this regard the student should contact the Graduate Coordinator before applying to the program).

#### Non-Degree Admission

The Department of Biology accepts Non-Degree Graduate Students within the general admission and credit regulations of the University of South Alabama with certain reservations and limitations. Students should consult the Department concerning these limitations before applying for such status. Included, but not limited to, are the following:

1. Students are restricted to enrollment in courses prefixed BLY that the Chair determines will advance their career development in biological sciences. Only in exceptional cases wherein it is determined to the satisfaction of the Chair that the aforementioned career goals are enhanced will a non-degree student be permitted to enroll in courses in other departments.
2. Students must confer with the Chair or the Graduate Coordinator of the Department of Biology before attempting to enroll in any class.
3. Students seeking to change from non-degree status to a degree-granting program must reapply and be evaluated as any other student who has not previously applied to such program.

## Opportunities For Research Training In Marine Biology

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The Dauphin Island Sea Laboratory is supported by nineteen colleges and universities in Alabama to form one marine campus. Students in the MS program Biological Sciences at the University of South Alabama may take courses through the sea laboratory and apply credits earned toward fulfilling requirements for the MS degree. Students frequently choose to spend part of their time, particularly in the summers, at Dauphin Island and the rest of their time on the main campus in Mobile. Other arrangements are also possible.

### Graduate Assistantships

The Department offers several types of assistantships to qualified students. Application forms for assistantships with primary responsibilities in teaching and preparing laboratories are available from the departmental office. In addition, some assistantships with primary responsibility in research are usually available each year. These assistantships are associated with grants and contracts that support the research of individual faculty members. In all cases, assistantships are approved by the Dean of the Graduate School upon recommendation of the appropriate sponsor within the University. To be eligible for an assistantship, MCAT or GRE scores must be submitted to the Biology Department.

### Requirements For Degree For All Students

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The curriculum for each student will be developed by the student's advisory committee in view of the student's professional goals. If, in the opinion of a student's committee, the student lacks adequate undergraduate preparation or English skills, the student will be required to make up such deficiencies.

All requirements must be met in five years. In addition to satisfying the general requirements of the Graduate School, the candidates for the Master of Science degree in Biology must satisfy the following requirements:

#### Thesis Program

1. Complete, with a minimum grade of "B", thirty hours of course work at the 500 level. All Biology graduate student must complete at least 18 hours of formal coursework in BLY (excluding directed studies and thesis) listed courses. No course at the 400 level or below may be taken for graduate credit. A maximum of six credit hours may be granted for Directed Studies (BLY 594). All courses must be accepted by the student's graduate advisory committee. The student's graduate committee may, at its option, after consultation with the student, require demonstration of additional proficiency in mathematics, computer skills, statistics, and/or require the student to take additional course work.
2. Included in the 18 hours of formal coursework, students will complete the following core sequence:
  - BLY510 – Professionalism in Science (3h)
  - BLY520 – Biometry (4h)
  - BLY544 – Molecular Biology (3h)
  - BLY545 – Bioinformatics of Genetics (1h)
  - BLY585 – Evolutionary Biology (3h)
  - BLY592 – Seminar (1h)

(The remaining 3 hours needed to meet the 18-hour requirement can be chosen from other 500-level BLY course offerings)

3. Complete a thesis representing original research. A maximum of 9 hours credit will be granted for the thesis. Enrollment in BLY 599 (Thesis) is not permitted until the student's research prospectus has been approved by the advisory committee and the Director of Graduate Studies, College of Arts and Sciences.
4. After submission of the written research prospectus to the committee, students will schedule a committee meeting and comprehensive qualifying exam. The exam will be oral and will start with a presentation of the prospectus and, where applicable, a progress report. Students will first be examined on the prospectus and progress report, and then any area of study closely or broadly related to the student's area of specialization. The exam committee will consist of the student's thesis committee.
5. The student will be graded by all committee members, following a rubric that considers various aspects of the presentation and has three possible scores for each category: 1 (insufficient), 2 (meets expectations), and 3 (above expectations). To pass the exam, a student will have to score an average of 2 or higher. Students are encouraged to look at the rubric before the presentation to be aware of the committee's expectations. Students who fail the exam will be given a second opportunity.
6. Make an oral defense of the thesis.

#### Non-Thesis Program

Students planning to pursue the Ph.D. degree are encouraged to follow the thesis option. However, a non-thesis curriculum is available for those students who so elect.

1. The student will be required to complete, with a minimum grade of "B", thirty hours of course work at the 500 level. No course at the 400 level or below may be taken for graduate credit. A maximum of six credit hours may be granted for Directed Studies (BLY 594).

2. A thesis will not be required. Consequently, BLY 599 (Thesis) may not be taken, and the six semester hours normally associated with it must be earned through formal coursework.

3. The student will complete at least 18 hours of graduate coursework with the "BLY" designation, excluding BLY 594. Additional career-relevant graduate course selection may be from other departments. The 18 hours of BLY coursework will include the following core sequence:

- BLY510 – Professionalism in Science (3h)
- BLY520 – Biometry (4h)
- BLY544 – Molecular Biology (3h)
- BLY545 – Bioinformatics of Genetics (1h)
- BLY585 – Evolutionary Biology (3h)
- BLY592 – Seminar (1h)

4. The student must complete 3-6 hours of BLY 594 (Directed Studies) under the direction of a member of the Biology graduate faculty. A committee consisting of the student's faculty advisor and two others tenure-track faculty members will decide if the student's report relating to the directed study is satisfactory. The student is required to present an open seminar about the directed study during the last semester of residency.

5. Transition between "thesis" and "non-thesis" options requires the majority consent of the student's advisory

# Biology (BS)

## Degree Requirements

Majors in Arts and Sciences may be completed with a minimum of 120 semester hours unless designated otherwise. At least 30 hours of course work, which represents 25% of the required 120 hours, must be at the upper division level in order to fulfill the University's residency requirement. At least 15 of the 30 upper-division hours must be in the major or concentration area. An overall grade-point-average (GPA) of 2.0 is required for graduation. In addition, a minimum GPA of 2.0 is required in the student's major or concentration area.

Effective for fall, 2016, Major Milestones are used in all concentrations of the Biology Bachelor of Science major to help students stay on track for timely graduation. Each regular semester in the Biology major is a tracking term. In order to remain on track, students must complete the milestone requirements for each tracking term. These requirements are viewable on the Major Milestone tab above.

Major milestone requirements apply only to full-time, degree-seeking students who first entered Fall 2016 or later. Milestone requirements do not apply to transfer students in the Biology program.

The sample academic plan viewable on the Major Milestone tab above is designed to ensure graduation in the Biology major in four years. Several academic plans are available -- consult with your academic advisor for the plan that is the best fit for you. For specific course requirements, refer to the program requirements above and the General Education requirements of the College of Arts and Sciences.

### Requirements For A Major In Biology

Students desiring to major in biology must meet the general requirements for a degree of Bachelor of Science in addition to the following requirements.

Major in Biology	Credit Hours
1. At least 37 hours of biology, including:	37
BLY 121 (L) <b>AND</b> BLY 122 (L)	8 hrs
BLY 301, 302, 303	9 hrs
Upper level courses	20 hrs
The upper-level choices will be based on career counseling provided by advisors using models of tracks including (but not limited to) Botany, Ecology and Evolution, Environmental Science, Marine Biology, Cell/Microbiology, and Zoology (see department web site for examples).	
NOTE: A "C" or better in BLY 121, BLY 121L, BLY 122, BLY 122L, or the equivalents, are prerequisites to all courses numbered 300 or above except by permission of the Chair of the Department of Biology. A year of college chemistry, or advanced high school preparation in biology and chemistry is highly recommended for these two introductory courses. Credit will not be allowed for both the non-major sequence (BLY 101, BLY 101L, and BLY 102, BLY 102L) and the major/minor sequence (BLY 121, BLY 121L, BLY 122, BLY 122L.)	
Upper level courses not listed here will count towards a biology major, but do not satisfy the requirements above.	
2. Chemistry	
CH 131	
CH 132	
CH 201	
3. A year of Physics (PH 114, PH 115) <b>OR</b> Geology (GY 111 and GY 112)	
4. Mathematics through Calculus (MA 115 and 125) or Statistics (MA 115 and ST 210)	

## General Education Requirements For Biology Majors

Areas I, II, and IV of the General Education Requirements for Biology are specified in the College of Arts and Sciences section. Note that Area III requirements (Mathematics and Natural Sciences) are fulfilled by the major requirements specified above.

## Major Milestones

Effective for fall, 2016, Major Milestones are used in all concentrations of the Biology Bachelor of Science major to help students stay on track for timely graduation. Each regular semester in the Biology major is a tracking term. In order to remain on track, students must complete the milestone requirements for each tracking term. These requirements are viewable on the Major Milestone table below.

Major milestone requirements apply only to full-time, degree-seeking students who first entered Fall 2016 or later. Milestone requirements do not apply to transfer students in the Biology program.

The sample academic plan viewable on the Major Milestone tab below is designed to ensure graduation in the Biology major in four years. Several academic plans are available -- consult with your academic advisor for the plan that is the best fit for you. For specific course requirements, refer to the program requirements above and the General Education requirements of the College of Arts and Sciences.

### Biology Sample 4+Year Plan With Milestones

Term 1	Course Description	Pre-req	Cr Hrs	Milestone Notes
CAS 100	First Yr Exp - College Success		2	Must complete at least 12 hours with a 2.0 or higher GPA
EN 101*	English Composition I		3	
MA 115*/MA 113	Precal Algebra-Trigonometry	ACT Math 25	4	
CH 131/131L	General Chemistry I	ACT Math 24	4	
BLY 121/121L	General Biology I	ACT Math 22	4	
			<b>17</b>	

Term 2	Course Description	Pre-req	Cr Hrs	Milestone Notes
EH 102 or Honors	English Composition II	EH 101 or test score	3	EH 101 or EH 105*
ST 210	Stat Reason and Application		3	CH 131 and lab with a grade of D or better*
CH 132/132L	General Chemistry II	CH 131	4	
BLY 122/122L	General Biology II	BLY 121	4	

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Term 3	Course Description	Pre-req	Cr Hrs	Milestone Notes
BLY 301	Cell Biology	BLY 122 and CH 131	3	BLY 121 and lab with a grade of C or better*
BLY 302	Genetics	BLY 122 and CH 131	3	
CH 201/201L	Organic Chemistry I	CH 132	4	
<b>Foreign Language I</b>			3	
<b>CA 110</b>	Public Speaking		3	
			<b>16</b>	

Term 4	Course Description	Pre-req	Cr Hrs	Milestone Notes
BLY 303	Ecology and Evolution	BLY 122 and CH 131	3	BLY 301 or BLY 302 or BLY 303 with a grade of C or better
Minor/ Elective			3	CH 201 and lab with a grade of D or better
<b>Foreign Language II</b>			3	
<b>English Literature</b>		EH 102 or Honors	3	
<b>History (US or West. Civ.)</b>			3	
			<b>15</b>	

Term 5	Course Description	Pre-req	Cr Hrs	Milestone Notes
Biology Elective	300 level or higher	BLY 301, 302 and 303***	4	BLY 301, BLY 302, and BLY 303 with a grade of C or better
Biology Elective	300 level or higher	BLY 301, 302, and 303***	3	
GY 111/111L or PH 114/114L	Geology or Physics sequence required		4	

Fine Arts  
Elective

3

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Term 6	Course Description	Pre-req	Cr Hrs	Milestone Notes
Biology Elective	300 level or higher	BLY 301, 302, and 303***	3	Apply for graduation
Biology Elective	300 level or higher	BLY 301, 302, and 303***	3	
GY 112/112L or PH 115/115L	Geology or Physics sequence required		4	
<b>Social/ Behavioral Elective**</b>			3	
Minor			3	
			<b>16</b>	

Term 7	Course Description	Pre-req	Cr Hrs	Milestone Notes
Biology Elective	300 level or higher	BLY 301, 302, and 303***	4	Complete a total of at least 12 upper division (300-400) Biology elective hours
<b>Humanities Electives**</b>			3	
<b>Social/ Behavioral Elective</b>			3	
Minor			3	
Minor			3	
			<b>16</b>	

Term 8	Course Description	Pre-req	Cr Hrs	Milestone Notes
Biology Elective	300 level or higher	BLY 301, 302, and 303***	4	Complete a total of at least 20 upper division (300-400) Biology elective hours
<b>Humanities Elective</b>			3	

<b>Social/ Behavioral Elective</b>	3
Minor	3
	13
	<b>Total degree hours = 121</b>

All bolded courses meet general education requirements.

- **Students with ACT Math scores 22-23 should take CH 100 and MA 112 in the first semester, and they will graduate with 128 hours; MA 125 also satisfies the math requirement. Students with ACT Math scores 21 and below should begin math courses in the summer before Fall - Year 1.**

\* Students who earn an English ACT score of 27, or a written SAT score of 550, can opt out of EH 101.

\*\* Must have one history elective and one literature elective. In addition, students must choose a second history or literature to complete a two-part sequence.

\*\*\* There may be additional prerequisites for upper level major electives. Refer to the bulletin for more information.

All Arts and Sciences majors require a minor between 18 and 24 hours. Courses used in a minor can also be used for general education requirements or major requirements (up to two courses).

Two designated writing (W) courses are required with at least one course chosen from offerings in the student's major or minor. Courses carrying this required credit are identified in the University Bulletin by a (W) after the course title.

The Sample 4-year plan is designed as a guide for students preparing for their course selections. This information provides only a suggested schedule. Actual course selections should be made in consultation with an advisor.

# Biology (BS) - Marine Biology Concentration

## Degree Requirements

Majors in Arts and Sciences may be completed with a minimum of 120 semester hours unless designated otherwise. At least 30 hours of course work, which represents 25% of the required 120 hours, must be at the upper division level in order to fulfill the University's residency requirement. At least 15 of the 30 upper-division hours must be in the major or concentration area. An overall grade-point-average (GPA) of 2.0 is required for graduation. In addition, a minimum GPA of 2.0 is required in the student's major or concentration area.

Effective for fall, 2016, Major Milestones are used in all concentrations of the Biology Bachelor of Science major to help students stay on track for timely graduation. Each regular semester in the Biology major is a tracking term. In order to remain on track, students must complete the milestone requirements for each tracking term. These requirements are viewable on the Major Milestone tab above.

Major milestone requirements apply only to full-time, degree-seeking students who first entered Fall 2016 or later. Milestone requirements do not apply to transfer students in the Biology program.

The sample academic plan viewable on the Major Milestone tab above is designed to ensure graduation in the Biology major in four years. Several academic plans are available -- consult with your academic advisor for the plan that is the best fit for you. For specific course requirements, refer to the program requirements above and the General Education requirements of the College of Arts and Sciences.

### Requirements For A Major In Biology

Students desiring to major in biology must meet the general requirements for a degree of Bachelor of Science in addition to the following requirements.

Biology (BS) with a Marine Biology Concentration	Credit Hours
1. At least 37 hours of biology, including:	37
BLY 121 (L) <b>AND</b> BLY 122 (L)	8 hrs
BLY 301, 302, 303	9 hrs
Upper level courses	20 hrs
The upper-level choices will be based on counseling provided by advisors for career paths including (but not limited to) Botany, Ecology and Evolution, Environmental Science, Marine Biology, Cell/Microbiology, and Zoology (see department web site for examples).	
NOTE: A "C" or better in BLY 121, BLY 121L, BLY 122, BLY 122L, or the equivalents, are prerequisites to all courses numbered 300 or above except by permission of the Chair of the Department of Biology. A year of college chemistry, or advanced high school preparation in biology and chemistry is highly recommended for these two introductory courses. Credit will not be allowed for both the non-major sequence (BLY 101, BLY 101L, and BLY 102, BLY 102L) and the major/minor sequence (BLY 121, BLY 121L, BLY 122, BLY 122L.)	
A "C" or better is required in BLY 301, BLY 302, and BLY 303 before any other BLY 300-400 level courses can be taken.	
Upper level courses not listed here will count towards a biology major, but do not satisfy the requirements above.	
2. Chemistry	
CH 131	
CH 132	
CH 201	
3. A year of Physics (PH 114, PH 115) <b>OR</b> Geology (GY 111 and GY 112)	

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4. Mathematics through Calculus (MA 115 and 125) or Statistics (MA 115 and ST 210)

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### **Marine Biology Concentration**

The marine biology concentration requires a total of 17 credit hours including the nine credit hours from the required core course series for majors: BLY 301, BLY 302 and BLY 303. Eight credit hours of elective courses must be taken at the Marine Environmental Sciences Consortium (MESC) at Dauphin Island or other pre-approved marine lab. MESC courses are offered in the summer semester. The department recommends that students select elective courses from the following: BLY 367, BLY 368, BLY 369, BLY 370, BLY 371, BLY 372, BLY 430, BLY 451, BLY 466, BLY 471, BLY 472, BLY 474 and BLY 475. Other pre-approved elective courses, such as BLY 490 Special Topics, may also be accepted on a course-by-course basis.

The most current information about MESC course offering can be found in the Dauphin Island Sea Lab Summer Bulletin that is published in January. Students may request a copy of the Bulletin by contacting the Registrar, Dauphin Island Sea Laboratory, 101 Bienville Blvd., Dauphin Island, AL 36528; (251) 861-2141, X 2256 or download it from <http://www.disl.org>.

### **General Education Requirements For Biology Majors**

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Areas I, II, and IV of the General Education Requirements for Biology are specified in the College of Arts and Sciences section. Note that Area III requirements (Mathematics and Natural Sciences) are fulfilled by the major requirements specified above.

# Biology (BS) - Senior Thesis Concentration

## Degree Requirements

Majors in Arts and Sciences may be completed with a minimum of 120 semester hours unless designated otherwise. At least 30 hours of course work, which represents 25% of the required 120 hours, must be at the upper division level in order to fulfill the University's residency requirement. At least 15 of the 30 upper-division hours must be in the major or concentration area. An overall grade-point-average (GPA) of 2.0 is required for graduation. In addition, a minimum GPA of 2.0 is required in the student's major or concentration area.

Effective for fall, 2016, Major Milestones are used in all concentrations of the Biology Bachelor of Science major to help students stay on track for timely graduation. Each regular semester in the Biology major is a tracking term. In order to remain on track, students must complete the milestone requirements for each tracking term. These requirements are viewable on the Major Milestone tab above.

Major milestone requirements apply only to full-time, degree-seeking students who first entered Fall 2016 or later. Milestone requirements do not apply to transfer students in the Biology program.

The sample academic plan viewable on the Major Milestone tab above is designed to ensure graduation in the Biology major in four years. Several academic plans are available -- consult with your academic advisor for the plan that is the best fit for you. For specific course requirements, refer to the program requirements above and the General Education requirements of the College of Arts and Sciences.

### Requirements For A Major In Biology

Students desiring to major in biology must meet the general requirements for a degree of Bachelor of Science in addition to the following requirements.

Biology (BS) with a Senior Thesis Concentration	Credit Hours
1. At least 37 hours of biology, including:	37
BLY 121 (L) and BLY 122 (L).	8 hrs
BLY 301, 302, 303	9 hrs
Upper level courses	20 hrs
The upper-level choices will be based on counseling provided by advisors for career paths including (but not limited to) Botany, Ecology and Evolution, Environmental Science, Marine Biology, Cell/Microbiology, and Zoology (see department web site for examples).	
NOTE: A "C" or better in BLY 121, BLY 121L, BLY 122, BLY 122L, or the equivalents, are prerequisites to all courses numbered 300 or above except by permission of the Chair of the Department of Biology. A year of college chemistry, or advanced high school preparation in biology and chemistry is highly recommended for these two introductory courses. Credit will not be allowed for both the non-major sequence (BLY 101, BLY 101L, and BLY 102, BLY 102L) and the major/minor sequence (BLY 121, BLY 121L, BLY 122, BLY 122L.)	
A "C" or better is required in BLY 301, BLY 302, and BLY 303 before any other BLY 300-400 level courses can be taken.	
Upper level courses not listed here will count towards a biology major, but do not satisfy the requirements above.	
2. Chemistry (CH 131, CH 132, CH 201)	
CH 131	
CH 132	
CH 201	
3. A year of Physics (PH 114, PH 115) or Geology (GY 111 and GY 112)	

4. Mathematics through Calculus (MA 115 and 125) or Statistics (MA 115 and ST 210)

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## General Education Requirements For Biology Majors

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Areas I, II, and IV of the General Education Requirements for Biology are specified in the College of Arts and Sciences section. Note that Area III requirements (Mathematics and Natural Sciences) are fulfilled by the major requirements specified above.

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## Undergraduate Senior Thesis In Biology

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The Biology Senior Thesis Program offers bright, academically motivated undergraduate students the opportunity to develop research and communication skills in preparation for a graduate or professional career. To apply for admission into the program, a student must:

1. have completed BLY 121, 121L, BLY 122, 122L, CH 131, CH 132, plus one more upper division biology course.
2. have earned a 3.25 GPA or better in biology courses attempted.
3. have earned a 3.0 GPA or better overall.
4. obtain a recommendation from a faculty member.

In addition to fulfilling the requirements of the standard biology program, senior thesis students must:

1. participate in the Undergraduate Senior Thesis in Biology program for four terms; this may include summer terms.
2. complete a minimum of six credits of directed research, three credits of which must be Honors Research in Biology (BLY 499).
3. complete a research prospectus including an introduction, proposed methods, and relevant literature citations. The prospectus must be submitted and approved by their advisory committee during the first term of participation in the program.
4. complete a written thesis, which must be approved by the advisory committee.
5. present a public oral defense of the research project.
6. complete a poster presentation at the USA Annual Research Forum or the UCUR Annual Research Forum.

Students participating in the *Biology Senior Thesis Program* who have a 3.5 GPA will also be eligible for *Departmental Honors* status.

Biology students who are part of the University Honors College will meet requirements for the Undergraduate Biology Senior Thesis as well as those of the University's program.

# Minor In Biology

## Degree Requirements

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If a minor is required in your degree program, at least 9 (lower and/or upper-division) hours of courses in the minor must be completed at the University.

Minor in Biology	Credit Hours
Twenty-one hours of biology are required, including:	21
BLY 121, BLY 121L, BLY 122, BLY 122L(General Biology)	
BLY 301, BLY 302, BLY 303	
One 4 hour upper level course taken in the Biology department at the University of South Alabama.	
Credit will not be allowed for both the non-major sequence (BLY 101, BLY 101L and BLY 102, BLY 102L) and the major/minor sequence (BLY 121, BLY 121L, BLY 122, BLY 122L.)	

# Biomedical Sciences

## Department Information

Biomedical Sciences Administrative Staff	(251) 445-9265
Interim Chair	Julio F. Turrens
Professors	Spector, Turrens
Professor Emeritus	Covey, Davis
Associate Professors	Henderson, Stanfield, Mockett, Ravine
Assistant Professors	Thulasiraman, Shokolenko, Swiger, Gorelik

Department of Biomedical Sciences web site  
<http://www.southalabama.edu/colleges/alliedhealth/biomedical>

The Department of Biomedical Sciences is dedicated to providing excellent undergraduate preparation for those students interested in pursuing careers in medicine, dentistry, basic medical research, biomedical education or other health professions. The curriculum is designed to provide students a strong general education in the humanities, arts, social sciences, mathematics, and sciences, followed by in-depth study in the basic medical sciences. The program offers an optional Honors Research Thesis (BMD 499) to qualified students consisting of a first-hand research laboratory apprenticeship in biomedical research under the mentorship of a faculty scientist. Students interested in the Honors Research Thesis option should contact Dr. Michael Spector for information. The Biomedical Sciences curriculum as a whole is aimed at establishing a conceptual framework from which the student can pursue post baccalaureate educational experiences in the biomedical sciences, particularly medicine, dentistry, pharmacy, optometry, or Ph.D. study in Basic Medical Sciences, as well as in a variety of health and science related fields. In addition, the Department of Biomedical Sciences offers basic medical science course work that serves as a background for students wishing to pursue professional component programs in the Pat Capps Covey College of Allied Health Professions.

### Pre-professional Advising Program

Students planning to major in Biomedical Sciences who also have plans to attend medical, dental, optometry, physician assistant, veterinary or pharmacy school are advised by a Pat Capps Covey College of Allied Health Professions advisor and by a Health Preprofessional advisor.

Cindy Stanfield, Ph.D.  
 Health Preprofessional Advisor  
 HAHN 4004  
 (251) 445-9280

Academic Advisor  
 Karen LaSarge  
 Pat Capps Covey College of Allied Health Professions  
 HAHN 3028  
 (251) 445-9260

## Areas Of Study

### Degrees, Programs, Or Concentrations

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## Courses

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### Course Listing

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Allied Health Professions.....	855
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## Faculty

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GORELIK, GABRIELA  
Assistant Professor  
PHD, Univ of Buenos Aires

HENDERSON, JAMES D.  
Associate Professor  
BS, Spring Hill College  
PHD, Emory University  
BS, Auburn University

MOCKETT, ROBIN J.  
Associate Professor  
BS, Queens University  
PHD, Southern Methodist University

RAVINE, TERRENCE J.  
Associate Professor  
BSMT, University of Akron  
MS, University of Akron  
PHD, Virginia Commonwealth U

SHOKOLENKO, INNA N.  
Assistant Professor  
MS, Kiev State Linguistic Univ  
PHD, Univ of South Alabama - COM

SPECTOR, MICHAEL P.  
Professor  
BS, Philadelphia College  
PHD, Marshall University

STANFIELD, CINDY L.  
Associate Professor  
BS, University of California-Davis  
PHD, University of California-Davis

SWIGER, BRAD M.  
Assistant Professor  
BS, University of South Alabama  
PHD, University of South Alabama

THULASIRAMAN, PADMAMALINI  
Assistant Professor  
BS, McGill University Quebec  
MS, University of Oklahoma-Norman  
PHD, University of Illinois-Urbana

# Biomedical Sciences (BS)

## Degree Requirements

Biomedical Sciences (BS)		Credit Hours
Requirements:		121
Area I - Written Composition		6
EH 101	3 hrs	
EH 102	3 hrs	
Area II - Humanities & Fine Arts		12
CA 110	3 hrs	
ARH 100, ARH 103, ARH 123, ARH 240, ARH 242, ARS 101, DRA 110, MUL 101	3 hrs	
EH 215 or EH 216 or EH 225 or EH 226 or EH 235 or EH 236	3 hrs	
*Humanities Elective (recommend PHL 121 if HY sequence chosen)	3 hrs	
Area III - Natural Sciences & Math		12
MA 125	4 hrs	
CH 131/CH 131L	4 hrs	
CH 132/CH 132L	4 hrs	
Area IV - History, Social & Behavioral Sciences		12
PSY 120	3 hrs	
HY 101 or HY 102 or HY 135 or HY 136	3 hrs	
SY 109	3 hrs	
*Social Science Elective	3 hrs	
Area V - Preprofessional, Major & Electives		29
BLY 121/BLY 121L	4 hrs	
BLY 122/BLY 122L	4 hrs	
CH 201	4 hrs	
CH 202	4 hrs	
PH 114	5 hrs	
PH 115	5 hrs	
ST 210	3 hrs	
CIS 150 Intro to Computer Applications <b>OR</b> CIS 010 Computer proficiency exam (passed)		
*Must complete two course sequence in Literature or History		

Major Requirements	
Humanities/Fine Arts	3 hrs
General Elective	3 hrs
Biomedical Sciences courses:	
BMD 201 - Seminars in Biomedical Sciences	1 hr
BMD 311 - Human Anatomy	3 hrs
BMD 321 - Biochemistry I	3 hrs
BMD 322 - Biochemistry II	3 hrs
BMD 323 - Biochemistry Laboratory	1 hr
BMD 334 - Human Physiology I	3 hrs
BMD 335 - Human Physiology II	3 hrs
BMD 336 - Physiology Laboratory (W)	1 hr
BMD 401 - Immunology	3 hrs
BMD 402 - Medical Microbiology	5 hrs
BMD 410 - Pathophysiology	3 hrs
BMD 430 - Neuroscience*	4 hrs
BMD 450 - Introduction to Research	2 hrs
BMD 493 - Issues in Biomedical Sciences (W)	3 hrs
And either	
BMD 499 (*Honors students taking BMD 499 may substitute BMD 420 for BMD 430 above; See Advisor)	6 hrs
Or	
BMD 420 (3 credits) plus at least 3 credits of Math/Science Elective (BMD 210, 350, 494, MA 126, ST 310, BLY 205, 215, 311, 341, 363, 459, CH 265, CH 499 or other courses as approved)	6 hrs

## Graduation Plan

### Biomedical Sciences BMD (BS)

**Note: This form does not guarantee course availability. Please check the appropriate Schedule of Classes.**

First Year			Credit Hours
Fall Semester			14
EH 101	English Comp I (I)	3 hrs	
BLY 121	General Biology I	3 hrs	
BLY 121L	Gen Biology I Lab	1 hrs	

CH 131	Gen Chemistry I	3 hrs	
CH 131L	Gen Chemistry I Lab	1 hrs	
PSY 120	General Psychology	3 hrs	
Spring Semester			15
EH 102	Composition II	3 hrs	
BLY 122	Gen Biology II	3 hrs	
BLY 122L	Gen Biology II Lab	1 hrs	
CH 132	Gen Chemistry II	3 hrs	
CH 132L	Gen Chemistry II Lab	1 hrs	
MA 125	Calculus I	4 hrs	
<b>Second Year</b>			<b>Credit Hours</b>
Fall Semester			16
CH 201	Organic Chem I	3 hrs	
CH 201L	Organic Chem Lab I	1 hrs	
PH 114	Physics-Alg/Trig I	5 hrs	
EH _____ <sup>2</sup>	Lit Elective	3 hrs	
_____ <sup>2</sup>	Fine Arts Elective	3 hrs	
BMD 201	Semi-Biomed Sci	1 hrs	
Spring Semester			
CH 202	Organic Chem II	3 hrs	
CH 202L	Organic Chem Lab II	1 hrs	
PH 115	Physics-Algebra/Trig II	5 hrs	
ST 210	Statistical Reasoning	3 hrs	
CA 110	Public Speaking	3 hrs	

Third Year			Credit Hours
Fall Semester			15
BMD 311	Human Anatomy	3 hrs	
BMD 321	Biochemistry I	3 hrs	
BMD 334	Human Physiol I	3 hrs	
_____ <sup>2</sup>	Social Sci Elective	3 hrs	
HY____ <sup>2</sup>	History Elective	3 hrs	
Spring Semester			14
BMD 322	Biochemistry II	3 hrs	
BMD 323	Biochemistry Lab	1 hrs	
BMD 335	Human Physiol II	3 hrs	
BMD 336	Human Physiol Lab-W	1 hrs	
CIS 150	Intro-Comp Apps		
<b>OR</b>			
CIS 010	Comp Prof. Exam (passed)		
<b>AND</b>			
_____ <sup>1</sup>	General Elective	3 hrs	
_____ <sup>2</sup>	Social Science Elective	3 hrs	
Fourth Year			Credit Hours
Fall Semester			15
BMD 401	Immunology	3 hrs	
BMD 420	Pharm*	3 hrs	
<b>OR</b>			
BMD 499	Hon Res Thesis-W	3 hrs	
BMD 430	Neurosci*	4 hrs	

**OR**

BMD 499	Hon Res Thesis-W	3 hrs
BMD 493	BMD Issues-W	3 hrs
_____ <sup>2</sup>	Humanities Elec	3 hrs
Spring Semester		16
BMD 402	Medical Microbiology	5 hrs
_____ <sup>2</sup>	Math/Science Elec*	3 hrs

**OR**

BMD 499	Honors Research Thesis- W	
BMD 410	Pathophysiology	3 hrs
BMD 450	Intro Research	2 hrs
_____ <sup>1</sup>	General Elective	3 hrs

**Notes**

<sup>1</sup> General electives can be chosen from any courses to reach the 121 total credits required for graduation.

<sup>2</sup> Electives are listed on back.

<sup>3</sup> A two-course sequence must be completed in either Literature or History.

\* Honors students may take: BMD 420 Pharmacology OR BMD 430 Neurosciences with 499 Honors Research Thesis

## Major Milestones

Effective for fall, 2016 Major Milestones are used in all concentrations of the Biomedical Sciences major to help students stay on track for timely graduation. Each regular semester in the Biomedical Sciences major is a tracking term. In order to remain on track, students must complete the milestone requirements for each tracking term. These requirements are viewable on the Major Milestones table below.

Major milestone requirements apply only to full-time, degree-seeking students who first entered Fall 2016 or later. Milestone requirements do not apply to transfer students in the Biomedical Sciences program.

The sample academic plan viewable on the Major Milestone tab below is designed to ensure graduation in the Biomedical Sciences major in four years. Several academic plans are available – consult with your academic advisor for the plan that is the best fit for you. For specific course requirement, refer to the program requirements above and the General Education requirement of the College of Allied Health Professions.

## Biomedical Sciences Major Milestones

Term 1	Course Description	Pre-req	Cr Hrs	Milestone Notes
CAS 100/ HSC 101/ AHP101	First Yr Exp-College Success		2	
EH 101/ EH102/ EH105	English Composition I		3	
PSY 120	General Psychology		3	
CH 131/131L	General Chemistry I	ACT Match 24	4	
BLY 121/121L	General Biology I	ACT Math 22	4	
			<b>16</b>	
Term 2	Course Description	Pre-req	Cr Hrs	Milestone Notes
EH 102 or EH 105H	English Composition II	EH 101 or test score	3	MA 113/MS 115 or MATH ACT of 27
CH 132/132L	General Chemistry II	CH 131/CH 131L	3	
BLY 122/122L	General Biology II	BLY 121/BLY 121L	4	
MA 125	Calculus	MA 113/115 or ACT Math 27	4	
CA 110	Public Speaking		3	
			<b>17</b>	
Term 3	Course Description	Pre-req	Cr Hrs	Milestone Notes
PH 114	Alg-Trig Based Physics I	ACT Math 21	5	
CH 201/201L	Organic Chemistry I	CH 132/CH 132L	4	Biology 121 and lab with a grad of C or better
Social Science Elective			3	CH 131 and lab with a grade of C or better
History (US or West. Civ.)			3	

15

Term 4	Course Description	Pre-req	Cr Hrs	Milestone Notes
CH 202/202L	Organic Chemistry II	CH 201/201L	4	CH 132 and lab with a grade of C or better
PH 115	Physic II	PH 114	5	
ST 210	Stat Reason & Application		3	
English Literature		EH 102 or Honors	3	

15

Term 5	Course Description	Pre-req	Cr Hrs	Milestone Notes
BMD 311	Anatomy	BLY 121 and BMD 115	3	BLY 122 and lab with a grade of C or better
BMD 321	Biochemistry I	CH 201	3	CH 201 and lab with a grade of C or better
BMD 334	Physiology I	BLY 121, 122, CH 131, 132	3	PH 114 with a grade of C or better
Social/ Behavioral Elective**			3	
Humanities elective			3	

15

Term 6	Course Description	Pre-req	Cr Hrs	Milestone Notes
BMD 322	Biochemistry II	BMD 321 and CH 202	3	
BMD 323	Biochemistry lab	BMD 321	1	
BMD 335	Physiology II	BMD 334	3	
BMD 336 - W	Physiology II	BMD 334, 335 and EH 102	1	
Social Science or Humanities elective			3	
General elective			3	

14

<b>Term 7</b>	<b>Course Description</b>	<b>Pre-req</b>	<b>Cr Hrs</b>	<b>Milestone Notes</b>
BMD 401	Immunology	BMD 321 or BMD 210 & CH 202	3	BMD 311 with a grade of C or better
BMD 420	Pharmacology	BMD 321, 322, 334, 335	3	
BMD 430	Neurosciences	BMD 311 and 334 or 335	4	
BMD 493	Issues in Biomedical Science	BMD 321	3	
			<b>13</b>	

<b>Term 8</b>	<b>Course Description</b>	<b>Pre-req</b>	<b>Cr Hrs</b>	<b>Milestone Notes</b>
BMD 402	Medical Microbiology	BMD 401	5	
BMD 410	Pathophysiology	BMD 210 or BLY 213	3	
BMD 450	Intro to Research	BMD 311, 321, 322, 334, 335,336	2	
Math/ Science elective			3	
General elective			3	
			<b>16</b>	

# Minor In Biomedical Sciences

## Degree Requirements

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A minimum of 18 credits in Biomedical Sciences, including BMD 311, 321, 322, 334, 335, and 3 additional BMD credits. At least 50% of the credit hours must be taken in the Department of Biomedical Sciences.

# Cardiorespiratory Care

## Department Information

Cardiorespiratory Care Administrative Staff	(251) 445-9284
Chair	William Wojciechowski
Medical Director	Wiley Justice
Professors	Chang, Op't Holt
Associate Professor	Wojciechowski
Senior Clinical Instructor	Pruitt

Department of Cardiorespiratory Care web site  
<http://www.southalabama.edu/colleges/alliedhealth/crc>

The University of South Alabama offers a complete program in Cardiorespiratory Care leading to the Bachelor of Science degree. The curriculum provides a broad education in liberal arts and basic sciences and an in-depth study in respiratory therapy and non-invasive cardiovascular technology. The program is accredited by the Commission on Accreditation for Respiratory Care (CoARC). Upon graduation students are eligible to sit for the National Board for Respiratory Care Examination for entry into practice.

The curriculum is divided into two components: the Pre-Professional Component and the Professional Component.

### Pre-Professional Component

The Pre-Professional Component (freshman and sophomore years) may be completed in two years and consists of 59 semester hours of prescribed and elective course work.

### Professional Component

The Professional Component (junior and senior years) consists of two years of academic and clinical study in Cardiorespiratory Care. The program includes one summer term between the junior and senior years. All candidates must have satisfied the requirements of the Pre-Professional Component to qualify for admission to the Professional Component. Enrollment into the Pre-Professional Component as a Cardiorespiratory Care major does NOT automatically assure the student admission to the Professional Component. Enrollment in the Professional Component is limited and admission is based on academic record and aptitude for a career in respiratory therapy and non-invasive cardiovascular technology as evidenced by personal qualifications such as character and motivation.

Students will be required to complete formal application to the Professional Component. The application process normally begins in the spring semester of the sophomore year.

### Cardiorespiratory Care Curriculum

The Cardiorespiratory Care curriculum incorporates problem-based learning and team-based learning in its curriculum. These instructional methodologies require students to actively participate in the learning process. Problem-based learning and team-based learning are used to develop and improve the students' problem-solving and decision-making skills.

In the curriculum, students work in groups (5-7 students) and solve case studies under the direction of faculty members. Students assume the major responsibility for resolving the problems in the case studies by utilizing a variety of resources.

This approach to learning emphasizes self-direction, independent thinking, decision-making, information gathering, and problem solving. All of these skills are needed to succeed in the clinical setting. Students also develop and improve communication skills through this process, as they interact with fellow students, instructors, and other health care personnel. Students learn the value of working together as a team through the small group process.

## Admission Requirements For The Professional Component

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1. Completed application form submitted no later than March 15 of the year for which admission is requested. (Late applications will be evaluated based on individual circumstances.)
2. A minimum of a 2.8 cumulative grade-point average in the science prerequisites.
3. A minimum of a 2.8 cumulative grade-point average in the Pre-Professional Component.
4. A personal interview with the Cardiorespiratory Care Admissions Committee.
5. Tour of hospital.
6. International students must score a minimum of 76 on the TOEFL exam to include the following minimum subscores on the IBT:
  - Listening 20
  - Speaking 20
  - Reading 18
  - Writing 18

The IELTS exam will not be used as an admission requirement to the Cardiorespiratory Care Program.

## Areas Of Study

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### Degrees, Programs, Or Concentrations

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## Courses

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### Course Listing

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Cardiorespiratory Care.....	890
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## Faculty

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CHANG, DAVID W.

Professor

BA, University of Northern Iowa

MED, Columbus State University

EDD, Nova Southeastern University

OPTHOLT, TIMOTHY B.

Professor

BS, Michigan State University

MS, Illinois Sch Of Health Careers

EDD, Auburn University

PRUITT, WILLIAM C.

Senior Instructor

BA, Georgia College and State U

MBA, Brenau University

# Cardiorespiratory Care (BS)

## Degree Requirements

Cardiorespiratory Care (BS)		Credit Hours
Requirements		121
Successful completion of 121 semester hours of Pre-Professional and Professional course work as specified below.		
<b>I. Pre-Professional Component</b>		59
Area I - Written Composition		6
EH 101	3 hrs	
EH 102	3 hrs	
Area II - Humanities & Fine Arts		12
CA 110	3 hrs	
ARH 100, 103,123, ARS 101, DRA 110, MUL 101	3 hrs	
EH 215 or EH 216 or EH 225 or EH 226 or EH 235 or EH 236	3 hrs	
*Humanities Elective (recommend PHL 121 or PHL 131 if HY sequence chosen)	3 hrs	
Area III - Natural Sciences & Math		11
MA 112	3 hrs	
BLY 121/BLY 121L	4 hrs	
CH 131/CH 131L	4 hrs	
Area IV - History, Social & Behavioral Sciences		12
PSY 120	3 hrs	
Social Science Elective	3 hrs	
HY 101 or HY 102 or HY 135 or HY 136	3 hrs	
*Social Science Elective	3 hrs	
Area V - Pre-Professional, Major & Electives**		18
ST 305	3 hrs	
PH 104	4 hrs	
BMD 210	3 hrs	
BMD 114, BMD 115	8 hrs	
*Must complete two course sequence in Literature or History.*Must pass CIS 010 proficiency exam or take CIS approved course.**All Area V courses are required for entry into the Cardiorespiratory Care Program.		
<b>II. Professional Component</b>		62

CRC 330	5 hrs
CRC 331	3 hrs
CRC 334	3 hrs
CRC 342	3 hrs
CRC 335	5 hrs
CRC 345	5 hrs
CRC 332	4 hrs
CRC 428	3 hrs
CRC 415	2 hrs
CRC 430	3 hrs
CRC 435	3 hrs
CRC 440	6 hrs
CRC 450	2 hrs
CRC 447	2 hrs
CRC 441	6 hrs
CRC 446	2 hrs
CRC 451	2 hrs
CRC 460	3 hrs

In special situations, advanced standing may be available in the form of transfer credits and equivalency examinations. Documentation of pertinent information submitted by advanced-standing applicants, such as individuals having an associate degree in respiratory therapy, certified respiratory therapy technicians, or practitioners credentialed in other allied health professions, will be reviewed by the Cardiorespiratory Care Admissions Committee to determine the actual awarding and the method of advanced standing. Applicants seeking advanced standing at the University of South Alabama should consult directly with the Chair of the Department of Cardiorespiratory Care, 5721 USA North Drive, HAHN 3137, Mobile, Alabama 36688, Phone: (251)445-9284.

Special Course Fees:

CRC 330	\$ 60.00
CRC 428	\$125.00
CRC 450	\$ 19.00
CRC 451	\$ 19.00

## Graduation Plan

### Cardiorespiratory Care (BS)

**Note: This form does not guarantee course availability. Please check the appropriate Schedule of Classes.**

1st Year			Credit Hours
Fall Semester			14
EH 101	Composition I	3	

CH 131	General Chemistry I	3
CH 131L	General Chemistry I Lab	1
BLY 121	General Biology I	3
BLY 121L	General Biology I Lab	1
CA 110	Public Speaking	3
Spring Semester		12
EH 102	Composition II	3
MA 112	Precalculus Algebra	3
_____	Fine Arts Elective	3
SY 109	Introductory Sociology	3

2nd Year		Credit Hours
Fall Semester		16
EH _____	Literature Elective*	3
BMD 114	Human Anatomy & Physiology I	4
BMD 210	Infectious Disease in HC Environments	3
HY _____	History Elective*	3
PSY 120	General Psychology	3
Spring Semester		17
_____	Literature or Humanities Elective*	3
BMD 115	Human Anatomy & Physiology II	4
ST 210	Statistical Reasoning and Applications	3
_____	History or Social Science Elective*	3
PH 104	Concepts of Physics	4
*Must complete a sequence in Literature or History		

<b>3rd Year</b>			<b>Credit Hours</b>
Fall Semester			14
CRC 330	CRC Assessment Skills	5	
CRC 331	Respiratory Anatomy & Physiology	3	
CRC 334	Pharmacology	3	
CRC 342	Intermittent CRC Practicum	3	
Spring Semester			14
CRC 332	Intermittent and Diagnostic CRC	4	
CRC 335	Intensive CRC	5	
CRC 345	Intensive CRC Practicum	5	
Summer Semester			8
CRC 415	Research Meth	2	
CRC 430	Neo-Ped. Care	3	
CRC 431	Spec. Procedures	3	
<b>4th Year</b>			<b>Credit Hours</b>
Summer Semester			8
CRC 415	Research Methodology	2	
CRC 430	Neonatal-Pediatric CRC	3	
CRC 431	Special Procedures	3	
Fall Semester			13
CRC 435	Critical Care Concepts	3	
CRC 440	Advanced Clinical I	6	
CRC 447	CRC Management	2	
CRC 450	Clinical Research I	2	
Spring Semester			13
CRC 441	Advanced Clinical II	6	
CRC 446	CRC Education	2	
CRC 451	Clinical Research II	2	

CRC 460

Advanced-Level  
Exam Review

3

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\*Must complete a 2 course sequence in literature or history. Acceptable sequences are:

EH 215 and 216 or

EH 225 and 226 or

EH 235 and 236 or

HY 101 and 102 or

HY 135 and 136

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<sup>1</sup>See back for options

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# Instructional Design W/ Respiratory Therapy Educator Preparation Electives (MS)

## Degree Requirements

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The College of Education and Professional Studies, through an agreement with the Department of Cardiorespiratory Care offers an innovative Master of Science Degree in Instructional Design and Development live and online. This degree will prepare baccalaureate degree, registered respiratory therapists (RRTs) for the teaching profession. This internationally recognized IDD program uses state-of-the-art technology to deliver high-quality, affordable courses, both live and via Internet, enabling the completion of most of this degree from anywhere in the world. These courses and selected electives will fulfill the need for RRTs who aspire to teach respiratory therapy at the university and community college levels.

### Admission Requirements

1. Bachelor's degree
2. Registered Respiratory Therapist credential (National Board for Respiratory Care)
3. Graduate Record Examination (GRE) or Millers Analogy Test (MAT) with the GRE writing component.

For detailed information regarding requirements, admissions, courses, and registration, please refer to the description of the IDD Master's program in the bulletin.

### Additional Information

Instructional Design & Development web page

<http://www.southalabama.edu/colleges/ceps/cins/idd-main.html>

or

[Department of Cardiorespiratory Care](#)

University of South Alabama

Mobile, Alabama 36688

Telephone: (251) 445-9284

Email: [topholt@southalabama.edu](mailto:topholt@southalabama.edu)

# Chemical-Biomolecular Eng

## Department Information

<b>Department of Chemical and Biomolecular Engineering Staff</b>		<b>(251) 460-6160</b>
Chair	F. Carl Knopf	
Professors	Knopf, Sylvester	
Associate Professors	Leavesley, West	
Assistant Professors	Glover, Rabideau, Wheeler	

Department of Chemical and Biomolecular Engineering web site  
<http://www.southalabama.edu/colleges/engineering/chbe/index.html>

Chemical Engineering is a profession in which knowledge of mathematics, chemistry, biology and other natural sciences gained by study, experience, and practice is applied with judgment to develop economical ways of using material and energy for the benefit of mankind. The program required for the degree of Bachelor of Science in Chemical Engineering provides fundamental instruction in mathematics, chemistry, biology, physics, and engineering. This education prepares the graduate to seek employment in petrochemical, pharmaceutical, healthcare, microelectronics, polymers, energy and environmental industries. In addition, the graduate is adequately prepared to pursue graduate school.

Chemical engineering students are required to take the Chemical Engineering discipline specific Fundamentals of Engineering (FE) examination in Alabama or another state prior to graduation. All electives must be approved by the student's advisor. Degree requirements include a minimum of 18 semester hours of approved electives in the Humanities and Social Sciences.

Satisfactory completion of the 127 hour program outlined below leads to a Bachelor of Science in Chemical Engineering. Students must also comply with the College of Engineering Requirements for a Degree, which are covered in the Bulletin under the College of Engineering.

### BSCHE Program Educational Objectives

The educational objectives of the Department of Chemical & Biomolecular Engineering's undergraduate program are that, within a few years of program completion, graduates will have used the knowledge and skills gained through academic preparation and post-graduation experience so they have:

1. Advanced in the chemical engineering profession, obtained professional licensure, and applied engineering knowledge and problem-solving skills to multi-disciplinary projects.
2. Incorporated economic environmental, social, regulatory, constructability, safety, and sustainability considerations into the practice of chemical engineering.
3. Exhibited effective communication skills, teamwork, leadership, initiative, project management, and professional and ethical behavior.
4. Continued their technical and professional development, which may include graduate level education, continuing education, and participation in professional organizations.

### BSCHE Student Outcomes

By the time of graduation from the BSCHE program, a student will have demonstrated attainment of the following outcomes:

1. An ability to apply knowledge of mathematics, science, and engineering.
2. An ability to design and conduct experiments, as well as to analyze and interpret data.
3. An ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability.
4. An ability to function on multidisciplinary teams.
5. An ability to identify, formulate, and solve chemical engineering problems.
6. An understanding of professional and ethical responsibility.

7. An ability to communicate effectively.
8. The broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context.
9. A recognition of the need for, and an ability to engage in life-long learning.
10. A knowledge of contemporary issues.
11. An ability to use techniques, skills, and modern engineering tools necessary engineering practice.

The BSChE curriculum is designed to ensure the attainment of the student outcomes.

The Bachelor of Science in Chemical Engineering program is accredited by the Engineering Accreditation Commission of ABET, <http://www.abet.org>

## Areas Of Study

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### Degrees, Programs, Or Concentrations

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## Courses

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### Course Listing

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Chemical Engineering.....	892
Engineering.....	969
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## Faculty

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CLOUTIER, ROBERT J.  
Professor  
BS, United States Naval Academy  
MBA, Eastern University  
PHD, Stevens Inst of Technology

GLOVER, THOMAS G.  
Assistant Professor  
BS, Georgia Inst of Tech - Main  
PHD, Vanderbilt University

KNOPF, FREDERICK C.  
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BSChE, Ohio State U-Main Campus  
MS, Ohio State U-Main Campus  
PHD, Purdue University-Main Campus

LEAVESLEY, SILAS J.  
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BS, Florida State University  
PHD, Purdue University-Main Campus

LESTER, HENRY D.  
Assistant Professor  
BS, Embry-Riddle Aeronautical U  
MS, University of Arkansas- Fayette  
MSCE, University of Alabama  
MS, University of Alabama  
PHD, University of Alabama

RABIDEAU, BROOKS D.  
Assistant Professor  
BS, Northwestern University  
PHD, University of Texas- Austin

SYLVESTER III, NICHOLAS D.  
Professor  
BS, Ohio University  
PHD, Carnegie Mellon University

WALKER, SEAN  
Assistant Professor  
BS, Univ of Waterloo  
MS, Univ of Waterloo  
PHD, Univ of Waterloo

WEST, CHRISTY W.  
Assistant Professor  
BS, University of Alabama  
PHD, Georgia Inst of Tech - Main

WEST, KEVIN N.  
Associate Professor  
BS, University of Virginia  
PHD, Georgia Inst of Tech - Main

# Chemical Engineering (BS)

## Degree Requirements

First Year		Credit Hours
Fall		17
EH 101	3 hrs	
MA 125	4 hrs	
EG 101	2 hrs	
CH 131	4 hrs	
BLY 121	4 hrs	
Spring		15
EH 102	3 hrs	
MA 126	4 hrs	
CH 132	4 hrs	
PH 201	4 hrs	

Second Year		Credit Hours
Fall		16
MA 227	4 hrs	
CH 201	4 hrs	
PH 202	4 hrs	
CHE 203	4 hrs	
Spring		16
MA 238	3 hrs	
Chemistry Elective	4 hrs	
Tech Elective I (Chem/Bio)	3 hrs	
EG 231	3 hrs	
Gen Ed	3 hrs	

Note:

1. Minimum grade of 'C' is required for all prerequisites to CHE 300-level and 400-level courses.
2. Appropriate software tools will be utilized in almost all CHE courses.

Third Year		Credit Hours
Fall		16

CHE 321	3 hrs	
CHE 331	3 hrs	
CHE 342	3 hrs	
CHE 351	1 hrs	
Gen Ed	3 hrs	
Tech Elective II	3 hrs	
Spring		16
CHE 311	3 hrs	
CHE 322	3 hrs	
CHE 332	3 hrs	
CHE 352	1 hrs	
CHE 372	3 hrs	
Gen Ed	3 hrs	

Fourth Year		Credit Hours
Fall		17
CHE Elective I	3 hrs	
CHE 421	3 hrs	
CHE 441	2 hrs	
CHE 461	3 hrs	
Gen Ed	3 hrs	
Gen Ed	3 hrs	
Spring		14
CHE Elective II	3 hrs	
CHE 442	2 hrs	
CHE 452	3 hrs	
CHE 462	3 hrs	
Gen Ed	3 hrs	

It is important that students make adequate progress in the Chemical Engineering program. Satisfactory completion of a set of fundamental courses is required before a student is allowed to take advanced courses. Professional Component Standing (PCS) is awarded by the chair of the department when the student completes the College of Engineering PCS requirements and the ChBE departmental PCS requirements.

College of Engineering PCS Courses			
Course Number	Course Title	Credit Hours	Minimum Grade
EH 101	English Composition I	3	C
EH 102	English Composition II	3	C
CH 131	General Chemistry I + Lab	4	C

MA 125	Calculus I	4	C
MA 126	Calculus II	4	C
PH 201	Calculus-Based Physics I + Lab	4	C

#### Chemical and Biomolecular Engineering PCS Courses

Course Number	Course Title	Credit Hours	Minimum Grade
CH 132	General Chemistry II + Lab	4	C
CH 201	Organic Chemistry I + Lab	4	C
MA 227	Calculus III	4	C
MA 238	Differential Equations I	3	C
BLY 121	General Biology I + Lab	4	C
CHE 203	Elementary Prin of Chem Processes	4	C

Students who fail to maintain at least a 2.00 GPA overall at the University of South Alabama will lose PCS and may be required to take or repeat appropriate courses as specified by the department chair to correct their deficiencies and may not be permitted to continue in 300- and 400-level engineering courses. CHE 203 may only be taken twice. Failure to achieve a C or better grade in the second attempt of CHE 203 will result in dismissal from the Chemical Engineering program.

## Major Milestones

### CHEMICAL ENGINEERING SAMPLE 4-YEAR PLAN WITH MILESTONES (2017-2018 USA Bulletin)

Term 1	Course Description	Pre-req	Cr Hrs	Milestone Notes
EH 101*	English Composition I		3	Must complete at least 12 hours with a 2.0 or higher GPA
MA 125	Calculus I	ACT Math 27	4	**Minimum grade of 'C' required in all prerequisite courses
CH 131/131L	General Chemistry I	ACT Math 24	4	
BLY 121/121L	General Biology I	ACT Math 22	4	
EG 101	Freshman Seminar	ACT Math 22	2	
			<b>17</b>	
Term 2	Course Description	Pre-req	Cr Hrs	Milestone Notes
EH 102	English Composition II	EH 101 or test score	3	MA 125
MA 126	Calculus II	MA 125	4	CH 131/131L

CH 132/132L	General Chemistry II	CH 131	4	BLY 121/121L
PH 201/201L	Physics I	MA 125 and MA 126	4	EH 101 or EH 105*
				**Minimum grade of 'C' required for all prerequisite courses
<b>15</b>				

Term 3	Course Description	Pre-req	Cr Hrs	Milestone Notes
MA 227	Calculus III	MA 126	4	MA 126
CH 201/201L	Organic Chemistry I	CH 132	4	PH 201/201L
CHE 203	Principles of Chemical Processes	CH 132/132L and MA 126	4	CH 132/132L
PH 202/202L	Physics II	PH 201	4	EH 102
				**Minimum grade of 'C' is required in all prerequisite courses
<b>16</b>				*CHE 203; only 2 attempts permitted to complete the course with minimum grade of 'C'

Term 4	Course Description	Pre-req	Cr Hrs	Milestone Notes
MA 238	Differential Equations	MA 227	3	CHE 203 *Summer not guaranteed
Chemistry Elective	CH 202/202L or CH 265/265L		4	MA 238
EG 231	Engineering Economics and Ethics	MA 126	3	CH 201/201L
Technical Elective I (CH/BLY)	See advisor for approved course list		3	MA 227
English Literature			3	**Minimum grade 'C' required in all prerequisite courses
<b>16</b>				

Term 5	Course Description	Pre-req	Cr Hrs	Milestone Notes
CHE 342	Engineering Communication	EH 102, BLY 121 and CHE 321 (cc)	3	**Minimum grade of 'C' required in all prerequisite courses
CHE 321	Transport Phenomenal	PH 201, MA 238, and CHE 203	3	CHE courses only available in Fall semester
CHE 331	Thermodynamics I	CH 201/201L, PH 201, CHE 203, MA 238, CHE 351 (cc)	3	
<b>History (US or Western Civ.)</b>			3	
CHE 351	Measures Lab I	CHE 331 (cc) and CHE 342 (cc)	1	
Technical Elective II	See adviser for approved course list		3	
			<b>16</b>	
Term 6	Course Description	Pre-req	Cr Hrs	Milestone Notes
CHE 311	Separations I	CHE 203 and CHE 331	3	**Minimum grade of 'C' required in all prerequisite courses
CHE 322	Transport Phenomena II	CHE 321	3	CHE courses only available in Spring semester
CHE 332	Thermodynamics II	CHE 331 and CHE 352 (cc)	3	
CHE 372	Reactor Design	CHE 322 and CHE 332	3	
CHE 352	Measures Lab II	CHE 351, CHE 332 (cc), CHE 372 (cc)	1	
<b>Social/ Behavioral Elective</b>			3	
			<b>16</b>	
Term 7	Course Description	Pre-req	Cr Hrs	Milestone Notes
CHE 421	Separations II	CHE 311 and CHE 322	3	Take FE exam

CHE 441	Unit Operations Lab I	CHE 322, CHE 342, CHE 351, CHE 352	2	Apply for graduation
CHE 461	Design I	EG 231, CHE 332, CHE 342, and CHE 372	3	**Minimum grade of 'C' in all prerequisite courses
ChE Elective I	See advisor for approved course list		3	CHE courses only available in Fall semester
<b>Fine Arts Elective</b>			3	
<b>Humanities Elective</b>			3	
			<b>17</b>	

Term 8	Course Description	Pre-req	Cr Hrs	Milestone Notes
CHE 452	Process Controls	CHE 372	3	**Minimum grade of 'C' required in all prerequisite courses
CHE 462	Design II	CHE 461	3	CHE courses only available in Spring semester
CHE 442	Unit Operations Lab II	CHE 311, CHE 421, CHE 441	2	
ChE Elective II	See advisor for approved course list		3	
<b>Social/ Behavioral Elective</b>			3	
			<b>14</b>	
		<b>**TOTAL</b>	<b>127</b>	

All bolded courses meet general education requirements.

Courses listed as Milestones are required to obtain the Professional Component Standing (PCS) and require a minimum grade of 'C'.

Prerequisite courses denoted (cc) may be taken concurrently.

\*Students who earn an English ACT score of 27, or a written SAT score of 550, can opt out of EH 101.

**\*\*Students not Term 1 - Calculus I ready will exceed the 127 hours required for this degree. Students with ACT Math scores 21 and below will not complete the degree in 4 years. Students beginning in MA 112 must utilize summer before**

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**Term 3 by taking MA 125 and CH 132/132L and utilize the summer before Term 5 to complete the degree in 4 years. Students with ACT Math scores 23 and below should begin math courses in the summer before Fall - Year 1.**

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Two designated writing (W) courses are required with at least one course chosen from offerings in the student's major or minor. Courses carrying this required credit are identified in the University Bulletin by a (W) after the course title.

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The Sample 4-year plan is designed as a guide for students preparing for their course selections. This information provides only a suggested schedule. Actual course selections should be made in consultation with an advisor.

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# Chemical Engineering (MS)

## Degree Requirements

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With the ever-increasing pace of technological development in society, new opportunities are becoming available that require chemical engineering graduates with increased levels of specialization. The Department offers a Master of Science degree in Chemical Engineering that blends scholarship and research with advanced coursework to provide excellent training for students to pursue careers in the chemical industry. Graduate students have opportunities to undertake cutting-edge research with faculty for both thesis and project work. In addition, a course work-only program is also offered by the department for those who intend to further their professional development while pursuing a graduate degree. Students with a bachelor's degree in a major other than chemical engineering can qualify for admission by taking a prescribed series of undergraduate courses.

### Admission To The MScE Program

The following criteria supplement the College of Engineering admission criteria ([see Admission To Graduate Programs](#)):

- I. Regular Admission Requirements
    - A. A bachelors degree in chemical engineering.
    - B. A grade-point average of 3.0 or greater (A=4.0) on all undergraduate work is required.
    - C. A minimum score of 151 in the quantitative section and a minimum score of 141 in the verbal section of the Graduate Record Examination (GRE) is required.
    - D. A minimum score of 79 in the internet-based TOEFL or a minimum band score of 6.5 in the IELTS is required.
  - II. Provisional Admission Requirements
    - A. A bachelors degree in chemistry, physics, mathematics or engineering.
    - B. A minimum grade-point average of 2.5 (A=4.0) on all undergraduate work is required.
    - C. A minimum score of 151 in the quantitative section and a minimum score of 141 in the verbal section of the Graduate Record Examination (GRE) is required.
    - D. A minimum score of 79 in the internet-based TOEFL or a minimum band score of 6.5 in the IELTS is required.
- Thesis Option 30 credit hours
  - Project Option 30 credit hours
  - Course Option 34 credit hours

# Chemistry

## Department Information

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Department of Chemistry web site

<http://www.southalabama.edu/colleges/artsandsci/chemistry/>

### Undergraduate Studies

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The chemistry curriculum is designed for students seeking a liberal education as well as for those students requiring more specialized training and skills. The courses provide the foundation necessary for those planning careers as chemists and biochemists following graduation, for students planning to further their education through advanced degrees in chemistry, biochemistry, related sciences, and for those in other professional fields. Two basic curricula are offered for chemistry majors:

1. The American Chemical Society certified degree program in Chemistry is available for those students seeking technical positions in chemistry, as well as for those planning to attend graduate school, or
2. A Biochemistry Option track is available for students strongly interested in the interface of chemistry and biomedical or biological sciences, especially for students anticipating going to graduate school in medical sciences, biochemistry, biophysics, or other life sciences.

Students pursuing a degree in Chemistry also must have a minor in another discipline. All first-time freshmen must successfully complete CAS 100: First Year Experience as a degree requirement. Students must enroll during their first term at USA, except for summer-entry students who must enroll in the fall semester following entry. CH 150 will fulfill the technology proficiency requirement.

### Undergraduate Senior Thesis In Chemistry

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The Chemistry Senior Thesis Program is designed to stimulate analytical and critical thinking and as such offers motivated and focused undergraduate students the opportunity to develop research and communication skills in preparation for a graduate or professional career. To apply for admission into the program, a student must:

1. Have Junior Chemistry Major status or above.
2. Have completed CH 131, CH 132, CH 201, CH 202, plus one (1) more lower or upper division chemistry course.
3. Have earned a 3.25 GPA or better in chemistry courses attempted.
4. Have earned a 3.0 GPA or better overall.
5. Obtain a recommendation from a faculty member who will serve as research mentor for senior thesis.

In addition to fulfilling the requirements of the standard chemistry program, senior thesis students must complete:

1. A minimum of six (6) semester hours of Honors Research (CH 499). Upon successful completion of six (6) hours of CH 499 the requirement for four (4) hours of Directed Studies (CH 494) will be waived.
2. A formal research Project Prospectus needs to be submitted and approved by the student's research mentor during the first term of participation in program. The prospectus will be prepared under the supervision of the student's research mentor and should include an introduction to the proposed research project, proposed research methods, and relevant literature citations.
3. Complete a written research thesis.
4. The formation of a thesis committee will be at the discretion of the faculty mentor.
5. Present a formal oral defense of the research work to Chemistry Department faculty and students.
6. Complete a poster presentation at national, regional, or local research forum.

Examples being an ACS National meeting, the USA Annual Research Forum (Spring term) or the UCUR Annual Research Forum (Fall term). Students participating in the Chemistry Senior Thesis Program who have a 3.5 GPA will also be eligible for Departmental Honors status. Chemistry majors who are part of the University Honors College will meet the requirements for the Undergraduate Chemistry Senior thesis as well as those of the University's program.

## Graduate Studies

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Although the Department of Chemistry has no graduate degree programs, courses are offered at the graduate level for those students who need such work.

## Areas Of Study

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### Degrees, Programs, Or Concentrations

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## Courses

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### Course Listing

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Chemistry.....	895
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## Faculty

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BATTISTE, DAVID R.  
Assistant Professor  
BS, University of Florida  
PHD, Louisiana State University

CLEMENTS, JASON W.  
Part-Time Instructor  
BS, University of South Alabama  
MSET, University of South Alabama

COYM, JASON W.  
Associate Professor  
BS, University of Texas- Austin  
PHD, Florida State University

DAVIS JR., JAMES H.  
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AB, University of North Alabama  
MS, Vanderbilt University  
PHD, Vanderbilt University

FORBES, DAVID C.  
Professor  
BS, University of Florida  
PHD, University of Illinois-Urbana

O'BRIEN, RICHARD A.  
Assistant Professor  
BS, South Dakota State University  
MS, University of North Dakota  
PHD, University of Nebraska -Lincoln

OERTLI, CHRISTIAN U.  
Assistant Professor  
MS, Swiss Federal Inst of Tech  
PHD, Swiss Federal Inst of Tech

PERINE, DONALD R.  
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BA, Dillard University  
MS, Ohio State U-Main Campus  
MBA, University of South Alabama  
DA, Middle Tennessee State U

PHILLIPS, GLENN W.  
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BA, Atlantic Union College  
BS, Atlantic Union College  
MS, Michigan State University  
PHD, Michigan State University

REICHERT, WILLIAM M.  
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BS, Berry College  
PHD, University of Alabama

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BS, University of South Alabama

STENSON, ALEXANDRA C.  
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PHD, Florida State University

STOJANOVIC, MILORAD  
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PHD, Florida State University

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PHD, Auburn University

WIERZBICKI, ANDRZEJ  
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MS, A. Mickiewicz University  
PHD, A. Mickiewicz University

YET, LARRY  
Assistant Professor  
BS, Univ of British Columbia  
MS, Ohio State U-Main Campus  
PHD, Ohio State U-Main Campus



# Chemistry ACS Certified Chemistry Track, Major

## Degree Requirements

Majors in Arts and Sciences may be completed with a minimum of 120 semester hours unless designated otherwise. At least 30 hours of course work, which represents 25% of the required 120 hours, must be at the upper division level in order to fulfill the University's residency requirement. At least 15 of the 30 upper-division hours must be in the major or concentration area. An overall grade-point-average (GPA) of 2.0 is required for graduation. In addition, a minimum GPA of 2.0 is required in the student's major or concentration area.

### Requirements For A Major In Chemistry (ACS Certified Chemistry)

Major in Chemistry (B.S.) ACS Certified Chemistry Track		Credit Hours
A minimum of 40 semester hours in Chemistry beyond the CH 132 and CH 132L course level as listed below:		40
CH 131, 131L	3, 1 hrs	
CH 132, 132L	3, 1 hrs	
CH 150	2 hrs	
CH 201, 201L	3, 1 hrs	
CH 202, 202L	3, 1 hrs	
CH 265, 265L	3, 1 hrs	
CH 301, 301L	3, 1 hrs	
CH 302, 302L	3, 1 hrs	
CH 401, 401L	3, 2 hrs	
CH 465, 465L	3, 2 hrs	
CH 440	3 hrs	
CH 492	1 hr	
CH 394/CH 494	4 hrs	

**Mathematics** Two semesters of Calculus (MA 125, MA 126).

**Physics** Students are to select one of the following options. Option 1: PH 201 and PH 202; Option 2: PH 114, PH 115, and MA 227; Option 3: PH 114, PH 115, and PH 201 with approval of the physics department chair; Option 4: PH 114, PH 115 and PH 202 with approval of the physics department chair.

### General Education Requirements For Chemistry Majors

Areas I, II, and IV of the General Education Requirements for Chemistry are specified in the College of Arts and Sciences section. Note that Area III requirements (Mathematics and Natural Sciences) are fulfilled by the major requirements specified above.

# Chemistry Biochemistry Track, Major

## Degree Requirements

Majors in Arts and Sciences may be completed with a minimum of 120 semester hours unless designated otherwise. At least 30 hours of course work, which represents 25% of the required 120 hours, must be at the upper division level in order to fulfill the University's residency requirement. At least 15 of the 30 upper-division hours must be in the major or concentration area. An overall grade-point-average (GPA) of 2.0 is required for graduation. In addition, a minimum GPA of 2.0 is required in the student's major or concentration area.

### Requirements For A Major In Chemistry (Biochemistry Track)

A minimum of 39 semester hours in Chemistry beyond the CH 132 and CH 132L course level, as listed below:

Major in Chemistry (Biochemistry Track)	Credit Hours
A minimum of 39 semester hours in Chemistry beyond the CH 132 and CH 132L course level, as listed below:	39
CH 131, 131L	3, 1 hrs
CH 132, 132L	3, 1 hrs
CH 150	2 hrs
CH 201, 201L	3, 1 hrs
CH 202, 202L	3, 1 hrs
CH 265, 265L	3, 1 hrs
CH 300, CH 300L OR CH 301, 301L OR CH 302, 302L	3, 1 hrs
CH 440, 441	3, 3 hrs
CH 443	2 hrs
CH 465, 465L	3, 2 hrs
CH 492	1 hr
CH 394/494	4 hrs

Electives: In addition to those courses above, a student must choose one (1) other 300/400 level Chemistry, physical science, or life science course (no less than 3 hrs) with the prior approval of their advisor and department chair to satisfy the degree program requirements.

**Mathematics** Two Semesters of Calculus (MA 125, MA 126)

**Physics** Students are to select one of the following options. Option 1: PH 201 and PH 202; Option 2: PH 114, PH 115, and MA 227; Option 3: PH 114, PH 115, and PH 201 with approval of the physics department chair; Option 4: PH 114, PH 115, and PH 202 with approval of the physics department chair.

Students in the Biochemistry track who desire ACS Certification of their degree must take CH 401 and 401L as their elective course.

### General Education Requirements For Chemistry Majors

Areas I, II, and IV of the General Education Requirements for Chemistry are specified in the College of Arts and Sciences section. Note that Area III requirements (Mathematics and Natural Sciences) are fulfilled by the major requirements specified above.



# Minor In Chemistry

## Degree Requirements

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If a minor is required in your degree program, at least 9 (lower and/or upper-division) hours of courses in the minor must be completed at the University.

### Requirements For A Minor In Chemistry

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A minimum of 12 semester hours in Chemistry beyond the CH 132 and CH 132L course level is required. This minor will consist of CH 201 and CH 201L, CH 202 and CH 202L, and CH 265 and CH 265L. Students are advised to consult with the Chair of the Department of Chemistry.

# Civil, Coastal, And Environmental Engineering

## Department Information

<b>Department of Civil, Coastal, and Environmental Engineering Staff</b>	
	<b>(251) 460-6174</b>
Chair	Kevin D. White
Professors	White
Associate Professors	Laier, Omar, Islam, Webb
Assistant Professors	Cleary, Kang, Pandit, Smallegan, Steward

Department of Civil, Coastal, and Environmental Engineering web site  
<http://www.southalabama.edu/colleges/engineering/ce/index.html>

Civil Engineering involves the design and construction of systems necessary for our modern society to function. It encompasses many technical specialties whose focus is the design of large, normally one-of-a-kind, facilities such as bridges, buildings, tunnels, highways, dams, waterways, airports, flood control systems, coastal protection systems, water supply networks, and waste treatment plants. As our society expands, challenging opportunities will continue to be available for Civil Engineers practicing in their own private firms, in large companies, or in governmental agencies.

### BSCE Program Educational Objectives:

The educational objectives of the Civil Engineering undergraduate program are that, within a few years of program completion, graduates will have used the knowledge and skills gain through academic preparation and post-graduation experience so they have:

1. Advanced in the civil engineering profession, obtained professional licensure, and applied engineering knowledge and problem-solving skills to multi-disciplinary projects.
2. Incorporated economic, environmental, social, regulatory, constructability, and sustainability considerations into the practice of civil engineering.
3. Exhibited effective communication, teamwork, leadership, initiative, project management, and professional and ethical behavior as complements to technical competence.
4. Continued their technical and professional development, which may include graduate level education, continuing education, and participation in professional organizations.

### BSCE Student Outcomes:

By the time of graduation from the Civil Engineering Program, students should attain the following outcomes:

1. An ability to apply knowledge of mathematics, science, and engineering.
2. An ability to design and conduct experiments, as well as to analyze and interpret data.
3. An ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability.
4. An ability to function on multidisciplinary teams.
5. An ability to identify, formulate, and solve engineering problems.
6. An understanding of professional and ethical responsibility.
7. An ability to communicate effectively.
8. The broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context.
9. A recognition of the need for, and an ability to engage in life-long learning.
10. A knowledge of contemporary issues.
11. An ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.

12. An appreciation of the unique concerns regarding safety when working with electrical and computer systems.

The Bachelor of Science in Civil Engineering program is accredited by the Engineering Accreditation Commission of ABET, <http://www.abet.org>.

The curriculum builds on a strong base in mathematics, physical sciences, engineering sciences, and humanities developed primarily during the freshman and sophomore years. During the junior year, students develop an understanding of the fundamentals of each area of Civil Engineering. The specialty areas include:

- Environmental Engineering
- Geotechnical Engineering
- Structural Engineering
- Transportation Engineering
- Water Resources and Coastal Engineering

The senior year focuses on design, construction practices, and the integration of more advanced knowledge in civil engineering. A comprehensive project with students participating in a design team prepares them to enter professional practice.

Satisfactory completion of the program outlined below leads to a Bachelor of Science in Civil Engineering. Students must also comply with the College of Engineering Requirements for a Degree which is covered in this Bulletin under College of Engineering.

## Areas Of Study

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### Degrees, Programs, Or Concentrations

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Civil Engineering (BS).....	302
Civil Engineering (MS).....	308

## Courses

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### Course Listing

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Civil Engineering.....	900
Engineering.....	969
Systems Engineering.....	1151

## Faculty

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CLEARY, JOHN C.  
Assistant Professor  
BSCE, Cleveland State University  
MS, Cleveland State University  
PHD, Case Western Reserve U

ISLAM, SAMANTHA  
Associate Professor  
BS, Bangladesh Univ of Engineer  
MS, Purdue University-Main Campus  
PHD, Purdue University-Main Campus

LAIER, JAMES E.  
Associate Professor  
BSCE, Citadel Military Col of S Caro  
MSCE, West Virginia University  
PHD, University of Florida

CLOUTIER, ROBERT J.  
Professor  
BS, United States Naval Academy  
MBA, Eastern University  
PHD, Stevens Inst of Technology

KANG, MIN W.  
Assistant Professor  
BS, Hanyang University  
MS, Hanyang University  
MS, University of Maryland-Cllg Pk  
PHD, University of Maryland-Cllg Pk

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BS, Embry-Riddle Aeronautical U  
MS, University of Arkansas- Fayette  
MSCE, University of Alabama  
MS, University of Alabama  
PHD, University of Alabama

OMAR, HUSAM A.  
Associate Professor  
BS, University of Texas- Arlington  
MS, University of Texas- Arlington  
PHD, Univ of Manitoba

PANDIT, ARKA  
Assistant Professor  
BE, Bengal Engineering and Sci Uni  
MS, University of Mass-Dartmouth  
PHD, Georgia Inst of Tech - Main

SMALLEGAN, STEPHANIE M.  
Assistant Professor  
BSCE, Georgia Inst of Tech - Main  
MSCE, Georgia Inst of Tech - Main  
PHD, Virginia Polytechnic Inst and

STEWARD, ERIC J.  
Assistant Professor  
BS, University of CO- Colorado Sp  
MS, Louisiana Tech University  
PHD, Louisiana Tech University

WEBB, BRET M.  
Associate Professor  
BS, University of Florida  
MS, University of Florida  
PHD, University of Florida

WHITE, KEVIN D.  
Professor  
BS, Louisiana State University  
ME, Louisiana State University  
PHD, Virginia Polytechnic Inst and

# Civil Engineering (BS)

## Degree Requirements

First Year		Credit Hours
Fall		16
MA 125	4 hrs	
CH 131	4 hrs	
EG 101	2 hrs	
EH 101	3 hrs	
Gen Ed*	3 hrs	
Spring		17
MA 126	4 hrs	
CH 132	4 hrs	
EH 102	3 hrs	
CE 102	2 hrs	
PH 201	4 hrs	
Second Year		Credit Hours
Fall		17
MA 227	4 hrs	
Sci Elective**	4 hrs	
CE 204	2 hrs	
CE 205	1 hrs	
EG 283	3 hrs	
Gen Ed*	3 hrs	
Spring		18
MA 238	3 hrs	
ST 315	3 hrs	
EG 284	3 hrs	
EG 315	3 hrs	
Gen Ed*	3 hrs	
Gen Ed*	3 hrs	

Third Year		Credit Hours
Fall		17
CE 314	3 hrs	
CE 315	1 hrs	
CE 352	3 hrs	
CE 384	3 hrs	
CE 385	1 hrs	
EG 231	3 hrs	
EG 360	3 hrs	
Spring		17
CE 340	3 hrs	
CE 341	1 hrs	
CE 353*****	3 hrs	
CE 360	2 hrs	
CE 367	1 hrs	
CE 370	3 hrs	
CE 374	1 hrs	
Gen Ed*	3 hrs	
Fourth Year		Credit Hours
Fall		16
CE 431	2 hrs	
CE 440*****	3 hrs	
CE 470*****	3 hrs	
CE 471	1 hrs	
Str Design***	3 hrs	
Str Dsn Lab***	1 hrs	
CE 460*****	3 hrs	
Spring		13
CE 432	4 hrs	
Tech Elect****	3 hrs	
Tech Elect****	3 hrs	
Gen Ed*	3 hrs	

\*Students must complete eighteen credit hours of courses in Humanities and Fine Arts and History, Social and Behavioral Sciences that satisfy both college and university General Education requirements. CA 110, Public Speaking is required for all Civil Engineering students.

\*\*BLY 121, GY 111, or GEO 102

\*\*\*Either CE 480 and CE 481 (Steel Design) or CE 485 and CE 486 (Concrete Design)

\*\*\*\*Two Technical Electives from an approved list. A second structural design course may be taken to satisfy a technical elective requirement.

\*\*\*\*\*Students must complete all 5 terminal subdiscipline courses (CE 353, 440, 460, 470, and structural design) with a "C" grade or better.

It is important that students make adequate progress in the Civil Engineering program. Satisfactory completion of a set of fundamental courses is required before a student is allowed to take advanced courses. Professional Component Standing (PCS) is awarded by the chair of the department when the student completes the College of Engineering PCS requirements and the CCEE departmental PCS requirements.

College of Engineering PCS Courses			
Course Number	Course Title	Credit Hours	Minimum Grade
EH 101	English Composition I	3	C
EH 102	English Composition II	3	C
CH 131	General Chemistry I + Lab	4	C
MA 125	Calculus I	4	C
MA 126	Calculus II	4	C
PH 201	Calculus-Based Physics I + Lab	4	C

Civil, Coastal, and Environmental Engineering PCS Courses			
Course Number	Course Title	Credit Hours	Minimum Grade
CH 132	General Chemistry II + Lab	4	C
MA 227	Calculus III	3	C
EG 283	Statics	3	C
CE 102	Intro to Civil Engineering	2	C
CE 204/205	Surveying Fundamentals + Lab	3	C
Science Elective	Biology, Geology, or Land Processes	4	C

Students who fail to maintain at least a 2.00 GPA overall at the University of South Alabama may be required to take or repeat appropriate courses as specified by the department chair to correct their deficiencies and may not be permitted to continue in 300- and 400-level engineering courses.

## Major Milestones

### CIVIL ENGINEERING SAMPLE 4-YEAR PLAN WITH MILESTONES

Term 1	Course Description	Pre-req	Cr Hrs	Milestone Notes
EH 101*	English Composition I		3	Must complete at least 12 hours with a 2.0 or higher GPA

MA 125	Calculus I	ACT Math 27	4	
CH 131/131L	General Chemistry I	ACT Math 24	4	
EG 101	Freshman Seminar	ACT Math 24	2	
<b>Fine Arts Elective</b>			3	
			<b>16</b>	

Term 2	Course Description	Pre-req	Cr Hrs	Milestone Notes
EH 102	English Composition II	EH 101 or test score	3	MA 125
MA 126	Calculus II	MA 125	4	CH 131/131L
CH 132/132L	General Chemistry II	CH 131	4	EH 101 or EH 105*
PH 201/201L	Physics I	MA 125 and MA 126 (cc)	4	
CE 102	Intro to Civil Engineering	ACT Math 24+ or MA 112	2	
			<b>17</b>	

Term 3	Course Description	Pre-req	Cr Hrs	Milestone Notes
MA 227	Calculus III	MA 227 (cc)	4	PH 201/201L
CE 204	Surveying Fundamentals	CE 102 and MA 113	2	MA 126
CE 205	Surveying Fundamentals Lab	CE 102 and MA 113	1	CH 132/132L
EG 283	Statics	MA 126 and PH 201	3	
Science Elective	See advisor for approved course list		4	
<b>History (US or Western Civ.)</b>			3	
			<b>17</b>	

Term 4	Course Description	Pre-req	Cr Hrs	Milestone Notes
MA 238	Differential Equations	MA 227 (cc)	3	MA 227
EG 284	Dynamics	EG 283	3	EG 283
EG 315	Mechanics of Materials	EG 283 and MA 227	3	EH 102
ST 315	Apps Prob and Statistics	MA 125	3	Science Elective

CA 110		3	CE 204
English Literature		3	CE 205
		<b>18</b>	

Term 5	Course Description	Pre-req	Cr Hrs	Milestone Notes
CE 314	Civil Engineering Materials	EG 315 and CE 315 (cc)	3	
CE 315	Civil Engineering Materials Lab	EG 315 and CE 314 (cc)	1	
CE 384	Structural Analysis	EG 315	3	
CE 385	Structural Analysis Lab	EG 315	1	
EG 231	Engineering Economics and Ethics	EG 283	3	
EG 360	Fluid Mechanics	MA 238 and EG 284	3	
EH 372	Technical Writing	EH 102	3	
			<b>17</b>	

Term 6	Course Description	Pre-req	Cr Hrs	Milestone Notes
CE 340	Soil Mechanics	EG 315, EG 360, and CE 341 (cc)	3	Apply for graduation
CE 341 (W)	Geotechnical Lab	CE 340 (cc)	1	
CE 352	Transportation Engineering	CE 204 and CE 205	3	
CE 360	Water Resources Engineering I	EG 360 and CE 205	2	
CE 367 (W)	Hydraulics Lab	EG 360 and CE 360 (cc)	1	
CE 370	Intro to Environmental Engineering	CH 132 and MA 238	3	
CE 374	Environmental Engineering Lab	CH 132 and MA 238		
Social/ Behavioral Elective			3	
			<b>17</b>	

Term 7	Course Description	Pre-req	Cr Hrs	Milestone Notes
CE 431	Senior Design List		2	

CE 443	Geotechnical Engineering	CE 340	3
CE 460	Water Resources Engineering II	CE 360	3
CE 470	Water/Wastewater	CE 360, CE 370, and CE 374	3
CE 471	Water/Wastewater Lab	CE 360, CE 370, and CE 374	1
Structural Design Elective	See advisor for approved course list		4
			<b>16</b>

Term 8	Course Description	Pre-req	Cr Hrs	Milestone Notes
CE 432	Senior Design II		4	
Technical Elective	See advisor for approved course list		3	
Technical Elective	See advisor for approved course list		3	
Social/Behavioral Elective			3	
			<b>13</b>	
<b>**TOTAL</b>			<b>131</b>	

All bolded courses meet general education requirements.

Courses listed as Milestones are required to obtain the Professional Component Standing (PCS).

Prerequisite courses denoted (cc) may be taken concurrently.

\*Students who earn an English ACT score of 27, or a written SAT score of 550, can opt out of EH 101.

**\*\*Students not Term 1 - Calculus I ready will exceed the 131 hours required for this degree. If math is not started prior to Fall -Year 1, you are likely extending your four-year graduation time table. Students with ACT Math scores 21 and below should begin math courses in the summer before Fall - Year 1.**

Two designated writing (W) courses are required with at least one course chosen from offerings in the student's major or minor. Courses carrying this required credit are identified in the University Bulletin by a (W) after the course title.

The Sample 4-year plan is designed as a guide for students preparing for their course selections. This information provides only a suggested schedule. Actual course selections should be made in consultation with an advisor.

# Civil Engineering (MS)

## Degree Requirements

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The program leading to the Master of Science in Civil Engineering focuses on civil engineering in the coastal environment and allows for specialization in several possible civil engineering sub-disciplines: Environmental Engineering, Geotechnical Engineering, Structural Engineering, Transportation Engineering, or Water Resources/Coastal Engineering. Program admission and MS Degree requirements, as well as plan of study options (thesis, project, and coursework only), are described under the College of Engineering section of this Bulletin. Most graduate courses in Civil Engineering are offered in late afternoon or early evening to accommodate practicing engineers. See degree requirements.

### Admission To The MSCE Program

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The following criteria supplement the College of Engineering admission criteria ([see Admission To Graduate Programs](#)):

1. Regular Admission
  - a. A grade-point average of 3.0 or greater (A=4.0) on all undergraduate work is required.
  - b. A minimum score of 151 on the GRE quantitative section and a minimum score of 146 on the GRE verbal section is required.
  - c. Names and e-mail addresses of three (3) references who can evaluate the applicant's previous academic and professional work must be submitted with the application.
  - d. Verification of registration by examination as a Professional Engineer (P.E.) can be substituted for GPA and GRE.
  - e. International students must submit documentary evidence showing TOEFL test scores of 71 on the internet based test or IELTS band score of 6.5 or higher.
2. Provisional Admission
  - a. A minimum grade-point average of 2.5 (A=4.0) on all undergraduate work is required.
  - b. A minimum score of 151 on the GRE quantitative section and a minimum score of 146 on the GRE verbal section is required.
  - c. Names and e-mail addresses of three (3) references who can evaluate the applicant's previous academic and professional work must be submitted with the application.
  - d. International students must submit documentary evidence showing TOEFL test scores of 71 on the internet based test or IELTS band score of 6.5 or higher.

Applicants to the MSCE program must submit official scores on the Graduate Record Exam (GRE). This requirement is waived for students who received the BSCE degree from USA. Those students may be required, however, to present GRE scores to be eligible for some assistantships or fellowships.

The minimum credit hour requirements for the different options pertaining to the MSCE degree are:

- Thesis Option: 31 credit hours
- Project Option: 34 credit hours
- Course Option: 33 credit hours

# Clinical And Counseling Psychology

## Department Information

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The University of South Alabama offers a Doctor of Philosophy in Clinical and Counseling Psychology (CCP). This program is a collaborative effort between the Department of Psychology in the College of Arts and Sciences and the Department of Professional Studies in the College of Education and Professional Studies. The Clinical and Counseling Psychology program prepares professionals to provide the most effective types of psychological care for individuals and communities. Graduates of the program will have a set of competencies which will also enable them to work successfully with a variety of other professionals for the purposes of health promotion and to treat mental disorders. Graduates might be employed in a variety of settings, including counseling centers in colleges and universities, medical centers, Veterans Administration hospitals, schools, private practices, health and wellness facilities, state and federal agencies, family counseling services, academic departments in higher education institutions, and professional associations. The program combines an asset-strength model from Counseling Psychology with a health psychology/wellness model from Clinical Psychology. Graduates will be comfortable providing care in a variety of settings including medical, traditional mental health or counseling, school, university, and community. Such care would include direct service to individuals and the management of psychological services for individuals and groups using evidence-based interventions.

### Program Admission Requirements

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Students are admitted to start the program in the fall semester. No spring or summer admission will be accepted. Participation in the program is full-time and, with the exception of an assistantship, students are discouraged from engaging in any outside employment. Applications to the Clinical and Counseling Psychology (CCP) program should be completed by December 15th for admission for the following fall semester. In addition to the Graduate School application form and required supporting documentation, the Clinical and Counseling Psychology program requires submission of a program application form, a statement of purpose, and three letters of academic recommendation. The following criteria supplement the Graduate School criteria for admission:

In addition to meeting graduate school requirements for regular admission, applicants to the Clinical and Counseling Psychology program must meet the following criteria:

- a. Summed score of 300 or greater on the verbal and quantitative sub tests of the General Test of the Graduate Record Examination will be expected.
- b. Completion of an undergraduate or graduate degree in psychology, counseling or a similar program from an accredited institution.

### Required Psychological Foundations

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Students must complete graduate course work and demonstrate competency in the following foundation areas. These courses will typically be completed in the student's Master's degree program of study, but in exceptional circumstances, deficiencies may be approved to be addressed in the doctoral program of study. Each deficiency will reduce the likelihood of admission, however, or may extend time to complete the program.

- Cognitive Psychology
- Counseling and Psychotherapy Skills
- Evidence Based Practice in Psychology
- Inferential Statistics
- Lifespan Developmental Psychology
- Personality Assessment
- Physiological Psychology
- Psychometrics
- Psychopathology
- Research Design
- Social Psychology

Applicants should submit the following materials by December 15th to:

University of South Alabama  
Office of Admissions  
Meisler Hall, Suite 2500  
Mobile, Alabama 36688-0002

- Official GRE scores
- Official copies of all undergraduate and graduate academic transcripts
- Statement of purpose
- Three letters of academic recommendation
- Clinical and Counseling Psychology program application form
- Graduate School application form
- Those interested in applying for a graduate assistantship should also submit a graduate assistantship application form
- One or two representative work samples of current skills (e.g., test reports, counseling summaries, research reports, publications, etc.)

## Graduate Assistantships

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Graduate assistantships are available annually on a competitive basis. Applicants interested in receiving an assistantship should complete the graduate assistantship application form.

## Comprehensive Examination

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Students must pass a comprehensive examination following successful completion of their academic work to be admitted to candidacy for the doctoral degree. The content of the comprehensive examination will be determined by the comprehensive examination committee and may consist of a written as well as an oral component.

## Candidacy

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Admission to candidacy for the doctoral degree requires completion of the following:

- successful completion of required academic work
- successful completion of the comprehensive examination
- approval of a dissertation research project

The doctoral candidate is, therefore, a student who has fulfilled all requirements for the Ph.D. degree with the exception of completing the dissertation research and the required internship.

## Dissertation Hours And Defense

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Nine credit hours of dissertation research may be applied to and are required for completion of the doctoral program of studies in Clinical and Counseling Psychology. However, a student must be continually enrolled in CCP 799 (Dissertation Research) until the final defense of the dissertation is completed and the dissertation document has been approved by the Graduate School. The final defense is scheduled following the completion of and preparation of the final written report of the dissertation research. Revisions of the dissertation may be required for final approval by the student's advisory committee or as a condition of the Graduate School's evaluation of the written report.

## The Limit

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After being admitted to candidacy for the Ph.D. degree in Clinical and Counseling Psychology, the student has a maximum of three years to complete the dissertation.

## Areas Of Study

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# Clinical And Counseling Psychology (Ph.D.)

## Degree Requirements

### Program Completion Requirements

A minimum of 60 credit hours of doctoral level courses taken at the University of South Alabama is required for the doctoral degree in Clinical and Counseling Psychology.

Course Work	Credit Hours
Core courses, including:	36
Ethics and Practice in Professional Psychology	3 hrs
Applied Multivariate Statistics in Psychology	3 hrs
Applied Health Psychology	3 hrs
Psychology of Resilience to Trauma/Crisis	3 hrs
History and Systems	3 hrs
Group and Systems Theory and Intervention	3 hrs
Multicultural/Diversity Issues	3 hrs
Supervision of Clinical Interventions Internship	3 hrs
Practicum I	3 hrs
Practicum II	3 hrs
Practicum III	3 hrs
Dissertation research on a subject identified jointly by the student and his or her Advisory Committee	9
Elective courses are to be selected from the following list of courses.	9
Teaching of Psychology	3 hrs
Introduction to Neuropsychology	3 hrs
Advanced Applied Psychophysiology and Biofeedback	3 hrs
Child and Family Psychopathology and Intervention	3 hrs
Special Topics	3 hrs
Supervision of Clinical Interventions	3 hrs
Practicum III	3 hrs
Directed Studies	1-3 hrs

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Psychology Internship

3 hrs

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Note: This list above represents the minimum requirements for completion of the doctoral program of studies. A student may be required or elect to take additional course work in a specific area if needed to enhance skills or to support an area of specialization. Each candidate for the Ph.D. degree in clinical psychology takes practicum courses in the psychological clinic and must also complete a one-year internship in an accredited facility. The internship is taken after completion of coursework and passing of the doctoral preliminary exam, and is a degree requirement.

# Communication

## Department Information

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Department of Communication web site

<http://www.southalabama.edu/colleges/artsandsci/communication/index.html>

The purpose of the Department of Communication is to provide students with core competencies, within the context of a broad liberal arts and sciences curriculum, which will prepare them to be independent, critical thinkers who uphold the highest ethical standards as communication leaders in a global society.

Given this purpose, the Department attempts to meet individual performance and career needs with a flexible curriculum. Students select one of the concentrations offered and confer with their advisors to plan their courses of study. These focused areas of study help prepare students for a variety of careers in the communication field.

The concentrations of study offered in Communication are: Communication Studies, Digital Cinema and Television, Journalism (Multimedia Journalism and Broadcast Journalism), and Strategic Communication. Students pursuing a degree in Communication also must have a minor in another discipline.

All first-time freshmen must successfully complete CAS 100: First Year Experience as a degree requirement. Students must enroll during their first term at USA, except for summer-entry students who must enroll in the fall semester following entry.

### Honors In Communication

The Communication Departmental Honors program offers undergraduate students an opportunity to prepare for a graduate program or professional career. Students in this program will use their communication skills to develop a formal research project. To be awarded Department honors in communication, students must:

1. Complete the standard requirements for the major in communication.
2. Have an overall institutional GPA of 3.5 or higher (University requirement).
3. Have a minimum 3.5 GPA in all communication courses (Department requirement).
4. Complete a communication research methods course (CA 300, mass communication concentrations or CA 424, communication studies concentration) with an earned grade of "B" or higher. This course may be counted toward the communication degree and toward 3 hours of upper division credit.
5. Complete a minimum of 3 credit hours, and no more than 6 credit hours in the Senior Honors Project, CA 499. Students receiving honors in communication will be required to take a minimum of 48 hours in communication (including CA 110, Public Speaking).
6. Successfully defend the final research project during an oral presentation to a faculty committee. It is recommended that the student present a summary of the project during the Department's colloquium series and/or another appropriate public forum.

Application procedure - Students must:

1. Have earned an overall institutional GPA of 3.5 or higher and a minimum 3.5 GPA in all communication courses.
2. Apply by April 1 of their junior year.
3. Receive agreement of a tenure-track faculty member of the Communication Department to serve as mentor, and obtain a letter of recommendation from that faculty member.
4. Receive permission of the Department Chair.

## Areas Of Study

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### Degrees, Programs, Or Concentrations

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## Faculty

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AUCOIN, JAMES L. Professor BA, University of Missouri-KC MA, University of Colorado-Boulder PHD, University of Missouri-Columb	MOODY, REGINALD F. Associate Professor BA, University of South Alabama MA, University of South Alabama PHD, University of Southern Miss
BUSH, NADIA K. Senior Instructor BA, University of South Alabama MA, University of South Alabama	RIGSBY, KATHERINE B. Instructor BA, University of South Alabama MA, University of South Alabama
DARDEAU, GENEVIEVE M. Senior Instructor BA, Auburn University MA, Florida State University	ROCKWELL, STEVEN C. Associate Professor BA, University of South Alabama MA, University of Alabama PHD, University of Alabama
GLOVER, JOSEPH L. Assistant Professor BA, University of Miami MA, University of Florida PHD, University of Florida	SHEFFIELD, JESSICA L. Assistant Professor BA, University of Alabama-Huntsv MA, Pennsylvania State University PHD, Pennsylvania State University
HOSSAIN, MOHAMMAD D. Assistant Professor BA, University of Dhaka MA, University of Dhaka PHD, Southern Illinois U-Carbondale	SPARKS, MEGAN S. Senior Instructor BA, University of South Alabama MA, University of South Alabama
LONG ANDERSON, MIA C. Assistant Professor ABJ, University of Georgia MS, University of Tennessee-Knox PHD, University of Alabama	TAYLOR, APRIL D. Assistant Professor BS, University of Southern Miss MS, University of Southern Miss PHD, University of South Alabama
MARK, PATRICIA F. Associate Professor BA, University of South Alabama MBA, University of South Alabama PHD, University of Southern Miss	WARD, RICHARD L. Professor BA, University of Southern CA MS, University of Southern Miss PHD, University of Texas- Austin

# Communication (BA) - Communication Studies Concentration

## Degree Requirements

Majors in Arts and Sciences may be completed with a minimum of 120 semester hours unless designated otherwise. At least 30 hours of course work, which represents 25% of the required 120 hours, must be at the upper division level in order to fulfill the University's residency requirement. At least 15 of the 30 upper-division hours must be in the major or concentration area. An overall grade point average (GPA) of 2.0 is required for graduation. In addition, a minimum GPA of 2.0 is required in the student's major or concentration area.

### Requirements For A Major In Communication

Communication majors must complete the College of Arts and Sciences Public Speaking requirement (CA 110) and 5 additional Communication Core classes: CA 101, Introduction to Communication Media or CA 100, Introduction to Communication; CA 220-W, Introduction to Writing and Reporting for the Media (W) or CA 210, Argumentation; CA 260, Digital Writing and Production; CA 300, Foundations of Communication Research; and CA 445, Ethics and Social Responsibility in Communication. Students in mass communication concentrations (Strategic Communication, Multimedia or Broadcast Journalism, or Digital Cinema and TV) MUST take CA101 and CA220.

In addition to these 6 courses, all communication majors must complete 27 semester hours in one of the Department's concentrations listed below. At least 5 communication classes (15 hours) must be numbered 300 or higher and must be taken at USA. Only 3 hours of credit from CA 394 or CA 494 can be used to satisfy this requirement.

### General Education Requirements For Communication Majors

General Education Requirements for Communication are specified in the College of Arts and Sciences Section. Communication majors and minors may use CA 222, Rhetoric Culture and Society, in the Humanities and Fine Arts Section.

### General Education Technology Requirement

Students in the Department of Communication may take CA 260 or CIS 150 to fulfill the College's General Education Requirement for a technology training course.

#### Communication Studies

The communication studies concentration allows students to analyze, evaluate, and critique human communication practices in a variety of contexts such as the workplace, the family and the community. Students will develop skills that can be used in many fields or careers.

Required: CA 200, CA 222, CA 275, CA 310

Choose five classes from the following courses:

CA222, CA230, CA315, CA330-W, CA410, CA411, CA430, CA422, CA424-W, CA425, CA453, CA475, CA496

# Communication (BA) - Digital Cinema & Television Concentration

## Degree Requirements

Majors in Arts and Sciences may be completed with a minimum of 120 semester hours unless designated otherwise. At least 30 hours of course work, which represents 25% of the required 120 hours, must be at the upper division level in order to fulfill the University's residency requirement. At least 15 of the 30 upper-division hours must be in the major or concentration area. An overall grade point average (GPA) of 2.0 is required for graduation. In addition, a minimum GPA of 2.0 is required in the student's major or concentration area.

### Requirements For A Major In Communication

Communication majors must complete the College of Arts and Sciences Public Speaking requirement (CA 110) and 5 additional Communication Core classes: CA 101, Introduction to Communication Media or CA 100, Introduction to Communication; CA 220-W, Introduction to Writing and Reporting for the Media (W) or CA 210, Argumentation; CA 260, Digital Writing and Production; CA 300, Foundations of Communication Research; and CA 445, Ethics and Social Responsibility in Communication.

In addition to these 6 courses, all communication majors must complete 27 semester hours in one of the Department's concentrations listed below. At least 5 communication classes (15 hours) must be numbered 300 or higher and must be taken at USA. Only 3 hours of credit from CA 394 or CA 494 can be used to satisfy this requirement.

### Special Requirements For Mass Communication Concentrations: Digital Cinema And Television, Journalism (Multimedia And Broadcast), And Strategic Communication

1. Students in these concentrations must take CA 101 and CA 220, either as part of the core or as additional classes.
2. At least 72 hours in courses outside the Department of Communication are required, including general education requirements required by the College of Arts and Sciences.

### General Education Requirements For Communication Majors

General Education Requirements for Communication are specified in the College of Arts and Sciences Section. Communication majors and minors may use CA 222, Rhetoric Culture and Society, in the Humanities and Fine Arts Section.

### General Education Technology Requirement

Students in the Department of Communication may take CA 260 or CIS 150 to fulfill the College's General Education Requirement for a technology training course.

#### Digital Cinema and Television

This track focuses on the practical aspects of digital television and film production. Students will gain a broad theoretical understanding of media while participating in hands-on field and high definition studio production. Students will also gain an understanding of the historical, aesthetic, and management side of media production.

Required: CA 241, CA 320, CA 340, CA 341, CA 356, CA 440

Choose 1: CA 343, CA 344

Choose 2: CA 240, CA 244, CA 275, CA 283, CA 284, CA 343 (if not chosen above), CA 344 (if not chosen above), CA 352, CA 382, CA 383, CA 424-W, CA 441, CA 452, CA 496

# Communication (BA) - Journalism Concentration

## Degree Requirements

Majors in Arts and Sciences may be completed with a minimum of 120 semester hours unless designated otherwise. At least 30 hours of course work, which represents 25% of the required 120 hours, must be at the upper division level in order to fulfill the University's residency requirement. At least 15 of the 30 upper-division hours must be in the major or concentration area. An overall grade point average (GPA) of 2.0 is required for graduation. In addition, a minimum GPA of 2.0 is required in the student's major or concentration area.

### Requirements For A Major In Communication

Communication majors must complete the College of Arts and Sciences Public Speaking requirement (CA 110) and 5 additional Communication Core classes: CA 101, Introduction to Communication Media or CA 100, Introduction to Communication; CA 220-W, Introduction to Writing and Reporting for the Media (W) or CA 210, Argumentation; CA 260, Digital Writing and Production; CA 300, Foundations of Communication Research; and CA 445, Ethics and Social Responsibility in Communication.

In addition to these 6 courses, all communication majors must complete 27 semester hours in one of the Department's concentrations listed below. At least 5 communication classes (15 hours) must be numbered 300 or higher and must be taken at USA. Only 3 hours of credit from CA 394 or CA 494 can be used to satisfy this requirement.

### Special Requirements For Mass Communication Concentrations: Digital Cinema And Television, Journalism (Multimedia And Broadcast), And Strategic Communication

1. Students in these concentrations must take CA 101 and CA 220, either as part of the core or as additional classes.
2. At least 72 hours in courses outside the Department of Communication are required, including general education requirements required by the College of Arts and Sciences.

### General Education Requirements For Communication Majors

General Education Requirements for Communication are specified in the College of Arts and Sciences Section. Communication majors and minors may use CA 222, Rhetoric Culture and Society, in the Humanities and Fine Arts Section.

### General Education Technology Requirement

Students in the Department of Communication may take CA 260 or CIS 150 to fulfill the College's General Education Requirement for a technology training course.

#### Journalism

Backed by the First Amendment to the U.S. Constitution, journalism promises to provide citizens with useful information about public issues and be a watchdog on powerful institutions, including government and business. Students in the journalism track choose between multimedia journalism and broadcast news, but also receive cross-training to provide them with as broad a range of skills as possible within the confines of an academic degree.

Required: CA 350, CA 370-W, CA 455

Choose Group A or Group B:

Group A. Multimedia Journalism: CA 281, CA 382, CA 387, 482; and Choose 2 from CA 288, CA 481-W, CA 496

Group B. Broadcast Journalism: CA 250, CA 450, CA 451, CA 454; and Choose 2 from CA 288, CA 382, CA 482, CA 496

# Communication (BA) - Strategic Communication Concentration

## Degree Requirements

Majors in Arts and Sciences may be completed with a minimum of 120 semester hours unless designated otherwise. At least 30 hours of course work, which represents 25% of the required 120 hours, must be at the upper division level in order to fulfill the University's residency requirement. At least 15 of the 30 upper-division hours must be in the major or concentration area. An overall grade point average (GPA) of 2.0 is required for graduation. In addition, a minimum GPA of 2.0 is required in the student's major or concentration area.

### Requirements For A Major In Communication

Communication majors must complete the College of Arts and Sciences Public Speaking requirement (CA 110) and 5 additional Communication Core classes: CA 101, Introduction to Communication Media or CA 100, Introduction to Communication; CA 220, Introduction to Writing and Reporting for the Media-W or CA 210, Argumentation; CA 260, Digital Writing and Production; CA 300, Foundations of Communication Research; and CA 445, Ethics and Social Responsibility in Communication.

In addition to these 6 courses, all communication majors must complete 27 semester hours in one of the Department's concentrations listed below. At least 5 communication classes (15 hours) must be numbered 300 or higher and must be taken at USA. Only 3 hours of credit from CA 394 or CA 494 can be used to satisfy this requirement.

### Special Requirements For Mass Communication Concentrations: Digital Cinema And Television, Journalism (Multimedia And Broadcast), And Strategic Communication

1. Students in these concentrations must take CA 101 and CA 220, either as part of the core or as additional classes.
2. At least 72 hours in courses outside the Department of Communication are required, including general education requirements required by the College of Arts and Sciences.

### General Education Requirements For Communication Majors

General Education Requirements for Communication are specified in the College of Arts and Sciences Section. Communication majors and minors may use CA 222, Rhetoric Culture and Society, in the Humanities and Fine Arts Section.

### General Education Technology Requirement

Students in the Department of Communication may take CA 260 or CIS 150 to fulfill the College's General Education Requirement for a technology training course.

#### Strategic Communication

The Strategic Communication concentration integrates theories and applied methods of advertising, public relations, visual communication, research and digital technologies in the design of communication messages. The concentration emphasizes developing communication goals, creating effective messages, selecting appropriate media outlets, and measuring outcomes. Students may specialize in advertising (either account management or visual communication) or public relations to complement their strategic communication course work.

Required: CA 224, CA 321, CA 485, CA 486 or CA 487

Choose from one of the following two groups:

#### Group 1 – Advertising

##### A. Account Management

Required: CA 324(W), CA 381, CA 384

Choose 2: CA 322(W), CA 470, CA 474, CA 496

##### B. Visual Communication

Required: CA 271, CA 322(W), CA 371, CA 471

Choose 1: CA 383, CA 496

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Group 2 – Public Relations

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Required: CA324, CA381.

Choose 3: CA 323, CA 325, CA375, CA 387, CA 453, CA 470, CA 496

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# Communication (MA) – Non-Thesis Option

## Degree Requirements

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### Graduate Studies

The Master of Arts degree in Communication is a broad-based degree program that integrates theoretical and research components of mass communication and rhetorical communication. The program is designed to prepare recent graduates and experienced professionals for doctoral studies, professional advancement, and personal enrichment.

The Department's graduate faculty combines applied knowledge with communication theory and works to engage students to think critically as they address communication practices and issues. Courses examine how communication creates, sustains, and changes personal lives, organizations, political and cultural institutions, and society.

The program curriculum consists of 33 credit hours, including a 9-hour core, 24 hours from elective courses from the communication and other university departments, and successful completion of a written qualifying examination.

### Requirements For Admission

All applications must receive approval from the Graduate Program Coordinator, the Director for Graduate Studies for the College of Arts and Sciences, and the Graduate Dean. Students are admitted each semester and must meet the following requirements:

#### Regular Admission

##### GRE/GMAT Scores

Students must submit a satisfactory score on the general portion of the Graduate Record Examination or the Graduate Management Admissions Test. The scores required for regular admission are:

- GRE - For exams taken after November 1, 2011, the required score is 297 or more combined points on the quantitative and verbal portions. For exams taken prior to November 1, 2011, the required score is 1,000 or more combined points on the quantitative and verbal portions.
- GMAT - A combined score of 1000 or more when calculated as follows:  $200 \times \text{undergraduate GPA} + \text{GMAT score}$ .
- Earned graduate degree - An earned graduate degree may substitute for graduate entry exam scores. Students must submit a written request along with evidence of the degree to the graduate coordinator for review.

#### Undergraduate Requirements

Students must submit official copies of undergraduate transcripts indicating the following:

- A minimum grade point average of 3.0.
- A major in communication or 15 semester hours in communication. A bachelor's degree in a field related to communication or a master's degree earned in a field other than communication may be offered as a substitute for a major in communication. Students must submit written request for review to the Graduate Coordinator.

#### International Students

- International students must submit documentation of TOEFL test scores of at least 525 (197 on computer based test) or 71 on internet based test, or a minimum score of 6 on the IELTS.
- Students who are required to take the English Language Proficiency Examination and whose scores suggest an English language deficiency must take the appropriate English as a Second Language courses. These courses are not counted as part of the 33-hour degree program.

#### Provisional Admission

Students who do not meet the requirements for regular admission may apply for provisional admission if they meet the following standards:

##### GRE/GMAT Scores

- GRE - For exams taken after November 1, 2011, a score of 311 using the formula (GRE quantitative and verbal score + [undergraduate GPA x 10] = 311 is required. For exams taken prior to November 1, 2011, the required score is 800 or more combined points on the quantitative and verbal portions.
- GMAT - A combined score of 800 or better when calculated as follows: 200 x undergraduate GPA + GMAT score.

### **Undergraduate Requirements**

Students must submit official copies of undergraduate transcripts indicating the following:

- A minimum grade point average of 2.5 on all undergraduate work or a 2.75 on the last 64 hours of undergraduate work. Students with a GPA below 2.5 may want to consider enrolling in undergraduate classes to increase their GPA average before applying to graduate school. Students with less than a 2.5 undergraduate GPA will not be admitted under any circumstances. USA course work completed after graduation is automatically averaged into the final GPA. The USA Office of Academic Records computes transfer credit averages and can advise students in determining when the minimum GPA has been met.
- An undergraduate minor in communication or 15 semester hours in communication or a related field.

Provisional students will be eligible for regular standing after accruing at least 9 500-level semester hours (usually 3 courses) taken for graduate credit toward the degree requirements with at least a 3.0 GPA. Applications for regular status must be submitted prior to completion of 16 credit hours. Provisional students who do not have a 3.0 GPA after completing 16 hours of course work will be subject to dismissal from the program.

### **Non-Degree Admission**

Students may register for and complete up to 15 hours without formal entrance into the program.

### **Degree Requirements And Courses**

Students must complete a minimum of 33 semester hours of credit in approved 500-level courses. This includes 6 hours additional course work. A minimum of 27 semester hours must be completed at the University of South Alabama. At least 27 semester hours must be taken in communication. All students are required to pass a written qualifying examination and non-thesis tracks students are required to take two additional courses numbered 500 or above.

### **Core Courses**

For students with an undergraduate degree in communication, the normal requirements consist of the following 3 courses. These courses must be completed at the University of South Alabama.

- CA 500, Introduction to Graduate Studies in Communication. Students must take CA 500 before or concurrently with their first 500-level classes, or be given permission by the graduate studies coordinator to delay enrollment in CA 500.
- CA 502, Communication Theory (generally offered in the fall semester)
- CA 503, Communication Research Methods (generally offered in the spring semester).

Although students are advised to take CA 502 and CA 503 sequentially, they are not required to do so.

### **Remaining Courses**

- With advisor approval, students may take up to 6 of the 33 required graduate hours outside of the Communication Department. Students should work closely with their advisors to develop a plan of study.
- After completing the three required courses, the remaining hours (excluding any directed studies, courses outside the department, or thesis hours for those on the thesis-track will come from the following list. The courses for a focus in strategic communication (above the core curriculum) are as follows:
  - CA 501, Qualitative Research Methods
  - CA 510, Persuasion and Professional Communication
  - CA 545, Communication Ethics
  - CA 549, Media Effects
  - CA 560, Digital Communication
  - CA 570, Audience Dynamics
  - CA 576, History of Strategic Communication
  - CA 585, Strategic Crisis Management
  - CA 522, Rhetorical Strategy for Communication Professionals
  - CA 555, Corporate and Public Communication Law
  - CA 590, Special Topics in Communication

### **Directed Studies - CA 594**

Directed study courses involve independent study of a communication topic. The purpose is to provide study in an area of specialization not covered by an existing course.

- The student must submit a topic proposal to a graduate faculty member. Once the topic is approved, both the faculty member and the student must sign a contract describing student expectations and outcomes and grading criteria.
- The student can register for between 1 and 3 credit hours in CA 594 courses with course requirements determined accordingly.
- The student may take a maximum of 3 hours in directed study coursework.

### **Grade Requirements**

- A minimum of a 3.0 GPA on all work attempted is required for graduation.
- Courses in which a student receives a "D" or below will not be counted toward the degree program.
- A maximum of 2 courses with a grade of "C" will be counted toward the degree program.
- Students receiving 3 grades of "C" or below, regardless of the overall GPA, will be dismissed from the program.
- A student who receives a failing grade in a course for graduate credit may be dismissed from the program.

### **Time Limitations**

- All degree requirements must be completed within 7 calendar years.
- Most students who take 9 hours per semester complete the degree within a 2-year period.
- The time required for degree completion depends on how many courses a student can take each semester and the ability of that student to complete the thesis or final project.

### **Course Load**

- Two or three courses (6-9 credit hours) per semester constitute a full-time course load.

### **Written Qualifying Examinations**

All degree candidates must successfully complete a written qualifying examination after successful completion of all core requirements and before the student completes 24 credit hours. The exams lasts 4 hours and covers material from Department graduate core courses. It provides an opportunity for students to demonstrate independent thought and depth of understanding of the discipline. Using examples from the area of specialization, students should be prepared to demonstrate the ability to:

- Conceptualize problems.
- Create and critique research designs
- Evaluate literature, research theories, models, and methodologies
- Discern, discuss, and explain substantive issues, problems, trends, alternative perspectives and research approaches in both general and specific areas.

The qualifying examination may be attempted no more than 2 times. A student who fails this examination must wait until the next, regularly scheduled examination before repeating it. Failure of the examination on the second attempt will result in dismissal from the program.

# Communication (MA) – Thesis Option

## Degree Requirements

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### Graduate Studies

The Master of Arts degree in Communication is a broad-based degree program that integrates theoretical and research components of mass communication and strategic and rhetorical communication. The program is designed to prepare recent graduates and experienced professionals for doctoral studies, professional advancement, and personal enrichment.

The Department's graduate faculty combines applied knowledge with communication theory and works to engage students to think critically as they address communication practices and issues. Courses examine how communication creates, sustains, and changes personal lives, organizations, political and cultural institutions, and society.

The program curriculum consists of 33 credit hours, including a 9-hour core, 18 hours from elective courses from the communication and other university departments, a written qualifying examination, and 6 credit hours toward completion of a thesis.

### Requirements For Admission

All applications must receive approval from the Graduate Program Coordinator, the Director for Graduate Studies for the College of Arts and Sciences, and the Graduate Dean. Students are admitted each semester and must meet the following requirements:

#### Regular Admission

#### GRE/GMAT Scores

Students must submit a satisfactory score on the general portion of the Graduate Record Examination or the Graduate Management Admissions Test. The scores required for regular admission are:

- GRE - For exams taken after November 1, 2011, the required score is 297 or more combined points on the quantitative and verbal portions. For exams taken prior to November 1, 2011, the required score is 1,000 or more combined points on the quantitative and verbal portions.
- GMAT - A combined score of 1000 or better when calculated as follows:  $200 \times \text{undergraduate GPA} + \text{GMAT score}$ .
- Earned graduate degree - An earned graduate degree may substitute for graduate entry exam scores. Students must submit a written request along with evidence of the degree to the graduate coordinator for review.

#### Undergraduate Requirements

Students must submit official copies of undergraduate transcripts indicating the following:

- A minimum grade point average of 3.0.
- A major in communication or 15 semester hours in communication. A bachelor's degree in a field related to communication or a master's degree earned in a field other than communication may be offered as a substitute for a major in communication. Students must submit written request for review to the Graduate Coordinator.

#### International Students

- International students must submit documentation of TOEFL test scores of at least 525 (197 on computer based test) or 71 on internet based test or a minimum score of 6 on the IELTS.
- Students who are required to take the English Language Proficiency Examination and whose scores suggest an English language deficiency must take the appropriate English as a Second Language courses. These courses are not counted as part of the 33-hour degree program.

#### Provisional Admission

Students who do not meet the requirements for regular admission may apply for provisional admission if they meet the following standards:

## GRE/GMAT Scores

- GRE - For exams taken after November 1, 2011, the score is 311 using the formula (GRE quantitative and verbal score + [undergraduate GPA \* 10])=311 is required. For exams taken prior to November 1, 2011, the required score is 800 or more combined points on the quantitative and verbal portions.
- GMAT - A combined score of 800 or better when calculated as follows: 200 x undergraduate GPA + GMAT score.

## Undergraduate Requirements

Students must submit official copies of undergraduate transcripts indicating the following:

- A minimum grade point average of 2.5 on all undergraduate work or a 2.75 on the last 64 hours of undergraduate work. Students with a GPA below 2.5 may want to consider enrolling in undergraduate classes to increase their GPA average before applying to graduate school. Students with less than a 2.5 undergraduate GPA will not be admitted under any circumstances. USA course work completed after graduation is automatically averaged into the final GPA. The USA Office of Academic Records computes transfer credit averages and can advise students in determining when the minimum GPA has been met.
- An undergraduate minor in communication or 15 semester hours in communication or a related field.

Provisional students will be eligible for regular standing after accruing at least 9 500-level semester hours (usually 3 courses) taken for graduate credit toward the degree requirements with at least a 3.0 GPA. Applications for regular status must be submitted prior to completion of 16 credit hours. Provisional students who do not have a 3.0 GPA after completing 16 hours of course work will be subject to dismissal from the program.

## Non-degree Admission

Students may register for and complete up to 15 hours without formal entrance into the program.

## Degree Requirements And Courses

Students must complete a minimum of 33 semester hours of credit in approved 500-level courses. This includes 6 hours for thesis. A minimum of 27 semester hours must be completed at the University of South Alabama. At least 27 semester hours must be taken in communication. All students are required to pass a written qualifying examination and non-thesis tracks students are required to complete a final project.

## Core Courses

For students with an undergraduate degree in communication, the normal requirements consist of the following 3 courses. These courses must be completed at the University of South Alabama.

- CA 500, Introduction to Graduate Studies in Communication. Students must take CA 500 before or concurrently with their first 500-level classes, or be given permission by the graduate studies coordinator to delay enrollment in CA 500.
- CA 502, Communication Theory (generally offered in the fall semester)
- CA 503, Quantitative Communication Research Methods (generally offered in the spring semester)

Although students are advised to take CA 502 and CA 503 sequentially, they are not required to do so.

## Remaining Courses

- With advisor approval, students may take up to 6 of the 33 required graduate hours outside of the Communication Department. Students should work closely with their advisors to develop a plan of study.
- After completing the three required courses, the remaining hours (excluding any directed studies, courses outside the department, or thesis hours for those on the thesis-track will come from the following list. The courses for a focus in strategic communication (above the core curriculum) are as follows:

# CA 501, Qualitative Research Methods

# CA 510, Persuasion and Professional Communication

# CA 545, Communication Ethics

# CA 549, Media Effects

# CA 560, Digital Communication

# CA 570, Audience Dynamics

- # CA 576, History of Strategic Communication
- # CA 585, Strategic Crisis Management
- # CA 522, Rhetorical Strategy for Communication Professionals
- # CA 555, Corporate and Public Communication Law
- # CA 590, Special Topics in Communication

### **Directed Studies - CA 594**

Directed study courses involve independent study of a communication topic. The purpose is to provide study in an area of specialization not covered by an existing course.

- The student must submit a topic proposal to a graduate faculty member. Once the topic is approved, both the faculty member and the student must sign a contract describing student expectations and outcomes and grading criteria.
- The student can register for between 1 and 3 credit hours in CA 594 courses with course requirements determined accordingly.
- The student may take a maximum of 3 hours in directed study coursework.

### **Grade Requirements**

- A minimum of a 3.0 GPA on all work attempted is required for graduation.
- Courses in which a student receives a "D" or below will not be counted toward the degree program.
- A maximum of 2 courses with a grade of "C" will be counted toward the degree program.
- Students receiving 3 grades of "C" or below, regardless of the overall GPA, will be dismissed from the program.
- A student who receives a failing grade in a course for graduate credit may be dismissed from the program.

### **Time Limitations**

- All degree requirements must be completed within 7 calendar years.
- Most students who take 9 hours per semester complete the degree within a 2-year period.
- The time required for degree completion depends on how many courses a student can take each semester and the ability of that student to complete the thesis or final project.

### **Course Load**

- Two or three courses (6-9 credit hours) per semester constitute a full-time course load.

### **Written Qualifying Examinations**

All degree candidates must successfully complete a written qualifying examination after successful completion of all core requirements and before the student completes 24 credit hours. The exam lasts 4 hours and covers material from Department graduate core courses. It provides an opportunity for students to demonstrate independent thought and depth of understanding of the discipline. Using examples from the area of specialization, students should be prepared to demonstrate the ability to:

- Conceptualize problems.
- Create and critique research designs
- Evaluate literature, research theories, models, and methodologies
- Discern, discuss, and explain substantive issues, problems, trends, alternative perspectives and research approaches in both general and specific areas.

The qualifying examination may be attempted no more than 2 times. A student who fails this examination must wait until the next, regularly scheduled examination before repeating it. Failure of the examination on the second attempt will result in dismissal from the program.

# Minor In Communication

## Degree Requirements

If a minor is required in your degree program, at least 9 (lower and/or upper-division) hours of courses in the minor must be completed at the University.

### Requirements For A Minor In Communication

Minors in Communication must complete a total of 21 hours including CA 110 (Public Speaking), and 18 additional hours in communication including 9 upper division hours.

Minor in Communication	Credit Hours
Students may elect to focus on a communication track as listed below, but no course except CA 110 will be considered as required:	21
Advertising: CA 224, 300, 321, 322; choose 1 from upper division CA courses	
Broadcast News: CA 220, 250, 350, 450, 451, 454	
Documentary News: CA 220, 250, 350, 451, 452	
Interpersonal Communication: CA 211, 275, 315, 330, 411	
Media/Film Studies: CA 101, CA 222; choose 3 from CA 343, 344, 351, 352	
Multimedia Story Telling: CA 220, 350, 370, 382, 482	
Multimedia Journalism: CA 220, 281, 370, 445; choose 1 from CA 387, 455, 482	
Public Relations: CA 220, 224, 324, 485, 486	
Digital Cinema/TV: CA 241, 244, 340, 440; choose 1 from CA 343, 344, 351, 441	
Rhetoric: CA 210, 222, 422, 424; choose 1 from CA 310, 410, 425	

# Computer Science

## Department Information

### Department of Computer Science Staff

Associate Professor &amp; Computer Science Chair

Dr. Tom Johnsten

Computer Science is a discipline that involves the understanding and design of computers and computational processes. In its most general form, it is concerned with the understanding of information transfer and transformation. Particular interest is placed on making processes efficient and endowing them with some form of intelligence. The discipline includes both advancing the fundamental understanding of algorithms and information processes in general, as well as the practical design of efficient, reliable software to meet given specifications. Courses offer students the opportunity to explore current trends in computing such as: information assurance, big data, video game development, computer graphics and robotics.

## Areas Of Study

### Degrees, Programs, Or Concentrations

Computer Science (BS).....	330
Computer and Information Sciences (MS).....	332
Minor in Computer Sciences.....	334

## Courses

### Course Listing

Computer Science.....	921
Computer and Inform Sciences.....	926
Health Informatics.....	1001
Information Systems.....	1014
Information Technology.....	1018

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MBA, Tennessee Technological U  
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PHD, Florida State University

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MS, University of Cincinnati  
MS, Univ. of Michigan-Dearborn

YAMPOLSKIY, MARK  
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MS, Technical University of Munich  
PHD, Ludwig-Maximilians Univ Munich

YASINSAC, ALEC F.  
Professor  
BS, Appalachian State University  
MS, Naval Postgraduate School  
PHD, University of Virginia

# Computer Science (BS)

## Degree Requirements

Computer Science (BS)		Course Title	Credit Hours
Requirements: Fifty-one (51) credit hours, with a minimum grade of "C" in each course, are required as follows			51
CA 275	3 hrs	Small Group Discussion	
EH 372	3 hrs	Technical Writing (W)	
CSC 108	3 hrs	Introduction to Computer Science	
CSC 120	4 hrs	Problem Solving and Programming Concepts	
CSC 228	3 hrs	Digital Logic and Comp Architecture	
CSC 231	4 hrs	Introduction to Data Structures and Algorithms	
CIS 300	1 hr	Information Technology in Society	
CSC 311	3 hrs	Networking and Communications	
CSC 320	3 hrs	Computer Organization and Architecture	
CSC 322	3 hrs	Operating Systems	
CSC 331	3 hrs	Software Engineering Principles (W)	
CSC 332	3 hrs	Advanced Data Structures and Algorithms	
CSC 333	3 hrs	Program Language Theory	
CSC 399	3 hrs	Concurrency and Distributed Computing	
CSC 440	3 hrs	Secure Software Engineering	
CSC 434	3 hrs	Formal Language and Automata Theory	
CIS 497	3 hrs	Senior Project (W)	
CIS 498	0 hrs	Senior Seminar	
Computer Science Electives - Twelve (12) credit hours, with a minimum grade of "C" in each course, are required. Select any four (4) of the following courses:			12
CSC 410	3 hrs	Compiler Design & Construction	
CSC 412	3 hrs	Real-Time Systems	
CSC 413	3 hrs	Computer Graphics	
CSC 416	3 hrs	Artificial Intelligence Theory and Programming	
CSC 417	3 hrs	Game Development	
CSC 418	3 hrs	Advanced Game Development	
CSC 428	3 hrs	Introduction to Bioinformatics	
CIS 324	3 hrs	Database Concepts	
CIS 494	3 hrs	Directed Study	

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CSC 457	3 hrs	Data Warehousing
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CSC 490	3 hrs	Computer Science Special Topics
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Computer Science General Studies Electives - Hours as needed to meet degree and 125 semester hour requirement. All General Studies Electives must be approved by the Computer Science Coordinator.

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# Computer And Information Sciences (MS)

## Degree Requirements

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### Requirements For Masters Degree With Computer Science (CSC) Specialization

Students must satisfactorily complete all prescribed Graduate Professional Component courses, a comprehensive examination, and thirty-six (36) graduate credit hours for the Master of Science degree with Computer Science specialization. Required prerequisite courses are prescribed by the Computer Science Chair after reviewing prior academic work and results from any required School of Computing Foundation Placement Examinations.

Computer Science Specialization majors must complete their Computer Systems program with a minimum grade of "B" in core courses, and an overall GPA of 3.0. The thirty-six (36) graduate semester hours consisting of twelve (12) semester hours of CORE courses, six (6) semester hours of REQUIRED courses, and eighteen (18) semester hours of approved elective courses according to the selected concentration option as follows:

### Required Courses (18 Semester Hours):

- Performance Evaluation of Algorithms CSC 522
- Software Engineering Principles CS 527
- Computer Architecture CSC 520
- Data Security CSC 580 or MA 581
- CIS Research Methodologies CIS 518
- Distributed Systems CSC 532

### Concentrations (18 Semester Hours):

Two concentrations of study are available to students who select the Computer Science Specialization in the SoC masters program. These are THESIS and COURSE-ONLY concentrations.

### Thesis Concentration

For the Thesis Concentration, eighteen (18) semester hours of required and elective course work are required.

### Research Development

A minimum of three (3) semester hours credit of CIS 595, Computer and Information Sciences Research Development, are required. A Thesis Concentration student must be enrolled in CIS 595 in the semester during which they defend their thesis prospectus. A grade of "C" or lower in CIS 595 will result in the dismissal of the student from the Thesis Concentration.

### Thesis

A minimum of three (3) semester hours credit of CIS 599, Computer and Information Sciences Thesis, must be applied towards the degree for the Thesis Concentration. Students may only enroll in CIS 599 after successfully defending their thesis prospectus (minimum grade of "B" in CIS 595). A Thesis Concentration student must be enrolled in CIS 599 in the semester during which they defend and/or submit their thesis.

### Elective Course Work

Twelve (12) semester hours of additional approved electives are required. A maximum of three (3) semester hours of Special Permission courses may be applied to the degree for the Thesis Concentration. A list of Pre-Approved Computer Science courses and a list of Special Permission courses are given at the end of this section.

### Comprehensive Examination

All students in the Thesis Concentration must pass an oral comprehensive examination administered after the thesis committee accepts the thesis. The School of Computing Comprehensive Examination Policies and Procedures document and the Comprehensive Examination Application form are available at <http://www.southalabama.edu/colleges/soc>.

### Course Only Concentration

For the Course Only Concentration, eighteen (18) semester hours of elective course work are required.

## Elective Course Work

A maximum of six (6) semester hours of Special Permission courses may be applied to the degree for the Course Only Concentration. No credits from CIS 599 may be applied to the Course Only Concentration. A list of Pre-Approved Computer Science courses and a list of Special Permission courses are given at the end of this section.

## Comprehensive Examination

Students in the Course Only Concentration must pass a written examination. Students wishing to sit for the examination must apply online to the Director of SoC Graduate Studies by the Friday of the last week of classes in the semester prior to which the examination is to be taken. The comprehensive examination is offered at least once a year. The School of Computing Comprehensive Examination Policies and Procedures document and the Comprehensive Examination Application form are available at <http://www.southalabama.edu/colleges/soc>.

## Computer Science Electives

A list of Pre-Approved Computer Science elective courses and a list of Special Permission courses are given below. All other courses must be approved by the Computer Sciences Chair. A maximum of six (6) credit hours of non-CSC or non-CIS courses will be allowed.

### Pre-approved Computer Science Electives

- Compiler Design and Construction
- Communications and Network Analysis
- Real-Time Software Systems
- Computer Graphics
- Modeling and Simulation
- Numerical Analysis
- Artificial Intelligence Theory and Programming
- Game Development
- Computer Language Design
- Data Mining
- Introduction to Bioinformatics
- Artificial Intelligence and Heuristic Programming
- Information Assurance and IT Auditing
- Digital Forensic Analysis
- Network Security
- Special Topics in Computer Science
- Data Warehousing
- Information Systems Database Management
- Advanced Data Management

### Special Permission Courses

Approval of the Computer Science Chair and the Director of the School of Computing Graduate Studies is required for CIS graduate faculty sponsorship of a Special Permission course. A maximum of nine (9) credit hours of Special Permission courses may be applied to the degree for the Thesis Concentration or the Project Concentration; a maximum of six (6) credit hours of Special Permission courses may be applied to the degree for the Course Only Concentration.

- Directed Study
- Computer and Information Sciences Research Development

# Minor In Computer Sciences

## Degree Requirements

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(23 hours) A student wishing to obtain a minor in Computer Science must complete all courses shown below with a minimum grade of "C".

Course	Course Title
CSC 120	Problem Solving and Programming Concepts
CSC 228	Digital Logic and Computer Architecture
CSC 231	Introduction to Data Structures and Algorithms
CSC 311	Networking and Communications
CSC 322	Operating Systems
CSC 332	Advanced Data Structures and Algorithms
<b>And one course from</b>	
CSC 320	Computer Organization and Architecture
CIS 324	Database Design, Development, and Management
CSC 331	Software Engineering Principles (W)

# Computing

## Department Information

### Doctor of Philosophy Program in Computing

Associate Professor & Computer Science Coordinator

Dr. Tom Johnsten

Computer Science is a discipline that involves the understanding and design of computers and computational processes. In its most general form, it is concerned with the understanding of information transfer and transformation. Particular interest is placed on making processes efficient and endowing them with some form of intelligence. The discipline includes both advancing the fundamental understanding of algorithms and information processes in general, as well as the practical design of efficient, reliable software to meet given specifications. Courses offer students the opportunity to explore current trends in computing such as: game development, robotics, graphics, and data mining.

## Areas Of Study

### Degrees, Programs, Or Concentrations

Computing (Ph.D.)..... 337

## Courses

### Course Listing

Computer Science..... 921  
 Computer and Inform Sciences..... 926  
 Health Informatics..... 1001  
 Information Systems..... 1014  
 Information Technology..... 1018

## Faculty

ANDEL, TODD R.  
 Professor  
 BS, University of Central Florida  
 MS, Air Force Inst of Technology  
 PHD, Florida State University

BLACK, MICHAEL E.  
 Senior Instructor  
 BS, University of South Alabama  
 MS, University of South Alabama  
 PHD, Capella University

CAMPBELL, STEPHEN M.  
 Associate Professor  
 BS, Tennessee Technological U  
 MBA, Tennessee Technological U  
 PHD, University of NC- Charlotte

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 Assistant Professor  
 BS, Loyola University-New Orleans  
 MS, University of LA at Lafayette  
 PHD, University of LA at Lafayette

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 Assistant Professor  
 BA, Michigan State University  
 PHD, Auburn University

CHAPMAN, DEBRA L.  
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 BS, University of Southern Miss  
 MS, University of South Alabama  
 PHD, University of Southern Miss

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MS, University of South Alabama

DENTON JR., LEO F.  
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MS, University of South Alabama

HOLIFIELD, JEFFREY K.  
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BS, Southern Illinois U-Carbondale  
MA, George Washington University  
MMOAS, Community Col Of The Air  
Force  
MS, University of South Alabama

HUANG, JINGSHAN  
Associate Professor  
BE, Fuzhou University  
ME, University of SC-Columbia  
PHD, University of SC-Columbia

JOHNSTEN, TOM  
Associate Professor  
BS, Oklahoma State University  
MS, Arizona State University-Main  
PHD, University of LA at Lafayette

LANDRY, JEFFREY P.  
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BS, University of New Orleans  
MBA, University of New Orleans  
PHD, Florida State University

LUCAS, RHONDA L.  
Part-Time Instructor  
BS, University of South Alabama  
MS, University of South Alabama

MCDONALD, JEFFREY T.  
Professor  
BS, US Air Force Academy  
MBA, University of Phoenix  
MS, Air Force Inst of Technology  
PHD, Florida State University

MCKINNEY, DAWN M.  
Senior Instructor  
BA, University of South Alabama  
MS, University of South Alabama

MENARD, PHILIP R.  
Assistant Professor  
BS, Nicholls State University  
MIS, University of Phoenix  
PHD, Mississippi State University

OVERSTREET, PAUL R.  
Instructor  
BS, University of Alabama  
MS, University of Alabama

PARDUE, JOHN H.  
Professor  
BA, University of South Alabama  
MS, University of South Alabama  
PHD, Florida State University

SHROPSHIRE, JORDAN D.  
Associate Professor  
BBA, University of Florida  
PHD, Mississippi State University

SMITH, MELISSA E.  
Senior Instructor  
BS, Troy University-Main  
MS, University of South Alabama

SWEENEY JR., ROBERT B.  
Associate Professor  
BS, Auburn University  
MS, University of Memphis  
PHD, University of Memphis

VAN DEVENDER, MAUREEN S.  
Instructor  
BS, University of South Alabama  
MBA, Spring Hill College

WHITSTON, HOWARD E.  
Instructor  
BS, Lawrence Technological U  
MS, University of Cincinnati  
MS, Univ. of Michigan-Dearborn

YAMPOLSKIY, MARK  
Assistant Professor  
MS, Technical University of Munich  
PHD, Ludwig-Maximilians Univ Munich

YASINSAC, ALEC F.  
Professor  
BS, Appalachian State University  
MS, Naval Postgraduate School  
PHD, University of Virginia

# Computing (Ph.D.)

## Degree Requirements

### DOCTOR OF PHILOSOPHY IN COMPUTING

The interdisciplinary Doctor of Philosophy degree in Computing integrates coursework and research projects from three related disciplines: computer science, information systems, and information technology. The program emphasizes advanced discovery and the development of solutions to research-focused problems in the areas of cyber assurance, risk assessment, forensics, and data analytics. Ph.D. graduates are eligible for research positions in academia, industry, and government.

The Ph.D. degree is awarded to candidates who have demonstrated a capacity for original research, have made a meaningful contribution to knowledge in the computing discipline, and have successfully defended a dissertation.

### REQUIREMENTS FOR ADMISSION

Applicants are normally admitted in the fall semester and are encouraged to complete the admissions application prior to February 1. In addition to the general admission requirements of the USA Graduate School, admission requirements for the Computing Ph.D. program are:

1. A statement of purpose indicating the student's personal goals and research interests. Because prospective students are matched with a faculty mentor, competitive applications align with the research areas of School of Computing graduate faculty.
2. Three letters of recommendation from persons able to speak directly to the applicant's ability to engage in advanced discovery and contribute new knowledge to the discipline.
3. Curriculum vita
4. An official transcript from each college or university attended.
5. A baccalaureate or graduate degree in Computer Science, Information Systems, Information Technology or a closely related field. A graduate degree is not required for admission.
6. An undergraduate minimum GPA of 3.3 overall or a graduate minimum GPA of 3.5 overall (4 point scale).
7. Official scores for the Graduate Records Examination (GRE) including the AW portion.
8. For international students, an official TOEFL or IELTS score.
9. A completed application for admission to the Graduate School

Admission is competitive and the decision is based on a review of all submitted admission materials. A personal interview may be requested. Applicants are encouraged to submitted samples of prior work. All admissions materials should be sent to the Office of Admissions, 2500 Meisler Hall, Mobile Alabama 36688.

### PROGRAM REQUIREMENTS

To qualify for the Ph.D. in Computing, a minimum of 72 semester hours of approved graduate credit is required and the following program of study must be completed with a grade of "B" or better in all course work.

Required Course Work (18 hours)		
CIS 612	Cybersecurity	3 hrs
CIS 626	Tools for Analyzing Big Data	3 hrs
ISC 629	Computing Ecosystems	3 hrs
ISC 673	Digital Investigations – Theory and Practice	3 hrs
IST 675	Advanced Topics in Information Systems	3 hrs
ISC 686	Advanced Topics in Risk Analysis	3 hrs

**Electives (24 Hours)**

Student will complete 24 semester hours of 500-level or higher approved graduate coursework. A maximum of 12 semester hours of CIS 694 Directed Study may be counted towards fulfilling the electives requirement.

**Dissertation (30 Hours)**

A primary educational objective of the Ph.D. program is for students to develop the ability to conduct advanced research and contribute new knowledge to the discipline. To that end, the student will complete 30 hours of CIS 799 Dissertation.

**Academic Standards**

Student must maintain a cumulative 3.0 GPA in order to be in good standing. Failure to maintain a cumulative 3.0 GPA will result in the student being placed on academic probation. The School of Computing Director of Graduate Programs may recommend dismissal of a student who does not maintain good academic standing or is not making sufficient progress.

**GRADUATE ASSISTANTSHIPS**

Graduate assistantships are available annually on a competitive basis. The application deadline is July 1. Information regarding assistantships is available on the School of Computing website.

**COMPREHENSIVE EXAMINATIONS**

Doctoral students must pass a comprehensive examination. The format of the examination will be determined by the comprehensive examination committee. Normally the examination is based on the required coursework. Failure to pass the comprehensive examination within three attempts will result in dismissal from the program.

**CANDIDACY**

A doctoral student is admitted to candidacy upon successful completion of a comprehensive examination. Candidacy indicates the student has completed the required coursework and is eligible to begin the dissertation research project.

**DISSERTATION HOURS AND DEFENSE**

Doctoral candidacy is required to enroll in CIS 799 Dissertation. At the discretion of the Director of Graduate programs, directed study credit constituting preliminary preparation for the dissertation study may be substituted for CIS 799. While only 30 hours of CIS 799 may be counted toward the degree, a student must continuously enroll in at least 1 credit hour of dissertation during the fall and spring semesters until the dissertation is successfully defended. Failure to enroll continuously without the written approval of the Director of the Graduate program may lead to dismissal from the program.

A doctoral candidate must successfully defend a dissertation prospectus. The final oral defense of the dissertation is scheduled after the dissertation study has been completed and prepared in written form. Revisions to the written dissertation may be required for final approval by the dissertation committee and as a result of a review by the Graduate School.

**TRANSFER CREDIT**

A maximum of 24 semester hours of graduate credit earned at an approved graduate school may be counted toward the Ph.D. program. Transfer credit may be approved after the completion of nine (9) semester hours of credit at the University of South Alabama. Transfer credit must be approved by the School of Computing Director of Graduate programs with the recommendation of the student's advisor.

**TIME LIMIT**

After reaching candidacy, a student has a maximum of 3 years to complete the dissertation. A student may apply to the Director of Graduate programs for an extension to complete the degree.

## Graduation Plan

First Year Fall Semester	Course Description	Course Number	Credit Hours
	Digital Investigations	ISC 673	3
	Cybersecurity	CSC 612	3
	Comp Ecosystems	ISC 629	3
		Elective	3
			<b>12</b>
First Year Spring Semester	Course Description	Course Number	Credit Hours
	Risk Analysis	ISC 686	3
	Advanced Big Data	CSC 626	3
	Information Systems	ISC 675	3
	Elective	Elective	3
			<b>12</b>
Second Year Fall Semester	Course Description	Course Number	Credit Hours
	Dissertation	CIS 799	3
	Dissertation	CIS 799	3
	Elective	Elective	3
	Elective	Elective	3
			<b>12</b>
Second Year Spring Semester	Course Description	Course Number	Credit Hours
	Dissertation	CIS 799	3
	Dissertation	CIS 799	3
	Elective	Elective	3
	Elective	Elective	3
			<b>12</b>
Third Year Fall Semester	Course Description	Course Number	Credit Hours
	Elective	Elective	3

Dissertation	CIS 799	3
Dissertation	CIS 799	3
Dissertation	CIS 799	3
		<b>12</b>

<b>Third Year Spring Semester</b>	<b>Course Description</b>	<b>Course Numbers</b>	<b>Credit Hours</b>
	Elective	Elective	3
	Dissertation	CIS 799	3
	Dissertation	CIS 799	3
	Dissertation	CIS 799	3
			<b>12</b>

# Counseling And Instructional Sciences

## Department Information

<b>Department of Counseling and Instructional Sciences</b>	
	<b>(251) 380-2861</b>
Chair	James R. Stefurak
Professors	Davidson-Shivers, Johnson, Litchfield, Van Haneghan
Associate Professors	Fregeau, Lewis, Stefurak
Assistant Professors	Browning, McDermott, Moore, Upton
Instructors	Tashbin

Department of Counseling and Instructional Sciences website

<http://www.southalabama.edu/colleges/ceps/cins>

### Department Of Counseling And Instructional Sciences

The Department of Counseling and Instructional Sciences offers the Master of Education degree in Educational Media (leading to certification in Library Media), and in School Counseling leading to certification as a school counselor, and the Master of Science degree in Educational Media & Technology, Clinical Mental Health Counseling, and Instructional Design. The department also offers the Doctor of Philosophy degree in Instructional Design and Development. The department collaborates with the Department of Psychology in the College of Arts and Sciences to deliver the Ph.D. degree in Combined-Integrated Clinical & Counseling Psychology. Finally, the department offers the B.S. degree and minor in Instructional Design & Performance Improvement.

### Interdepartmental Education

Faculty within the department offer foundational coursework in Education Technology, Educational Psychology, Educational Foundations, and Educational Research. These courses are offered for students in the undergraduate and graduate programs throughout the college and are designed to broaden and strengthen degree-area preparation.

## Areas Of Study

### Degrees, Programs, Or Concentrations

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Graduate Certificate in Educational Media and Technology.....	350
Graduate Certificate in Human Performance Improvement.....	351
Graduate Certificate in Instructional Design and Development.....	352
Graduate Certificate in Mental Health Counseling.....	354
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Instructional Design and Performance Improvement (BS).....	361
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## Courses

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### Course Listing

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Counselor Education.....	929
Educational Foundations.....	943
Educational Media.....	949
Educational Psychology.....	950
Instructional Systems Design.....	1020
Interdepartmental Education.....	1023

## Faculty

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BILLINGSLEY, JOEL L.  
Associate Professor  
BS, University of South Alabama  
MS, University of South Alabama  
PHD, University of South Alabama

BROWNING, BRANDON R.  
Assistant Professor  
BBA, Idaho State University  
MCOUN, Idaho State University  
PHD, Auburn University

DAVIDSON-SHIVERS, GAYLE V.  
Professor  
BS, Oregon State University  
MA, University of Minn-Twin Cities  
PHD, University of Minn-Twin Cities

FREGEAU, LAUREEN A.  
Associate Professor  
BS, Stonehill College  
MA, University of Mass-Boston  
PHD, Pennsylvania State University

JOHNSON, ROBERT B.  
Professor  
BS, University of Oregon  
MS, Radford University  
MA, Bowling Green St U-Main  
Campus  
MPA, University of Michigan-Ann Arb  
PHD, University of Georgia

LITCHFIELD, BRENDA C.  
Professor  
BA, University of Florida  
MED, University Of North Florida  
PHD, Florida State University

MCDERMOTT, RYON C.  
Assistant Professor  
BA, University of Kansas  
MED, University of Houston  
PHD, University of Houston

STEFURAK, JAMES R.  
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AB, University of Georgia  
MED, University of Georgia  
PHD, University of Georgia

UPTON, AMY W.  
Assistant Professor  
BA, Old Dominion University  
MS, Old Dominion University  
PHD, Old Dominion University

VAN HANEGHAN, JAMES P.  
Professor  
BS, State University of New York  
MA, State University of New York  
PHD, University of Maryland-Bal Cnt

# Clinical Mental Health Counseling (MS)

## Degree Requirements

The program described below is designed to provide for the acquisition of skills and competencies needed by counselors working in an agency setting.

A grade of "B" or better is required in the professional major sequences.

Counselor educators are ethically required to ensure that students meet academic requirements and demonstrate clinical competencies. Satisfactory progress will be predicated on a combination of factors such as academic success, clinical competence, adherence to ethical standards, and appropriate interpersonal functioning. Students who do not demonstrate satisfactory competence within any of these critical areas of professional performance may be terminated from the program. Core faculty will evaluate students on a continuing basis to determine students' satisfactory progression through the program. Other policies, procedures, and guidelines are addressed in the Counselor Education Graduate Student Handbook.

### Admissions Requirements

The curriculum for the Clinical Mental Health Counseling program begins each summer semester and proceeds in a sequenced manner. Applications for graduate programs in counseling are reviewed in the spring of each year and students are admitted beginning in summer semester. The deadline for all application materials is February 1st.

Requirements for admission are:

1. A completed application for admission to the Graduate School.
2. One official copy of all undergraduate and graduate transcripts.
3. Three letters of recommendation from persons familiar with the applicant's academic and/or professional abilities.
4. A typed double-space statement of 3-5 pages in length regarding the applicant's career goal(s) and purpose(s) for pursuing the Master's program in counseling.
5. Results of the Graduate Record Examination (GRE) or the Miller Analogies Test (MAT).
6. Resume
7. Applicants whose application portfolio is deemed to be acceptable are required to participate in an interview by counseling program faculty.

Applications, transcripts, letters of recommendation and all supporting materials should be submitted to the Office of Admissions, 2500 Meisler Hall, University of South Alabama, Mobile, Alabama 36688-0002 by the deadlines noted above.

Final admission decisions involve evaluation of the following: grade-point average; scores on the GRE or MAT; letters of reference; professional experience; the applicant's statement of purpose; interview by counseling faculty and program enrollment and availability. All new students are required to attend the Counselor Education Graduate Student Orientation in the first semester following admission to one of the programs.

Students who are not enrolled for three consecutive semesters must complete all admissions requirements again and be reviewed by the program admissions committee.

Comprehensive Examination Type I is required.

Clinical mental health counseling requirements	Credit Hours
Requirements:	60 Semester Hour Minimum
Required Major Professional Core	39
CED 560	
CED 562	

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CED 566	
CED 571	
CED 572	
CED 574	
CED 576	
CED 584	
CED 586	
CED 588	
CED 592	
CED 597 (6 semester hours. required; 600 contact hours)	
Required Related Professional Courses	9
IDE 510	
EPY 521	
EPY 555	
Approved Electives	12

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# Educational Media (M.Ed.) – Library Media

## Degree Requirements

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The Department of Counseling and Instructional Sciences offers two options entirely over the Internet: Master of Education Degree with Certification in Library Media, and Alabama Class "A" Certification in Library Media. These options prepare students to plan, design, and administer school libraries and qualify them to serve as school librarians in P-12 schools. Because the programs are nationally recognized and accredited graduates may be able to qualify for certification in states other than Alabama.

For certification as a library media specialist by the State Department of Education, one must have completed a basic program in a teaching field. Eligibility for certification requires two years of appropriate professional experience. See specific requirements for each program. The initial certificate is valid for five years.

The online format offers students the flexibility and convenience of taking graduate courses at home, at the office, or wherever they have access to the Internet. The programs are designed to provide contact with the professor, interaction with other students, and access to the University Library and student services.

Satisfactory progress in the program will be predicated on a combination of factors such as academic success, demonstration of competence in requisite skills, adherence to ethical standards, and appropriate interpersonal functioning. Students who do not demonstrate satisfactory competence with any of these critical areas of professional performance may be terminated from the program. Core faculty will evaluate students on a continuing basis to determine students' satisfactory progression through the program.

### Admission Requirements

Applications for the Educational Media program are reviewed throughout the year. Deadlines for all application materials (specified below) are: Fall admission - June 15; Spring admission - December 1; and Summer admission - April 1. Requirements for admission are (in addition to the general Graduate School Standards):

1. A completed application for admission to the Graduate School.
2. One official copy of all undergraduate and graduate transcripts.
3. Two letters of recommendation from persons familiar with the applicant's academic and/or professional abilities. In addition, the letters should reference the applicant's dispositions necessary to help P-12 students learn.
4. A two page narrative from the applicant indicating the applicant's goal(s) and purpose(s) for pursuing the field of Educational Media, and the dispositions that make the applicant a good candidate for helping P-12 students learn.
5. For the master's degree, baccalaureate-level or master's level VALID Certificate in teaching field. For the endorsement only, a master's level VALID Certificate in a teaching field or another area of instructional support.
6. Results of the Graduate Record Examination (GRE), including the Analytical Writing component (required of all applicants, regardless of degrees and certificates previously earned).
7. A resume with a chronology of professional employment.
8. Two full years of full-time, acceptable professional education work experience.

Applications, transcripts, letters, and all supporting materials should be submitted to the Office of Admissions, 2500 Meisler Hall, University of South Alabama, Mobile, Alabama 36688-0002 by the deadlines noted above. Final admission decision involves evaluation of the following: grade-point average, scores on the GRE, letters of recommendation, applicant's statement of career goal(s) and purpose(s), professional experience, and program enrollment and availability.

Students entering this program must have access to a computer that contains the current Microsoft Office® suite. Specifically, the programs should include Microsoft Word®, Access®, PowerPoint®, Excel®, and Publisher®. Because students will be required to spend a great deal of time searching the Internet, a high-speed Internet connection is highly recommended.

### Master Of Education Degree With Certification In Library Media

(33 semester hours)

Students entering this program must have valid baccalaureate-level or master's level professional educator certification in a teaching field. Program requirements include:

1. Completing a minimum of 30 semester hours as outlined below, with a minimum grade-point average of 3.0 ("B") on all work attempted. A minimum grade of "B" is required for all EDM courses, and a satisfactory performance is required in each of the internship experiences.
2. Passing a written comprehensive and portfolio examination.
3. Passing the PRAXIS II test for Library Media Specialist.

Master Of Education Degree With Certification In Library Media	Credit Hours
Educational Media Core Courses	18
EDM 510	
EDM 533	
EDM 552	
EDM 580	
EDM 581	
EDM 583	
With the exception of EDM 510, enrollment is limited to Educational Media majors only.	
Internship	3
EDM 595-A (prerequisite EDM 581)	
EDM 595-B (prerequisite EDM 580)	
EDM 595-C (prerequisite EDM 583)	
See additional information below.	
Instructional Support Courses	9
EPY 502 or EDF 515 or Advisor Approved Elective	
IDE 510	
SPE 500 or EDU 567 (If a survey course in Special Education was previously taken at the undergraduate or graduate level, EDU 567 must be taken in lieu of SPE 500.)	

### Alabama Class "A" Certification In Library Media (21 Semester Hours)

To be eligible for admission to this program, students must have a valid Alabama master's level certification in a teaching field or a valid master's level certification in another area of instructional support and must have completed the equivalent graduate course work listed under Instructional Support Courses for the master's degree (9 semester hours). Program requirements include:

1. Completing the Educational Media Core (21 semester hours) as outlined below, with a minimum grade point average of 3.25 in all core courses and a satisfactory performance in each of the internship experiences.
2. Passing a written comprehensive and portfolio examination.
3. Passing the PRAXIS II test for Library Media Specialist.
4. Having at least two years of successful teaching experience at the time of admission.

Alabama Class "A" Certification In Library Media (21 Semester Hours)	Credit Hours
Educational Media Core Courses	18
EDM 510	
EDM 533	
EDM 552	
EDM 580	

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 EDM 581
 

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 EDM 583
 

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 With the exception of EDM 510, enrollment is limited to Educational Media majors only.
 

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 Internship
 

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3

 EDM 595-A (prerequisite EDM 581)
 

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 EDM 595-B (prerequisite EDM 580)
 

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 EDM 595-C (prerequisite EDM 583)
 

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 See additional information below.
 

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 In addition, an ALSDE-Approved diversity course is required if not previously taken with the Class A certification.
 

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Students will be required to accumulate a total of 300 contract hours during the three internships: A, B, and C (100 hours in each). Of the 300 contact total hours, 150 must be accumulated in a P-12 school library. Although it is preferred that all internship hours are accumulated in a P-12 school library, other settings may be approved such as a public or university library. Internship A MUST be conducted in a school library. Of the 300 total hours, at least 100 must be at the elementary level (K-6) and at least 100 at the secondary level (7-12); the remaining 100 may be at the level(s) of choice. It is the students' responsibility to initiate the internship experiences by: identifying potential sites and obtaining on-site administrative approval. Final approval of internship arrangements will be made by program faculty. The supervising library media specialist must be certified, currently employed as a media specialist, and have at least three successful years as a media specialist.

# Educational Media And Technology (MS)

## Degree Requirements

The University of South Alabama Master of Science degree in Educational Technology prepares educators to design, evaluate, and implement educational and instructional technology in the classroom. Through coursework and practical experiences in instructional design and information science, students will learn to use a diverse set of technological tools for design and development of effective instruction. Students will also evaluate technological tools and resources designed to enhance teaching and learning and collaborate with educators to use technology to enhance student experiences and outcomes.

The Master's program in Educational Technology is delivered entirely online. Graduates of the program will be prepared to use computer hardware and software, databases, and the internet to support teaching and learning in a variety of contexts.

For more detailed information, please visit the Educational Media and Technology program website: <http://www.southalabama.edu/colleges/ceps/cins/emt-ms.html>

### Admission Requirements

Applications for the Educational Media and Technology program are reviewed throughout the year. Deadlines for all application materials (specified below) are: Fall admission – June 15; Spring admission – December 1; and Summer admission – April 1. Requirements for admission are (in addition to the general Graduate School Standards):

1. A completed application for admission to the Graduate School.
2. One official copy of all undergraduate and graduate transcripts.
3. Two letters of recommendation from person's familiar with the applicant's academic and/or professional abilities.
4. Results of the Graduate Record Examination (GRE), including the Analytical Writing component (required of all applicants, regardless of degrees and certificates previously earned).
5. A resume with a chronology of professional employment.

Applications, transcripts, letters, and all supporting materials should be submitted to the Office of Admissions, 2500 Meisler Hall, University of South Alabama, Mobile, Alabama 36688-0002 by the deadlines noted above. The final admission decision involves evaluation of the following: grade-point average, scores on the GRE, letters of recommendation, applicant's statement of career goal(s) and purpose(s), professional experience, and program enrollment and availability.

Students entering this program must have access to a computer that contains the current Microsoft Office suite. Specifically, the programs should include Microsoft Word, Access, PowerPoint, Excel, and Publisher. Because students will be required to use the Internet as a component of this program, a high-speed Internet connection is highly recommended.

### Requirements For Degree

To qualify for the Master's Degree in Instructional Technology, candidates must satisfactorily complete the following program with a minimum grade of "B" or better on all course work. Students must complete a written course of study by the end of their first semester in this program. Students must successfully complete a written comprehensive exam, thesis paper, and a school-based instructional technology project. The exam may only be taken two times.

Requirements for the M.S. Degree in Educational Media and Technology	Credit Hours
Requirements for the M.S. Degree in Educational Media and Technology	(30 semester hours minimum)
Instructional Technology Core Courses	24
EDM 510	
EDM 520	
EDM 580	

EDM 584

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EDM 590

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EDM 591

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ISD 581

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Instructional Support Courses

6

EPY 502

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Electives

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# Graduate Certificate In Educational Media And Technology

## Degree Requirements

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Requirements for Graduate Certificate In Educational Media And Technology	Credit Hours
The Graduate Certificate for Educational Media and Technology requires a minimum of 6 courses (18 hours)	18
EDM 520	
EDM 584	
EDM 590	
ISD 621	
ISD 642	
ISD 651	

# Graduate Certificate In Human Performance Improvement

## Degree Requirements

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### Criteria

To be eligible, the student must meet the master's admission and applicant requirements of the IDD master's program. These include the following: a) hold a bachelor's degree or equivalent from a regionally accredited institution, and b) have a cumulative junior/senior undergraduate GPA of 2.5 or higher or 2.75 GPA or higher on the last 64 undergraduate credit hours.

### Application Procedures And Requirements

The students would make application to the certificate program via University admissions application process and submit documents and fees as required by the IDD certificate program.

The current requirements are as follows:

1. A completed application for admission to the Graduate School.
2. Official transcripts from all institutions attended.
3. Two letters of recommendation from persons familiar with the applicant's academic and/or professional abilities.
4. A statement of the applicant's career goal(s) and purpose(s) for pursuing one of the certificate programs.
5. Identify the certificate program to which they are applying (either IDD Certificate Program OR HPI Certificate Program).
6. Results of the Graduate Record Examination (GRE) including the writing component or the MAT, sent by the testing agency to the Registrar.

Applications, transcripts, letters, and all supporting materials should be submitted to the Office of Admissions, Administration Building, Room 182, University of South Alabama, Mobile, Alabama 36688-0002.

Final admission decision involves evaluation of the following: grade-point average, scores on the GRE, letters of reference, applicant's statement of career goal(s) and purpose(s), professional experience, and program enrollment and availability.

Applicants are responsible to ensure that all materials arrive within the deadline. Incomplete applications will not be considered. Applications will be retrieved for review when all materials are received.

An IDD program faculty admission committee will review applications, make admissions decisions and a written communication from the university will notify applicants about admissions decisions.

### Requirements For Certificate Program

A minimum GPA of 3.0 on all program of study courses and all work attempted is required. A maximum of two Cs can be counted. No grades of D or F may be counted. If a third C or any grade below is earned, the student will be dismissed from the program.

Those enrolled in the Certificate program may also elect to pursue the master's degree and be allowed to apply the courses toward their degree program once admitted and upon approval of the IDD faculty admissions committee.

Students enrolled in an IDD graduate program may opt to complete a certificate program to earn the certificate in addition to completing their degree program.

# Graduate Certificate In Instructional Design And Development

## Degree Requirements

Graduate Certificate for Instructional Design and Development		Credit Hours
Requirements		15
ISD 613	3 hrs	
ISD 621	3 hrs	
ISD 622	3 hrs	
ISD 642	3 hrs	
ISD 653	3 hrs	

To be eligible, the student must meet the master's admission and applicant requirements of the IDD master's program. These include the following: a) hold a bachelor's degree or equivalent from a regionally accredited institution, and b) have a cumulative junior/senior undergraduate GPA of 2.5 or higher or 2.75 GPA or higher on the last 64 undergraduate credit hours.

### Application Procedures And Requirement

The students would make application to the certificate program via University admissions application process and submit documents and fees as required by the IDD certificate program.

The current requirements are as follows:

1. A completed application for admission to the Graduate School.
2. Official transcripts from all institutions attended.
3. Two letters of recommendation from persons familiar with the applicant's academic and/or professional abilities.
4. A statement of the applicant's career goal(s) and purpose(s) for pursuing one of the certificate programs.
5. Identify the certificate program to which they are applying (either IDD Certificate Program OR HPI Certificate Program).
6. Results of the Graduate Record Examination (GRE) including the writing component or the MAT, sent by the testing agency to the Registrar.

Applications, transcripts, letters, and all supporting materials should be submitted to the Office of Admissions, Administration Building, Room 182, University of South Alabama, Mobile, Alabama 36688-0002.

Final admission decision involves evaluation of the following: grade-point average, scores on the GRE, letters of reference, applicant's statement of career goal(s) and purpose(s), professional experience, and program enrollment and availability.

Applicants are responsible to ensure that all materials arrive within the deadline. Incomplete applications will not be considered. Applications will be retrieved for review when all materials are received.

An IDD program faculty admission committee will review applications, make admissions decisions and a written communication from the university will notify applicants about admissions decisions.

### Requirements For Certificate Programs

A minimum GPA of 3.0 on all program of study courses and all work attempted is required. A maximum of two Cs can be counted. No grades of D or F may be counted. If a third C or any grade below is earned, the student will be dismissed from the program.

Those enrolled in the Certificate program may also elect to pursue the master's degree and be allowed to apply the courses toward their degree program once admitted and upon approval of the IDD faculty admissions committee.

Students enrolled in an IDD graduate program may opt to complete a certificate program to earn the certificate in addition to completing their degree program.

# Graduate Certificate In Mental Health Counseling

## Degree Requirements

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The Graduate Certificate in Mental Health Counseling at USA requires a minimum of five courses (15 hours) with grades of "A" or "B". The student may choose from a list of courses to meet requirements for the certificate that provides specific training in the individual's area of counseling emphasis. The student will work with the program director/and or advisor to develop the best plan possible to meet career goals.

Counselor educators are ethically required to ensure that students meet academic requirements and demonstrate clinical competencies. Satisfactory progress will be predicated on a combination of factors such as academic success, clinical competence, adherence to ethical standards, and appropriate interpersonal functioning. Students who do not demonstrate satisfactory competence within any of these critical areas of professional performance may be terminated from the program. Core faculty will evaluate students on a continuing basis to determine students' satisfactory progression through the program. Other policies, procedures, and guidelines are addressed in the Counselor Education Graduate Student Handbook.

### Admissions Requirements

The curriculum for the Clinical Mental Health Counseling program begins each summer semester and proceeds in a sequenced manner. Applications for graduate programs in counseling are reviewed in the spring of each year and students are admitted beginning in summer semester. The deadline for all application materials is February 1st.

Requirements for admission are:

1. A master's degree in Counseling or Counselor Education.
2. A completed application for admission to the Graduate School.
3. One official copy of all undergraduate and graduate transcripts.
4. Three letters of recommendation from persons familiar with the applicant's academic and/or professional abilities.
5. A personal statement describing their career goal(s) and how the certificate program will further these goals.
6. Results of the Graduate Record Examination (GRE) or the Miller Analogies Test (MAT).
7. Resume
8. Applicants whose application portfolio is deemed to be acceptable are required to participate in an interview by counseling program faculty.

Applications, transcripts, letters of recommendation and all supporting materials should be submitted to the Office of Admissions, 2500 Meisler Hall, University of South Alabama, Mobile, Alabama 36688-0002 by the deadlines noted above.

Final admission decisions involve evaluation of the following: grade-point average; scores on the GRE or MAT; letters of reference; professional experience; the applicant's statement of purpose; interview by counseling faculty and program enrollment and availability. All new students are required to attend the Counselor Education Graduate Student Orientation in the first semester following admission to one of the programs.

Students who are not enrolled for three consecutive semesters must complete all admissions requirements again and be reviewed by the program admissions committee.

Comprehensive Examination Type I is required.

# Instructional Design And Development (MS)

## Degree Requirements

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The Master of Science degree program in Instructional Design and Development provides students with the information and skill training to analyze instructional tasks, to design and deliver instructional programs, and to perform evaluative procedures on instructional products and services. The job market potential for graduates of the program includes the management of in-service education in business and industry, health-related institutions and agencies, military agencies, institutions of higher education, K-12 education, and related self-employed activities.

1. Each student will be assigned a major professor and will complete a course-of-study form by the end of the first semester of study.
2. A program committee will be appointed to work with the student.
3. A Master's Comprehensive Examination will be completed by each student during the student's last semester.

The Master's program in Instructional Design and Development (IDD) has both on-campus and online courses. Although not all courses are taught in both formats, students are able to complete the Master's program in one format or the other, or a combination of on-campus and online courses. Using the Internet and other distance learning technologies, the IDD online program provides an educational opportunity for those who choose to use similar technology that they might employ for delivering educational and training courses after graduation.

Flexibility is the key to the program, and students can complete courses via the Internet following their individual learning schedules during the semester. Students are able to interact directly with their instructor and classmates to obtain subject information, to work on course and team assignments, and to complete assessments via the Internet. In addition, students have direct access to the University Library and advising services.

For more detailed information, please visit the ID&D web site at <http://www.southalabama.edu/colleges/ceps/cins/> or contact: Ms. Gail McLean, Secretary, College of Education and Professional Studies, University of South Alabama, Mobile, AL 36688-0002. Telephone (251) 380-2861; E-mail: [gmclean@southalabama.edu](mailto:gmclean@southalabama.edu).

### Admission Requirements

Applications for the Instructional Design and Development program are reviewed throughout the year. Requirements for admission are:

1. A completed application for admission to the Graduate School.
2. Official transcripts from all institutions attended.
3. Two letters of recommendation from persons familiar with the applicant's academic and/or professional abilities.
4. A statement of the applicant's career goal(s) and purpose(s) for pursuing the Master's program in Instructional Design and Development.
5. Results of the Graduate Record Examination (GRE) including the writing component or the MAT, sent by the testing agency to the Registrar.

Applications, transcripts, letters, and all supporting materials should be submitted to the Office of Admissions, Administration Building, Room 182, University of South Alabama, Mobile, Alabama 36688-0002.

Final admission decision involves evaluation of the following: grade-point average, scores on the GRE, letters of reference, applicant's statement of career goal(s) and purpose(s), professional experience, and program enrollment and availability.

### Internship

Many Instructional Design and Development students complete an internship of a minimum of 240 contact hours. Students must complete all foundational core courses prior to enrolling for the internship. The internship component is designed to give students practical experience in design, implementation, and/or evaluation of instructional systems and must have prior approval of the internship coordinator and the student's advisor.

### Requirements For Degree

To qualify for the Master's Degree in Instructional Design and Development, candidates must satisfactorily complete the following program, maintain a minimum GPA of 3.0 on all program of study courses and all work attempted. A maximum of two Cs can be

counted. No grades of D or F may be counted. If a third C or any grade below is earned, the student will be dismissed from the program. Students must complete a written course of study by the end of their first semester in the program.

Students must successfully complete a 1-hour oral comprehensive exam. The exam may be taken only two times.

Requirements for the M.S. Degree in Instructional Design and Development Program	Credit Hours
Requirements for the M.S. degree in Instructional Design and Development Program	33 minimum
Foundational Core Courses	21
ISD 610	
ISD 613	
ISD 621	
ISD 641	
EPY 502	
IDE 510	
IDE 660	
Additional Requirements	9
ISD 581	
ISD 611	
ISD 653	
Field Courses	3 minimum
ISD 595	
ISD 598	
ISD 599	

# Instructional Design And Development (Ph.D.)

## Degree Requirements

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The Doctor of Philosophy degree in Instructional Design and Development consists of components in instructional systems design, instructional technology, learning theory, and research and evaluation. Program emphases are: applying instructional systems design procedures in educational program development; developing instructional models for a variety of subject matter areas and educational settings; matching instructional strategies to student learning styles; evaluating, selecting, and integrating new technologies into instructional systems; and utilizing formative and summative evaluation and research in the development and improvement of instructional systems. Graduates of the program will be prepared to function in school districts, colleges and universities, business and industry, health care organizations, and the military with responsibility for planning, implementing, and evaluating instructional programs.

### Admission Requirements

Applicants for the doctoral program with a Bachelor's degree or without a Master's degree in Instructional Design and Development from a program deemed to be equivalent by the admissions committee will be required to complete the Foundational Core courses in the Master's degree in IDD and take a qualifying exam on the Foundational Core. Students must satisfy all Foundational Core requirements and maintain a minimum GPA of 3.0 on all program of study courses and all work attempted. A maximum of two Cs can be counted. No grades of D or F may be counted. If a third C or any grade below is earned, the student will be dismissed from the program. The student must pass the qualifying examination. In addition, the applicant's progress and preparation for advanced work will be reviewed by a committee that will make a decision for or against admission to the regular Ph. D. program.

Applicants with a Master's degree in Instructional Design and Development or equivalent may be admitted to the regular Ph.D. program. After transcript review, however, the admission committee may require additional coursework and/or successful completion of the Master's comprehensive exam. Any additional pre-requisite coursework will be indicated in the acceptance letter.

The Admissions Committee will select the most highly qualified candidates to be considered for admission to the program. A positive effort will be made to identify and recruit minority students into the program. The following must be on file for an applicant to be considered.

1. A completed application for admission to the Graduate School.
2. Official GRE scores, including the writing section or the MAT, sent by the testing agency to the Registrar.
3. Official transcripts from all institutions attended.
4. A written statement of the applicant's career goal(s) and purpose(s) for pursuing the Ph.D. program in Instructional Design and Development.
5. Three letters of recommendation from persons familiar with the applicant's academic and/or professional abilities.
6. Curriculum vita

The admission decision involves evaluation of the following: the grade-point average on undergraduate and graduate course work, scores on the GRE or the MAT, letters of recommendation, professional experience, the applicant's statement of purpose, and the program's current enrollment. Final decisions regarding admission will be based on the applicant's personal and professional qualifications as well as the program's ability to accommodate additional doctoral students. Upon acceptance by the College of Education and Professional Studies, the applicant will be recommended for admission. Admissions will notify all applicants in writing of the disposition of their applications.

Requests for application forms for admission should be addressed to the Office of Admissions, 2500 Meisler Hall, University of South Alabama, Mobile, Alabama 36688-0002 (Telephone: (251) 460-6141 or 1-(800) 872-5247) or downloaded from the university website <http://www.southalabama.edu/departments/admissions/>.

Information about the Ph.D. program should be requested from the Coordinator, Instructional Design and Development Program, UCOM 3800, College of Education and Professional Studies, the University of South Alabama, Mobile, Alabama 36688-0002 (Telephone: (251) 380-2861).

All documents for admission review (i.e., transcripts, test scores or letters of recommendation) must be official and mailed from the home institutions or testing agency directly to the Office of Admissions. Once submitted, documents become the property of the University of South Alabama.

### Program

The Doctor of Philosophy degree program in Instructional Design and Development is designed to provide persons with skills required in planning, implementing, and evaluating instructional programs in a variety of educational settings. The program consists of four major components:

1. the instructional design and development foundation core
2. research methods and statistics
3. supporting coursework
4. completion of a dissertation

A minimum of 60 semester hours of approved graduate course work is required in the program. Refer to the current Instructional Design and Development doctoral handbook for specific requirements.

The requirements for each of the components in the program in Instructional Design and Development are described below. (Any additional requirements will be determined by the student's doctoral advisory committee.)

Requirements for the Ph.D. in instructional design and development program (60 semester hours)

To qualify for the Doctor of Philosophy Degree in Instructional Design and Development candidates must maintain a minimum GPA of 3.0 on all program of study courses and all work attempted. A maximum of two Cs can be counted. No grades of D or F may be counted. If a third C or any grade below is earned, the student will be dismissed from the program.

Requirements	Credit Hours
Foundation Courses	18 minimum
Students who have not already completed a master's degree in Instructional Design & Development must take the following ISD Foundation Courses:	
ISD 610	
ISD 613	
ISD 621	
ISD 641	
EPY 502	
EPY 510	
Instructional Core	24 minimum
EPY 602 or ISD 614	
ISD 612	
ISD 620	
IDE 660	
ISD 640	
ISD 651	
ISD 653	
ISD 695	
Research Core	Choose 15 minimum

IDE 620	
IDE 621	
IDE 623	
IDE 630	
IDE 631	
IDE 635	
IDE 710	
IDE 711 (IDE 711 is 1 semester hour; must be repeated for three semesters.)	
Supporting Coursework	12 minimum
Courses must be approved by doctoral advisory committee.	
Research/Dissertation	9 minimum
Instructional Core and Research Core comprehensive examinations are required before enrolling in research/dissertation hours. No more than 9 research/dissertation hours count toward the semester hours requirement.	

### Continuous Enrollment

Doctoral students must be continuously enrolled for one semester hour or more to remain active in the program. After admission to candidacy and until graduation, students must enroll each academic term for a minimum of one semester hour of IDE 799, Research and Dissertation. A minimum of 9 hours of dissertation credit is required.

Failure to enroll for any hours during any semester will result in a student being removed from the program. Students who voluntarily withdraw from the program may be considered for readmission. The student will be reviewed by the Admissions Committee under standards in effect at the time the student applies for readmission. The student will need to demonstrate that he or she is current with the research literature in the field. This may require additional work on the part of the candidate.

### Residency

Students in the program will complete a minimum of one year of residency during their doctoral studies. Residency is defined as enrollment as a full-time student for a period of two consecutive semesters. Residency is a requirement for admission to candidacy.

### Examinations

Doctoral students are required to successfully complete two major examinations before admission to candidacy.

#### Research Core Examination

This Research Core Examination is a one-day examination consisting of a written portion and the analysis of a data set using a computer program of the student's choice. The purpose of the examination is to verify that the student has developed an understanding of research, measurement, evaluation and statistical skills.

#### Instructional Core Examination

The Instructional Core Examination is a written and oral examination. The purpose of the two-day written portion is to assure that all Instructional Design and Development candidates are prepared in the core areas of the discipline. The two-hour oral examination is intended to review and extend the topics covered in the written parts of the examination. The written exam must be passed in order to sit for the oral exam. The Instructional Core Exam may be taken only two times.

### Candidacy

Students will be admitted to candidacy for the degree of Doctor of Philosophy in Instructional Design and Development after successful completion of the following program requirements:

1. doctoral advisory committee appointed;
2. program of study established;

3. residency established;
4. Research Core Examination;
5. Instructional Core Examination; and
6. dissertation topic approved.

### **Transfer Credit**

A maximum of nine (9) semester hours of graduate credit earned at an approved graduate school may be counted toward the Ph.D. plan of study. The credit is approved only after completion of a minimum of nine (9) semester hours of graduate credit at the University of South Alabama and the student must be in regular status. Recommendations concerning transfer credit will be made by the Doctoral Advisory Committee in light of a student's total program of study. All proposed transfer credit must be approved by the Director of Graduate Studies and the student's Doctoral Advisory Committee. Only courses with "A" or "B" grades are acceptable for transfer and must be from a regionally accredited institution.

### **IDD Doctoral Student Handbook**

The Instructional Design and Development Doctoral Student Handbook provides additional information about the program. The latest version of the handbook is available from the Professional Studies department secretary or online. In addition to basic information about the program, the IDD Doctoral Handbook includes specific information on requirements doctoral students must complete.

# Instructional Design And Performance Improvement (BS)

## Degree Requirements

The Instructional Design and Performance Improvement (IDPI) undergraduate program is designed to prepare students with the skills necessary to develop and implement instructional/training systems. Graduates will be prepared to create and implement instruction aimed at systematic processes of identifying the root causes of performance issues, and implementing comprehensive solutions across organizations. The program will engage students in the practice of analyzing, designing, developing, implementing, and evaluating instructional and non-instructional interventions in order to enhance individual and organizational performance necessary for the effective, collaborative, team-based work environments.

Requirements for admission to candidacy in instructional design and performance improvement

All students must apply for admission to the program during the semester immediately following the completion of 60 semester hours of credit provided they meet the requirements listed below. Courses in progress during the semester the student makes application for candidacy may be used in the candidacy application process.

For upper level Instructional Design & Performance Improvement Majors in the Counseling and Instructional Sciences Department, the following criteria are to be considered by the Undergraduate Candidacy Committee:

1. Candidacy applications are due one semester prior to enrolling in classes that require Candidacy. The intent is for students to apply for Candidacy AND make contact with their advisor prior to registration to enable appropriate planning decisions for upcoming semesters.
2. Apply for Candidacy in the Advising Center (UCOM 3360) or on the College of Education and Professional Studies website.
3. The College of Education and Professional Studies Undergraduate Candidacy Committee may recommend, defer or deny admission to the program. Admission to Candidacy will remain deferred until all requirements have been met and grades are submitted at the end of the term. Once grades are available and all requirements are met, the Office of Student Services will notify students via their official JAG email account when they have been admitted to Candidacy. Students will then be able to register for Candidacy courses.
4. Students must complete of 60 semester hours (48 must be in General Studies). A minimum of 12 semester hours must be taken through instruction offered by the University of South Alabama.
5. Course requirements include EDM 310, plus 9 hours of general studies courses.
6. Students must maintain:
  - a. A minimum overall grade-point average of 2.2 in the major (including transfer work) and grade point average on all work attempted at the University of South Alabama.
  - b. A minimum program grade-point average in all courses on the advising sheet. including transfer work.
  - c. A minimum grade-point average in IDPI Major Core GPA including all courses in the IDPI, including transfer work.

The Undergraduate Candidacy Committee may recommend the admission of a student to the program, defer admission, or reject the student's application.

Requirements For B.S. Degree In Instructional Design And Performance Improvement	Credit Hours
Credit hours required in general education	45
Credit hours required in major	46
Credit hours in minor, concentration or emphasis area	29
Total credit hours required for completion	120 with a 2.20 GPA in the Major and Overall.

**Course Description**

EDM 310 (3cr) – Microcomputing Systems in Education – Basic understanding of current and emerging technologies for instructional purpose. This course requires a special fee.

ISD 301 (3 cr) - Trends & Issues IDPI – This course provides an overview of current trends, technology, and issues in instructional design and performance improvement.

ISD 310 (3 cr) - Instructional Design – This project-based course introduces students to the process of instructional design including analysis, design, development, implementation, and evaluation.

ISD 320 (3 cr) - Training Intervention – Students will design training interventions focused on improving performance in various contexts.

ISD 340 (3 cr) - Analysis, Assessment & Evaluation (W) – Students will explore a variety of models to analyze, assess, and evaluate processes related to the development of instructional systems and improving performance in selected settings.

ISD 350 (3 cr) - Emerging Learning Technologies - This course provides students with the skills and knowledge necessary to develop technology-based modules using different delivery methods for application in non-instructional and instructional training solutions.

ISD 360 (3 cr) – Human Development Interventions – Students will learn and apply various human development theories and interpersonal skills related to the effective design of training interventions to improve learning and performance. A special area of emphasis will focus on students' own developmental experiences, particularly related to career planning strategies and skills.

ISD 370 (3 cr) - Distance and Mobile Learning- This course will identify and utilize innovative technologies related to distance and mobile learning in various job sectors and learning environments.

ISD 400 (1 cr) - Portfolio Development – Students will create an online portfolio to showcase projects, assignments, and collaborations related to instructional design and performance improvement.

ISD 410 (3 cr) - Organization and Coordination of Training Programs - This course is designed to develop knowledge and competencies in the coordination of large-scale, comprehensive training programs.

ISD 420 (3 cr) – Cultural Factors in IDD & HPI – This course will focus on the interaction of multicultural aspects of learning and teaching. Students will enhance their cognitive and affective awareness and understanding, as well as their personal acceptance of differences associated with the learning/teaching process. The ultimate goal is to prepare multiculturally competent designers of instruction for a global society.

ISD 430 (3 cr) - Psychology of Learning in Organizations (W) - The course covers major theoretical perspectives in organizational psychology based on empirical research and case studies. Students will explore learning theory, group dynamics, and change in different types of learning organizations.

ISD 440 (3 cr) – Interpersonal & Communication Skills in Organizations –This course is designed to teach students the theory and practice of communication as utilized in the processes of analysis, design, development, implementation, and evaluation of instruction. The primary focus of the course will be on the study and development of human relations skills and competencies. Emphasis will be placed on the development of human relations skills associated with effectiveness in small group and large group learning and performance.

ISD 450 (3 cr) - Human Performance Improvement – This course includes conducting various types of analysis in order to solve human performance problems by design of non-instructional interventions.

ISD 480 (3 cr) - Learning Training and Performance Project – Students will complete a supervised field project on a topic related to instructional design and/or performance improvement.

**OR**

ISD 496 (3 cr) - Internship - The internship is a supervised learning experience in an actual or similar setting in which instructional design or performance improvement related professionals are employed.

ISD 490 (3 cr) - Special Topics - Topics of contemporary interest in the area of instructional design and performance improvement will be presented, discussed, and investigated.

# School Counseling (M.Ed.)

## Degree Requirements

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The program described below is designed to provide for the acquisition of skills and competencies needed by counselors working in educational settings.

A grade of "B" or better is required in the professional major sequences.

Counselor educators are ethically required to ensure that students meet academic requirements and demonstrate clinical competencies. Satisfactory progress will be predicated on a combination of factors such as academic success, clinical competence, adherence to ethical standards, and appropriate interpersonal functioning. Students who do not demonstrate satisfactory competence within any of these critical areas of professional performance may be terminated from the program. Core faculty will evaluate students on a continuing basis to determine students' satisfactory progression through the program. Other policies, procedures, and guidelines are addressed in the Counselor Education Graduate Student Handbook.

### Admissions Requirements

The curriculum for the Counselor Education program begins each summer semester and proceeds in a sequenced manner. Applications for graduate programs in counseling are reviewed in the spring of each year and students are admitted beginning in summer semester. The deadline for all application materials is February 1st.

Requirements for admission are:

1. A completed application for admission to the Graduate School.
2. One official copy of all undergraduate and graduate transcripts.
3. Three letters of recommendation from persons familiar with the applicant's academic and/or professional abilities.
4. A typed double-space statement of 3-5 pages in length regarding the applicant's career goal(s) and purpose(s) for pursuing the Master's program in counseling.
5. Results of the Graduate Record Examination (GRE) or the Miller Analogies Test (MAT).
6. Resume
7. Applicants whose application portfolio is deemed to be acceptable are required to participate in an interview by counseling program faculty.
8. Two full years of full-time, acceptable professional educational work experience, unless pursuing CACREP route.

Applications, transcripts, letters of recommendation and all supporting materials should be submitted to the Office of Admissions, 2500 Meisler Hall, University of South Alabama, Mobile, Alabama 36688-0002 by the deadlines noted above.

Final admission decisions involve evaluation of the following: grade-point average; scores on the GRE or MAT; letters of reference; professional experience; the applicant's statement of purpose; interview by counseling faculty and program enrollment and availability. All new students are required to attend the Counselor Education Graduate Student Orientation in the first semester following admission to one of the programs.

Students who are not enrolled for three consecutive semesters must complete all admissions requirements again and be reviewed by the program admissions committee.

Comprehensive Examination Type I is required.

The Alabama State Department of Education (ALSDE) now offers an expanded certification option for CACREP- accredited programs. Requirements under this option include "completion of a school counseling program that is accredited by the Council for Accreditation of Counseling and Related Educational Programs (CACREP), and attainment of passing scores on the National Counseling Examination for Licensure and Certification, the basic skills assessments of the Alabama Prospective Teacher Testing Program, and Praxis II test #0421, Professional School Counseling. Note that certification in a teaching field or another area of instructional support is not required for admission to a CACREP-accredited program in school counseling".

School counseling	Credit Hours
Requirements for school counseling	48 Minimum
Major Instructional Support Area:	36
CED 565	
CED 566	
CED 572	
CED 574	
CED 576	
CED 582	
CED 584	
CED 586	
CED 588	
CED 591	
CED 595 Internship (6 semester hours required; 600 contact hours)	
School Counselors are required to successfully complete the PRAXIS II Subject Test prior to enrolling in internship.	
Related Studies in Educational Foundations*	6
EPY 521	
EPY 555	
Research in Education Area	3
IDE 510	
School Counselors are required under the CACREP Certification Option to successfully complete the National Counselor Exam.	
*SPE 500 Must be taken for 3 additional hours by students who have not previously satisfied the special education requirement.	

# Developmental Studies

## Department Information

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Department of Developmental Studies	(251) 460-7155
Math Coordinator, Interim Co-Chair	Leslie Whiston
Instructional Lab Supervisor	Sharon Schwarz
Secretary	Melissa Hennis

Department of Developmental Studies  
<http://www.southalabama.edu/colleges/scesp/ds/>

The Mission of the Department of Developmental Studies is to produce courses and instructional support services of excellence that address the needs of students in their preparation for collegiate study and students in transition to the University.

### Developmental Studies

The courses and services offered provide students with opportunities to strengthen the basic skills necessary for academic success; to explore career options and preparation; to access campus activities, programs, and services; and to become active participants in the University community.

Credits earned in courses with a DS prefix do not meet degree requirements within the University. The credits earned do carry institutional, non-degree credit and allow students to qualify for financial aid. Grades earned are computed into the overall GPA in most colleges and hours are counted toward classification (sophomore, etc.). Credits earned in courses with a MTH prefix count as free electives.

### Math Lab Information

#### Location:

The Math Technology Lab is located in ASC 1301.

#### Resources:

- 137 computer workstations with Internet access
- Separate testing area and private tutoring rooms
- Study room for one-on-one or group tutoring
- Tutors and instructors available during all operating hours to assist students

## Courses

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### Course Listing

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## Faculty

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ADAMS, JAMES R.  
Instructor  
BS, Spring Hill College  
MS, University of South Alabama

ANTOINE ARMSTRONG, MISCHA K.  
Instructor  
BS, University of South Alabama  
MED, University of South Alabama

BOLERJACK, SHEILA R.  
Instructor  
BS, University of South Alabama  
MED, University of South Alabama

DARBY, LATONYA C.  
Instructor  
BS, University of Mobile  
MED, University of South Alabama

WHISTON, LESLIE E.  
Instructor  
BS, Indiana University-Bloomington  
XCTF, Immaculata College  
MED, University of South Alabama

# Earth Sciences

## Department Information

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Department of Earth Sciences web site

<http://www.southalabama.edu/colleges/artsandsci/earthsci/>

The Department of Earth Sciences includes the disciplines of Geography, Geology, and Meteorology, and it offers a B.S. degree as well as a minor in each of these three majors. Students can also earn a GIS Certificate or a minor in Geographic Information Technology (GIT)

Geography, which is both a natural and a social science, studies the location, spatial distribution, and spatial interaction of Earth's natural and human environments. Courses cover the subfields of Human Geography, Physical Geography, Regional Geography, and Geographic Information Science.

Geology is the study of Earth, its composition, and the forces that form and change it, as well as the natural mineral resources it contains. As such, it encompasses a broad spectrum of studies and draws from the other basic sciences: chemistry, physics, and biology.

Meteorology is the study of atmospheric phenomena and the processes that cause weather. The science of meteorology is firmly rooted in basic physical laws governing mass, momentum, and energy. Many weather processes are simulated by complex computer models; however, accurate weather analysis and forecasting often requires meteorologists to identify and conceptualize weather patterns often missed by automated techniques.

The programs of the Department of Earth Sciences are designed to give the non-major a background in Earth and atmospheric science and the human impact on the landscape as part of a general education. Students pursuing a degree in Geography, Geology, or Meteorology must also have a minor in another discipline.

The Earth Sciences Department offers a departmental honors program that allows exceptional students to pursue independent research. Students work with a faculty committee to choose an Earth Sciences research project (Geography, Geology, Meteorology), develop a prospectus, and complete a senior thesis. Students completing this program graduate with departmental honors.

Requirements for successful completion of an honors degree in Geography, Geology, or Meteorology require a GPA of at least 3.50 at graduation and completion of ES 492 (Honors Earth Sciences Seminar), ES 497 (Senior Thesis Prospectus), and six hours of ES 499 (Senior Honors Thesis). These classes are in addition to those required for the major in Geography, Geology, or Meteorology. All honors courses are listed under the prefix ES. Students interested in Earth Sciences honors must apply for the program by their junior year. Complete requirements are available on the departmental web page.

All first-time freshmen must successfully complete CAS 100: First Year Experience as a degree requirement. Students must enroll during their first term at USA, except for summer-entry students who must enroll in the fall semester following entry. Students must demonstrate technology proficiency by passing the designated class in their major. GEO 331 for Geography majors, GY 301 for Geology majors, or MET 455 for Meteorology majors.

### Graduate Studies

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Although the Department of Earth Sciences has no graduate degree program, courses, including Geographic Information Technology (GIT), are offered at the graduate level for students enrolled in Marine Sciences and Environmental Toxicology, and others who need such course work. Contact the Department for more information.

## Areas Of Study

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### Degrees, Programs, Or Concentrations

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Minor in Geography.....	381
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## Courses

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### Course Listing

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Meteorology.....	1065

## Faculty

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ALLISON II, DAVID T.  
Associate Professor  
BS, University of Alabama  
PHD, Florida State University

BEEBE, DONALD A.  
Instructor  
BS, University of South Alabama  
PHD, Clemson University

BLACKWELL, KEITH G.  
Associate Professor  
BS, University of Wisconsin-Madison  
MS, Texas A & M University  
PHD, Texas A & M University

CLARK, MURLENE W.  
Associate Professor  
BS, Florida State University  
MS, Florida State University  
PHD, Florida State University

HAYWICK, DOUGLAS W.  
Associate Professor  
BS, McMaster University  
MS, Memorial Univ of Newfoundland  
PHD, James Cook University

JORDAN, KAREN J.  
Senior Instructor  
BS, University of South Alabama  
MS, University of Alabama

KIMBALL, SYTSKE K.  
Professor  
BS, Delft University of Technology  
MS, Monash University  
PHD, Pennsylvania State University

MUJICA, FRANCES C.  
Assistant Professor  
BA, University of Memphis  
MA, Louisiana State University  
PHD, Louisiana State University

MURRAY, DAVID A.  
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BS, University of South Alabama  
MS, Florida State University

RYDER, ROY H.  
Professor  
BS, Univ of Glasgow  
MS, Univ of Glasgow  
PHD, University of Florida

SAWYER, CAROL F.  
Associate Professor  
BS, Montana State U-Bozeman  
MS, Texas State Univ - San Marcos  
PHD, Texas State Univ - San Marcos

SCHULTZE, STEVEN R.  
Assistant Professor  
BA, University of Florida  
MA, Western Michigan University  
PHD, Michigan State University

STURM, DIANA J.  
Part-Time Instructor  
BS, Northern Illinois University  
MS, Northeastern Illinois U  
PHD, University of Alabama

TERWEY, WESLEY D.  
Assistant Professor  
BA, Valparaiso University  
BS, Valparaiso University  
MS, Colorado State University  
PHD, Colorado State University

# Geographic Information Science (GIS) Certificate

## Degree Requirements

Geographic Information Science Certificate		Credit Hours
Students who want to earn a GIS (Geographic Information Science) Certificate must take all six of the following courses:		24
GEO 331	4 hrs	
GEO/GY 332	4 hrs	
GIT 442	4 hrs	
GIT 460	4 hrs	
GIT 461	4 hrs	
GIT 462	4 hrs	
<p>For students to earn a GIS Certificate, they must have a 3.0 overall GPA and at least a "B" in each of the six courses that make up the GIS Certificate. If students receive less than a B in a class, it may still count as credit, but not towards the certificate.</p>		

# Geography (BS)

## Degree Requirements

Majors in Arts and Sciences may be completed with a minimum of 120 semester hours unless designated otherwise. At least 30 hours of course work, which represents 25% of the required 120 hours, must be at the upper division level in order to fulfill the University's residency requirement. At least 15 of the 30 upper-division hours must be in the major or concentration area. An overall grade-point-average (GPA) of 2.0 is required for graduation. In addition, a minimum GPA of 2.0 is required in the student's major or concentration area.

A student with a major in geography must take a group of required core geography courses as well as six (6) additional upper division courses for a total of 47 semester hours. The six (6) additional upper division courses include at least one course from each of the four categories: Human, Physical, Regional, and Technical. **Geography 101 and 102 are prerequisites to most upper level physical geography courses and Geography 114 and 115 are prerequisites to most upper level human geography courses listed below.**

Geography Major Requirements (47 HRS)	Credit Hours
Core requirements for a geography major	29
GEO 101 & 101L	4 hrs
GEO 102 & 102L	4 hrs
GEO 114	3 hrs
GEO 115	3 hrs
GEO 201	1 hrs
GEO 331	4 hrs
GEO 332	4 hrs
GEO 435	3 hrs
GEO 485	3 hrs
One additional natural science course, one additional social science course outside of geography and ST 210. Students must also take GEO 301 W.	
Geography majors will have to take at least one upper level course from each of the four categories: Human, Physical, Regional, and Technical. Majors are still required to take at least six upper level courses (for at least 18 hrs).	18
Human Geography Courses:	
GEO 312	3 hrs
GEO 321	3 hrs
GEO 365	3 hrs
GEO 370	3 hrs
GEO 381	3 hrs
GEO 417	3 hrs
Physical Geography Courses:	
GEO 310	3 hrs
GEO 341	3 hrs

GEO 342	3 hrs	
GEO 353	4 hrs	
GEO 405	3 hrs	
GEO 410	3 hrs	
GEO 411	3 hrs	
GEO 412	3 hrs	
GEO 440	2 hrs	
GEO 441	2 hrs	
Regional Geography Courses:		
GEO 313	3 hrs	
GEO 314	3 hrs	
GEO 315	3 hrs	
GEO 317	3 hrs	
GEO 320	3 hrs	
Technical Geography Courses: *		
GIT 442	4 hrs	
GIT 460	4 hrs	
GIT 461	4 hrs	
GIT 462	4 hrs	
GIT 490	4 hrs	
*Only two courses in the GIT minor may be counted toward the Geography major.		
Complete at least 15 semester hours in residence in major at the 300 and/or 400 level. A minimum GPA of 2.0 is required in major.		15

### General Education Requirements For Geography Majors

Areas I and II of the General Education Requirements for Geography are specified in the College of Arts and Sciences section. Note that a portion of Area IV (GEO 114, GEO 115) and the Natural Sciences portion of Area III (GEO 101, GEO 102, ST 210) are fulfilled by the major requirements specified above.

# Geology (BS)

## Degree Requirements

Majors in Arts and Sciences may be completed with a minimum of 120 semester hours unless designated otherwise. At least 30 hours of course work, which represents 25% of the required 120 hours, must be at the upper division level in order to fulfill the University's residency requirement. At least 15 of the 30 upper-division hours must be in the major or concentration area. An overall grade-point-average (GPA) of 2.0 is required for graduation. In addition, a minimum GPA of 2.0 is required in the student's major or concentration area.

Students should complete a minimum of 44 semester hours in Geology. GY 111 and GY 112 are prerequisites for most upper level geology courses. The core requirements for a degree in Geology are listed below:

Geology Major Requirements (44 hrs)		Credit Hours
Core requirements for a geology major		44-46
GY 111 & 111L	4 hrs	
GY 112 & 112L	4 hrs	
GY 301	3 hrs	
GY 302	4 hrs	
GY 303	4 hrs	
GY 304	3 hrs	
GY 401	3 hrs	
GY 402	3 hrs	
GY 403	4 hrs	
GY 480	6 hrs	
GY Elective	1 3/4 hrs	
GY Elective	2 3/4 hrs	
Additional requirements from other disciplines		
MA 125		
MA 126		
CH 131		
CH 132		
A minimum of 8 hours of Physics (algebra/trigonometry-based; PH 114 and PH 115, or calculus-based; PH 201 and PH 202).		
Students can elect to substitute GY 305 for PH 115/PH 202; however, those intending to pursue graduate study are encouraged to complete a full year of calculus and physics at the University of South Alabama.		

A Geology major may seek a traditional minor. A Certificate in Geographic Information Science (GIS) can be obtained simultaneously with a B.S. in Geology if the student elects to minor in Geography or GIT. Contact the Department of Earth Sciences for information concerning the GIS certification program; other possible options for minors, Geology elective courses, and Department Honors opportunities in Geology. An overall GPA 2.0 is required for the major.

### **General Education Requirements For Geology Majors**

Areas I, II, and IV of the General Education Requirements for Geology are specified in the College of Arts and Sciences section. Note that Area III requirements (Mathematics and Natural Sciences) are fulfilled by the major requirements specified above.

# Meteorology (BS) - Broadcast Met Track

## Degree Requirements

Majors in Arts and Sciences may be completed with a minimum of 120 semester hours unless designated otherwise. At least 30 hours of course work, which represents 25% of the required 120 hours, must be at the upper division level in order to fulfill the University's residency requirement. At least 15 of the 30 upper-division hours must be in the major or concentration area. An overall grade-point-average (GPA) of 2.0 is required for graduation. In addition, a minimum GPA of 2.0 is required in the student's major or concentration area.

A student with a major in Meteorology must take a group of required courses totaling at least 47 semester hours. Meteorology students must take a core of 32 semester hours of meteorology courses, plus one of the three specialty tracks listed below. Each specialty track allows for flexibility with required course selections and electives.

The meteorology degree also requires:

- MA 125, 126, 227, 238
- PH 201, 202
- ST 315.

Meteorology Major Requirements (47 hrs)		Credit Hours
Core requirements for a meteorology major		32
MET 140	4 hrs	
MET 341 (W)	3 hrs	
MET 353	4 hrs	
MET 354	3 hrs	
MET 355	3 hrs	
MET 356	3 hrs	
MET 454	6 hrs	
MET 455	6 hrs	
Group 3 - Broadcast Meteorology Track:		15
MET 342	3 hrs	
MET 358	4 hrs	
MET 359	2 hrs	
MET 496	1 hr	
MET 497	3 hrs	
Choose 2 hours of electives from the list below		
Choose from these electives as directed by your Track:		
MET 191	1 hr	
MET 342	3 hrs	
MET 357	2 hrs	
MET 358	4 hrs	

MET 360	1 hr
MET 370	3 hrs
MET 410 (W)	3 hrs
MET 420	4 hrs
MET 430	3 hrs
MET 440	2 hrs
MET 442	2 hrs
MET 456 (W)	3 hrs
MET 490	1-3 hrs
MET 492	1-3 hrs
MET 495	1-2 hrs
MET 496>	1-2 hrs
GY 425	4 hrs
GIT 460	4 hrs
MGT 300	3 hrs
MKT 320	3 hrs
MET 359	2 hrs

Additional electives may be approved on a case by case basis.

MET 191 may be taken up to 3 times for credit but will only count once toward a meteorology elective.

Complete at least 15 semester hours in residence in major at the 300 and/or 400 level. A minimum GPA of 2.0 is required in major.

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### General Education Requirements For Meteorology Majors

Areas I, II, and IV of the General Education Requirements for Meteorology are specified in the College of Arts and Sciences section. Note that Area III requirements (Mathematics and Natural Sciences) are fulfilled by the major requirements specified above.

# Meteorology (BS) - Graduate School Track

## Degree Requirements

Majors in Arts and Sciences may be completed with a minimum of 120 semester hours unless designated otherwise. At least 30 hours of course work, which represents 25% of the required 120 hours, must be at the upper division level in order to fulfill the University's residency requirement. At least 15 of the 30 upper-division hours must be in the major or concentration area. An overall grade-point-average (GPA) of 2.0 is required for graduation. In addition, a minimum GPA of 2.0 is required in the student's major or concentration area.

A student with a major in Meteorology must take a group of required courses totaling at least 47 semester hours. Meteorology students must take a core of 32 semester hours of meteorology courses, plus one of the three specialty tracks listed below. Each specialty track allows for flexibility with required course selections and electives.

The meteorology degree also requires:

- MA 125, 126, 227, 238
- PH 201, 202
- ST 315

Meteorology Major Requirements (47 hrs)		Credit Hours
Core requirements for a meteorology major		32
MET 140	4 hrs	
MET 341 (W)	3 hrs	
MET 353	4 hrs	
MET 354	3 hrs	
MET 355	3 hrs	
MET 356	3 hrs	
MET 454	6 hrs	
MET 455	6 hrs	
Group 2 - Graduate School Meteorology Track:		15
MET 420	4 hrs	
MET 358 <b>OR</b> MET 370	3-4 hrs	
Choose 7-8 hrs of electives from the list below including at least one 2+ hour 400-level class.	7-8 hrs	
Choose from these electives as directed by your Track:		
MET 191	1 hr	
MET 342	3 hrs	
MET 357	2 hrs	
MET 358	4 hrs	
MET 360	1 hr	
MET 370	3 hrs	

MET 410 (W)	3 hrs
MET 420	4 hrs
MET 430	3 hrs
MET 440	2 hrs
MET 442	2 hrs
MET 456 (W)	3 hrs
MET 490	1-3 hrs
MET 492	1-3 hrs
MET 495	1-2 hrs
MET 496	1-2 hrs
GY 425	4 hrs
GIT 460	4 hrs
MGT 300	3 hrs
MKT 320	3 hrs
MET 359	2 hrs

Additional electives may be approved on a case by case basis.

MET 191 may be taken up to 3 times for credit but will only count once toward a meteorology elective.

Complete at least 15 semester hours in residence in major at the 300 and/or 400 level. A minimum GPA of 2.0 is required in major. 15

### General Education Requirements For Meteorology Majors

Areas I, II, and IV of the General Education Requirements for Meteorology are specified in the College of Arts and Sciences section. Note that Area III requirements (Mathematics and Natural Sciences) are fulfilled by the major requirements specified above.

# Meteorology (BS) - Professional Track

## Degree Requirements

Majors in Arts and Sciences may be completed with a minimum of 120 semester hours unless designated otherwise. At least 30 hours of course work, which represents 25% of the required 120 hours, must be at the upper division level in order to fulfill the University's residency requirement. At least 15 of the 30 upper-division hours must be in the major or concentration area. An overall grade-point-average (GPA) of 2.0 is required for graduation. In addition, a minimum GPA of 2.0 is required in the student's major or concentration area.

A student with a major in Meteorology must take a group of required courses totaling at least 47 semester hours. Meteorology students must take a core of 32 semester hours of meteorology courses, plus one of the three specialty tracks listed below. Each specialty track allows for flexibility with required course selections and electives.

The meteorology degree also requires MA 125, 126, 227, 238, PH 201, 202; ST 315.

Meteorology Major Requirements (47 hrs)		Credit Hours
Core requirements for a meteorology major		32
MET 140	4 hrs	
MET 341 (W)	3 hrs	
MET 353	4 hrs	
MET 354	3 hrs	
MET 355	3 hrs	
MET 356	3 hrs	
MET 454	6 hrs	
MET 455	6 hrs	
Group 1 - Professional Meteorology Track:		15
MET 357	2 hrs	
MET 358 <b>OR</b> MET 370	3-4 hrs	
MET 420 <b>OR</b> GIT 460	4 hrs	
Choose 5-6 hrs of electives from the list below.	5-6 hrs	
Choose from these electives as directed by your Track:		
MET 191	1 hr	
MET 342	3 hrs	
MET 357	2 hrs	
MET 358	4 hrs	
MET 360	1 hr	
MET 370	3 hrs	
MET 410 (W)	3 hrs	
MET 420	4 hrs	

MET 430	3 hrs
MET 440	2 hrs
MET 442	2 hrs
MET 456 (W)	3 hrs
MET 490	1-3 hrs
MET 492	1-3 hrs
MET 495	1-2 hrs
MET 496	1-2 hrs
GY 425	4 hrs
GIT 460	4 hrs
MGT 300	3 hrs
MKT 320	3 hrs
MET 359	2 hrs

Additional electives may be approved on a case by case basis.

MET 191 may be taken up to 3 times for credit but will only count once toward a meteorology elective.

Complete at least 15 semester hours in residence in major at the 300 and/or 400 level. A minimum GPA of 2.0 is required in major.

15

### General Education Requirements For Meteorology Majors

Areas I, II, and IV of the General Education Requirements for Meteorology are specified in the College of Arts and Sciences section. Note that Area III requirements (Mathematics and Natural Sciences) are fulfilled by the major requirements specified above.

# Minor In Geographic Information Technology

## Degree Requirements

If a minor is required in your degree program, at least 9 (lower and/or upper-division) hours of courses in the minor must be completed at the University.

Minor in Geographic Information Technology (22 hrs)	Credit Hours
A minimum of 22 hours of Geographic Information Technology related classes.	22
The student must take all three core classes:	
GIT 460	
GIT 461 or 462	
CIS 110 or MET 420	
Three additional electives from the following:	
GEO 331	
GEO 332 or MET 370	
GY 301	
GIT 442	
GIT 461	
GIT 462	
or other GIT electives	

# Minor In Geography

## Degree Requirements

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If a minor is required in your degree program, at least 9 (lower and/or upper-division) hours of courses in the minor must be completed at the University.

A student must take 20 semester hours of Geography, including 101, 102, 114, and three electives at the 300 or 400 level.

# Minor In Geology

## Degree Requirements

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**If a minor is required in your degree program, at least 9 (lower and/or upper-division) hours of courses in the minor must be completed at the University.**

A student must take a minimum of 18 semester hours of Geology courses including GY 111, GY 111L, GY 112, GY 112L, and a minimum of two courses from the following list: GY 301 (Geomorphology), GY 302 (Crystallography and Mineralogy), GY 304 (Stratigraphy), GY 401 (Paleontology), and GY 425 (Hydrology). Any GY courses numbered 300 and higher may be used to satisfy the remainder of the 18 hours requirement. A geology faculty advisor is recommended for planning an appropriate minor curriculum past the initial introductory sequence.

# Minor In Meteorology

## Degree Requirements

If a minor is required in your degree program, at least 9 (lower and/or upper-division) hours of courses in the minor must be completed at the University.

Minor in Meteorology (20 hrs)	Credit Hours
A student must take 20 semester hours of Meteorology including	20
MET 140	
MET 353	
MET 341	
9 semester hours of electives from	9
MET 191	
MET 342	
MET 354	
MET 355	
MET 356	
MET 357	
MET 358	
MET 370	
MET 401	
MET 402	
MET 410 (W)	
MET 420	
MET 430	
MET 440	
MET 442	
MET 456 (W)	
MET 191 may be taken up to 3 times for credit but will only count once toward the meteorology minor.	

# Economics And Finance

## Department Information

Department of Economics and Finance	(251) 460-7171
Chair	Kenneth J. Hunsader
Professors	Hunsader, Swofford, Wood
Associate Professor	Pennywell
Assistant Professors	Affuso, Cummings, Huang, Istiak, Lahtinen, Lawrey, Le, Wisser

Department of Economics and Finance web site

[http://www.southalabama.edu/colleges/mcob/economic\\_and\\_finance](http://www.southalabama.edu/colleges/mcob/economic_and_finance)

The Economics and Finance major is designed to prepare students for managerial positions in business and government. Three concentrations are available within the Economics/Finance major: Economics, Finance, and Real Estate. All Economics/Finance majors are required to take the following two courses and choose one concentration area:

- ECO 315
- FIN 343

### The Economics Concentration

The Economics program is designed to prepare students for professional careers in managerial positions, government, administration, education, and others. Positions in business economics and graduate study require knowledge of economics and the application of economic tools to analyze problems for decision-making.

### The Finance Concentration

The Finance program is designed to provide an understanding of the various areas and principles of finance. Students will develop a body of specialized knowledge and analytical techniques that are used in the acquisition, allocation and management of financial resources. Finance careers are typically in industry and commercial businesses, public utilities and government agencies, banks, insurance companies, brokerage houses, investment companies and other financial institutions. The finance degree is appropriate for students who plan a career in corporate finance, financial planning, investment planning and research, or insurance.

### The Real Estate Concentration

The Real Estate program is designed to educate and prepare students for the myriad of professional careers available in residential, commercial, and related real estate industries. Students will develop the specialized quantitative and qualitative skills necessary to elevate their knowledge of real estate as an asset class and investment vehicle. Studying real estate will better prepare students for the unique demands and complex risks associated with real estate practice and investment. Additionally, exposure to active real estate professionals through coursework and internships will provide students the opportunity to begin building a professional network that will add value to their education, and enhance their career prospects upon graduation.

## Areas Of Study

### Degrees, Programs, Or Concentrations

Economics and Finance (BSBA)..... 386

## Courses

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### Course Listing

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Economics.....	937
Finance.....	981

## Faculty

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AFFUSO, ERMANNO  
Assistant Professor  
MS, Polytechnic University of Bari  
PHD, Auburn University

CUMMINGS, JOHN R.  
Assistant Professor  
BA, University of NC- Chapel Hill  
MBA, University of Mobile  
DBA, Kennesaw State University

HUANG, YING  
Assistant Professor  
MRCP, University of Memphis  
MS, University of Memphis  
PHD, University of Memphis

HUNSADER, KENNETH J.  
Professor  
BS, Florida State University  
PHD, Florida State University

ISTIAK, KHANDOKAR  
Instructor  
BS, University of Dhaka  
MS, University of Dhaka  
MA, University of Arizona  
PHD, Univ of Calgary

LAHTINEN, KYRE D.  
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BS, Florida State University  
MS, Florida State University  
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LAWREY, CHRISTOPHER M.  
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LE, HUUBINH B.  
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BS, Georgia State University  
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PHD, Georgia State University

SWOFFORD, JAMES L.  
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BA, University of Richmond  
MA, University of Florida  
PHD, University of Florida

WISER, MATTHEW J.  
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BA, University of Rochester  
MS, Louisiana State University  
MS, Louisiana State University  
PHD, Louisiana State University

WOOD JR., BOB G.  
Professor  
BS, Arkansas State University-Main  
MBA, Arkansas State University-Main  
PHD, Louisiana State University

# Economics And Finance (BSBA)

## Degree Requirements

### Bachelor Of Science Degree Requirements - Major In Economics and Finance

To graduate, students complete a minimum of 122 semester hours with an overall institution grade-point average (GPA) of 2.0 (38 hours of general education requirements and 84 hours of business courses). In addition, a grade of at least C is required in each of the Basic Business Techniques courses and a 2.0 GPA is required in the 300-level business core courses, and a 2.0 GPA is required for all courses counted in the Economics and Finance Major, which include the following:

Concentration in Economics	Course Title	Credit Hours
ECO 315	Intermediate Microeconomics	3
FIN 343	Money Markets & Financial Institutions	3
ECO 316	Intermediate Macroeconomics	3
ECO 330	Current Global Economic Issues	3
ECO 491	History of Economic Thought	3
Choose four electives from the following:		12
ECO 318	Principles of Managerial Economics	
ECO 322	Economics of Industrial Organization	
ECO 323	Public Finance	
ECO 343	Labor Economics	
ECO 363	International Economics	
ECO 372	Urban Economics	
ECO 383	Economic History of the United States	
ECO 390	Environmental Economics	
ECO 451	Mathematical Economics	
ECO 453	Introduction to Econometrics	
FIN 420	Investments	
FIN 430	Derivative Securities	
<b>Total</b>		<b>27</b>

Concentration in Finance	Course Title	Credit Hours
ECO 315	Intermediate Microeconomics	3
FIN 343	Money Markets & Financial Institutions	3
FIN 332	Multinational Finance	3
FIN 350	Financial Statement Analysis & Corporate Strategy	3

FIN 410	Intermediate Business Finance	3
FIN 411	Advanced Business Finance	3
FIN 420	Investments	3
Choose two electives from the following:		6
FIN 344	Real Estate	
FIN 345	Principles of Insurance	
FIN 370	Short-Term Financial Management	
FIN 421	Security Analysis & Portfolio Management	
FIN 425	Student Managed Investment Fund I	
FIN 426	Student Managed Investment Fund II	
FIN 430	Derivative Securities	
FIN 445	Life and Disability Insurance	
FIN 446	Real Estate Finance & Investments	
FIN 470	Depository Institutions Management I	
FIN 471	Depository Institutions Management II	
<b>Total</b>		<b>27</b>

Concentration in Real Estate	Course Title	Credit Hours
ECO 315	Intermediate Microeconomics	3
FIN 343	Money Markets & Financial Institutions	3
FIN 344	Real Estate Principles	3
FIN 444	Real Estate Valuation	3
FIN 446	Real Estate Finance & Investments	3
FIN 448	Real Estate Law	3
Plus three (3) electives from the following:		9
ECO 372	Urban Economics	
FIN 345	Principles of Insurance	
FIN 350	Financial Statement Analysis	
FIN 420	Investments	
FIN 494	Directed Studies in Finance	
MGT 457	Franchising	
MKT 381	Sales Management & Personal Selling	
<b>Total</b>		<b>27</b>

# Electrical-Computer Engineering

## Department Information

Department of Electrical and Computer Engineering Administrative Staff		(251) 460-6117
Chair	Hulya Kirkici	
Professors	Kirkici, Steadman, Wood	
Associate Professors	El-Sharkh, Khan, Russ, Spencer, Thomas	
Assistant Professors	Al-Assadi, Gollapalli, Latif, Lazarou	
Emeritus Professors	Bosarge, Gungor, Sakla	
Part-time Instructor	Gholson, Nicholson, Peirre, Sakla	

Department of Electrical and Computer Engineering web site  
<http://www.southalabama.edu/colleges/engineering/ece/index.html>

The Department of Electrical and Computer Engineering offers the Bachelor of Science in Electrical Engineering (BSEE) and the Bachelor of Science in Computer Engineering (BSCpE), both degrees being granted by the College of Engineering. The BSCpE program is administered by ECE Department in consultation with the School of Computing.

### BSEE Program Educational Objectives

The program educational objectives (PEOs) of the Electrical Engineering Degree Program are to produce graduates who, during their first few years after graduation, will:

1. Achieve professional advancement with increasing responsibility and leadership, and mentorship
2. Function effectively on multidisciplinary teams, and individually, to develop and apply electrical engineering solutions within a global, societal, and environmental context
3. Communicate effectively and manage resources skillfully as members and leaders of their profession
4. Advance professional competence through continuous learning such as advanced degrees, professional registration, leadership through ethical standards and professionalism.

### BSEE Student Outcomes

By the time of graduation from the Electrical Engineering Program, students should attain the following outcomes:

1. An ability to apply knowledge of mathematics, science, and engineering.
2. An ability to design and conduct experiments, as well as to analyze and interpret data.
3. An ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability.
4. An ability to function on multidisciplinary teams.
5. An ability to identify, formulate, and solve engineering problems.
6. An understanding of professional and ethical responsibility.
7. An ability to communicate effectively.
8. The broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context.
9. A recognition of the need for, and an ability to engage in life-long learning.
10. A knowledge of contemporary issues.
11. An ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.

The BSEE curriculum is designed to ensure the attainment of the student outcomes.

The Bachelor of Science in Electrical Engineering program is accredited by the Engineering Accreditation Commission of ABET, <http://www.abet.org>

Electrical Engineering is among the fastest evolving disciplines in our technological society. The engineering developments in electrical technology have provided, in a substantial way, for improvement in the standard of Living of humanity. The domain of the electrical engineer reaches from massive electrical energy systems to microscopic integrated circuits; from Life studies in bioengineering to satellite communications systems; and from the control of electromagnetic radiation to the control of information flow in a computer. The Computer Engineering program is geared to students who are interested in the design of digital computing systems, integrating both hardware and software design components.

The highly diverse and rapidly evolving characteristics of these fields require a thorough understanding of fundamentals as well as flexibility in the design of individualized programs of study. Therefore, emphasis is placed on mathematics, physics, humanities, social sciences, basic sciences and engineering sciences during the first two years while sufficient flexibility is provided at the senior level to allow a student, in consultation with an advisor, to prepare a specialized course of study in two areas from the broad field of electrical and computer engineering.

### **BSCpE Program Educational Objectives**

The program educational objectives (PEOs) of the Computer Engineering Degree Program are to produce graduates who, during their first few years after graduation, will:

1. Achieve professional advancement with increasing responsibility, leadership and mentorship
2. Function effectively on multidisciplinary teams, and individually, to develop and apply computer engineering solutions within a global, societal, and environmental context.
3. Communicate effectively and manage resources skillfully as members and leaders of their profession.
4. Advance professional competence through continuous learning such as advanced degrees, professional registration, leadership through ethical standards and professionalism.

### **BSCpE Student Outcomes**

The student outcomes (SOs) of the Computer Engineering degree program are to produce graduates who at the time of graduation will have:

By the time of graduation from the BSCpE program, a student will have demonstrated attainment of the following outcomes:

1. An ability to apply knowledge of mathematics, science, and engineering.
2. An ability to design and conduct experiments, as well as to analyze and interpret data.
3. An ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability.
4. An ability to function on multidisciplinary teams.
5. An ability to identify, formulate, and solve engineering problems.
6. An understanding of professional and ethical responsibility.
7. An ability to communicate effectively.
8. The broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context.
9. A recognition of the need for, and an ability to engage in life-long learning.
10. A knowledge of contemporary issues.
11. An ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.

The BSCpE curriculum is designed to ensure the attainment of the student outcomes.

The Bachelor of Science in Computer Engineering program is accredited by the Engineering Accreditation Commission of ABET, <http://www.abet.org>

In the Computer Engineering Degree Program, sequences of courses are chosen from Electrical and Computer Engineering and from Computer Science that produce an in-depth treatment of digital logic and systems theory. In addition, means are provided in both degree programs, through the Electrical and Computer Engineering Design Laboratory, for a student to pursue a design topic outside of, but related to, the formal course work.

Students are required to take general education (GenEd) elective courses in two broad areas: (i) Literature, Humanities and Fine Arts, and (ii) History, Social, and Behavioral Sciences. These courses provide breadth to the educational experience of Electrical Engineering and Computer Engineering students. They must be planned, in consultation with an academic advisor, to reflect a rationale appropriate to the educational objectives of the Departmental Programs, while conforming strictly to the requirements of the Articulation and General Studies Committee of the State of Alabama.

A minimum of 18 semester hours from areas (i) and (ii) above must be successfully completed. In area (i), Public Speaking (CA 110) is required for all Electrical and Computer Engineering students. Of the two remaining courses, one course must be in literature and one course must be in the fine arts; in area (ii), at least one course must be in history and at least one course must be from disciplines in the social and behavioral sciences.

Students in Electrical Engineering are required to become Student Members of the Institute of Electrical and Electronics Engineers (IEEE) when they enroll in EE 401 and EE 404. Students in Computer Engineering are required to become members of either the Institute of Electrical and Electronics Engineers (IEEE) or the Association for Computing Machinery (ACM) when they enroll in EE 401 and EE 404. Through participation in the activities of such technical organizations the student becomes aware of the activities of electrical and computer engineers in society. An excellent opportunity is provided to students for contact with practicing professionals as well as fellow students.

Any Electrical and Computer Engineering student interested in pursuing a career in medicine or bioengineering should consult with an advisor for an appropriate sequence of courses which will meet the minimum requirements for entry into a medical school or the necessary life sciences background to enter a graduate program in bioengineering.

The attainment of the BSEE or the BSCpE degree will allow the graduate to enter the professions of electrical engineering or computer engineering directly, or to continue his/her education at the graduate level.

## Areas Of Study

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### Degrees, Programs, Or Concentrations

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### Course Listing

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Systems Engineering.....	1151

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BSEE, University of South Alabama  
MSEE, Univ of Alabama-Birmingham  
PHD, University of Alabama-Huntsv

WOODS, ROGER C.  
Professor  
BA, University of Cambridge UK  
MA, University of Oxford England  
PHD, University of Oxford England  
DSC, University of Oxford England

# Computer Engineering (BS)

## Degree Requirements

First Year		Credit Hours
Fall		16
MA 125	4 hrs	
CH 131	3 hrs	
CH 131L	1 hr	
EH 101*	3 hrs	
EG 101	2 hrs	
Gen Ed	3 hrs	
Spring		17
MA 126	4 hrs	
EH 102	3 hrs	
PH 201	4 hrs	
CIS 210	3 hrs	
Gen Ed	3 hrs	
Second Year		Credit Hours
Fall		17
MA 227	4 hrs	
MA 267	3 hrs	
PH 202	4 hrs	
EE 220	3 hrs	
EE 263	3 hrs	
Spring		18
EE 223	3 hrs	
EE 227	1 hr	
EE 264	3 hrs	
EE 268	1 hr	
CSC 231	4 hrs	
MA 238	3 hrs	
Gen Ed	3 hrs	
Third Year		Credit Hours
Fall		16

EE 321	3 hrs
EE 331	3 hrs
EE 368	1 hr
Gen Ed	3 hrs
CSC 311	3 hrs
EG 231	3 hrs
Spring	16
EE 328	3 hrs
EE 334	4 hrs
EE 322	3 hrs
CSC 322	3 hrs
EE 457	3 hrs

Fourth Year*****		Credit Hours
Fall		14
EE 401	1 hr	
EE 446	1 hr	
Tech Elect**	3 hrs	
Tech Elect**	3 hrs	
Tech Elect**	3 hrs	
Gen Ed	3 hrs	
Spring		16
EE 404	3 hrs	
EE 454	3 hrs	
Tech Elect**	3 hrs	
Tech Elect**	3 hrs	
Senior Lab***	1 hr	
Gen Ed	3 hrs	

\*Students with an adequate ACT/SAT score in English Composition will not be required to take EH 101 as a prerequisite to EH 102.

\*\*Computer Engineering technical electives must be selected with permission of the student's advisor from EE 422, EE 423, EE 424, EE 427, EE 430, EE 431, EE 432, EE 438, EE 439, EE 440, EE 441, EE 443, EE 444, EE 447, EE 465, EE 468, EE 469, EE 470, EE 471, EE 473, and EG 480. CIS technical electives must be selected from CSC 410, CSC 411, CSC 412, CSC 413, CSC 414, CSC 415, CSC 416, CSC 417, CSC 418, CSC 434, CIS 439.

\*\*\*Senior lab may be chosen from either EE 425, EE 447 or EE 449.

**Note:**

1. A student must complete EH 101, EH 102, MA 125, MA 126, CH 131, PH 201, CIS 210, and EE 220 with a 'C' or better in each course to obtain PCS in the Computer Engineering Program.
2. Appropriate software tools will be utilized in almost all EE and CIS courses.
3. For technical elective courses, BSCpE students must select one of the following tracks:

- Hardware Track: Students must take 3 senior level EE courses and the remaining 2 courses can be senior level EE or CSC courses.
- Software Track: Students must take CSC 331, CSC 333, CSC 432 and the remaining 2 courses can be senior level EE or CSC courses.

It is important that students make adequate progress in the Computer Engineering program. Satisfactory completion of a set of fundamental courses is required before a student is allowed to take advanced courses. Professional Component Standing (PCS) is awarded by the chair of the department when the student completes the College of Engineering PCS requirements and the ECE departmental PCS requirements.

College of Engineering PCS Courses			
Course Number	Course Title	Credit Hours	Minimum Grade
EH 101	English Composition I	3	C
EH 102	English Composition II	3	C
CH 131	General Chemistry I + Lab	4	C
MA 125	Calculus I	4	C
MA 126	Calculus II	4	C
PH 201	Calculus-Based Physics I + Lab	4	C

Electrical and Computer Engineering PCS Courses			
Course Number	Course Title	Credit Hours	Minimum Grade
CIS 210	Intro to C++ Programming	3	C
EE 220	Circuit Analysis I	3	C

Students who fail to maintain at least a 2.00 GPA overall at the University of South Alabama will lose PCS and may be required to take or repeat appropriate courses as specified by the department chair to correct their deficiencies and may not be permitted to continue in 300- and 400-level engineering courses.

## Major Milestones

### COMPUTER ENGINEERING SAMPLE 4-YEAR PLAN WITH MILESTONES

Term 1	Course Description	Pre-req	Cr Hrs	Milestone Notes
EH 101*	English Composition I		3	Must complete at least 12 hours with a 2.0 or higher GPA
MA 125	Calculus I	ACT Math 27	4	
CH 131/131L	General Chemistry I	ACT Math 24	4	
EG 101	Freshman Seminar	ACT Math 24	2	
<b>Fine Arts Elective</b>				

3

16

Term 2	Course Description	Pre-req	Cr Hrs	Milestone Notes
EH 102	English Composition II	EH 101 or test score	3	MA 125
MA 126	Calculus II	MA 125	4	CH 131/131L
PH 201/201L	Physics I	MA 125 and MA 126 (cc)	4	EH 101 or EH 105*
CIS 210	Introduction to C++ Programming	MA 125 (cc)	3	
<b>CA 110</b>	<b>Public Speaking</b>		3	
			<b>17</b>	Grade of "C" or better required in all Milestones for PCS

Term 3	Course Description	Pre-req	Cr Hrs	Milestone Notes
MA 227	Calculus III	MA 126	4	PH 201/201L
MA 267	Discrete Math	ACT Math 23	3	MA 126
PH 202/202L	Physics II	PH 201	4	CIS 210
EE 220	Circuit Analysis	MA 125	3	
EE 263	Digital Logic Design	CIS and EE 220 (cc)	3	
			<b>17</b>	Grade of "C" or better required in all Milestones for PCS

Term 4	Course Description	Pre-req	Cr Hrs	Milestone Notes
MA 238	Differential Equations	MA 227 (cc)	3	EE 220
EE 223	Network Analysis	EE 220, MA 227, and MA 238 (cc)	3	EH 102
EE 227	Circuits and Devices Lab	EE 223 (cc) and EH 102 (cc)	1	Obtain PCS
EE 268	Digital Logic Design Lab	EE 263 and EE 227 (cc)	1	
EE 264	Microprocess Systems and Interfacing	EE 263	3	

CSC 231	Introduction to Data Structures and Algorithms	CIS 210 and MA 267 (cc)	4	
<b>History/ English Literature</b>		EH 102	3	
			<b>18</b>	Grade of "C" or better required in all Milestones for PCS

<b>Term 5</b>	<b>Course Description</b>	<b>Pre-req</b>	<b>Cr Hrs</b>	<b>Milestone Notes</b>
EE 331	Physical Electronics	CH 131, MA 238 and PH 202	3	
EE 321	Signals, Systems, and Digital	MA 238 and EE 223	3	
EE 368	Microprocess Systems and Interfacing Lab	EE 268 and EE 264 (cc)	1	
EG 231	Engineering Economics and Ethics	EE220	3	
CSC 311 (Fall only)	Networking and Communications	CSC 231	3	
<b>History/ English Literature</b>			3	
			<b>16</b>	

<b>Term 6</b>	<b>Course Description</b>	<b>Pre-req</b>	<b>Cr Hrs</b>	<b>Milestone Notes</b>
EE 334	Analog and Digital Electronics	EE 331	4	Apply for Graduation
EE 328	Feedback Control Systems	EE 321	3	Apply for FE Exam
EE 322	Probability, Random Signals, and Statistical Analysis	MA 238 and EE 321 (cc)	3	
EE 457	Embedded System Design	EE 264 and EE 368	3	
CSC 322 (Spring only)	Operating Systems	CSC 231	3	
			<b>16</b>	

Term 7	Course Description	Pre-req	Cr Hrs	Milestone Notes
Technical Elective	EE/CSC 400 level or higher		3	Take FE Exam
Technical Elective	EE/CSC 400 level or higher		3	
Technical Elective	EE/CSC 400 level or higher		3	
EE 401 (W)	Introduction to ECE Design	EE 321, CA 110, EE 334 (cc) and EE 368 (cc)	1	
EE 446	Embedded System Design Lab	EE 457 (cc)	1	
<b>Social/ Behavioral Elective</b>			3	
			<b>14</b>	
Term 8	Course Description	Pre-req	Cr Hrs	Milestone Notes
Technical Elective	EE/CSC 400 level or higher		3	
Technical Elective	EE/CSC 400 level or higher		3	
Senior Technical Elective Lab	EE 400 level or higher		1	
EE 404 (W) (Spring only)	ECE Design	EE 401	3	
EE 454	Digital Computer Architecture	EE 264, and EE 268	3	
Social/ Behavioral Elective			3	
			<b>16</b>	
	<b>**TOTAL</b>		<b>130</b>	

All bolded courses meet general education requirements. See the departmental flow chart for the current listing of courses.

Courses listed as Milestones are required to obtain Professional Component Standing (PCS). All Milestone courses require a grade of "C" or better. Prerequisite courses denoted (cc) may be taken concurrently.

\*Students who earn an English ACT score of 27, or a written SAT score of 550, can opt out of EH 101.

**\*\*Students not Term 1- Calculus I ready will exceed the 130 hours required for this degree. If math is not started prior to Fall -Year 1, you are likely extending your four-year graduation time table. Students with ACT Math scores 21 and below should begin math courses in the summer before Fall - Year 1.\*\***

Two designated writing (W) courses are required with at least one course chosen from offerings in the student's major or minor. Courses carrying this required credit are identified in the University Bulletin by a (W) after the course title.

The Sample 4-year plan is designed as a guide for students preparing for their course selections. This information provides only a suggested schedule. Actual course selections should be made in consultation with an advisor.

# Electrical Engineering (BS) - General Track

## Degree Requirements

First Year		Credit Hours
Fall		16
MA 125	4 hrs	
CH 131	3 hrs	
CH 131L	1 hr	
EH 101*	3 hrs	
EG 101	2 hrs	
Gen Ed	3 hrs	
Spring		17
MA 126	4 hrs	
EH 102	3 hrs	
PH 201	4 hrs	
CIS 210	3 hrs	
Gen Ed	3 hrs	
Second Year		Credit Hours
Fall		17
MA 227	4 hrs	
PH 202	4 hrs	
EE 263	3 hrs	
EE 220	3 hrs	
Gen Ed*	3 hrs	
Spring		15
EE 223	3 hrs	
EE 227	1 hr	
EE 264	3 hrs	
EE 268	1 hr	
MA 237	3 hrs	
MA 238	3 hrs	
EG 270	3 hrs	
Third Year		Credit Hours
Fall		16

EE 321	3 hrs	
EE 322	3 hrs	
EE 331	3 hrs	
EE 354	3 hrs	
EE 368	1 hr	
EE 381	3 hrs	
Spring		17
EE 328	3 hrs	
EE 334	4 hrs	
EE 355	2 hrs	
EE 337	1 hr	
EE 365	3 hrs	
EE 372	3 hrs	
EE 385	1 hr	
<b>Fourth Year*****</b>		<b>Credit Hours</b>
Fall		14
EE 401	1 hr	
EG 231	3 hrs	
Senior Lab***	1 hr	
Gen Ed	3 hrs	
Tech Elect**	3 hrs	
Tech Elect**	3 hrs	
Spring		15
EE 404	3 hrs	
Tech Elect**	3 hrs	
Tech Elect**	3 hrs	
Gen Ed	3 hrs	
Gen Ed	3 hrs	

\*Students with an adequate ACT/SAT score in English Composition will not be required to take EH 101 as a prerequisite to EH 102.

\*\*EE technical electives must be selected from Electrical Engineering courses carrying a 400 number and must include a two-course concentration from the following concentration areas with permission of the student's advisor:

Control Systems: EE 422, EE 423, EE 424, EE427, EE 438, and EE 468.

Communications and Networks: EE 441, EE 444, EE 453, EE 456, EE 471, and EE 473.

Digital Systems: EE 438, EE 440, EE 441, EE 443, EE 454, EE 457, EE 465, EE 468 and EE 469.

Electromagnetics and Optics: EE 450, EE 452, EE 453, EE 455, EE 456, EE 458, and EE 488.

Electronics: EE 430, EE 431, EE 432, EE 438, EE 439, EE 455, EE 470, EE 482, and EE 486.

Power Systems: EE 430, EE 445, EE 481, EE 482, EE 483, EE 484, EE 485, EE 486, EE 488, and EE 489.

Students may also take EG 480 provided the concentration requirement is satisfied.

\*\*\*Senior Lab may be chosen from EE 425, EE 446, EE 447 or EE 449.

**Note:**

1. A student must complete EH 101, EH 102, MA 125, MA 126, CH 131, PH 201, CIS 210, and EE 220 with a 'C' or better in each courses to obtain PCS in the Electrical Engineering Program.
2. Appropriate software tools will be utilized in almost all EE courses.

It is important that students make adequate progress in the Computing Engineering program. Satisfactory completion of a set of fundamental courses is required before a student is allowed to take advanced courses. Professional Component Standing (PCS) is awarded by the chair of the department when the student completes the College of Engineering PCS requirements and the ECE departmental PCS requirements.

College of Engineering PCS Courses			
Course Number	Course Title	Credit Hours	Minimum Grade
EH 101	English Composition I	3	C
EH 102	English Composition II	3	C
CH 131	General Chemistry I + Lab	4	C
MA 125	Calculus I	4	C
MA 126	Calculus II	4	C
PH 201	Calculus-Based Physics I + Lab	4	C

  

Electrical and Computer Engineering PCS Courses			
Course Number	Course Title	Credit Hours	Minimum Grade
CIS 210	Intro to C++ Programming	3	C
EE 220	Circuit Analysis I	3	C

Students who fail to maintain at least a 2.00 GPA overall at the University of South Alabama will lose PCS and may be required to take or repeat appropriate courses as specified by the department chair to correct their deficiencies and may not be permitted to continue in 300- and 400-level engineering courses.

## Major Milestones

### ELECTRICAL ENGINEERING SAMPLE 4-YEAR PLAN WITH MILESTONES

Term 1	Course Description	Pre-req	Cr Hrs	Milestone Notes
EH 101	English Composition I		3	Must complete at least 12 hours with a 2.0 or higher GPA
MA 125	Calculus I	ACT Math 27	4	
CH 131/131L	General Chemistry I	ACT Math 24	4	
EG 101	Freshman Seminar	ACT Math 24	2	

**Fine  
Arts  
Elective**

3

16

<b>Term 2</b>	<b>Course Description</b>	<b>Pre-req</b>	<b>Cr Hrs</b>	<b>Milestone Notes</b>
EH 102	English Composition II	EH 101 or test score	3	MA 125
MA 126	Calculus II	MA 125	4	CH 131/131L
PH 201/201L	Physics I	MA 125 and MA 126 (cc)	4	EH 101 or EH 105*
CIS 210	Introduction to C++ Programming	MA 125 (cc)	3	
CA 110	<b>Public Speaking</b>		3	
			<b>17</b>	Grade of "C" or better required in all Milestones for PCS
<b>Term 3</b>	<b>Course Description</b>	<b>Pre-req</b>	<b>Cr Hrs</b>	<b>Milestone Notes</b>
MA 227	Calculus III	MA 126	4	PH 201/201L
PH 202/202L	Physics II	PH 201	4	MA 126
EE 220	Circuit Analysis	MA 125	3	CIS 210
EE 263	Digital Logic Design	CIS 210 and EE 220 (cc)	3	
<b>History/ English Literature</b>		EH 102	3	
			<b>17</b>	Grade of "C" or better required in al Milestones for PCS
<b>Term 4</b>	<b>Course Description</b>	<b>Pre-req</b>	<b>Cr Hrs</b>	<b>Milestone Notes</b>
MA 238	Differential Equations	MA 227 (cc)	3	EE 220
EE 223	Network Analysis	EE 220, MA 227 (cc) and MA 238 (cc)	3	EH 102
EE 227	Circuits and Devices Lab	EE 223 (cc) and EH 102 (cc)	1	Obtain PCS
EE 268	Digital Logic Design Lab	EE 263 and EE 227 (cc)		

EE 264	Microprocess Systems and Interfacing	EE 263	3	
MA 237	Linear Algebra	MA 126	3	
EG 270	Thermodynamics	MA 126 and PH 201	3	
			17	Grade of "C" or better required in all Milestones for PCS

Term 5	Course Description	Pre-req	Cr Hrs	Milestone Notes
EE 322	Probability, Random Signals, and Statistical Analysis	MA 238 and EE 321 (cc)	3	
EE 321	Signals, Systems, and Digital	MA 238 and EE 223	3	
EE 331	Physical Electronics	CH 131, MA 238 and PH 202	3	
EE 354	Electromagnetics I	MA 237, MA 238, and PH 202	3	
EE 381	Electromechanical Energy Conversion	EE 354 (cc)	3	
EE 368	Microprocess Systems and Interfacing Lab	EE 268 and EE 264 (cc)	1	
			16	

Term 6	Course Description	Pre-req	Cr Hrs	Milestone Notes
EE 465 (Previously EE 365)	Digital Signal Processing	EE 321 and EE 322	3	Apply for graduation
EE 328	Feedback Control Systems	EE 321	3	Apply for FE Exam
EE 372	Introduction to Communications	EE 321 and EE 322	3	
EE 355	Electromagnetics II	EE 354	2	
EE 385	Energy Conversion Lab	EE 381 (cc)	1	
EE 334	Analog and Digital Electronics	EE 331	4	
EE 337	Electronics Lab	EE 334 (cc)	1	
			17	

Term 7	Course Description	Pre-req	Cr Hrs	Milestone Notes
Technical Elective	EE 400 level or higher		3	Take FE Exam
Technical Elective	EE 400 level or higher		3	
Senior Technical Elective Lab	EE 400 level or higher		1	
EE 401 (W)	Introduction to ECE Design	EE 321, CA 110, EE 334 (cc), and EE 368 9cc)	1	
EG 231	Engineering Economics and Ethics	EE 220 or EG 270	3	
History/ Social/ Behavioral Elective			3	
			<b>14</b>	
Term 8	Course Description	Pre-req	Cr Hrs	Milestone Notes
Technical Elective	EE 400 level or higher		3	
Technical Elective	EE 400 level or higher		3	
EE 404 (W)	ECE Design	EE 401	3	
<b>History/ Social/ Behavioral Elective</b>			3	
<b>History/ Social/ Behavioral Elective</b>			3	
			<b>15</b>	
	<b>**TOTAL</b>		<b>129</b>	

All bolded courses meet general education requirements. See the departmental flow chart for the current listing of courses.

Courses listed as Milestones are required to obtain Professional Component Standing (PCS). All Milestone courses require a grade of "C" or better. Prerequisite courses denoted (cc) may be taken concurrently.

\*Students who earn an English ACT score of 27, or a written SAT score of 550, can opt out of EH 101.

**\*\*Students not Term 1- Calculus I ready will exceed the 129 hours required for this degree. If math is not started prior to Fall -Year 1, you are likely extending your four-year graduation time table. Students with ACT Math scores 21 and below should begin math courses in the summer before Fall - Year 1.**

Two designated writing (W) courses are required with at least one course chosen from offerings in the student's major or minor. Courses carrying this required credit are identified in the University Bulletin by a (W) after the course title.

The Sample 4-year plan is designed as a guide for students preparing for their course selections. This information provides only a suggested schedule. Actual course selections should be made in consultation with an advisor.

# Electrical Engineering (BS) - Premed Track

## Degree Requirements

First Year		Credit Hours
Fall		16
MA 125	4 hrs	
CH 131	3 hrs	
CH 131L	1 hr	
EH 101*	3 hrs	
EG 101	2 hrs	
Gen Ed	3 hrs	
Spring		18
MA 126	4 hrs	
EH 102	3 hrs	
PH 201	4 hrs	
CIS 210	3 hrs	
CH 132	4 hrs	
Second Year		Credit Hours
Fall		18
MA 227	4 hrs	
PH 202	4 hrs	
EE 263	3 hrs	
EE 220	3 hrs	
CH 201	4 hrs	
Spring		18
EE 223	3 hrs	
EE 227	1 hr	
CH 202	4 hrs	
BLY 121	4 hrs	
MA 237	3 hrs	
MA 238	3 hrs	
Third Year		Credit Hours
Fall		20
EE 268	1 hr	

EE 264	3 hrs	
EE 321	3 hrs	
EE 322	3 hrs	
EE 331	3 hrs	
BMD 321	3 hrs	
BLY 122	4 hrs	
Spring		18
Gen Ed	3 hrs	
EE 334	4 hrs	
EE 337	1 hr	
BMD 322	3 hrs	
BLY 350	3 hrs	
EE 368	1 hr	
Gen Ed	3 hrs	
<b>Fourth Year*****</b>		<b>Credit Hours</b>
Fall		16
EE 372	3 hrs	
EE 401	1 hr	
EG 231	3 hrs	
EE 465	3 hrs	
EE 328	3 hrs	
Tech Elect**	3 hrs	
Spring		18
EE 404	3 hrs	
Tech Elect**	3 hrs	
Tech Elect**	3 hrs	
Gen Ed	3 hrs	
Gen Ed	3 hrs	
Gen Ed	3 hrs	

\*Students with an adequate ACT/SAT score in English Composition will not be required to take EH 101 as a prerequisite to EH 102.

\*\*EE technical electives must be selected from Electrical Engineering courses carrying a 400 number and must include a two-course concentration from the following concentration areas with permission of the student's advisor:

Control Systems: EE 422, EE 423, EE 424, EE427, EE 438, and EE 468.

Communications and Networks: EE 441, EE 444, EE 453, EE 456, EE 471, and EE 473.

Digital Systems: EE 438, EE 440, EE 441, EE 443, EE 454, EE 457, EE 465, EE 468 and EE 469.

Electromagnetics and Optics: EE 450, EE 452, EE 453, EE 455, EE 456, EE 458, and EE 488.

Electronics: EE 430, EE 431, EE 432, EE 438, EE 439, EE 455, EE 470, EE 482, and EE 486.

Power Systems: EE 430, EE 445, EE 481, EE 482, EE 483, EE 484, EE 485, EE 486, EE 488, and EE 489.

Students may also take EG 480 provided the concentration requirement is satisfied.

\*\*\*Senior Lab may be chosen from EE 425, EE 446 or EE 447.

**Note:**

1. A student must complete EH 101, EH 102, MA 125, MA 126, CH 131, PH 201, CIS 210, and EE 220 with a minimum 'C' or better in each course to obtain PCS in the Electrical Engineering Program.
2. Appropriate software tools will be utilized in almost all EE courses.

# Electrical Engineering (MS)

## Degree Requirements

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With the ever-increasing pace of technological development in society, new and challenging opportunities are becoming available that require engineering graduates with increased levels of specialization. To provide for this, the Electrical and Computer Engineering Department offers electrical engineering and computer engineering graduates a cutting-edge program in graduate studies leading to the Master of Science in Electrical Engineering (MSEE) degree.

The program offers advanced level courses and areas of specialization in computer engineering, digital controls, laser-assisted fabrication, microelectronics, networks, image processing, pattern recognition, wireless communications, optical information processing and power systems. Graduate students have wide opportunities to undertake front-line engineering research alongside faculty for both thesis and project work. In addition, a course work-only program is also offered by the department for those in industry who intend to further their professional development while pursuing a graduate degree.

### Admission To The MSEE Program

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The following criteria supplement the College of Engineering admission criteria (see ADMISSION TO GRADUATE PROGRAMS):

1. Regular Admission
  - a. A B.S. degree in electrical or computer engineering.
  - b. A grade-point average of 3.0 or greater (A=4.0) on all undergraduate work.
  - c. A minimum GRE score of 151 and a minimum GRE Verbal score of 141. GRE scores are not required from applicants who received their undergraduate degrees in electrical or computer engineering from ABET-accredited institutions.
  - d. For International students, a minimum score of 550 on the written Test of English as a Foreign Language (TOEFL) or a 79 score on the Internet-based TOEFL exam, or a minimum score of Band 6.5 on the International English Language Testing System (IELTS) test.
2. Provisional Admission
  - a. A B.S. degree in electrical or computer engineering, or in a field acceptable to the departmental Graduate Admissions Committee. Depending on the student's background, additional undergraduate preparatory courses may be required. These courses will not count toward the Masters degree.
  - b. A minimum grade-point average of 2.5 (A=4.0) on all undergraduate work, including a minimum grade-point average of 2.5 over the last 64 course hours of undergraduate work. Alternatively, a minimum grade-point average of 2.75 over the last 64 course hours of undergraduate work is required.
  - c. A minimum GRE combined score greater than or equal to 283 (Verbal + Quantitative). GRE scores are not required from applicants who received their undergraduate degrees in electrical or computer engineering from ABET-accredited institutions.
  - d. For International students, a minimum score of 525 on the written Test of English as a Foreign Language (TOEFL) or a 71 score on the Internet-based TOEFL exam, or a minimum score of Band 6.0 on the International English Language Testing System (IELTS) test.

The minimum credit hour requirements for the different options pertaining to the MSEE degree are:

- Thesis Option: 31 credit hours
- Project Option: 31 credit hours
- Course Option: 30 credit hours

The details of each option are contained in the Electrical and Computer Engineering Department Guidelines for the MSEE program

# Emergency Medical Services

## Department Information

Department of Emergency Medical Services Education Administrative Staff		(251) 461-1832
Chair	Charles Erwin, M.A. NRP	
Program Directors	Brooks, Morgan, AGEMSS: D. Garmon	
Medical Director	Frank S. Pettyjohn, M.D.	
Professor	Frazer	
Instructors	Brooks, Erwin, Garmon, McArthur, McKenna, McDonald, Morgan, Powell	
Academic Advisors	Brooks, McArthur, Morgan, Powell, Sterns	
Part-time Instructors	Levy, Vanderkooi	
Clinical Faculty	Erwin, Brooks, McDonald	
CME Coordinator	Vanderkooi	

Department of Emergency Medical Services Education web site  
<http://www.southalabama.edu/colleges/alliedhealth/ems/index.html>

The Department of EMS Education prepares students for careers in Emergency Medical Services. To meet the expanding role of prehospital providers, the Department of EMS Education offers three certificate programs, EMT, AEMT and Paramedic, as well as a Bachelor of Science in Emergency Medical Services.

## Areas Of Study

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## Faculty

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BROOKS, JASON L.  
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MA, American Public University

ERWIN, CHARLES O.  
Senior Instructor  
BA, University of South Alabama  
MA, American Public University

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MA, Ball State University  
PHD, Southern Illinois U-Carbondale

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BS, Univ of Alabama-Birmingham  
MA, Univ of Alabama-Birmingham

MCARTHUR, SCOTTY A.  
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BSEMS, University of South Alabama

MCDONALD, AMANDA V.  
Instructor  
BS, University of South Alabama

MCKENNA, KRISTEN N.  
Instructor  
BSEMS, University of South Alabama

MORGAN JR., RONALD E.  
Instructor  
BPS, University of Memphis  
MSM, Troy University-Main  
PHD, University of South Alabama

POWELL, JONATHAN R.  
Instructor  
BSEMS, University of South Alabama

# Advanced EMT (AEMT) Certificate Program

## Degree Requirements

The EMT certificate program can be completed in one academic semester and is a prerequisite to the Advanced EMT (AEMT) certificate program. The AEMT certificate program can be completed in one academic semester and is a prerequisite to the Paramedic certificate program. The Paramedic certificate program can be completed in three academic semesters. Together, these programs can be completed in five semesters. Students may, however, elect to complete only the EMT level of education, or the AEMT level of education.

After successful completion of each level of education, the student is eligible to sit for the National Registry of EMT's (NREMT) certification examination. Successful completion of this examination is mandatory for licensure to practice in the State of Alabama. State licensure as an EMT is required to apply for AEMT education. State licensure as an AEMT is required to apply for Paramedic education. Those who complete any level of education and licensure are qualified to work in escalating roles (by level) in many areas of out-of-hospital emergency medical care, including ambulance services, fire rescue departments, and industrial health and safety settings.

Program Requirements	Course Title	Credit Hours
Advanced EMT (AEMT) Certificate Program		15 (1 semester)
EMS 210	Medical Terminology	3 hrs
EMS 200 (OR BMD 114 and 115)	Human Systems and Pathophysiology	3hrs
EMS 140	Advanced EMT	6 hrs
EMS 141	Advanced EMT Lab	1 hr
EMS 143	Advanced EMT Clinical	2 hrs

# EMT Certification Program

## Degree Requirements

The EMT certificate program can be completed in one academic semester and is a prerequisite to the Advanced EMT (AEMT) certificate program. The AEMT certificate program can be completed in one academic semester and is a prerequisite to the Paramedic certificate program. The Paramedic certificate program can be completed in three academic semesters. Together, these programs can be completed in five semesters. Students may, however, elect to complete only the EMT level of education, or the AEMT level of education. After successful completion of each level of education, the student is eligible to sit for the National Registry of EMT's (NREMT) certification examination. Successful completion of this examination is mandatory for licensure to practice in the State of Alabama. State licensure as an EMT is required to apply for AEMT education. State licensure as an AEMT is required to apply for Paramedic education. Those who complete any level of education and licensure are qualified to work in escalating roles (by level) in many areas of out-of-hospital emergency medical care, including ambulance services, fire rescue departments, and industrial health and safety settings.

EMT Certification Program	Course Title	Credit Hours
First Semester		8
EMS 112	EMT	6 hrs
EMS 113	EMT Lab	1 hr
EMS 115	EMT Clinical Internship	1 hr

# Emergency Medical Services (BS)

## Degree Requirements

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### Bachelor Of Science In Emergency Medical Services Program

Students graduating from USA's Paramedic certificate program, as well as licensed Paramedics from other educational institutions, may continue their education at USA and complete a Bachelor of Science Degree in Emergency Medical Services. The baccalaureate program is designed to provide graduates of the certificate program with an opportunity to expand their careers in Emergency Medical Services as administrators, educators and Critical Care Paramedics, or continue their graduate educations into other medical or allied health fields.

### Admissions

General admission to the University is required for all levels of EMS education. Additionally, admission to all EMS programs is contingent upon a satisfactory background check and drug screen. The following are admission requirements for the Bachelor of Science degree program:

- The following are admission requirements for the EMS certificate program:
- General admission to the University is required for all levels of EMS education.
- Admission to all EMS programs is contingent upon a satisfactory background check and drug screen.
- All incoming international students into the EMS programs must have passed the TOFEL exam with a minimum combined score of 80 IBT (Internet Based Testing)
- Academic advising prior to admission to any certificate level. Completion of all healthcare, administrative and documentation requirements.
- Completion of all mandatory requirements at least one week prior to the beginning of the semester.
- Evidence of a current State of Alabama EMT license prior to admission to AEMT program.
- Evidence of a current State of Alabama AEMT license prior to admission to Paramedic program.
- The following are admission requirements for the Bachelor of Science degree program.
- Evidence of successful completion of a nationally accredited or State approved paramedic program, or currently enrolled in the EMS program at the University of South Alabama.
- Evidence of a current state paramedic license or national certification.
- Official transcript or documentation which indicates the successful completion of at least 32 semester hours of paramedic credit (or its equivalent).
- Submission of departmental application per University admission policy including a \$50 application fee.
- Minimum GPA of 2.0 in all prerequisite courses and a minimum university GPA of 2.0.
- Submission of a one to two page written essay explaining professional goals and career aspirations.

### Admission To Paramedic To B.S. In EMS Track

The Department of EMS Education has a track designed especially for licensed Paramedics who obtained their paramedic education elsewhere. In addition to meeting all other admissions requirements, students in this track are required to take a six hour bridge course. Upon completion of the bridge course, up to 40 semester hours of credit will be awarded for the student's previous paramedic training during the final semester before graduation.

### Progression And Completion Policies

To progress throughout the certificate program, a minimum final grade of 80% (or satisfactory, if applicable) must be achieved in each course. The State of Alabama mandates the National Registry of EMT's examination at the EMT, AEMT and Paramedic levels of practice. Only those students who have met all academic requirements of the certificate program will be eligible for their respective National Registry examination.

Students unable to satisfactorily complete the final comprehensive examinations in EMS 297 will be required to repeat this course the following semester.

Students will be allowed to repeat any course only one time, and then only with the permission of the Program Director.

In accordance with State EMS Rules, each student must be a state licensed EMT prior to beginning AEMT instruction, and a licensed AEMT prior to beginning paramedic instruction.

All other criteria for progression will be listed in each course syllabus and will be mandatory.

### **Class And Clinical Internships**

Attendance is mandatory. Those students who have conflicts regarding attendance will be asked to transfer to programs more suited to their schedules.

### **Expenses**

Students enrolled in EMS clinical courses must maintain current CPR certification and must keep all immunizations current. Each semester of education; EMT (one semester), AEMT (one semester) and Paramedic (three semesters) have clinical components and current immunization status will be reviewed prior to the beginning of each semester by the Clinical Coordinator to prevent unprotected exposure to communicable diseases during clinical activity. Students are responsible for all personal health care expenses including expenses resulting from injury or accident, etc., while the student is engaged in learning experiences required by the EMS Department. Therefore, all students are responsible for the purchase and maintenance of current and adequate health care insurance. All students are charged once a year for professional liability insurance. Students are responsible for all travel expenses to clinical sites and classes at the University. Students are responsible for the purchase of uniforms and required clinical equipment and supplies. Students are also responsible for costs related to drug testing and criminal background checks required to be current and/or updated prior to advancement to each subsequent level of education. Tuition and fees are set by the University of South Alabama, upon approval of the Board of Trustees.

### **Background Examination**

Those students accepted into the clinical components of EMT, AEMT and Paramedic will be required to have a drug test and a background examination via an EMS Department designated vendor before beginning classes. Admission will be withdrawn for a student testing positive on their drug test. Admission may be withdrawn for students who in the judgment of the Dean and the Department Chair has been convicted of offenses or have pending criminal charges that would not be acceptable to our clinical agencies. Random drug screens or testing for reasonable suspicion are conducted. Students must submit to drug testing for controlled substances and background examinations as requested. Failure to submit to testing or a positive drug test and/or unsuitable background examination will result in the student's dismissal from the program.

### **Professional Accreditation**

The Department's Paramedic Program is fully accredited by the Commission on the Accreditation of Allied Health Education Programs (CAAHEP) and the Committee on

Accreditation of Educational Programs for the EMS Professions (CoAEMSP).

## **Graduation Plan**

<b>Freshman Year</b>		<b>Credit Hours</b>
First Semester		13
EH 101	3 hrs	
Any LAB science	4 hrs	
HY*	3 hrs	
Fine Arts Elective	3 hrs	
Second Semester		16
EH 102	3 hrs	
Any Lab Science	4 hrs	
SY 109	3 hrs	
MA 110 or 112	3 hrs	

CA 110	3 hrs
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<b>Sophomore Year</b>		<b>Credit Hours</b>
First Semester		17
Literature*	3 hrs	
PSY 120	3 hrs	
EMS 112	6 hrs	
EMS 113	1 hr	
EMS 115	1 hr	
EMS 210	3 hrs	
Second Semester		15
2nd HY or Lit*	3 hrs	
EMS 200	3 hrs	
EMS 140	6 hrs	
EMS 141	1 hr	
EMS 143	2 hrs	
<b>Junior Year</b>		<b>Credit Hours</b>
First Semester		15
MGT 300	3 hrs	
EMS 212	3 hrs	
EMS 214	3 hrs	
EMS 216	3 hrs	
EMS 217	3 hrs	
Second Semester		12
EMS 240	3 hrs	
EMS 242	3 hrs	
EMS 244	3 hrs	
EMS 245	1 hr	
EMS 247	2 hrs	
<b>Senior Year</b>		<b>Credit Hours</b>
First Semester		19
EMS 295	6 hrs	
EMS 297	1 hr	
EMS 310	3 hrs	
EMS 315	3 hrs	
EMS 320	3 hrs	

EMS 460	3 hrs	
Second Semester		16
EMS 325	3 hrs	
EMS 340	3 hrs	
EMS 440	3 hrs	
EMS 445	3 hrs	
EMS 475	3 hrs	
EMS 495	1 hr	
<b>Total Credits</b>		<b>123</b>

\*Must complete a two semester series of either Literature or History.

Fine Arts Elective - 1 course. Acceptable include: ARH 100, 103, 123, ARS 101, DRA 110, or MUL 101

Literature Elective\* - 1 course. Acceptable include: EH 215, 216, 225, 226, 235, or 236

Humanities Elective\* - 1 course. Acceptable include: AFR 101, AIS 105, ARH 100, 103, 123, ARS 101, 121, 123, 124,, DRA 110, EH 216, 225, 226, 235, 236, LG 211, 212, 231, 232, 251, 252, 271, 272, LGS 202, 206, LGS 207, 221, 222, 241, 242, MUL 101, PHL 110, 121, 131, 231, or 240

Lab Science\* - 2 courses. Acceptable include: BLY 101/101L, 102/102L, 121/121L, 122/122L, CH 101/101L, 103/103L, 132/132L, 141/141L, GEO 101/101L, 102/102L, GY 111, 112, PH 101, 114, 115, 201, 202.

History Elective \* - 1 course. Acceptable include: HY 101, 102, 135, or 136

Social Science Elective\* - 1 course. AIS 201, AN 100, 101, CA 100, 211, ECO 215, 216, GEO 114, 115, HY 101, 102, 135, HY 136, IS 100, PSC 130, PSY 121, 250,, SY 112

\*Must complete a 2 course sequence in Literature or History

Acceptable sequences are: EH 215 and 216 or EH 225 and 226 or EH 235 and 236 or HY 101 and 102 or HY 135 and 136

### **Requirements For A Minor In Emergency Medical Services**

A minimum of 24 credits in Emergency Medical Services including EMS 112, EMS 113, EMS 115, EMS 140, EMS 141, EMS 143, EMS 200 or BMD 115 and EMS 210.

# Paramedic Certificate Program

## Degree Requirements

The EMT certificate program can be completed in one academic semester and is a prerequisite to the Advanced EMT (AEMT) certificate program. The AEMT certificate program can be completed in one academic semester and is a prerequisite to the Paramedic certificate program. The Paramedic certificate program can be completed in three academic semesters. Together, these programs can be completed in five semesters. Students may, however, elect to complete only the EMT level of education, or the AEMT level of education.

After successful completion of each level of education, the student is eligible to sit for the National Registry of EMT's (NREMT) certification examination. Successful completion of this examination is mandatory for licensure to practice in the State of Alabama. State licensure as an EMT is required to apply for AEMT education. State licensure as an AEMT is required to apply for Paramedic education.

Those who complete any level of education and licensure are qualified to work in escalating roles (by level) in many areas of out-of-hospital emergency medical care, including ambulance services, fire rescue departments, and industrial health and safety settings.

Paramedic Certificate Program	Course Title	Credit Hours
Paramedic Certificate Program		31 (3 Semesters)
First Semester		12
EMS 212	Foundations of Paramedicine	3 hrs
EMS 214	Introduction to EMS Cardiology	3 hrs
EMS 216	Paramedic Assessment and Operations	3 hrs
EMS 217	Paramedic Clinical Internship I	3 hrs
Second Semester		12
EMS 240	Special Populations	3 hrs
EMS 242	Paramedic Emergency Care I	3 hrs
EMS 244	Paramedic Emergency Care II	3 hrs
EMS 245	Paramedic Skills Lab	1 hr
EMS 247	Paramedic Clinical Internship II	2 hrs
Third Semester		7
EMS 295	Paramedic Field Internship	6 hrs
EMS 297	Comprehensive Review and Exams	1 hr

**Special Notes**

Academic advising is required of all new and existing students prior to each semester. It is the responsibility of each student to schedule an advising session with the academic faculty advisor prior to registration each semester.

# Professional Health Sciences - Healthcare Management (BS)

## Degree Requirements

### Bachelor's Degree In Professional Health Sciences

The Department of Emergency Medical Services offers two BS degrees in Professional Health Sciences, Healthcare Management and Healthcare Informatics. This program is designed for students who wish to have a well-rounded background in health sciences, but do not wish to pursue a specific professional degree or allows students in pre-professional programs that change their mind about specific professional degrees to apply most of their course credits towards another degree. The program provides broad information in health related disciplines and also in health informatics. Graduates from this program should be suited to work at hospitals, health insurance companies, pharmaceuticals, long-term care facilities, assistant to hospital managers, physician offices, or health informatics technicians. They could also pursue an MBA to go into hospital administration.

### Admission To The Health Sciences Component

All students are required to fulfill a 41 semester hour General Education Core and a 21 semester hour Preprofessional Core as outlined in the curriculum below. After successfully completing these courses, students may then apply to the department for entry into the Health Sciences component. Requirement for admission to the professional component is the following:

- Minimum GPA of 2.0 in all pre-requisite courses and a minimum University GPA of 2.0.

Bachelor's Degree in Professional Health Sciences Curriculum		Credit Hours
Bachelor's Degree in Professional Health Sciences Curriculum		122
General Education Core		41
EH 101	3 hrs	
EH 102	3 hrs	
CA 110	3 hrs	
Fine Arts Elective	3 hrs	
Literature I and Literature II* or Humanities Electives	3,3 hrs	
MA 112	3 hrs	
BLY 101 or 121	4 hrs	
Any Lab Science	4 hrs	
PSY 120	3 hrs	
SY 109	3 hrs	
History I and History** or Social Science Electives	3,3 hrs	
*Must complete a two semester series of either Literature or History		
Pre-Professional Core		21
EMS 110 or Science Elective (4)	3 hrs	
EMS 104	1 hr	

EMS 210	3 hrs	
ST 210	3 hrs	
BMD 114	4 hrs	
BMD 115	4 hrs	
BMD 210	3 hrs	
Health Sciences Core (Required for both HCS tracks)		48
EMS 310	3 hrs	
EMS 320	3 hrs	
EMS 340	3 hrs	
EMS 440	3 hrs	
EMS 460	3 hrs	
EMS 401	3 hrs	
CP 450	3 hrs	
MGT 300	3 hrs	
EH 372	3 hrs	
FIN 300	3 hrs	
CA 275	3 hrs	
Sociology or Psychology Electives (100- 400 Levels) or requirements for Minor	15 hrs	
Track 1: Health Care Management Core		12
MGT 305	3 hrs	
MGT 340	3 hrs	
MGT 351	3 hrs	
MKT 320	3 hrs	
Track 2: Health Care Informatics Core		12
HI 300	3 hrs	
HI 410	3 hrs	
HI 450	3 hrs	
HI 455	3 hrs	

# English

## Department Information

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Department of English web site

<http://www.southalabama.edu/colleges/artsandsci/english>

Through its focus on the interpretation, analysis, and production of literary and other texts, the English Department teaches students how those texts shape and are shaped by the world around them. In so doing, the Department helps students acquire the critical skills they need to analyze and participate in these interactions and contribute to the shaping of their worlds. The faculty's teaching and research in literature, creative writing, and composition/rhetoric combine to foster excellence in critical reading, creative thinking, and effective writing.

For all students, the Department provides the composition skills essential for success at the University and offers courses introducing the cultural diversity and historical breadth of British, American, and world literatures. For students majoring or minoring in English, the Department teaches critical strategies needed for intensive study in creative writing, professional writing, and in diverse literatures in English. For students pursuing graduate study in English, the Department provides advanced training in creative writing, literary analysis, rhetoric, methods of scholarly research, and critical theory. In all cases, by asking students to read, discuss, and write about a wide variety of texts, the Department promotes an inclusive and evolving understanding of English Studies.

All first-time freshmen must successfully complete CAS 100, First Year Experience, as a degree requirement. Students must enroll during their first term at USA, except for summer-entry students who must enroll in the fall semester following entry. EH 300 will fulfill the technology proficiency requirement.

### Honors In English

To be awarded Departmental Honors in English a student must:

1. Complete all the standard requirements for the major in English.
2. Maintain a 3.5 overall GPA (University requirement) and a 3.5 GPA in all course work in English.
3. Receive permission from the Department Chair and agreement from a Department member to serve as mentor.
4. Complete a Senior Honors Thesis (EH 499), with a grade of "A" or "B" in addition to the standard requirements for the English major. EH 499, Senior Honors Thesis (six semester hours credit), may be counted toward three hours of the 36 hours required for the major and toward three hours of the nine 400-level hours required for the major. Thus, the student receiving honors in English will be required to take a total of 39 hours in English instead of 36. In EH 499 the student will normally take three hours in the Fall semester for research and three in the Spring for writing. A final committee of three or more faculty members, including a representative of the University Honors College, will conduct an oral defense. The thesis must be approved by the director of the University Honors College.

### Graduate Studies

The Master of Arts degree program in English is designed to meet the needs of students pursuing a terminal M.A. and of those planning to work toward the Ph.D. and a career in university teaching. The terminal M.A. serves such career tracks as junior college or secondary-school teaching and writing or editing in the business or corporate community. Creative writers find the degree meaningful in careers both in and out of the academic community.

### Requirements For Admission

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Students are admitted each semester. The following criteria supplement the Graduate School criteria (see Categories of Admission):

#### Regular Admission

1. For the Literature Concentration, an undergraduate major in English or at least 30 semester hours of course work in English beyond the freshman level. For the Creative Writing Concentration, at least 15 semester hours of course work in English beyond the freshman level.\*
2. A minimum GPA of 3.0 in junior and senior level courses presented in fulfillment of requirement 1.

3. A score of at least 153 on the new score scale on the Verbal sub test of the GRE General Test taken within the past seven years.
4. For all applicants, a personal statement of no more than 500 words, a writing sample of 5-15 pages in the area of concentration (creative writing or literature) and three letters of recommendation.
5. For applicants for whom English is a second language, a TOEFL IBT score of at least 79 or IELTS score of at least 6.5.

### Provisional Admission

1. For the Literature Concentration, a minor in English or at least 21 semester hours of course work in English beyond the freshman level, at least 12 of these hours in upper-division literature courses. Students lacking the literature component can qualify by completing additional upper-division courses in literature. For the Creative Writing Concentration, 15 semester hours of course work in English beyond the freshman level.\* Provisional Admission with fewer semester hours than those stipulated requires specific approval of the Department's Graduate Committee.
2. A minimum GPA of 2.50 in junior and senior level courses presented in fulfillment of requirement 1.
3. To be admitted provisionally, applicants should have taken the GRE General Test in the past seven years. Applicants presenting a score of less than 153 on the new score scale on the Verbal sub test of the GRE General Test must enter in the Provisional category. In rare cases applicants may be admitted provisionally without submitting a score, but one must be submitted before the student can advance to Regular Status.
4. Same as requirements 4 and 5 for Regular Admission.

\*Students must specify their concentration at the time of application and may not thereafter change concentrations without the specific approval of the English Department's Graduate Committee.

### Non-degree Admission

Applicants for non-degree status in English will normally be admitted only if they meet admission standards for provisional admission. That is, they must have a 2.5 GPA overall and in junior-level and senior-level courses presented to meet the 21 hour (15 hours for creative writing) course work in English requirement. Following admission, non-degree students must have the permission of the Department Chair and the Director of Graduate Studies of the College for each course in which they wish to enroll. Enrollment will be on a space available basis with preference being given to degree students. Non-degree students must satisfy the same prerequisites as degree students to enroll in a course. Non-degree students may not enroll in directed studies courses. Non-degree students can change their status to Regular Admission by reapplying to the program after two semesters. Non-degree students can transfer up to 15 credit hours they earned as non-degree students.

### Graduate Assistantships

The English Department awards both teaching assistantships and research assistantships. Teaching assistantships involve responsibility for freshman composition classes. Graduate students holding research assistantships are usually assigned tasks involving tutoring, research, editing, or administrative/clerical tasks. Awards are normally made for the academic year; occasionally, assistantships become available for spring semester. Applications are taken continuously; competition for appointments begins in May for the following year. See Graduate Coordinator for information and application. (See also Bulletin section on Graduate School, "Assistantships and Fellowships.")

## Areas Of Study

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# Courses

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English.....970

## Faculty

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Professor  
BA, University of Wisconsin-Madison  
MA, Kansas State University  
MA, University of Alabama  
PHD, University of Alabama

BEASON, LARRY

Professor  
BS, Stephen F Austin State U  
MA, Stephen F Austin State U  
PHD, Texas A & M University

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DIXON, CHARLES R.

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MA, University of Alabama  
PHD, University of Alabama

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MA, Southern Illinois U-Edwardsvi  
PHD, New Mexico State U-Main  
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MA, College of William and Mary  
PHD, Tulane University

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MA, Tulane University  
PHD, Tulane University

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MFA, Spalding University

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ST. CLAIR, JUSTIN M.  
Associate Professor  
BA, Washington and Lee University  
MA, University of Iowa  
PHD, University of Iowa

TROUT, STEVEN K.  
Professor  
BA, University of Missouri-KC  
MA, University of Missouri-KC  
PHD, University of Kansas

VOLF, STEPHANIE L.  
Instructor  
AB, University of Michigan-Ann Arb  
MA, Arizona State University-Main  
PHD, Arizona State University-Main

# English (BA)

## Degree Requirements

Majors in Arts and Sciences may be completed with a minimum of 120 semester hours unless designated otherwise. At least 30 hours of course work, which represents 25% of the required 120 hours, must be at the upper division level in order to fulfill the University's residency requirement. At least 15 of the 30 upper-division hours must be in the major or concentration area. An overall grade-point-average (GPA) of 2.0 is required for graduation. In addition, a minimum GPA of 2.0 is required in the student's major or concentration area.

Major in English	Credit Hours
Requirements: A minimum of 39 semester hours, exclusive of Freshman English.	39
Majors are required to take at least one survey sequence	6
EH 215/216 or EH 225/226 or EH 235/236	
In addition to the survey sequence EH 300 must be completed prior to taking any 400-level courses	3
Any additional 200-level courses may be used to fulfill the 39-hour requirement; however, no more than four 200-level courses can count toward the major.	
The remaining hours must come from courses at the 300 level or above and include:	
1. At least one course in literature prior to 1660	3
EH 314 EH 315 EH 321 EH 322 EH 323 EH 324 EH 461 EH 465 EH 467 EH 470 EH 471 EH 472	
2. At least one course in British or American literature from 1660 to 1900	3
EH 331 EH 332 EH 334 EH 340 EH 342 EH 343 EH 351 EH 352 EH 353 EH 354 EH 462 EH 474 EH 475	
3. At least one course in literature after 1900	3
EH 360 EH 362 EH 363	

EH 364  
 EH 365  
 EH 366  
 EH 369  
 EH 380  
 EH 463  
 EH 468  
 EH 476  
 EH 478  
 EH 479

4. One of the following courses	3
EH 402 EH 421 EH 422	
5. At least three 400 level English courses are required	9
6. A writing portfolio, to be submitted in the student's senior year, that includes two critical essays written for coursework in the Department as well as one reflective synthesis letter (details and deadlines are available in the English Department office).	
A student wishing to deviate from the standard curriculum and devise a unique program of study must demonstrate in writing to the English Advising Committee that such a program best serves that student's intellectual needs or career goals.	
General Education Requirements For English Majors	
General Education Requirements for English with a concentration in creative writing are specified in the College of Arts and Sciences section. Note that Area II requirements are partially satisfied and the Sequence Requirement is fully satisfied by the major requirements specified above.	

# English (BA) - Creative Writing Concentration

## Degree Requirements

Majors in Arts and Sciences may be completed with a minimum of 120 semester hours unless designated otherwise. At least 30 hours of course work, which represents 25% of the required 120 hours, must be at the upper division level in order to fulfill the University's residency requirement. At least 15 of the 30 upper-division hours must be in the major or concentration area. An overall grade-point-average (GPA) of 2.0 is required for graduation. In addition, a minimum GPA of 2.0 is required in the student's major or concentration area.

Major in English with a Concentration in Creative Writing	Credit Hours
To major in English with a concentration in creative writing, all requirements for the major must be met. In addition, at least five of the following electives must be taken:	15
EH 391 EH 392 EH 393 EH 394 EH 395 EH 396 EH 484 EH 485 EH 486 EH 487 EH 488 EH 497 EH 498	
Requirements for a Major in English: Minimum of 39 semester hours, exclusive of Freshman English.	39
Majors are required to take at least one survey sequence	6
EH 215/216 or EH 225/226 or EH 235/236	
In addition to the survey sequence EH 300 must be completed prior to taking any 400-level courses	3
Any additional 200-level courses may be used to fulfill the 36-hour requirement; however, no more than four 200-level courses can count toward the major.	
The remaining hours must come from courses at the 300 level or above and include:	
1. At least one course in literature prior to 1660	3
EH 314 EH 315 EH 321 EH 322 EH 323 EH 324 EH 461 EH 465 EH 467 EH 470 EH 471 EH 472	
2. At least one course in British or American literature from 1660 to 1900	3
EH 331 EH 332	

EH 334  
 EH 340  
 EH 342  
 EH 343  
 EH 351  
 EH 352  
 EH 353  
 EH 354  
 EH 462  
 EH 474  
 EH 475

3. At least one course in literature after 1900

3

EH 360  
 EH 362  
 EH 363  
 EH 364  
 EH 365  
 EH 366  
 EH 369  
 EH 380  
 EH 463  
 EH 468  
 EH 476  
 EH 478  
 EH 479

4. One of the following courses

3

EH 402  
 EH 421  
 EH 422

5. At least three 400 level English courses are required

9

6. A writing portfolio, to be submitted in the student's senior year, that includes two critical essays written for coursework in the Department as well as one reflective synthesis letter (details and deadlines are available in the English Department office).

A student wishing to deviate from the standard curriculum and devise a unique program of study must demonstrate in writing to the English Advising Committee that such a program best serves that student's intellectual needs or career goals.

#### General Education Requirements For English Majors

General Education Requirements for English with a concentration in creative writing are specified in the College of Arts and Sciences section. Note that Area II requirements are partially satisfied and the Sequence Requirement is fully satisfied by the major requirements specified above.

# English (MA) - Literature Concentration

## Degree Requirements

### Requirements for Degree

A. A minimum of thirty-six semester hours of credit is required beyond the bachelor's degree with a grade of "A" or "B," to include the following two courses in the first year of course work.

EH 501

Intro to Literary Theory

EH 502

Graduate Writing in English

Two courses from literary periods pre-1800

Two courses from literary periods post-1800

No more than 18 hours of dual-listed courses (400 and 500 level listing for the same course) may be counted towards meeting the minimum hours required for a degree.

Graduate students will receive graduate credit only for the 500 level versions of dual-listed courses.

B. Before graduation, English M.A. students in the literature concentration must successfully meet their comprehensive examination requirement by completing either a literature thesis and oral thesis defense or by completing a capstone option.

**Literature Thesis:** The literature thesis is the preferred option for students who plan to enter a doctoral program in English. Students write a thesis, which may draw on a student's previous written work in courses, but which must also involve substantial further research under the supervision of a thesis director. Students take three to six semester hours of credit toward the graduation requirement, which will be granted upon successful completion and defense of the thesis, leaving a minimum of thirty hours of credit to be accomplished in course work. An oral exam or defense, which will situate the thesis in the comprehensive objectives of the literature concentration, will be required one to two weeks prior to the Thesis First Submission Deadline for the Graduate School.

**Literature Capstone:** Students produce a capstone project, either the Research Essay or the Digital Humanities Teaching Option, which may draw on a student's previous written work in courses, but which must also involve significant further research, meeting the comprehensive objectives of the literature concentration under the supervision of a capstone mentor. In their last semester of graduate study, students take three semester hours of Directed Study credit toward the capstone requirement, leaving a minimum of thirty-three hours of credit to be accomplished in course work. Each capstone requires an annotated bibliography, a major researched essay or an essay/digital presentation, and a presentation in the department. In order to qualify for graduation, all capstone work must be completed by April 15 (spring) or November 15 (fall) and receive the approval of the capstone mentor and the Graduate Committee.

Departmental presentations will be scheduled between the deadline and the end of semester.

C. Demonstrated proficiency in a foreign language is required.

**Foreign Language Proficiency Requirement:**

All students pursuing the M.A. in English must demonstrate a reading proficiency in Spanish, French, German, or Latin before registering for the comprehensive exam or for thesis hours. Foreign nationals for whom English is not native may offer their native language. Credit in reading courses in acceptable languages may not count toward the 36 hour credit requirement for the M.A. in English.

# English (MA) Creative Writing

## Degree Requirements

### Requirements for Degree

A. A minimum of thirty-six semester hours of credit is required beyond the bachelor's degree with a grade of "A" or "B," including the following course in the first year of coursework.

EH 502

Graduate Writing in English

Eighteen hours of courses in literature

Fifteen hours of courses in creative writing

Three creative writing thesis hours

No more than 18 hours of dual-listed courses (400 and 500 level listing for the same course) may be counted towards meeting the minimum hours required for a degree.

Graduate students will receive graduate credit only for the 500 level versions of dual-listed courses.

The required thesis (three hours of thesis credit will be granted on the successful completion and oral defense of the thesis) will serve as the student's exit evaluation along with an oral defense.

B. Students may concentrate on writing fiction, nonfiction, poetry, or other genres.

C. This concentration requires a creative thesis, which is a book-length work of fiction, non-fiction, poetry, or other genres. An oral exam or defense, which will situate the thesis in the comprehensive objectives of the creative writing concentration, will be required one to two weeks prior to the Thesis First Submission Deadline for the Graduate School.

D. Demonstrated proficiency in a foreign language is required.

Foreign Language Proficiency Requirement:

All students pursuing the M.A. in English must demonstrate a reading proficiency in Spanish, French, German, or Latin before registering for the comprehensive exam or for thesis hours. Foreign nationals for whom English is not native may offer their native language. Credit in reading courses in acceptable languages may not count toward the 36 hour credit requirement for the M.A. in English.

# Minor In English Professional Writing

## Degree Requirements

If a minor is required in your degree program, at least 9 (lower and/or upper-division) hours of courses in the minor must be completed at the University.

The minor in English: Professional Writing provides students with the conceptual foundations and hands-on practice necessary for communicating and writing proficiently in technical and professional contexts. The minor is intended to prepare students for producing the forms of writing they will encounter in the workplace (feasibility studies, technical reports, business letters, and grants, for example), and to provide a broad understanding of the rhetorical dimensions of written communication, especially nonacademic texts.

English - Professional Writing Minor		Credit Hours
Requirements		21
Core Courses		9 hrs
EH 372	Technical Writing (W)	
<b>OR</b>		
EH 373	Writing in the Professions (W)	
EH 402	Rhetoric: Ancient & Modern (W)	
EH 481	Studies in Composition/ Rhetoric (W)	
One of the following		3 hrs
EH 371	Approaches to English Grammar (W)	
EH 372	Technical Writing (W)	
EH 373	Writing in the Professions (W)*	
EH 401	Theory & Practice in Composition (W)	
EH 403	Art of the Essay (W)	
EH 496	Professional Studies Internship	
Three additional 300- or 400-level English courses including but not limited to courses in the second section above		9 hrs
*Students can take either or both of these two courses.		

# Minor In English

## Degree Requirements

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If a minor is required in your degree program, at least 9 (lower and/or upper-division) hours of courses in the minor must be completed at the University.

### Requirements for a Minor in English

A minimum of 21 semester hours in English is required, exclusive of freshman English.

The minor requires at least four courses at the 300 level or above.

Students who wish to take 400-level courses must first take EH 300

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# Environmental Toxicology

## Department Information

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Environmental Toxicology web site

<http://www.southalabama.edu/graduatemajors/etox/>

The University of South Alabama offers an interdisciplinary curriculum to teach graduate students the biochemical and physiological processes resulting from the interactions between toxic compounds and the biosphere.

Students in this program will learn to:

- evaluate the impact of specific pollutants in the environment
- perform laboratory and field-tests to monitor environmental pollutants
- control and manage toxic substances
- identify water and air pollutants
- review current and new legislation and protocols in this area

Graduates from this program will be able to work in industrial settings in the areas of Industrial Hygiene, Environmental Health, Environmental Engineering and Toxicology or to continue their education by pursuing a Ph.D. degree in Toxicology or related areas. In addition, these graduates will be qualified for jobs requiring M.S. degrees in their original areas of concentration. For example, a chemist or a chemical engineer will be better qualified to work in a chemical or pharmaceutical company if, in addition to his/her background in chemistry or engineering, the applicant has training in toxicology to address the environmental impact of specific projects.

### Admission

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Students applying to this program must fulfill all the requirements for regular or provisional admission specified by the Graduate School. Additional requirements include:

- B.S./B.A. degree from an accredited four-year institution: the program is designed for graduates holding degrees in Biology, Biomedical Sciences, Chemistry, Engineering or related fields.
- The GRE will be required and will be considered among the admission criteria.
- In addition, students applying to this program must have completed the following undergraduate courses:
  - Biology (1 semester)
  - Statistics (1 semester)
  - Calculus (1 semester)
  - Organic Chemistry (2 semesters)
- It is recommended (but not required) that students applying to the program also complete 6 credit hours of undergraduate Biochemistry and have satisfied any other prerequisites needed for specific courses within each concentration. Those students who did not take undergraduate Biochemistry will have to include 6 hours of graduate Biochemistry among the required courses to complete the program. This will not change the total number of hours required to complete the program.

### Deadline For Application For Environmental Toxicology

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Applications are accepted in the Fall, Spring, and Summer semesters by the deadlines indicated in the University of South Alabama Bulletin.

## Areas Of Study

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### Degrees, Programs, Or Concentrations

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Environmental Toxicology (MS)..... 436

# Courses

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## Course Listing

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Environmental Toxicology..... 981

# Environmental Toxicology (MS)

## Degree Requirements

### Program Completion Requirements

In addition to six (6) credit hours of EXT 599, a minimum of nine (9) credit hours of elective graduate coursework within your track beyond the credit hours of core coursework are required for the M.S. degree in Environmental Toxicology's Research Thesis track.

Course Work	Credit Hours
<b>Core courses, including:</b>	20
BLY 515 Ecotoxicology	3, 1 hrs
CE 579 Fundamentals Environmental Engineering	3 hrs
CH 514 Environmental Chemistry	3, 1 hrs
EXT 515 Environmental Toxicology	3 hrs
GIS 501 Research Integrity	1 hr
ST 550 Environmental Statistics	3 hrs
SY 567 Environmental Sociology	3 hrs
<b>"Research Thesis" track:</b>	15
A Research Thesis on a subject identified jointly by the student and the Advisory Committee.	6 hrs
Courses in specific areas of concentration	9 hrs
<b>"Library Research Project" track</b>	15
A Library Research Project on a subject identified jointly by the student and the Advisory Committee.	3 hrs
Courses in specific areas of concentration	12 hrs
The "Research Thesis" must be completed either at the University of South Alabama or, upon approval by the Advisory Committee, at a government or industrial laboratory in the area.	

Students will choose one of the following areas of concentration:

- Biology (TXBY)
- Basic Medical Sciences (TXMS)
- Chemistry (TXCH)
- Environmental Engineering (TXEE)
- Exposure Route/Chemical Transport (TXEC)

The student, his/her advisory committee, and if necessary, members of the Advisory Board will be responsible for designing the curriculum that best fits the student's professional goals. If, in the opinion of the student's committee, the student lacks adequate undergraduate preparation, the student will be required to make up such deficiencies.

# Forensic Science

## Department Information

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### Forensic Science Administrative Staff

Co-Directors

Dr. Lesley Gregoricka, Dr. Sarah Koon-Magnin

Forensic Science at USA is an interdisciplinary program offering students the opportunity to gain foundation-level exposure to the various social and physical sciences from which forensic applications are derived. Students will acquire broad-based knowledge and skills in a combination of areas such as chemistry, anthropology, criminal justice and biology.

The minor is designed to prepare students for future graduate education or job training in specialized fields within forensic science, including the search for and recovery of human remains, human identification, crime scene investigation, evidence collection, and laboratory analyses. Although all students at USA are welcome to minor in FS, the minor will be especially useful for students in anthropology, biology, biomedical sciences, chemistry, and criminal justice. Students who plan to pursue careers in forensic science will benefit from a broader understanding of the criminal justice system, offender behavior, and due process law. Students who plan to pursue careers in the criminal justice system will benefit from a broader understanding of forensic science so that they understand what happens to evidence once it is taken to a lab for processing.

## Areas Of Study

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### Degrees, Programs, Or Concentrations

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Minor in Forensic Science ..... 439

# Minor In Forensic Science

## Degree Requirements

If a minor is required in your degree program, at least 9 (lower and/or upper-division) hours of courses in the minor must be completed at the University.

Minor Requirements	Course Title	Credit Hours
All forensic science minors must take the following core courses:		13
AN 250	Forensic Anthropology	
CH 265/L	Introductory Analysis	
CJ 205	Introduction to Criminal Justice	
CJ 223	Introduction to Forensic Science (formerly CJ 423: Criminalistics)	
All forensic science minors must select two of the following upper-division courses*		6
AN 335	Field Work in Archaeology	
AN 365	Human Osteology	
BLY 302	Genetics	
BLY 354	General Entomology	
CH 440	Biochemistry I	
CH 465	Instrumental Analysis	
CJ 332	Criminal Law	
CJ 360	Introduction to the Offender	
CJ 390	Drugs and Crime	
CJ 422	Criminal Investigations	
*Students must take at least one upper division course outside of their major discipline.		

# Gender Studies

## Department Information

<b>Gender Studies</b>	<b>(251) 460-7540</b>
Director	Martha Jane Brazy

Department of Gender Studies website  
<http://www.southalabama.edu/genderstudies>

The Gender Studies Program offers a minor in the interdisciplinary study of contemporary and historical gender theory and gender issues on a global level. The program allows students to acquire depth of knowledge in specific areas of gender-related focus and gender theory, as well as a wide range of research skills and methodologies from across the disciplines. The program offers courses from numerous departments within the College of Arts and Sciences, as well as service learning and community internship opportunities.

Gender Studies deepens students' understanding of areas of study such as historical/cultural constructions of femininity and masculinity and their representations; sexuality; feminist theory; LGBTQ studies; male and female physiology; gender and health, business and politics; and the intersection of race, class, gender and sexuality. The Gender Studies Program encourages students to become actively engaged in gender-focused research and its practical applications, and provides numerous opportunities for students to interact with faculty members to discuss their current research.

## Areas Of Study

### Degrees, Programs, Or Concentrations

Minor in Gender Studies ..... 441

## Courses

### Course Listing

African-American Studies.....	854
College of Arts and Sciences.....	908
Gender Studies.....	992
Gerontology.....	998
Interdisciplinary Programs.....	1026
International Studies.....	1029
Museum Studies.....	1070

# Minor In Gender Studies

## Degree Requirements

If a minor is required in your degree program, at least 9 (lower and/or upper-division) hours of courses in the minor must be completed at the University.

### Core Requirements

1. Students minoring in Gender Studies must complete a total of 18 semester hours in approved courses.
2. Students are required to complete two courses in the Humanities and two courses in Social Sciences.
3. Minor courses must also represent four different disciplines.
4. Approved Variable and Special Topics Courses that focus on gender studies can also be taken to complete the 18 semester hour requirement. For information on upcoming variable and special topics courses, consult the Director.
5. GS 101 Introduction to Gender Studies.
6. One 400 level course with a focus on gender studies. This can be a GS course (i.e. GS 490) or an approved 400 level course in another discipline.

Gender Studies Courses	Course Title
Core Courses	
GS 101	Introduction to Gender Studies
GS 290	Special Topics
GS 490	Gender Studies Special Topics
GS 492	Gender Studies Seminar
GS 494	Directed Studies
GS 496	Internship
*Please note that there are frequent offerings in approved special topics. Check course schedule on the Gender-Studies Website.	
Humanities Courses	
AFR 101	Introduction to African-American Studies
EH 207	Literature and Gender
EH 480	Studies in Gender and Literature
LG 305	Studies in Gender and Writing
Social Science Courses	
AN 355	Gender and Anthropology
CA 315	Gender and Communication
CJ 372	Gender and Criminal Justice
CJ 403	Sexual Violence
HY 343	Witchcraft and Magic in Medieval and Early Modern Europe
HY 377	African American Experiences
HY 485	History of American Feminist Movements
PSC 340	Race, Gender and Politics

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PSC 345	Women in Politics
PSY 485	Psychology of Gender
SY 200	Social Factors in Sexual Behavior
SY 220	Marriage and the Family
SY 418	Advanced Family Studies
SY 428	Gender and Society
Fine Arts Course	
ARH 480	Women in Art
Other Courses	
IST 315	Women's Issues in the Workplace and Community
IST 320	Cultural Diversity
GRN 290	Gender and Aging
HS 463	Human Sexuality: Some Health Education Perspectives

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For a description of these courses, please refer to the appropriate departments. For further information about the program contact Dr. Martha Jane Brazy, Gender Studies Program, Department of History, HUMB 344, University of South Alabama, Mobile, AL 36688-0002. Phone (251) 460-7540; FAX: (251) 460-6750; E-mail address: [mjbrazy@southalabama.edu](mailto:mjbrazy@southalabama.edu)

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# Gerontology

## Department Information

Gerontology Staff	
	(251) 460-6020
Program Director and Academic Advisor	Dr. Roma Stovall Hanks
Assistant Director and Academic Advisor	Dr. Hosik Min

Department of Gerontology web site

<http://www.southalabama.edu/colleges/artsandsci/syansw/gerontologyprogram/>

The University of South Alabama offers Certificates in Gerontology at the Graduate and Undergraduate levels and an Interdisciplinary Minor in Gerontology.

Gerontology is the interdisciplinary study of:

1. The human life cycle
2. Issues related to aging
3. The relationships between the generations

The Gerontology program is designed to establish an expertise that will enhance and compliment the analytical skills that the student acquires as part of the major area of study. This expertise may be used as preparation to specialize within the career area related to the student's major area of study or to pursue further academic training in graduate or medical school. Special topics courses and online instruction are available.

Depending on their specific needs and interests, students may be able to complete requirements for the Undergraduate or Graduate Certificate in Gerontology through distance learning options. Students who are interested in pursuing a Gerontology Certificate online should speak with their academic advisor and the Gerontology program director. Students in professional programs may be able to use field placements in lieu of the Gerontology Internship.

The Degree Works audit tool lists the Gerontology Certificates as programs. Students should alert their advisors to check that they are enrolled in a Gerontology Certificate program (Graduate or Undergraduate). In order to receive the printed Gerontology Certificate, the student must submit a completed Data Sheet and Application available at the program website: <http://www.southalabama.edu/colleges/artsandsci/syansw/gerontologyprogram/>. The certificate is not automatically issued without an application.

## Areas Of Study

### Degrees, Programs, Or Concentrations

Graduate Gerontology Certificate.....	445
Minor in Gerontology .....	447
Undergraduate Gerontology Certificate.....	449

## Courses

### Course Listing

African-American Studies.....	854
College of Arts and Sciences.....	908

Gender Studies..... 992  
Gerontology..... 998  
Interdisciplinary Programs..... 1026  
International Studies..... 1029  
Museum Studies..... 1070

# Graduate Gerontology Certificate

## Degree Requirements

### Requirements For The Graduate Certificate In Gerontology

The Graduate Certificate Program at USA requires a minimum of six courses (18 hours) with grades of "A" or "B", including Aging in American Society (SY 523) and an approved internship. It is strongly recommended that students take other courses to enhance their research/practice in aging and the life course, such as a course in public policy; a research methods course appropriate to the student's primary discipline and/or gerontology; and a course in professional ethics. All courses not specifically listed in this section must be approved by the Gerontology Program Director and the student's academic advisor prior to registration for the course.

The Gerontology internship (GRN 596) is required or an equivalent internship experience within the student's discipline. The internship must allow the student to apply skills to work with older individuals and their families. Research shows that positive, supportive attitudes toward aging are best developed through personal involvement with older people. The skill of applying knowledge to the issues in aging is developed in experiential learning situations. Therefore, an internship is required unless the student demonstrates substantial previous experience with the client population. In that event, a directed study or an additional academic course in aging may be substituted for the internship. A maximum of six credit hours of internship and six credit hours of directed study may be applied toward the requirements for the Graduate Certificate in Gerontology. The internship must be approved by the program director during the semester prior to placement. Students in professional programs may be able to use field placements in lieu of the Gerontology Internship.

All course waivers and substitutions must be approved by the Gerontology program director. The student must work closely with the director and with the advisor in the major area of specialization to develop the best program possible to meet career goals. Directed studies, special topics courses, and online courses may be used to fulfill program requirements.

#### Graduate Certificate in Gerontology

Following are the courses approved for the Graduate Certificate in Gerontology:

##### Required Courses:

SY 523

GRN 596 or equivalent

##### Elective Courses:

CED 564

GRN 535

GRN 594

GRN 597

HSC 524

HSC 550

PSC 581

PSC 587

PSY 516

PSY 524

PSY 575

SY 572

Graduate level Special Topics courses and Directed Studies may be taken as electives when the course topic is appropriate for gerontology. Distance learning options may be offered for some courses. Check with the program director or assistant director for information about online courses and other distance learning opportunities.

Other electives may be taken from the student's degree discipline with approval by the student's graduate advisor, the Gerontology program director, and the Graduate School (Examples: courses in Advanced Geropsychiatric Nursing and courses in the College of Allied Health Professions where the focus is on aging and age-related health conditions). Students should meet with the Gerontology program director to discuss specific questions about elective courses.

Courses which are taken as part of a degree program may be considered for credit toward the certificate provided they are approved by the Director of the University Programs in Gerontology, the Director of Graduate Studies in the College offering the degree, and the Dean of the Graduate School. In order to receive the printed Graduate Certificate in Gerontology, you must submit a completed application form. Certificates are not issued automatically. Forms are available on the program web site at: <http://www.southalabama.edu/gerontology/>.

For further information about the program contact Dr. Roma Stovall Hanks, Director, USA Programs in Gerontology, 5991 USA Dr. N., HUMB 34, University of South Alabama, Mobile, Alabama 36688-0002; phone: (251) 460-6020; FAX (251) 460-7925 e-mail: [rhanks@southalabama.edu](mailto:rhanks@southalabama.edu).

web site: <http://www.southalabama.edu/colleges/artsandsci/syansw/gerontologyprogram/southalabama.edu/gerontology/>

### **Application For The Certificate**

The Degree Works audit tool lists the Gerontology Certificates (Graduate and Undergraduate) as programs. Students should alert their advisors to check that they are enrolled in the appropriate Gerontology Certificate program. Upon completion of requirements, an application must be submitted by the student.

The application is available at the Gerontology web site: <http://www.southalabama.edu/colleges/artsandsci/syansw/gerontologyprogram/southalabama.edu/gerontology/>. An exit interview may be required. Contact the program director at least 6 weeks prior to completion of requirements for the certificate. Certificate recipients are listed in the Commencement Program closest to the date the certificate completion documentation approved.

# Minor In Gerontology

## Degree Requirements

If a minor is required in your degree program, at least 9 (lower and/or upper-division) hours of courses in the minor must be completed at the University.

### Requirements For The Interdisciplinary Minor In Gerontology

The Interdisciplinary Minor in Gerontology requires 18 semester hours. At least 9 hours (lower and/or upper-division) hours of courses in the minor must be completed at the University. At least 9 hours of courses must be upper division. The Interdisciplinary Minor on Gerontology is designed for those Arts and Sciences majors who are interested in obtaining jobs in agencies that provide services for older individuals and their families or in pursuing graduate degrees that involve research on aging and the life course or intergenerational relationships. Majors in other colleges may also pursue the Interdisciplinary Minor in Gerontology, but should discuss this option with an advisor from the major field. Students who complete requirements for the Gerontology minor may be eligible to receive the Undergraduate Certificate in Gerontology as well, provided all requirements for the Certificate are met. Students should consult their advisor and the program director or assistant director to discuss this dual credential option. University policies regarding dual use of courses for both a major and a minor apply.

#### Interdisciplinary Minor in Gerontology

##### Core Courses For The Minor (Undergraduate)

##### Required:

SY 372 (3 hrs)

BLY 207, SY 435, or GRN 435 (3 hrs)

PSY 456 or PSY 250 (3 hrs)

##### Internship (Required)

Internship in Gerontology (GRN 496 or equivalent). With permission of the program director and the student's academic advisor, an internship in the student's primary discipline may be substituted if the internship provides significant contact with older people, their families, or appropriate service agencies. Three (3) semester hours required; up to six (6) semester hours may be accepted. Approval of the internship placement must be obtained at least 6 weeks prior to registration. The 3 hour internship requires 100 contact hours; the 6 hour internship requires 200 contact hours. If you plan to substitute an internship from another discipline, you must obtain written approval from the Gerontology Program Director prior to registration.

##### Elective Courses

(Select courses to bring total hours to 18)

Any required course option that is not chosen from the list above to fulfill a requirement may be used as an elective, other elective choices include:

GRN 272

GRN 290

GRN 490

GRN 435

SY 472

PSY 456

PSY 416

PSY 428

PSY 475

IST 210

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IST 401

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LS 397

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LS 479

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GRN 494

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\*SY 490

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\*May be taken as electives when the course topic is appropriate for gerontology. Please note: GRN 290 and GRN 490 are variable topic courses. Check the class schedule each term to determine which topic is being offered. Sample topics include: Gender and Aging; Leadership and Advocacy in Gerontology; Housing and Lifestyle Changes across the Life Course; and Aging and Public Policy. Other electives may be taken from the student's degree discipline with approval by the student's advisor and the Gerontology Program Director. Content of the elective must include substantial focus on aging.

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# Undergraduate Gerontology Certificate

## Degree Requirements

### Requirements For The Undergraduate Gerontology Certificate

Students who wish to earn an Undergraduate Certificate in Gerontology must complete 18 semester hours, including an internship that will expose the student directly to older people and their families. The internship must be approved by the program director during the semester prior to placement.

Approved courses are offered in various departments as well as in Gerontology (GRN). Students are encouraged to pursue the Gerontology Certificate in conjunction with degree programs. Some approved courses may not carry the GRN designation. It is essential for students to work with their academic advisors and the Gerontology program director or assistant director to develop a plan of study for the Gerontology Certificate.

#### Undergraduate Gerontology Certificate

##### Core Courses For The Undergraduate Certificate

(Required)

SY 372 (3 hrs)

BLY 207 (SY 435 or equivalent may be substituted with permission of Program Director)

Select One

IST 201, IST 401, PSY 456, PSY 250 (3 hrs) These courses may also be used as electives, if not selected to fulfill a requirement.

Internship (Required)

Internship in Gerontology (GRN 496 or equivalent). With permission of the program director and the student's academic advisor, an internship in the student's primary discipline may be substituted if the internship provides significant contact with older people, their families, or appropriate service agencies. Three (3) semester hours required; up to six (6) semester hours may be accepted. Approval of the internship placement must be obtained at least 6 weeks prior to registration. The 3 hour internship requires 100 contact hours; the 6 hour internship requires 200 contact hours. If you plan to substitute an internship from another discipline, you must obtain written approval from the Gerontology Program Director prior to registration.

Elective Courses

(Select courses to bring total hours to 18)

Any required course option that is not chosen from the list above to fulfill a requirement may be used as an elective, other elective choices include:

GRN 272

GRN 290

GRN 490

GRN 494

IST 401

IST 210

LS 397

LS 479

PSY 416

PSY 428

PSY 456

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PSY 475

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SY 435/GRN 435

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SY 472

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SY 490

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Directed studies courses, special topics, and seminars in gerontology or other disciplines may be accepted only when the course topic is appropriate for gerontology. Please note: GRN 290 and GRN 490 are variable topics courses. Check the class schedule each term to determine which topic is being offered. Sample topics include: Gender and Aging; Leadership and Advocacy in Gerontology; Housing and Lifestyle Changes across the Life Course; and Aging and Public Policy. Additional courses may be used as electives, if approved by the Gerontology program director or assistant director. Students should meet with the program director to discuss specific questions about elective courses.

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### **Program Enhancement**

Research opportunities, service learning, and scholarships may be available for students in Gerontology. Contact the Program Director for details. Membership in Sigma Phi Omega Gerontology Honor Society and the Gerontology Club are also available to qualified students.

### **Application For The Certificate**

Printed certificates are not sent automatically to students. The certificate application is available at the Gerontology web site: <http://www.southalabama.edu/colleges/artsandsci/syansw/gerontologyprogram/>.

An exit interview may be required. Contact the program director at least 6 weeks prior to completion of requirements for the certificate. Recipients of the Gerontology Certificates are listed in the Commencement Program closest to the date the certificate completion documentation was approved.

# Global Engagement

## Department Information

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### Global Engagement Staff

(251) 460-6746

Coordinator

Christine Rinne, Ph.D.

Global Engagement web site

<http://www.southalabama.edu/departments/academicaffairs/gec>

The Global Engagement Certificate provides students the opportunity to engage in global issues and experiences through a combination of course work and approved activities.

## Areas Of Study

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### Degrees, Programs, Or Concentrations

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Global Engagement Certificate Program.....452

# Global Engagement Certificate Program

## Degree Requirements

The program is open to all undergraduate students. Application to the program, admission, and advising are required; the application is available on the program website.

Program Requirements	Course Title	Credit Hours
Global Engagement Certificate		17
IS 210	Global Engagement Orientation	1 hr
IS 410	Global Engagement Capstone	1 hr
Remaining hours		15 hr
<ul style="list-style-type: none"> <li>No more than 6 hours should be general education requirements at 100-/200-level</li> <li>3 hours must be in foreign language</li> <li>at least 50% of course content must focus outside of the USA</li> <li>Students will complete nine hours of globally engaged activity, such as study abroad, service learning, and internships.</li> </ul>		
Contact the coordinator for a list of approved courses and activities.		

# Health, Kinesiology, And Sport

## Department Information

Department of Health, Kinesiology, and Sport Faculty	
	(251) 460-7131
Chair	Kovaleski
Professors	Gurchiek, Kovaleski
Associate Professors	Broach, Holden, Keshock
Assistant Professor	Forester, Hauff, McKinley-Barnard, Schwarz, Woltring
Senior Instructors	Anastasio, Barter, Palombo
Instructor	Montgomery

Department of Health, Kinesiology, and Sport web site  
<http://www.southalabama.edu/colleges/ceps/hks>

The Department of Health, Kinesiology, and Sport offers state and nationally accredited undergraduate and graduate teacher certification programs in Physical Education (P-12) and Health Education (6-12).

The Department offers a totally on-line graduate program in Sport Management. Undergraduate and graduate non-teacher certification programs are available in Exercise Science and Health. An undergraduate major is offered in Leisure Studies with concentrations in Sport and Recreation Management and Therapeutic Recreation. The department also provides a physical activity instructional program for all university students through courses in physical fitness, lifetime sports, dance, and martial arts. An undergraduate Coaching Certificate program is also provided by the department.

### Undergraduate

#### Requirements For Admission To Candidacy In Teacher-certification Programs (HS And PE)

All students must apply in the Advising Center (UCOM 3360), for admission to teacher candidacy. This is normally done during the final semester of the sophomore year or first semester of the junior year. All previously listed requirements of the University and College must be met prior to application.

Teacher Candidacy Admission Requirements for PHYSICAL EDUCATION P-12 & HEALTH 6-12 Majors

#### Hours:

60 semester hours (48 must be in General Education). A minimum of 12 semester hours must be taken at USA.

#### GPA Requirements:

- 2.75 Minimum Overall GPA (All work attempted at USA).
- 2.75 Minimum Program GPA (All courses used on this Advising Sheet, including transfer work).
- 2.75 Minimum Professional Studies GPA (All courses used in the Professional Studies area, including transfer work).
- 2.75 Minimum Teaching Field GPA (All courses used in the Teaching Field, including transfer work).
- No grade below a "C" will be accepted in Professional Studies courses.

#### Course Requirements:

- Course requirements for PE P-12 Majors: CA 110, EH 101, EH 102, BMD 114, EDM 310, EDU 400, EPY 351, PE 100, PE 201, and PE 166.
- Course requirements for Health 6-12 Majors: CA 110, EH 101, EH 102, BMD 114, EDM 310, EDU 400, EPY 351, PE 100, PE 201, HS 170, HS 262, and HS 263.

**Test Requirements:**

- Satisfactory performance on Core Academic Skills for Educators tests of mathematics, reading, and writing. If passed prior to 9/1/2017, the AECTP basic skills tests are acceptable until 9/1/2022.

**Other Requirements:**

- Proof of clear SDE fingerprinting/background check and professional liability insurance.
- Completion of the Dispositions Survey and a signed teacher Candidacy application form.
- Completion of a satisfactory departmental interview with your assigned advisor. Recommendation of advisor, department chairperson and approval of the Candidacy Committee.
- Sufficient physical ability and emotional stability to perform as a teacher.

**Application/Admission Information:**

- Candidacy applications are due the semester in which the student completes all candidacy requirements. The intent is for students to apply for Candidacy AND meet with their content area advisor prior to registration to enable appropriate planning decisions for upcoming semesters.
- Apply for Candidacy in the Advising Center (UCOM 3360).
- The College of Education and Professional Studies Candidacy Committee may recommend, defer or deny admission to the program.

Admission to Candidacy will remain deferred until all requirements have been met and grades are submitted at the end of the term. Once grades are available and all requirements are met, the Office of Student Services will notify students via their official JAG email account when they have been admitted to Candidacy. Students will then be able to register for Candidacy courses.

**Requirements For Admission To Candidacy In Non-teacher-certification Programs**

All students must apply for admission to a program during the semester immediately following the completion of 60 semester hours of credit provided they meet the requirements listed below. Courses in progress during the semester the student makes application for candidacy may be used in the candidacy application process.

Admission to a non-teacher certification program requires that

1. The student:
  - a. declare a specialization
  - b. take any necessary tests
  - c. submit to any needed evaluations
  - d. be available for necessary interviews
2. The student's application receives approval from the advisor and departmental chair. The application must be submitted to the College of Education and Professional Studies Advising Center by the second week of the semester in which the student is eligible to be admitted.
3. The student's application receives approval from the Undergraduate Candidacy Committee
4. The student's application receives the approval of the Dean or Associate Dean, College of Education and Professional Studies

Candidacy requirements are summarized on Departmental Advising Sheets.

The following are the criteria to be considered by the Undergraduate Candidacy Committee:

1. Completion of 60 semester hours of course work, 48 of which must be in General Studies.
2. A minimum overall grade-point average of 2.2 in the major/specialization (including transfer work) and a grade-point average of 2.2 on all work attempted at the University of South Alabama.
3. Sufficient physical ability and emotional stability to perform successfully as a professional. These and other factors could be determined in a departmental interview.
4. Recommendation of the advisor and department chair.
5. Completion of any departmental prerequisite courses.
6. HS majors must complete EH 101, EH 102; PE 100, PE 201; HS 170, HS 262, HS 263; BMD 114, BMD 115; CA 110, and any departmental prerequisite courses, in addition to the above.
7. LS majors must complete EH 101, EH 102; LS 191, LS 292, LS 391, CA 110 and any departmental prerequisite courses, in addition to the above.
8. Exercise Science majors must complete EH 101, EH 102; PE 100, PE 282; HS 170, BMD 114, CA 110, and any departmental prerequisite courses, in addition to the above.

The Undergraduate Candidacy Committee may recommend the admission of the student to the program, defer admission, or reject the student's application.

### **Internships In Non-teaching (NTC) Programs (Exercise Science, HS, LS)**

Students enrolled in one of the following NTC Majors: Exercise Science, Health, or Leisure Studies, must be admitted to candidacy in their program and attain senior status prior to enrollment in an internship. All internships must be completed at departmentally approved sites, and must be planned and approved at least one full semester in advance of the experience. No other academic courses may be taken during the internship without permission of the Department Chairperson and academic advisor. Health, and Exercise Science students enroll in PE 495 and Leisure Studies students enroll in LS 498. See advisor for details and internship planning.

### **Graduate**

The Department of Health, Kinesiology, and Sport offers:

I. The Master of Education degree with specializations in:

- Physical Education, Teacher Certification
- Health Education, Teacher certification

These programs are planned to lead to Alabama Class A Teacher Certification. An Alabama Class B certificate or the equivalent is required for students seeking the Master's level (Class A) certification.

II. The Master of Science degree in:

- Exercise Science
- Health (Non-Teacher Certification)
- Sport Management

## **Areas Of Study**

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### **Degrees, Programs, Or Concentrations**

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## **Courses**

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### **Course Listing**

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HPE Graduate.....	1000
Health and Safety.....	1003
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## Faculty

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ANASTASIO, RANDALL J.

Senior Instructor  
BS, University of Southern Miss  
MS, University of Southern Miss  
MS, University of Southern Miss

KOVALESKI, JOHN E.

Professor  
BS, Ohio University  
MA, Central Michigan University  
PHD, Ball State University

BARTER, ALEXANDRA S.

Senior Instructor  
BS, University of South Alabama  
MED, University of South Alabama

MCKINLEY-BARNARD, SARAH K.

Assistant Professor  
BS, University of Texas At El Paso  
MSED, Baylor University  
PHD, Baylor University

BROACH, MARY E.

Associate Professor  
BS, University of South Alabama  
MS, University of South Alabama  
EDD, University of Georgia

MONTGOMERY, SUSAN L.

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BS, University of Montevallo  
MS, University of Tennessee-Knox

FORESTER, BROOKE E.

Assistant Professor  
BS, University of South Alabama  
MED, University of South Alabama  
PHD, Florida State University

PALOMBO, ALEESHA S.

Senior Instructor  
BA, University of South Florida  
MED, University of South Alabama

GURCHIEK, LARRY R.

Professor  
BS, Indiana State University  
MS, Indiana State University  
MS, Indiana State University  
DA, Middle Tennessee State U

SCHWARZ, NEIL A.

Assistant Professor  
BS, Louisiana State University  
MS, University of South Alabama  
PHD, Baylor University

HAUFF, CAITLYN R.

Assistant Professor  
BS, Baldwin-Wallace University  
MS, Georgia Southern University  
PHD, University of Wisconsin-Milwau

WOLTRING, MITCHELL T.

Assistant Professor  
BS, Minnesota St University-Mankato  
MS, Middle Tennessee State U  
PHD, Middle Tennessee State U

HOLDEN, SHELLEY L.

Associate Professor  
BS, University of South Alabama  
MED, University of South Alabama  
EDD, University of West Florida

KESHOCK, CHRISTOPHER M.

Associate Professor  
BSBA, Ashland University  
MBA, University of Central Missouri  
PHD, Florida State University

# Coaching Certificate

## Degree Requirements

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The University of South Alabama Coaching Certificate is a 21 hour academic program that can be completed in two years. The program is intended to give students with coaching aspirations significant course work in coaching theory, sport behavior, basic athletic injury care, sport specific coaching strategies, and team management. Program Requirements: Satisfactory completion of 21 hours (12 required, PE 100, 278, 282, 478; 9 hours of electives from PE 373, 374, 375, 376, 377, 378) with a minimum GPA of 2.0 required for certificate. Combining the Coaching Certificate with the Class B Teaching Certificate prepares the individual for coaching in the high school setting.

### Coaching Certificate (21 Hours)

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PE 100

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PE 278

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PE 282

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PE 478

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9 hours of electives from PE 373, 374, 375, 376, 377, 378) with a minimum GPA of 2.0 required for certificate

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# Exercise Science (BS) - Health Fitness Concentration

## Degree Requirements

### Exercise Science (BS) - Health/Fitness Concentration

#### General Studies Component

See Department advising sheets for specific requirements and suggestions.

#### Requirements for Exercise Science Health/Fitness Concentration:

BMD 114

BMD 115

HS 170

PE 201

HS 262

HS 263

HS 362

LS 472

PE 100

PE 278

PE 282

PE 370

PE 380

PE 381 or ST 210

PE 474

PE 475

PE 476

PE 479

PE 480

PE 482

PE 484

PE 495

PE 102 and three (3) different one-hour PE activities

USA computer proficiency requirement

Students who are interested in a career at the baccalaureate level as an exercise professional may choose the Health-Fitness Concentration that provides the knowledge and the learning of practical and applied skills related to pre-participation health screenings, conducting and interpreting physical fitness assessments, developing exercise prescriptions, conducting exercise,

and applying behavioral and motivational strategies for participants. The Exercise Science major is recognized by the National Strength and Conditioning Program as an NSCA Education Recognition Program (ERP).

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# Exercise Science (BS) - Pre-Professional Concentration

## Degree Requirements

### Exercise Science (BS) - Pre-Professional Concentration

#### General Studies Component

See Department advising sheets for specific requirements and suggestions.

#### Requirements for Exercise Science Pre-Professional Concentration:

BMD 114

BMD 115

CH 131

CH 131L

CH 132

CH 132L

HS 170

HS 263

LS 472

PE 100

PE 278

PE 282

PE 370

PE 380

PE 474

PE 476

PE 479

PE 480

PE 482

PH 114 & 114L

PH 115 & 115L

ST 210

Elective 300-499

PE 102 and three (3) different one-hour PE activities

Students who are interested in post-graduate educational opportunities may choose the Pre-Professional Concentration that provides the coursework and academic preparation necessary for graduate study in applied kinesiology and clinical/research programs in exercise science and allied health programs such as physical therapy, occupational therapy, and athletic

training. The Exercise Science major is recognized by the National Strength and Conditioning Program as an NSCA Education Recognition Program (ERP).

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# Health (BS) - Health

## Degree Requirements

Health (BS) - Health
General Studies Component
See Department advising sheets for specific requirements and suggestions.
Requirements for Non-Certification Health Education
HS 170
HS 262
HS 263
HS 351
HS 361
HS 362
HS 463
PE 100
PE 201
PE 278
PE 381
PE 475
PE 380 or PE 474 or PE 476
PE 495, and one (1) hour activity course
LS 471 or LS 472
BLY 205
BMD 114
BMD 115
SY 220
Advisor approved electives (12 hours) from the following: ACC, BLY, BUS, CH, CLS, ECO, EMT, FIN, HS, LS, MA, MGT, MKT, PH, PSY, ST, SY, or PE 231-499
USA computer proficiency requirement

**Additional departmental requirements are listed on HKS advising sheets (see advisor).**

# Health (BS) - Health Education 6-12 Teacher Certification

## Degree Requirements

### Health Education (BS) - Health Education 6-12 Teacher Certification

#### General Studies Component

See Department advising sheets for specific requirements and suggestions.

#### Requirements for Health Education (6-12) Class B Teacher Certification

HS 170

HS 262

HS 263

HS 351

HS 361

HS 429

HS 460

HS 463

PE 100 and one (1) hour activity course

PE 201

PE 460

PE 475

PE 381

PE 380 or PE 474 or PE 476

BMD 114

BMD 115

Advisor Approved Electives from HS or PE Prefix 300-499 Level

HS 340

HS 430

EDU 363

EPY 351

EDM 310

EDU 400

HS 362

Successful completion of appropriate tests: AECTP, background check and professional liability insurance, Exit Exam, PRAXIS II in teaching field, PLT 7-12 and additional field experiences (see advisor)

**Additional departmental requirements are listed on HKS advising sheets (see advisor).**



# Leisure Studies (BS) – Sport And Recreation Management

## Degree Requirements

Leisure Studies (BS) - Sport & Recreation Management	Credit Hours
General Studies Component	
See Department advising sheets for specific requirements and suggestions.	
Leisure Studies Program Requirements	
Professional Core	34
LS 191	
LS 292	
LS 391	
LS 471	
LS 483	
LS 498	
HS 170	
HS 262	
HS 263	
USA computer proficiency requirement	
Concentration Areas	
Sport & Recreation Management	31
LS 276	
LS 297	
LS 384	
LS 394	
LS 472	
LS 486	
LS 496	
PE 278	
PE 478 or LS 300	
Advisor approved electives (4 hours) from the following: ACC, BLY, BMD, BUS, CA, CH, CLS, ECO, EMT, FIN, HS, LS, MGT, MKT, PE 201-499, PH, PSY, ST, or SY.	

# Graduation Plan

## Leisure Studies: Sport & Recreation Management

First Year		Credit Hours
Fall Semester		15
*EH 101 English Comp I (I)	3 hrs	
Fine Art (II)	3 hrs	
History (IV)	3 hrs	
MA 110 or Higher (III)	3 hrs	
PE 100 Concepts of Health & Fitness (V)	3 hrs	
Spring Semester		16
*CA 110 Public Speaking (II)	3 hrs	
*EH 102 English Comp II (I)	3 hrs	
CIS 150/Elective	3 hrs	
Science + Lab (III)	4 hrs	
Social Science Elective (IV)	3 hrs	
Second Year		Credit Hours
Fall Semester		16
*LS 191 Intro to Leisure Studies	3 hrs	
Science + Lab (III)	4 hrs	
Literature PR (II)	3 hrs	
LS 276 Intro to Sport & Rec Management	3 hrs	
Social Science Elective (IV)	3 hrs	
Spring Semester		15
*LS 292 Outdoor Recreation	3 hrs	
History/Social Science Elective (IV)	3 hrs	
HS 262 Personal Health	3 hrs	
Literature PR/Fine Art Elective (II)	3 hrs	
LS 297 Campus Rec (spring only)	3 hrs	
Third Year		Credit Hours
Fall Semester		15
*LS 391 Leadership in Leisure Services	3 hrs	

HS 170 First Aid	1 hr	
HS 263 Nutrition & Hunger	3 hrs	
LS 394 Sport Business and Finance (fall only)	3 hrs	
PE 101-157 PE Activity Course (V)	1 hr	
PE 101-157 PE Activity Course (V)	1 hr	
PE 278 Sport & Human Behavior	3 hrs	
<i>Apply for Candidacy</i>		
Spring Semester		16
<b>LS 472 Legal Issues (W)</b>	3 hrs	
Advisor Approved Elective	4 hrs	
LS 384 Sports Marketing (spring only)	3 hrs	
<b>LS 483 Issues in Leisure Services</b>	3 hrs	
PE 478 Coaching Theory or LS 300 Global Tourism (spring only)	3 hrs	

Fourth Year		Credit Hours
Fall Semester		15
Elective	3 hrs	
Elective	3 hrs	
<b>LS 471 Eval &amp; Research (W)</b>	3 hrs	
LS 486 Sport/Rec Facility Planning (fall only)	3 hrs	
<b>LS 496 Sport &amp; Rec Resource Mgt (fall only)</b>	3 hrs	
<i>Apply for Graduation</i>		
Spring Semester		12
<b>LS 498 Internship</b>	12 hrs	

### Key

PR = Prerequisite course required

\* = Prerequisite for Candidacy

Courses in **BOLD** indicate Candidacy required

(I)-(V) = General Education Area

(W) = Courses that satisfy USA writing requirement

# Leisure Studies (BS) - Therapeutic Recreation

## Degree Requirements

Leisure Studies (BS) - Therapeutic Recreation	Credit Hours
General Studies Component	
See Department advising sheets for specific requirements and suggestions.	
Leisure Studies Program Requirements	
Professional Core	34
LS 191	
LS 292	
LS 391	
LS 471	
LS 483	
LS 498	
HS 170	
HS 262	
HS 263	
USA computer proficiency requirement	
Concentration Areas	
Therapeutic Recreation	31
BMD 114 or BMD 115	
HS 362	
LS 295	
LS 375	
LS 395	
LS 465	
LS 466	
LS 468 or LS 397	
PE 370 or PE 380 or PE 461 or PE 476	
PSY 340	
Additional requirements may be needed for National Council for Therapeutic Recreation Certification (NCTRC). See departmental advisors for specific NCTRC requirements.	

# Minor In Leisure Studies

## Degree Requirements

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### Minor in Leisure Studies (21 Hours)

LS 191

LS 391

The remaining hours from the following:

LS 276

LS 292

LS 295

LS 297

LS 300

LS 375

LS 384

LS 394

LS 395

LS 397

LS 468

LS 479

LS 486

LS 490

PE 278

PE 478

See Leisure Studies academic advisor for help with course selection.

# Physical Education (BS) - Exercise Science

## Degree Requirements

Physical Education (BS) - Exercise Science
General Studies Component
See Department advising sheets for specific requirements and suggestions.
Requirements for Non-Certification Physical Education (Exercise Science)
HS 170
HS 262
HS 263
HS 362
LS 472
PE 100
PE 201
PE 278
PE 282
PE 370
PE 380
PE 381
PE 474
PE 475
PE 476
PE 479
PE 480
PE 482
PE 484
PE 495
BMD 114
BMD 115
PE 102 and three (3) different one-hour PE activities
USA computer proficiency requirement

The Exercise Science program is an approved educational program by the National Strength and Conditioning Association. American College of Sports Medicine (ACSM) guidelines are emphasized in the curriculum. Upon degree completion, students are eligible to pursue nationally recognized certifications such as Personal Trainer, Exercise Physiologist, Clinical Exercise Physiologist, and Strength and Conditioning Specialist.

**Additional departmental requirements are listed on HKS advising sheets.**



# Physical Education (BS) - P-12 Teacher Certification

## Degree Requirements

### Physical Education (BS) - P-12 Teacher Certification

#### General Studies Component

See Department advising sheets for specific requirements and suggestions.

#### Requirements for Physical Education (P-12) Class B Teacher Certification

HS 170

HS 262

HS 263

HS 361

HS 362

HS 429

HS 460

PE 100

PE 106

PE 130

PE 166

PE 201

PE 282

PE 351

PE 370

PE 380

PE 381

PE 429

PE 452

PE 461

PE 475

PE 476

PE 478

PE 470

BMD 114

EPY 351

EDM 310

EDU 400

Successful completion of appropriate tests: AECTP, background check and professional liability insurance, PRAXIS II in teaching field; Praxis PLT K-6 or Praxis PLT 7-12

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**Additional departmental requirements are listed on HKS advising sheets.**

# Physical Education (M.Ed.) - P-12 Teacher Certification

## Degree Requirements

### Requirements For Master Of Education Degree (M.Ed.30 Hours)

The requirements for the Master of Education Degree include Educational Research and Evaluation (IDE 510), and 27 semester hours in the area of specialization. Eighteen hours of graduate course work must be in HPE. No courses below the 500 level can apply to any graduate program.

Physical Education, M.Ed. - P-12 Teacher Certification (30 Hours)	Credit Hours
Physical Education (P-12)	
Curriculum and Teaching - HPE 506 and HPE 521	6
Professional Studies - SPE 500 or EDU 567	3
Special Education 500 OR Advisor Approved Elective (All certification programs require SPE 500 or an introductory Special Education course if not taken at the undergraduate level.)	
Research and Evaluation	3
IDE 510	
Technology Requirement	3
EDM 510	
Teaching Field	15
HPE 500	
HPE 505	
HPE 516	
HPE 562	
HPE 563	
Additional Requirements	
Students must successfully complete a comprehensive examination. See Graduate Student Checklist on Departmental Advising Sheets.	

# Physical Education (M.Ed.) – Health Education 6-12 Teacher Certification

## Degree Requirements

### Requirements For Master Of Education Degree (M.Ed.30 Hours)

The requirements for the Master of Education Degree include Educational Research and Evaluation (IDE 510), and 27 semester hours in the area of specialization. Eighteen hours of graduate course work must be in HPE. No courses below the 500 level can apply to any graduate program.

Physical Education, M.Ed. – Health Education 6-12 Teacher Certification (30 Hours)	Credit Hours
Health Education (6-12)	
Curriculum and Teaching	3
HPE 506	
Professional Studies Special Education (SPE 500) <b>OR</b> EDU 567	3
All certification programs require SPE 500 or an introductory Special Education course if not taken at the undergraduate level.	
EDF 501 or EDF 515 or EPY 502	3
Research and Evaluation	3
IDE 510	
Technology	3
EDM 510	
Teaching Field	15
HPE 505	
HS 562	
HS 563	
Advisor Approved Electives	
Additional Requirements	
Students must successfully complete a comprehensive examination. See Graduate Student Checklist on Departmental Advising Sheets.	

# Physical Education (MS) - Health Education

## Degree Requirements

### Requirements For Master Of Science Degree Program (30 Hours)

In addition to satisfying the general requirements of the Graduate School, the candidate for the Master of Science degree in HPELS must complete a minimum of 30 semester hours.

Physical Education, M.S. - Health Education	Credit Hours
Health Education (Non-Certification)	
Research and Evaluation	3
IDE 510	
Area of Specialization	12
HS 562	
HS 563	
HPE 505	
HPE 595	
Advisor Approved Electives	15
Additional Requirements	
Students must successfully complete a comprehensive examination. See Graduate Student Checklist on Department Advising Sheets.	

# Physical Education (MS) - Exercise Science

## Degree Requirements

### Requirements For Master Of Science Degree Program (30 Hours)

In addition to satisfying the general requirements of the Graduate School, the candidate for the Master of Science degree in HKS must complete a minimum of 30 semester hours.

Physical Education, M.S. - Exercise Science	Credit Hours
Exercise Science	
Research and Evaluation	3
IDE 510	
Area of Specialization	18
HPE 505	
HPE 516	
HPE 570	
HPE 571	
HPE 572	
HS 563	
Thesis Option	9
IDE 620	
HPE 599	
Non-Thesis Option	9
HPE 595	
HPE 540	
Advisor Approved Elective	
Additional Requirements	
Students must successfully complete a comprehensive examination. See Graduate Student Checklist on Departmental Advising Sheets.	

# Sport Management (MS)

## Degree Requirements

### Requirements For Master Of Science Degree Program (30 Hours)

In addition to satisfying the general requirements of the Graduate School, the candidate for the Master of Science degree in Sport Management must complete a minimum of 30 semester hours.

Sport Management, M.S.	Credit Hours
Research and Evaluation	3
IDE 510	
Area of Specialization	18
SM 572	
SM 575	
SM 584	
SM 585	
SM 586	
SM 587	
Thesis Option	9
IDE 620	
SM 599	
Non-Thesis Option	9
HPE 500	
SM 595	
Advisor Approved Elective	
Additional Requirements	
Students must successfully complete a comprehensive examination. See Graduate Student Checklist on Department Advising Sheets.	

# History

## Department Information

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Department of History web site

<http://www.southalabama.edu/history>

### Undergraduate Studies

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Knowledge and awareness of history and society are important ingredients of a liberal education. The Department of History offers general courses for all students, a major and a minor in history, and preparation for students who plan to continue study at the graduate level, to teach history, or to enter related fields.

All first-time freshmen must successfully complete CAS 100: First Year Experience as a degree requirement. Students must enroll during their first term at USA, except for summer-entry students who must enroll in the fall semester following entry. CIS 150 will fulfill the technology proficiency requirement for History Majors.

### Honors In History

To be awarded Honors in History, a student must:

- a. complete the standard requirements for a major in History
- b. have a 3.5 overall GPA (University requirement)
- c. have a 3.5 History GPA (Department requirement)
- d. receive agreement of a member of the History Department to serve as mentor
- e. receive permission of the Department Chair to undertake this program
- f. complete a Senior Honor Paper (HY 499), with a grade of "B" or "A", in addition to the standard History requirements. HY 499: Senior Honors Paper (six semester hours credit) may be counted toward three hours of the 36 required for a major and toward the three hours of 400-level electives required for the major. Thus, the student receiving honors in History will be required to take a total of 39 hours in History instead of 36 (In HY 499, the student will normally take three hours in Fall Semester for research and three in Spring for writing, though occasionally this may be spread out over a longer period. A final committee of three or more faculty, which may include a representative of the University Honors College, will conduct an oral defense)

NOTE: 1) one need not be receiving University Honors to obtain Honors in History; 2) a certificate will be awarded to the student indicating that they have been awarded "Honors in History."

### Graduate Studies

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The Master of Arts degree in History is designed to meet the varied needs of students. There are two study tracks or plans for completion of the degree: thesis, non-thesis.

Normally, those who wish to enter a Ph.D. program, law school, or certain positions in archives, government, and community college teaching positions pursue the thesis option. Other students pursuing positions where a thesis is not needed often study in the non-thesis track.

For further information on the M.A. program, see the departmental booklet Graduate Program in History, which can be found on the Department website or request one from the Department.

### Requirements For Admission

Students are admitted each semester. In addition to Graduate School requirements, all applicants must submit GRE scores, a statement of purpose for undertaking graduate work in History and provide three academic letters of recommendation directly to the Office of Admissions. A writing sample is also required and should be sent directly to the History Graduate Coordinator. Please contact the History Department Coordinator of Graduate Studies for more information. The following criteria supplement Graduate School criteria (see Categories of Admission).

### Regular Admission

1. At least twenty-one semester hours of college work in History approved by the Graduate Committee of the Department of History.

2. An average of "B" (3.0) or better in the junior- and senior-level history courses presented in fulfillment of requirement 1.

### Provisional Admission

Applicants whose undergraduate preparation in History does not meet the Graduate History Committee's full approval may, at the discretion of the Committee and under the regulations of the Graduate School, be admitted provisionally and may be required to make up deficiencies in undergraduate course work in addition to fulfilling the regular degree requirements listed as follows. To qualify for Regular Standing, a Provisional Admission student must satisfy the general requirements of this Bulletin and achieve a grade of "A" or "B" in nine consecutive semester hours of acceptable graduate course work.

### Non-degree Students

Students holding baccalaureate degrees from accredited institutions of higher education who are not interested in earning an MA degree, or who are not yet ready to apply for Regular Admission may enroll in a Non-Degree status. A suitable background for the courses to be taken is expected. Non-Degree students may enroll only in courses offered at specific times and places. They may not enroll in directed studies courses.

### Graduate Assistantships

A limited number of assistantships are awarded to incoming and returning graduate students on a competitive basis. Assistantships include a tuition waiver and a stipend, for which students are asked to work 20 hours a week, usually as teaching assistants, in public history, or assisting in the University Archives. Applications for each academic year are due in the department no later than March 15.

## Areas Of Study

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## Courses

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History.....	1005
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## Faculty

BRAZY, MARTHA J.  
Associate Professor  
BA, University of Wisconsin-Milwau  
MA, University of Wisconsin-Milwau  
PHD, Duke University

FAUST, ROBERT E.  
Senior Instructor  
BS, Manchester College  
MA, Ball State University  
PHD, University of Missouri-Columb

HAMILTON, MARSHA L.  
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BA, Purdue University-Main Campus  
MA, University of California-River  
PHD, State University of New York

CAGE, ERIN C.  
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AB, Dartmouth College  
MA, Johns Hopkins University  
PHD, Johns Hopkins University

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BA, Smith College  
MA, University of CA-Los Ang  
PHD, University of CA-Los Ang

HOLMES II, WILLIAMS C.  
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JD, Samford University  
MA, Univ of Alabama-Birmingham

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BA, Appalachian State University

MA, West Virginia University

PHD, University of Rochester

LOMBARDO, TIMOTHY J.

Assistant Professor

BA, Temple University

MA, Temple University

PHD, Purdue University-Main Campus

MCKIVEN, HENRY

Associate Professor

BS, Auburn University

MA, Virginia Polytechnic Inst and

PHD, Vanderbilt University

MEOLA, DAVID A.

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BS, University of NC- Chapel Hill

MA, Univ of British Columbia

PHD, Univ of British Columbia

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MA, Columbia U in the City of NY

MPHIL, Columbia U in the City of NY

PHD, Columbia U in the City of NY

STRONG, MICHELE M.

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PHD, University of NC- Chapel Hill

WILLIAMS, REBECCA R.

Associate Professor

BS, Northern Michigan University

MA, University of West Florida

PHD, McGill University Quebec

# History (BA)

## Degree Requirements

Majors in Arts and Sciences may be completed with a minimum of 120 semester hours unless designated otherwise. At least 30 hours of course work, which represents 25% of the required 120 hours, must be at the upper division level in order to fulfill the University's residency requirement. At least 15 of the 30 upper-division hours must be in the major or concentration area. An overall grade-point-average (GPA) of 2.0 is required for graduation. In addition, a minimum GPA of 2.0 is required in the student's major or concentration area.

Requirements for a Major in History	Credit Hours
A minimum of 36 semester hours for the BA in History.	36
HY 101	
HY 102	
HY 135	
HY 136	
One course in African (HY 362), Asian (HY 103, 104, 283, 284, 366, 367, 368, 461), Latin American (HY 228, 321, 323, 325, 326, 429), OR Middle Eastern History (HY 364, 365, 465).	
One research seminar (HY 441, 442, or 443)	
One elective course at the 400 level	
Three elective courses at the 300 or 400 level	
Two elective courses at any level	

Majors should seek as broad an acquaintance with the varieties of historical experience as possible. A strong major program should include upper-level courses numbered 300 or above in the history of Europe, the United States, Latin America, and non-Western societies. Students pursuing a degree in History also must have a minor in another discipline.

All first-time freshmen must successfully complete CAS 100: First Year Experience as a degree requirement. Students must enroll during their first term at USA, except for summer-entry students who must enroll in the fall semester following entry. CIS 150 will fulfill the technology proficiency requirement for History Majors.

### General Education Requirements For History Majors

General Education Requirements for History are specified in the College of Arts and Sciences section. Note that Area IV requirements are partially satisfied and the Sequence Requirement is fully satisfied by the major requirements specified above.

# History (MA) - Non-Thesis Option

## Degree Requirements

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### Requirements For Degree

All candidates for the Master of Arts degree in History, regardless of which of the two tracks they are following, must complete the following requirements:

- A minimum of 33 credit hours with grade of "A" or "B".
- A minimum of 20 credit hours completed at the University of South Alabama.
- A maximum of 9 credit hours of 500 level courses that are dual-listed at the 400 level. Graduate students will only receive graduate credit for the 500 level version of dual-listed courses. These courses will require extra work beyond that expected of undergraduates in the 400 level course.
- At least 24 credit hours at the 500 level courses that are not dual-listed with the 400 level.
- Complete HY 593 Research, Comprehensive Exam and Thesis Preparation
- Complete HY 530 American Historiography.
- Complete HY 540 Modern European Historiography, or HY 542 World Historiography (except for students taking the Public History topical field or other topical fields).
- Complete one of the following research seminars: HY 546, HY 580, HY 581 or HY 586. Other courses may be substituted if a research paper is completed (students must check with graduate coordinator for specific requirements).
- Choose two of the following fields and complete 12 credit hours in each: American History, European History or World History, Topical Fields

**Note:** A grade of "C" or below is not considered a passing grade by the Department of History. Students receiving such a grade in a required course must make-up the hours.

Requirements for topical fields vary. Students must check with graduate coordinator for specific requirements. The remaining requirements are dictated by the track in which students choose to study:

### Non-Thesis Option

- Complete comprehensive examinations in two fields choosing from American; European or World; or topical field.

# History (MA) - Thesis Option

## Degree Requirements

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### Requirements For Degree

All candidates for the Master of Arts degree in History, regardless of which of the two tracks they are following, must complete the following requirements:

- A minimum of 33 credit hours with grade of "A" or "B".
- A minimum of 20 credit hours completed at the University of South Alabama.
- A maximum of 9 credit hours of 500 level courses that are dual-listed at the 400 level. Graduate students will only receive graduate credit for the 500 level version of dual-listed courses. These courses will require extra work beyond that expected of undergraduates in the 400 level course.
- At least 24 credit hours at the 500 level courses that are not dual-listed with the 400 level.
- Complete HY 593 Research, Comprehensive Exam and Thesis Preparation
- Complete HY 530 American Historiography.
- Complete HY 540 Modern European Historiography, or HY 542 World Historiography (except for students taking the Public History topical field or other topical fields).
- Complete one of the following research seminars: HY 546, HY 580, HY 581 or HY 586. Other courses may be substituted if a research paper is completed (students must check with graduate coordinator for specific requirements).
- Choose two of the following fields and complete 12 credit hours in each: American History, European History or World History, Topical Fields

**Note:** A grade of "C" or below is not considered a passing grade by the Department of History. Students receiving such a grade in a required course must make-up the hours.

Requirements for topical fields vary. Students must check with graduate coordinator for specific requirements. The remaining requirements are dictated by the track in which students choose to study:

### Thesis Option

- Complete a comprehensive examination in one field (see list of fields above) other than the thesis field.
- Complete six credit hours of HY 599 Thesis.
- Submit an approved thesis prospectus.
- Formally defend their thesis. (Students must be enrolled in at least one hour of HY 599 when they defend.)
- Submit an approved thesis in accordance with Graduate School regulations.

# Minor In History

## Degree Requirements

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**If a minor is required in your degree program, at least 9 (lower and/or upper-division) hours of courses in the minor must be completed at the University.**

A minimum of 21 semester hours in History. Students must complete a six hour sequence in either Western Civilization (101 and 102) or US History (135 and 136) and 15 semester hours of electives, of which nine semester hours must be taken in courses numbered 300 or above at this University.

# Hospitality And Tourism Management

## Department Information

<b>Department of Hospitality and Tourism Management Staff</b>		<b>(251) 461-1902</b>
Interim Chair and Faculty Academic Advisor	Dr. Evelyn Kwan Green	
Faculty	Dr. Robert Thompson	
	Ms. Amanda Donaldson	
Academic Advising/Recruitment	Ms. Melanie McLain	
Secretary	Ms. Victoria Falls	

Department of Hospitality and Tourism Management website  
<http://www.southalabama.edu/colleges/ceps/htm/index.html>

### Vision

Improve the well-being of people along the Gulf Coast by producing hospitality, tourism and ecotourism professionals who possess fiscal, social, environmental and professional competencies through education and training, job placement and partnerships.

### Mission

To advance the people of the Gulf Coast, and the global community through the creation and dissemination of knowledge and experience anchored in sustainable and best practices in the hospitality, tourism and ecotourism sectors.

### Goal

Provide graduates with career and life competencies for sustainable employment, local and global leadership, engaged citizenry and research opportunities.

### Program Educational Objectives

Develop learner-focused pedagogies that:

- Prepare students for global hospitality, tourism and ecotourism careers from an interdisciplinary perspective.
- Provide students with observational, situational, experiential learning and research opportunities.
- Apply and infuse sustainable and best hospitality, tourism and ecotourism practices.

## Areas Of Study

### Degrees, Programs, Or Concentrations

Hospitality and Tourism Management (BS)..... 488

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# Courses

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## Course Listing

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Hospitality/Tourism Management..... 1011

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# Faculty

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DONALDSON, AMANDA B.  
Instructor  
BS, University of Alabama  
MS, University of Alabama

GREEN, EVELYN K.  
Assistant Professor  
BS, University of Southern Miss  
MBA, University of Southern Miss  
MS, University of Southern Miss  
PHD, University of Southern Miss

THOMPSON, ROBERT J.  
Assistant Professor  
BFA, University of Southern Miss  
MBA, University of Guelph  
PHD, University of Southern Miss

# Hospitality And Tourism Management (BS)

## Degree Requirements

To graduate, a student will complete a minimum of 120 semester hours with an overall institution grade-point average (GPA) of 2.0. In addition, a minimum GPA of 2.0 is required in the major.

Any academic course credits taken at, or accepted as a transfer by USA, may be used to meet elective requirements. Only 60 credit hours from a community college may be transferred to USA, and no more than 90 credit hours from a four-year university may be transferred. To receive a degree from USA, a minimum of 30 credit hours must be completed in residence at the 300/400 level.

Course of Study for B.S. in Hospitality and Tourism Management		Credit Hours
Major Requirements		49
Free Electives*		30
General Education Requirements		41
<b>Total credit hours required for completion</b>		<b>120</b>

Major Requirements (49 hours)		Credit Hours
HTM 200	Introduction to Hospitality & Tourism Industry	3
HTM 210	Food and Beverage Services Management	3
HTM 220	Meetings, Incentives, Conventions and Events	3
HTM 310	Global Leadership for HTM Professionals	3
HTM 315	Hospitality and Tourism Marketing (C)	3
HTM 350	Hospitality HR Management	3
HTM 396	HTM Professional Conduct and Career Planning	3
HTM 400	Legal Issues in Hospitality and Tourism	3
HTM 410	Sustainable- and Eco-tourism	4
MGT 305 HTM 435	Organizational Communications (W) OR Quality Service Management (W)	3
HTM 440	Lodging Management	3
ACC 211	Principles of Accounting I	3

LS 292	Outdoor Recreation and Adventure	3
LS 300	Global Tourism	3
<b>Choice of the following Capstone Experience Sequences:</b>		
HTM 496	Internship in HTM I (W)	3
HTM 498	Internship in HTM II	3
OR		
HTM 380	Research in HTM I (W)	3
HTM 430	Research in HTM II	3

<b>Free Electives (30 hours)</b>		<b>Credit Hours</b>
*Free Elective credits may be used to complete minors, although a minor is not required by this program. Any approved minor at USA will be accepted. A student may find that a minor in Leisure Studies (21 hrs.); Communication (21 hrs.); General Business (18 hrs.); General Management (18 hrs.); or Marketing (18 hrs.) may be of value to HTM majors. Electives offered by HTM include:		
HTM 212	Food Sanitation and Safety	3
HTM 230	Casino and Resort Operations Management	3
HTM 320	Destination Management and Marketing	3
HTM 330	Cruise Operations Management	3
HTM 397	Study Abroad - International Culture, Cuisine & Culinary Practice	3
HTM 398	Study Abroad - International Hospitality Management	3
HTM 445	HTM Financial Reporting	3
HTM 450	Timeshare and Condominium Management	3
HTM 490	Special Topics	1-4
HTM 494	Directed Studies	1-4

<b>General Education Requirements (41 hours)</b>		<b>Credit Hours</b>
I. Written Composition		6
II. Humanities, Fine Arts, Oral Communications		12
III. Natural Sciences and Mathematics		11



# Information Systems And Technology

## Department Information

### Department of Information Systems and Technology Staff

Professor, Information Systems Coordinator, and  
Department Chair

Dr. Jeffrey P. Landry

Computer-based information systems have become a critical part of products, services, and management of organizations. The Information Systems discipline centers on the development of systems that will improve the performance of people in organizations. Information systems are vital to problem identification, analysis, and decision making at all levels of management. Information Systems professionals must analyze the evolving role of information and organizational processes. Their work includes the design, implementation and maintenance of the information systems that form the backbone of today's global economy. Information Systems professionals distinguish themselves by integrating technology into business. Information Systems graduates pursue professional careers as application developers, database analysts, business analysts and into managerial positions. The combination of business, technical, and interpersonal skills are what recruiters demand of Information Systems professionals.

## Areas Of Study

### Degrees, Programs, Or Concentrations

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## Courses

### Course Listing

Computer Science.....	921
Computer and Inform Sciences.....	926
Health Informatics.....	1001
Information Systems.....	1014
Information Technology.....	1018

## Faculty

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Professor  
BS, University of Central Florida  
MS, Air Force Inst of Technology  
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BENTON, RYAN G.  
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PHD, Capella University

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PHD, Auburn University

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BS, Tennessee Technological U  
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PHD, University of Southern Miss

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MS, University of South Alabama

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MS, University of South Alabama

HOLIFIELD, JEFFREY K.  
Instructor  
BS, Southern Illinois U-Carbondale  
MA, George Washington University  
MMOAS, Community Col Of The Air Force  
MS, University of South Alabama

HUANG, JINGSHAN  
Associate Professor  
BE, Fuzhou University  
ME, University of SC-Columbia  
PHD, University of SC-Columbia

JOHNSTEN, TOM  
Associate Professor  
BS, Oklahoma State University  
MS, Arizona State University-Main  
PHD, University of LA at Lafayette

LANDRY, JEFFREY P.  
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BS, University of New Orleans  
MBA, University of New Orleans  
PHD, Florida State University

LUCAS, RHONDA L.  
Part-Time Instructor  
BS, University of South Alabama  
MS, University of South Alabama

MCDONALD, JEFFREY T.  
Professor  
BS, US Air Force Academy  
MBA, University of Phoenix  
MS, Air Force Inst of Technology  
PHD, Florida State University

MCKINNEY, DAWN M.  
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MS, University of South Alabama

MENARD, PHILIP R.  
Assistant Professor  
BS, Nicholls State University  
MIS, University of Phoenix  
PHD, Mississippi State University

OVERSTREET, PAUL R.  
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BS, University of Alabama  
MS, University of Alabama

PARDUE, JOHN H.  
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MS, University of South Alabama  
PHD, Florida State University

SHROPSHIRE, JORDAN D.  
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BBA, University of Florida  
PHD, Mississippi State University

SMITH, MELISSA E.  
Senior Instructor  
BS, Troy University-Main  
MS, University of South Alabama

SWEENEY JR., ROBERT B.  
Associate Professor  
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MS, University of Memphis  
PHD, University of Memphis

VAN DEVENDER, MAUREEN S.  
Instructor  
BS, University of South Alabama  
MBA, Spring Hill College

WHITSTON, HOWARD E.  
Instructor  
BS, Lawrence Technological U  
MS, University of Cincinnati  
MS, Univ. of Michigan-Dearborn

YAMPOLSKIY, MARK  
Assistant Professor  
MS, Technical University of Munich  
PHD, Ludwig-Maximilians Univ Munich

YASINSAC, ALEC F.  
Professor  
BS, Appalachian State University  
MS, Naval Postgraduate School  
PHD, University of Virginia

# Health Informatics (BS)

## Degree Requirements

Health Informatics (BS)	Course Title	Credit Hours
Information Systems Environment - Forty (40) credit hours are required as follows:		40
CIS 150	Intro to Computer Applications	
ACC 211	Accounting Principles I	
MGT 300	Management Theory & Practice	
ISC 245	Information Systems in Organizations	
ISC 272	Systems Architecture	
CIS 324	Database Design, Development and Management	
ISC 360	Information Systems Analysis and Design (W)	
ISC 462	Information Systems Strategy and Policy	
CIS 321	Data Communications and Networking	
ISC 475	Information Systems Project Management	
CIS 496	Internship- (0 Credit Hours)	
CIS 115	Beginning Programming	
CA 275	Small Group Communications	
EH 372 <b>OR</b> EH 373	Technical Writing (W) or Writing in the Professions (W)	
Core Courses - Twelve (12) credit hours are required as follows:		12
HI 300	Health Informatics Clinical Environment	
HI 410	Health Informatics	
HI 450	Health Data Security Compliance	
HI 455	Health Decision Support Systems	
Health Care Environment - Twenty-three (23) credit hours are required as follows:		23
BMD 210 or BLY 213	Infectious Disease in Health Care or Microbiology	
EMS 210	Medical Terminology	
NU 325 <b>OR</b> 390	Health Assessment or Patient Assessment for Non Nurses	
NU 327 <b>OR</b> EMS 200	Pathophysiological Basis of Nursing or Human systems and Pathophysiology	
EMS 401	Seminar in HP	
BMD 114	Human Anatomy and Physiology I	
BMD 115	Human Anatomy and Physiology II	

# Health Informatics Certificate

## Degree Requirements

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Health Informatics Certificate	Course Title
A certificate in health informatics from the School of Computing requires completion of the five courses listed below. All courses must be completed with a minimum grade of "C".	
HI 300	Health Informatics Clinical Environment
HI 410	Health Informatics
HI 450	Health Data Security and Compliance
HI 455	Health Decision Support Systems
ISC 475	Information Systems Project Management

# Information Systems (BS)

## Degree Requirements

Information Systems (BS)	Course Title	Credit Hours
Information Systems Core Courses - Forty-four (41) credit hours, with a minimum grade of "C" in each course, are required as follows:		41
CA 275	Small Group Discussion	3 hrs
CIS 115	Beginning Programming	4 hrs
ISC 245	Info Systems in Organizations	3 hrs
ISC 272	Systems Architecture	3 hrs
ISC 285	Intermediate Programming	3 hrs
CIS 300	Information Technology in Society	1 hr
CIS 321	Data Communications and Networking	3 hrs
CIS 324	Database Design, Development, and Management	3 hrs
ISC 360	Info Systems Analysis and Design (W)	3 hrs
ISC 361	Database for Info Systems	3 hrs
EH 372 <b>OR</b> EH 373	Technical Writing (W) or Writing in the Professions (W)	3 hrs
ISC 462	Information Systems Strategy and Policy	3 hrs
ISC 475	Information Systems Project Management	3 hrs
CIS 497	Senior Capstone Experience (W)	3 hrs
CIS 498	CIS Senior Seminar	0 hrs
Information Systems Environment - Fifteen (15) credit hours, with a minimum grade of "C" in each course, are required as follows:		15
ACC 211	Accounting Principles	3 hrs

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ECO 215	Principles of Microeconomics	3 hrs
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MGT 300	Management Theory & Practice	3 hrs
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Six (6) credit hours of 200 level or higher courses from Accounting, Business, Economics, Finance, Management, or Marketing.  
6 hrs

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Information Systems Electives - Twelve (12) credit hours of approved electives, with a minimum grade of "C" in each course, are required.	12
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# Information Systems (MS)

## Degree Requirements

### Requirements For Masters Degree With An Information Systems (ISC) Specialization:

Students must satisfactorily complete all prescribed prerequisite courses, a comprehensive examination, and thirty-six (36) graduate credit hours for the Information Systems specialization in the SoC Master of Science degree. Required prerequisite courses are prescribed by the Information Systems Coordinator after reviewing prior academic work and results from any required School of Computing Foundation Placement Examinations. Information Systems Specialization majors must complete their Information Systems program with a minimum grade of "B" in core courses, and an overall program GPA of 3.0. The thirty-six (36) graduate hours consist of twelve (12) hours of CORE courses, six (6) hours of REQUIRED courses, and eighteen (18) semester hours of approved elective courses according to the selected concentration option as follows:

Requirements	Course Title	Credit Hours
Core Courses - All core courses must be completed with a minimum grade of "B".		12
ISC 561	Info Systems Database Mgt	
ISC 565	Info Systems Project and Change Mgt.	
And select two (2) from the following:		
ISC 545	Management Informations Systems	
ISC 560	Info Systems Analysis- Design	
IA CIS 530	Information Assurance and IT Auditing	
IA CIS 538	Operating Systems Concepts and Security	
Required Courses		6
ISC 559	Applications Design and Implementation	
And select one (1) from the following:		
ISC 567	IS Function Integration	
IA CIS 595	CIS Research Development	
Concentrations		18
Two concentrations of study are available to students who select the Information Systems Specialization in the SoC Masters program. These are Thesis and Course-Only concentrations.		
A. Thesis Concentration - For the Thesis Concentration, eighteen (18) semester hours of required and elective course work are required.		
Research Development		
A minimum grade of "C" in CIS 518 is required.		
A minimum of three (3) semester hours credit of CIS 595, Computer and Information Sciences Research Development, are required.		
A Thesis Concentration student may only enroll in CIS 595 after successfully completing CIS 518 and their core courses. A Thesis Concentration student must be enrolled in CIS 595 in the semester during which they defend their thesis prospectus. A grade of "C" or lower in CIS 595 will result in the dismissal of the student from the Thesis Concentration to the Course-Only Concentration.		

## Thesis

A minimum of three (3) semester hours credit of CIS 599, Computer and Information Sciences Thesis, must be applied towards the degree for the Thesis Concentration. Students may only enroll in CIS 599 after successfully defending their thesis prospectus (minimum grade of "B" in CIS 595). A Thesis Concentration student must be enrolled in CIS 599 in the semester during which they defend and/or submit their thesis.

Elective  
Course Work

Nine (9) semester hours of additional approved electives are required. A maximum of three (3) semester hours of Special Permission courses may be applied to the degree for the Thesis Concentration. A list of Pre-Approved Information Systems courses and a list of Special Permission courses are given at the end of this section.

## Comprehensive Examination

All students in the Thesis Concentration must pass an oral comprehensive examination administered after the thesis committee accepts the thesis. The School of Computing Comprehensive Examination Policies and Procedures document and the Comprehensive Examination Application form are available at <http://www.southalabama.edu/colleges/soc>.

B. Course Only Concentration - For the Course Only Concentration, eighteen (18) semester hours of elective course work are required. 18

## Elective Course Work

Eighteen (18) semester hours of approved electives are required. A maximum of six (6) semester hours of Special Permission courses may be applied to the degree for the Course Only Concentration. A list of Pre-Approved Information Systems courses and a list of Special Permission courses are given at the end of this section. ISC 568 may be taken at most two (2) times for the Course Only Concentration.

## Comprehensive Examination

Students in the Course Only Concentration must pass a written comprehensive examination. Students wishing to sit for the examination must apply online to the SoC Director of Graduate Studies by the Friday of the last week of classes in the semester prior to which the examination is to be taken. The comprehensive examination is offered at least once a year. The School of Computing Comprehensive Examination Policies and Procedures document and the Comprehensive Examination Application form are available at <http://www.southalabama.edu/colleges/soc>.

## Information System Electives

A list of Pre-Approved Information Systems elective courses and a list of Special Permission courses are given below. All other courses must be approved by the Information Systems Coordinator.

A maximum of nine (9) credit hours of non-ISC or non-CIS courses will be allowed.

## A. Pre-approved Information Systems Electives

ISC 510	Health Informatics
ISC 550	Health Systems Analysis and Design
ISC 553	Information Systems Web Site Management
ISC 555	Health Data Management and Decision Support
ISC 568	IS Enterprise Integration (may be taken at most two (2) times - may ONLY be taken with the Course Only Concentration)
CSC 511	Communications and Network Analysis
CSC 514	Modeling and Simulation
CSC 527	Software Engineering Principles
CSC 533	Artificial Intelligence and Heuristic Programming
CIS 518	Research Methodologies
CIS 590	Special Topics
IA CIS 535	Digital Forensic Analysis

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IA CIS 540	Network Security Management
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ISC 590	Special Topics in Information Systems
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Special Permission Courses

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Approval of the Information Systems Coordinator and the Director of the SOC Graduate Studies is required for CIS graduate faculty sponsorship of a Special Permission Course. A maximum of nine (9) credit hours of Special Permission courses may be applied to the degree for the Thesis Concentration; a maximum of six (6) credit hours of Special Permission courses may be applied to the degree for the Course Only Concentration.

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CIS 594	Directed Study
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CIS 595	Computer and Information Sciences Research Development
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CIS 599	Computer and Information Sciences Thesis
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# Information Technology (BS)

## Degree Requirements

Information Technology (BS)	Course Title	Credit Hours
Information Technology Core Courses - Forty-four (44) credit hours, with a minimum grade of "C" in each course, are required as follows:		44
CA 275	Small Group Discussion	3 hrs
EH 372 OR EH 373	Technical Writing (W) OR Writing in the Professions (W)	3 hrs
CIS 115	Beginning Programming	4 hrs
ITE 271	Information Technology in Organizations	3 hrs
ITE 272	System Architecture	3 hrs
ITE 285	Intermediate Programming	3 hrs
CIS 300	Information Technology in Society	1 hr
CIS 321	Data Communications and Networking	3 hrs
CIS 324	Database Design, Development, & Management	3 hrs
ITE 370	Advanced Application Development	3 hrs
ITE 474	Human Computer Interface	3 hrs
ITE 475	IT Project Management	3 hrs
ITE 480	Needs Assessment and Technology Evaluation (W)	3 hrs
ITE 485	Senior Demonstration Project	3 hrs
CIS 497	Senior Project (W)	3 hrs
CIS 498	Senior Seminar	0 hrs
Information Technology Electives - Twenty-one (21) credit hours, with a minimum grade of "C" in each course, are required. Students complete one of the following Focus Tracks consisting of twelve (12) hours of specified courses and nine (9) hours of approved Information Technology support electives:		21
Web Publishing		
ITE 375	Publishing for the World Wide Web	3 hrs
ITE 380	Multimedia Production	3 hrs
ITE 453	Web Site Management	3 hrs
ITE 482	Advanced Web Development	3 hrs
Networking		
ITE 382	Network Administration	3 hrs

ITE 384	Network Infrastructure Systems	3 hrs
ITE 476	Network Security Management	3 hrs
ITE 484	Advanced Network Management	3 hrs
Digital Forensics		
ITE 372	Advanced Operating Systems	3 hrs
ITE 373	File Systems for Digital Forensics	3 hrs
ITE 473	Digital Forensics Analysis	3 hrs
CJ 205	Introduction to Criminal Justice	3 hrs
Information Technology Support Electives - Nine (9) credit hours, with a minimum grade of "C" in each course, are required. Support electives are designed to further refine and develop a set of focused skills. Support electives require approval of advisor/coordinator.		

# Minor In Information Systems

## Degree Requirements

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A student wishing to obtain a minor in Information Systems has two options: complete the eight recommended courses listed below or contact the Information Systems Coordinator at [isc@cis.usouthal.edu](mailto:isc@cis.usouthal.edu) to prepare a plan compatible with the student's major. This email address is being protected from spambots. You need JavaScript enabled to view it. All courses must be completed with a minimum grade of "C".

Course	Course Title
CIS 115	Beginning Programming
ISC 245	Info Systems in Organizations
ISC 285	Intermediate Programming
ISC 272	System Architecture
CIS 321	Data Communications and Networking
CIS 324	Database Design, Development & Management
ISC 360	Info Systems Analysis and Design
ISC 361	Database for Info Systems

\*At least 9 hours of courses in the minor, including all 300 level courses, must be completed at the University of South Alabama.

# Minor In Information Technology

## Degree Requirements

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A student wishing to obtain a minor in Information Technology must complete each of the following courses with a minimum grade of "C".

Course	Course Title
CIS 115	Beginning Programming
ITE 271	Information Technology in Organizations
ITE 285	Intermediate Programming
ITE 272	System Architecture
CIS 321	Data Communication and Networking
CIS 324	Database Design, Development & Management
ITE 370	Advanced Application Development
ITE 382	Network Administration

# Integrative Studies

## Department Information

Department of Integrative Studies Staff	(251) 460-6263
Chair	Dr. Joycelyn Finley-Hervey
Academic Advisor	Diane F. Harvey, MS
Academic Advisor	Pamela James
Secretary	Kathryn Erwin

Department of Integrative Studies website

<http://www.southalabama.edu/colleges/ceps/integrative/index.html>

The Interdisciplinary Studies (IST) degree is designed to give students a variety of options in earning a Bachelor's degree tailored to meet their needs and interests. The Department of Interdisciplinary Studies (IST) offers a fully online degree.

General Education Requirements (41 Credit Hours)	Credit Hours
<b>Area I - Written Composition</b>	
2 courses	EH 101, EH 102
<b>Area II - Humanities, Fine Arts, Oral Communication</b>	
Any (1) of*	EH 215, 216, 225, 226, 235, or 236
Any (1) of	ARH 100, 103, 123; ARS 101; DRA 110; MUL 101
1 course	CA 110
Any (1) of	EH 215, 216, 225, 226, 235, or 236; ARH 100, 103, 123; ARS 101; DRA 110; MUL 101; AFR 101; <b>IST 105</b> ; CLA 110; LG 111, 112, 131, 132, 151, 152, 171, 172, 211, 212, 231, 232, 251, 252, 271, 272; LGS 101, 102, 106, 107, 121, 122, 141, 142, 201, 202, 206, 207, 221, 222, 241, 242; PHL 110, 121, 131, 231, 240
<b>Area III - Natural Sciences and Math</b>	
2 courses w/ labs	BLY 101/101L, 102/102L, 121/121L, 122/122L; CH 101/101L, 103/103L, 131/131L, 132/132L; GEO 101/101L, 102/102L; GY 111/111L, 112/112L; PH 101/101L, 104/104L, 114/114L, 115/115L, 201/201L, or 202/202L, MET 140/140L

Any (1) of	MA 110, 112, 113, 115, 120, 125, 126, 227, 237, or 238	3
<b>Area IV - History, Social and Behavioral Sciences</b>		
Any (1) of*	HY 101, 102, 135, 136	3
3 courses	<b>IST 201;</b> AN 100, 101; CA 100, 211; ECO 215, 216; GEO 114, 115; GS 101; IS 101; PSC 130; PSY 120, 250; SY 109, or 112; HY 101, 102, 135, 136	9

\*As part of the General Education Requirements, students must complete a 6-hour sequence in Literature or History

## Areas Of Study

### Degrees, Programs, Or Concentrations

Interdisciplinary Studies (BSBA).....	506
Minor in Interdisciplinary Studies.....	511

## Courses

### Course Listing

Career Planning.....	891
Interdisciplinary Studies.....	1027

## Faculty

FINLEY-HERVEY, JOYCELYN A.  
Professor  
BBA, Eastern Michigan University  
MBE, Eastern Michigan University  
PHD, University of Michigan-Ann Arb

WILSON, CYNTHIA L.  
Assistant Professor  
BS, Millsaps College  
MS, Texas A & M U-Commerce  
PHD, University of Alabama

MANDERS, JEANETTE E.  
Assistant Professor  
BS, Spring Hill College  
MED, University of Georgia  
PHD, University of Georgia

MOODY, ERIC M.  
Assistant Professor  
BS, University of North Alabama  
MBA, University of North Alabama  
PHD, University of Florida

# Interdisciplinary Studies (BSBA)

## Degree Requirements

### Interdisciplinary Studies Degree Program (IST)

The Interdisciplinary Studies Degree (IST) is a highly flexible and customized degree which offers maximum utilization of credits without restrictions or prerequisites. Students can choose from seven concentrations: Administrative Sciences, Applied Arts, Applied Sciences, Community Services, Human Services, Liberal Studies, or Professional Development. A major in Interdisciplinary Studies leads to a Bachelor of Arts or Bachelor of Science degree. The degree consists of a minimum of 120 credit hours, including 25 percent in upper-division hours (i.e., 30 hours) earned in residence at USA.

Students applying to the Interdisciplinary Studies Degree Program must satisfy general requirements for admission to the University of South Alabama (see "[Admission to the University](#)"). The student's individualized program of study is planned in consultation with their advisor.

General Competencies	Course Title	Credit Hours
Interdisciplinary & Critical Thinking	IST 302	3
Cultural Competency	IST 320	3
Analytical & Information Literacy	IST 330	3
Advanced Verbal & Written Communication-W	IST 350	3
Professional Leadership & Teamwork	IST 495	3
<b>Total Hours</b>		<b>15</b>

Students enrolled in the Interdisciplinary Studies Degree Program must satisfy the following:

- University's General Education Requirement of 41 hours, (see "[Academic Policies and Procedures](#)")
- General Competency Requirement of 15 hours.
- Concentration Requirement of 29 hours (designed in consultation with an academic advisor).
- Capstone Requirement of 3 hours (IST 498 Internship I-Capstone Experience-W or IST 430 Senior Research Thesis-W).
- Elective Courses Requirement of 32 hours

A minimum grade-point-average of 2.0 is required for graduation.

## Major Milestones

Effective fall 2016, the Interdisciplinary Studies degree includes a Major Milestones guideline to help students stay on track for timely graduation. In order to remain on track, students must complete the Milestone requirements for each term. Requirements for Major Milestones apply only to full-time degree-seeking students who entered fall 2016 or later. These requirements are viewable on the Major Milestones table below.:

### INTERDISCIPLINARY STUDIES SAMPLE 4-YEAR PLAN WITH MILESTONES

Term 1	Course Description	Pre-req	Cr Hrs	Milestone Notes
EH 101*	English Composition I		3	
History			3	
Elective Course IST 101	Foundations of Interdisciplinary University Studies		3	
Social Behavioral Science			3	
Fine Arts			3	
			<b>15</b>	Minimum Term GPA 2.0
Term 2	Course Description	Pre-req	Cr Hrs	Milestone Notes
EH 102 or EH 105	English Composition II	EH 101 or test score	3	EH 101 C or better or EH 105 C or better
Natural Science w/ Lab			4	
CA 110	Public Speaking		3	
Social Behavioral Science			3	
English Literature			3	
			<b>16</b>	
Term 3	Course Description	Pre-req	Cr Hrs	Milestone Notes
Math	MA 110 or higher		3	
History or Social Behavioral Science**			3	
English Literature or Humanities**			3	
Natural Science w/ Lab			4	
Elective Course: IST 290	Special Topic		1	

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EH 102 C or  
better

Term 4	Course Description	Pre-req	Cr Hrs	Milestone Notes
<b>Elective Course:</b> IST 125	Professional Conduct		3	
<b>Elective Course:</b> IST 201	Seasons of Life		3	
<b>Competency Course:</b> IST 302	Interdisciplinary and Critical Thinking		3	
<b>Concentration Course</b>	Field of Study Course (Any Level)		3	
<b>Concentration Course</b>	Field of Study Course (Any Level)		3	
			15	Minimum Term GPA 2.0

Term 5	Course Description	Pre-req	Cr Hrs	Milestone Notes
<b>Elective Course:</b> IST 305	Issues in Human Services		3	
<b>Elective Course:</b> IST 310	Global Leadership		3	
<b>Competency Course:</b> IST 330	Analytical and Information Literacy		3	
<b>Competency Course:</b> IST 350	Advanced Verbal and Written Communication-W		3	
<b>Concentration Course</b>	Field of Study course (300-400 Level)		3	
			15	15 Hours of USA Upper Division Coursework Completed

Term 6	Course Description	Pre-req	Cr Hrs	Milestone Notes
<b>Elective Course:</b> IST 315	Women's Issues in the Community Workplace		3	
<b>Competency Course:</b>	Cultural Competency		3	

**IST 320**

<b>Concentration Course</b>	Field of Study Course (300-400 Level)	3	
<b>Concentration Course</b>	Field of Study Course (300-400 Level)	3	
<b>Concentration Course</b>	Field of Study Course (300-400)	3	
		<b>15</b>	<b>Apply for Graduation</b>

<b>Term 7</b>	<b>Course Description</b>	<b>Pre-req</b>	<b>Cr Hrs</b>	<b>Milestone Notes</b>
<b>Elective Course: IST 401</b>	Adults in Society		3	
<b>Elective Course: IST 420</b>	Community Development and Leadership		3	
<b>Elective Course: IST 425</b>	Workplace Learning and Development		3	
<b>Concentration Course</b>	Field of Study Course (Any Level)		3	
<b>Concentration Course</b>	Field of Study Course (Any Level)		3	
			<b>15</b>	Minimum Term GPA 2.0

<b>Term 8</b>	<b>Course Description</b>	<b>Pre-req</b>	<b>Cr Hrs</b>	<b>Milestone Notes</b>
<b>Competency Course: IST 495</b>	Professional Leadership and Teamwork		3	
<b>Capstone Course: IST 430 or IST 498</b>	Senior Research Thesis - W or Internship I Capstone Experience - W		3	IST 330 C or better and IST 350 C or better
<b>Concentration Course</b>	Field of Study Course (Any Level)		3	
<b>Elective Course</b>			3	
<b>Concentration Course</b>	Field of Study Course (Any Level)		3	

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Minimum  
Term GPA  
2.0

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**Total  
degree  
hours  
= 120**

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\* Students who earn an English ACT score of 27, or a written SAT score of 550, can opt out of EH 101.

\*\* Must have one history elective and one literature elective. In addition, students must choose a second history or literature course to complete a two-part sequence.

Two designated writing courses are required with at least one course chosen from the student's major. Writing courses are identified in the University Bulletin by a (W) after the course title.

This Sample 4-Year Plan is designed as a guide for students preparing for their course selections and only provides only a suggested schedule. Actual course selections should be made in consultation with an academic advisor.

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# Minor In Interdisciplinary Studies

## Degree Requirements

Students in other colleges may elect, with the approval of their department chair, an IST minor in the College of Education and Professional Studies. A 2.0 GPA is required for the courses applied toward the minor. Students must complete at least 50% of the courses counted towards the IST minor at the University of South Alabama.

Minor in Interdisciplinary Studies	Credit Hours
IST 125 – Professional Conduct	
IST 305 – Interdisciplinary & Critical Thinking	
IST 320 – Cultural Competency	
IST 420 – Community Development & Leadership	
IST 495 – Professional Leadership & Teamwork	
IST 305 – Issues in Human Services; or IST 315 – Women’s Issues in the Workplace & Community; or IST 401 – Adults in Society; or IST	
425 – Workplace Learning & Development)	

# Interdisciplinary Programs

## Department Information

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Interdisciplinary programs are designed to combine several disciplines in their curriculum. Several interdisciplinary programs are offered by the College.

## Areas Of Study

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a minor in African-American Studies.....	243
a Composite Science Minor (24 hrs.).....	513
a minor in Forensic Sciences.....	439
a minor in Gender Studies.....	441
an undergraduate and graduate certificate in Gerontology.....	443
a major in International Studies.....	515
a double major in International Studies and Modern and Classical Languages and Literatures.....	527
a minor in International Studies.....	528
a minor in Museum Studies.....	659
a minor in Related Sciences.....	514

## Courses

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### Course Listing

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African-American Studies.....	854
College of Arts and Sciences.....	908
Gender Studies.....	992
Gerontology.....	998
Interdisciplinary Programs.....	1026
International Studies.....	1029
Museum Studies.....	1070

# Minor In Composite Science

## Degree Requirements

If a minor is required in your degree program, at least 9 (lower and/or upper-division) hours of courses in the minor must be completed at the University.

Composite Science Minor	Credit Hours
Requirements	24
Choose three laboratory science sequences:	
a. BLY 101/BLY 102L and BLY 102/BLY 102L or BLY 121/BLY 121L and BLY 122/BLY 122L	
b. CH 131/CH 131L and CH 132/CH 132L	
c. GEO 101/GEO 101L and GEO 102/GEO 102L	
d. GY 111/GY111L and GY 112/GY 112L	
e. PH 114/PH 114L and PH 115/PH 115L or PH 201/PH 201L and PH 202/PH 202L	
Students cannot choose a laboratory sequence in their major.	
Geology majors are required to take a Physics laboratory sequence.	

# Minor In Related Science

## Degree Requirements

If a minor is required in your degree program, at least 9 (lower and/or upper-division) hours of courses in the minor must be completed at the University.

### Related Sciences Minor

The Related Sciences minor offers two tracks: a Medical/Molecular Sciences track, and an Ecosystems Sciences track. Students must choose one track: consult with your Academic Advisor about the best choice for your major and career. The Medical/Molecular Science Track is designed for students seeking to enhance their preparation in organic and biochemistry, such as pre-med students. The Ecosystems/Evolution Track emphasizes the study of terrestrial ecosystems.

#### Related Sciences Minor: Medical/Molecular Science Track

A student must take 22 semester hours as follows:

CH 131/131L General Chemistry I

CH 132/132L General Chemistry II

CH 201/201L Organic Chemistry I

CH 202/202L Organic Chemistry II

CH 440 Biochemistry I

CH 441 Biochemistry II

#### Related Sciences Minor: Ecosystems Sciences Track

A student must take GY 111/111L, GY 112/112L and four additional courses from the following list (total: 20-23 semester hours)

GIT 460 Introduction GIT

GIT 461 GIT Applications II

GY 310 Environmental Earth Science

GY 420 Paleontology

GY 420 Geostatistics

GY 4421 Applied Environmental Geology - W

GY 425 Hydrology

GY 426 Contaminant Hydrology

GEO 410 Biogeography

ST 340 Design-Analysis of Experiments

ST 345 Sampling-Survey Techniques

# International Studies

## Department Information

International Studies Staff	
	(251) 460-6746
Director	Dr. Christine Rinne (Europe)
Faculty Affiliates	<p>Ms. Kristy Britt, Modern and Classical Languages and Literature (Latin America)</p> <p>Dr. Isabel Z. Brown, Modern and Classical Languages and Literature (Latin America)</p> <p>Dr. Claire Cage, History (Europe)</p> <p>Dr. S. Raj Chaudhury, Innovation in Learning Center Physics (Asia)</p> <p>Dr. Nader Entessar, Political Science (International Relations, Middle East)</p> <p>Dr. Laureen Fregeau, Education (Latin America)</p> <p>Dr. Nicholas Gossett, Modern and Classical Languages and Literature (International Relations, Europe)</p> <p>Dr. Elwood Hannum, History (Europe)</p> <p>Dr. Delwar Hossain, Communication (Asia)</p> <p>Dr. Robert Houston, History (International Relations)</p> <p>Dr. Zohair Husain, Political Science (Asia, International Relations, Middle East))</p> <p>Dr. Zoya Khan, Modern and Classical Languages and Literature (Latin America)</p> <p>Dr. Mara Kozelsky, History (Asia, Europe)</p> <p>Dr. Christina Lindeman, Visual Arts (Europe)</p> <p>Dr. Eric Loomis, Philosophy (Asia)</p> <p>Dr. Mihaela Marin, Modern and Classical Languages and Literature (Europe)</p> <p>Dr. Susan McCready, Modern and Classical Languages and Literature (Europe)</p> <p>Dr. David Meola, History (Europe)</p> <p>Dr. Harrison Miller, History (Asia)</p> <p>Dr. Hosik Min, Sociology (Asia)</p> <p>Dr. Mark Moberg, Anthropology (Latin America)</p> <p>Dr. Frances Mujica, Geography (Latin America)</p> <p>Ms. Terri Rice, Modern and Classical Languages and Literature (Latin America)</p> <p>Dr. Roberto Robles-Valencia, Modern and Classical Languages and Literature (Europe)</p> <p>Dr. Harry Roddy, Modern and Classical Languages and Literature (Europe)</p> <p>Dr. Daniel Rogers, History (Europe)</p> <p>Dr. Roy Ryder, Geography (Latin America)</p> <p>Dr. Alex Sharland, Marketing (International Business)</p> <p>Dr. Michele Strong, History (Europe)</p> <p>Dr. James Swofford, Economics (International Business)</p>

Dr. Eleanor ter Horst, Modern and Classical Languages and Literature (Europe)  
 Dr. Brian Whitener, Modern and Classical Languages and Literature (Latin America)  
 Dr. Rebecca Williams, History (Asia, Middle East)

International Studies web site

<http://www.southalabama.edu/departments/internationalstudies>

The International Studies major is a rigorous interdisciplinary program designed for students who wish to build a solid foundation for a career in international affairs. The program combines language fluency, international/ area studies, and international business, and, as such, fulfills the requirements for both the major and minor. The faculty directing the major is drawn mostly from the departments of modern and classical languages and literature, geography, history, philosophy, political science, sociology and anthropology.

All first-time freshmen must successfully complete CAS 100: First Year Experience as a degree requirement. Students must enroll during their first term at USA, except for summer-entry students who must enroll in the fall semester following entry. GEO 312 will satisfy the technology requirement for International Studies majors.

### USA Education/Study Abroad

Students in International Studies are strongly encouraged to incorporate international experiences as part of their academic activities. Study, research, and internships as well as service learning and community service abroad are available options. For more information contact the IS Office and/or the USA Office of International Education.

## Areas Of Study

### Degrees, Programs, Or Concentrations

International Studies (BA) - Asian Studies Concentration.....	517
International Studies (BA) - European Studies Concentration.....	519
International Studies (BA) - International Relations Concentration.....	521
International Studies (BA) - Latin American Studies Concentration.....	523
International Studies (BA) - Middle East Studies Concentration.....	525
International Studies (BA) – Modern and Classical Languages and Literature /International Studies Double Major.....	527
Minor in International Studies.....	528

## Courses

### Course Listing

African-American Studies.....	854
College of Arts and Sciences.....	908
Gender Studies.....	992
Gerontology.....	998
Interdisciplinary Programs.....	1026
International Studies.....	1029
Museum Studies.....	1070

# International Studies (BA) - Asian Studies Concentration

## Degree Requirements

Majors in Arts and Sciences may be completed with a minimum of 120 semester hours unless designated otherwise. At least 30 hours of course work, which represents 25% of the required 120 hours, must be at the upper division level in order to fulfill the University's residency requirement. At least 15 of the 30 upper-division hours must be in the major or concentration area. An overall grade-point-average (GPA) of 2.0 is required for graduation. In addition, a minimum GPA of 2.0 is required in the student's major or concentration area.

### Requirements For A Major In International Studies

Students majoring in International Studies should complete the 15 hours of core courses, one of five tracks of study, and a pre-professional program. The pre-professional program takes the place of a traditional minor. IS majors must also take AN 100, GEO 114 and HY 102 as part of their general education requirements since these courses are prerequisites for upper division courses in the major.

Requirements	Course Title	Credit Hours
Core Courses (Required of all majors)		15
IS 100	Global Issues	
PSC 250	Comparative Politics	
PSC 270	International Relations	
GEO 312	World Economic Geography	
IS 495	Senior Seminar (W)	
Asian Studies		24
6 hours of Asian Language at the 200 level (LGS 201, LGS 206, LGS 221)		
HY 104 Asian Civilization since 1800		
3 hours 300-400 level course on Asian history (HY 367(W), HY 368, HY 461)		
3 hours in Asian Philosophy (PHL 354, PHL 355)		
PSC 368 Politics of South Asia (W)		
6 hours of electives from among the following: HY 367, HY 368, HY 461 (not taken above); PHL 354, PHL 355 (not taken above); PSC 365 (W); IS 492, IS 496; or any approved Special Topics course or Directed Studies focusing on contemporary Asia or Asian country.		
General Education Requirements for International Studies Majors:		
Areas I, II, and III of the General Education Requirements for International Studies are specified in the College of Arts and Sciences section. Intermediate level language courses required for the major also help fulfill general requirements under Area II. International Studies majors must take AN 100, GEO 114 and HY 102 as partial fulfillment of Area IV General Education requirements.		

### **Pre-professional Program**

Students should complete one of the following programs to help prepare them for a career in international business or international affairs. The pre-professional course of study takes the place of a traditional minor. Students taking a double major are not required to take the pre-professional program.

### **International Business (21 Hrs)**

The International Business option provides students with a basic foundation in business and best equips the student to enter the field of international business or related areas upon graduation.

- ECO 330 Global Economic Issues or
- ECO 363 International Economics
- MKT 320 Principles of Marketing
- MKT 374 Consumer Behavior
- MKT 380 Integrated Market
- 9 hrs electives from the following: FIN 332; MGT 334; MGT 465; MKT 336; MKT 384; MKT 390; MKT 310, MKT 477; MKT 492; IS 496; IS 475

### **Language Specialization (21 Hrs)**

The Language Concentration option allows students to acquire a professional level of fluency in a foreign language as a complement to their international studies training. The requirements are 21 hours of study in a selected foreign language. Students wishing to concentrate in language should consider the FL/IS double major described below. Note: This option may not be available for all languages.

### **Personalized Pre-professional Program (21 Hrs)**

The Personalized Pre-professional Program is designed primarily for students who wish to pursue graduate study and need a special program tailored to the needs of their expected graduate area. A pre-professional program consisting of a minimum of 21 semester hours including at least one upper-level seminar, directed studies, or internship. Proposals for a personalized program, drawn up by the student in consultation with his or her advisor, must be submitted for approval to the Program Director and the Dean of Arts and Sciences before the first semester of the student's junior year.

# International Studies (BA) - European Studies Concentration

## Degree Requirements

Majors in Arts and Sciences may be completed with a minimum of 120 semester hours unless designated otherwise. At least 30 hours of course work, which represents 25% of the required 120 hours, must be at the upper division level in order to fulfill the University's residency requirement. At least 15 of the 30 upper-division hours must be in the major or concentration area. An overall grade-point-average (GPA) of 2.0 is required for graduation. In addition, a minimum GPA of 2.0 is required in the student's major or concentration area.

### Requirements For A Major In International Studies

Students majoring in International Studies should complete the 15 hours of core courses, one of five tracks of study, and a pre-professional program. The pre-professional program takes the place of a traditional minor. IS majors must also take AN 100, GEO 114 and HY 102 as part of their general education requirements since these courses are prerequisites for upper division courses in the major.

Requirements	Course Title	Credit Hours
Core Courses (Required of all majors)		15
IS 100	Global Issues	
PSC 250	Comparative Politics	
PSC 270	International Relations	
GEO 312	World Economic Geography	
IS 495	Senior Seminar (W)	
European Studies		24
Six hours of a European language at the 200 level* (LG 211 and LG 212, LG 231 and LG 232, LG 241, LG 242, LG 251 and LG 252, or LG 271 and LG 272)		
GEO 314 Geography of Europe		
HY 357 Europe since 1918		
PSC 360 Politics of Europe		
9 hours of electives from among the following: any 300-400 level course in European language or literature (if not in language pre-professional or double major program); EH 216, EH 349; HY 246, HY 333, HY 334, HY 335, HY 336, HY 337, HY 338, HY 347, HY 348, HY 457; PSC 313; IS 492, IS 496; or any approved Special Topics course or Directed Studies focusing on contemporary Europe or European country.		
*Students selecting the pre-professional program in Language should take an additional six hours of non-language electives.		
General Education Requirements for International Studies Majors:		
Areas I, II, and III of the General Education Requirements for International Studies are specified in the College of Arts and Sciences section. Intermediate level language courses required for the major also help fulfill general requirements under Area II. International Studies majors must take AN 100, GEO 114 and HY 102 as partial fulfillment of Area IV General Education requirements.		

**Pre-professional Program**

Students should complete one of the following programs to help prepare them for a career in international business or international affairs. The pre-professional course of study takes the place of a traditional minor. Students taking a double major are not required to take the pre-professional program.

**International Business (21 Hrs)**

The International Business option provides students with a basic foundation in business and best equips the student to enter the field of international business or related areas upon graduation.

- ECO 330 Global Economic Issues **OR** ECO 363 International Economics
- MKT 320 Principles of Marketing
- MKT 374 Consumer Behavior
- MKT 380 Integrated Market
- 9 hrs electives from the following: FIN 332; MGT 334; MGT 465; MKT 336; MKT 384; MKT 390; MKT 310, MKT 477; MKT 492; IS 496; IS 475

**Language Specialization (21 Hrs)**

The Language Concentration option allows students to acquire a professional level of fluency in a foreign language as a complement to their international studies training. The requirements are 21 hours of study in a selected foreign language. Students wishing to concentrate in language should consider the FL/IS double major described below. Note: This option may not be available for all languages.

**Personalized Pre-professional Program (21 Hrs)**

The Personalized Pre-professional Program is designed primarily for students who wish to pursue graduate study and need a special program tailored to the needs of their expected graduate area. A pre-professional program consisting of a minimum of 21 semester hours including at least one upper-level seminar, directed studies, or internship. Proposals for a personalized program, drawn up by the student in consultation with his or her advisor, must be submitted for approval to the Program Director and the Dean of Arts and Sciences before the first semester of the student's junior year.

# International Studies (BA) - International Relations Concentration

## Degree Requirements

Majors in Arts and Sciences may be completed with a minimum of 120 semester hours unless designated otherwise. At least 30 hours of course work, which represents 25% of the required 120 hours, must be at the upper division level in order to fulfill the University's residency requirement. At least 15 of the 30 upper-division hours must be in the major or concentration area. An overall grade-point-average (GPA) of 2.0 is required for graduation. In addition, a minimum GPA of 2.0 is required in the student's major or concentration area.

### Requirements For A Major In International Studies

Students majoring in International Studies should complete the 15 hours of core courses, one of five tracks of study, and a pre-professional program. The pre-professional program takes the place of a traditional minor. IS majors must also take AN 100, GEO 114 and HY 102 as part of their general education requirements since these courses are prerequisites for upper division courses in the major.

Requirements	Course Title	Credit Hours
Core Courses (Required of all majors)		15
IS 100	Global Issues	
PSC 250	Comparative Politics	
PSC 270	International Relations	
GEO 312	World Economic Geography	
IS 495	Senior Seminar* (W)	
International Relations		24
Six hours of a foreign language at the 200 level* (LG 211 and LG 212, LG 231 and LG 232, LG 251 and LG 252, LG 271 and LG 272, LGS 206 and LGS 207, LGS 221 and LGS 222, LGS 241 and LGS 242, or LGS 201 and LGS 202)		
PSC 251 World Leaders		
PSC 372 American Foreign Policy		
IS 492 Seminar		
9 hours of electives from among the following: ECO 330, ECO 363 (if not taken as part of a pre-professional program), ECO 371; HY 303, HY 305, HY 405; PSC 313, PSC 365 (W), PSC 470, PSC 484; IS 473, IS 475, IS 492 (when content varies), IS 496; or any approved Special Topics course or Directed Studies focusing on International Relations.		
*Students selecting the pre-professional program in Language should take an additional six hours of electives.		
General Education Requirements for International Studies Majors:		
Areas I, II, and III of the General Education Requirements for International Studies are specified in the College of Arts and Sciences section. Intermediate level language courses required for the major also help fulfill general requirements under Area II. International Studies majors must take AN 100, GEO 114 and HY 102 as partial fulfillment of Area IV General Education requirements.		

### **Pre-professional Program**

Students should complete one of the following programs to help prepare them for a career in international business or international affairs. The pre-professional course of study takes the place of a traditional minor. Students taking a double major are not required to take the pre-professional program.

### **International Business (21 Hrs)**

The International Business option provides students with a basic foundation in business and best equips the student to enter the field of international business or related areas upon graduation.

- ECO 330 Global Economic Issues **OR** ECO 363 International Economics
- MKT 320 Principles of Marketing
- MKT 374 Consumer Behavior
- MKT 380 Integrated Market
- 9 hrs electives from the following: FIN 332; MGT 334; MGT 465; MKT 336; MKT 384; MKT 390; MKT 310, MKT 477; MKT 492; IS 496; IS 475

### **Language Specialization (21 Hrs)**

The Language Concentration option allows students to acquire a professional level of fluency in a foreign language as a complement to their international studies training. The requirements are 21 hours of study in a selected foreign language. Students wishing to concentrate in language should consider the FL/IS double major described below. Note: This option may not be available for all languages.

### **Personalized Pre-professional Program (21 Hrs)**

The Personalized Pre-professional Program is designed primarily for students who wish to pursue graduate study and need a special program tailored to the needs of their expected graduate area. A pre-professional program consisting of a minimum of 21 semester hours including at least one upper-level seminar, directed studies, or internship. Proposals for a personalized program, drawn up by the student in consultation with his or her advisor, must be submitted for approval to the Program Director and the Dean of Arts and Sciences before the first semester of the student's junior year.

# International Studies (BA) - Latin American Studies Concentration

## Degree Requirements

Majors in Arts and Sciences may be completed with a minimum of 120 semester hours unless designated otherwise. At least 30 hours of course work, which represents 25% of the required 120 hours, must be at the upper division level in order to fulfill the University's residency requirement. At least 15 of the 30 upper-division hours must be in the major or concentration area. An overall grade-point-average (GPA) of 2.0 is required for graduation. In addition, a minimum GPA of 2.0 is required in the student's major or concentration area.

### Requirements For A Major In International Studies

Students majoring in International Studies should complete the 15 hours of core courses, one of five tracks of study, and a pre-professional program. The pre-professional program takes the place of a traditional minor. IS majors must also take AN 100, GEO 114 and HY 102 as part of their general education requirements since these courses are prerequisites for upper division courses in the major.

Requirements	Course Title	Credit Hours
Core Courses (Required of all majors)		15
IS 100	Global Issues	
PSC 250	Comparative Politics	
PSC 270	International Relations	
GEO 312	World Economic Geography	
IS 495	Senior Seminar (W)	
Latin American Studies		24
Six hours of Spanish at the 200 level (LG 231 and 232)*		
AN 347 Latin American Cultures and Societies		
GEO 315 Geography of Latin America		
HY 228 Latin America		
PSC 363 Politics of Latin America		
6 hours of electives from among the following: any 300-400 level course in Spanish language or literature (if not in language pre-professional or double major program); HY 321, HY 323, HY 325, HY 326, HY 429; PSC 450 (appropriate content), PSC 470 (appropriate content); or any approved Special Topics course or Directed Studies focusing on contemporary Latin America or Latin American country.		
*Students selecting the pre-professional program in Language should take an additional six hours of non-language electives.		
General Education Requirements for International Studies Majors:		
Areas I, II, and III of the General Education Requirements for International Studies are specified in the College of Arts and Sciences section. Intermediate level language courses required for the major also help fulfill general requirements under Area II. International Studies majors must take AN 100, GEO 114 and HY 102 as partial fulfillment of Area IV General Education requirements.		

**Pre-professional Program**

Students should complete one of the following programs to help prepare them for a career in international business or international affairs. The pre-professional course of study takes the place of a traditional minor. Students taking a double major are not required to take the pre-professional program.

**International Business (21 Hrs)**

The International Business option provides students with a basic foundation in business and best equips the student to enter the field of international business or related areas upon graduation.

- ECO 330 Global Economic Issues **OR** ECO 363 International Economics
- MKT 320 Principles of Marketing
- MKT 374 Consumer Behavior
- MKT 380 Integrated Market
- 9 hrs electives from the following: FIN 332; MGT 334; MGT 465; MKT 336; MKT 384; MKT 390; MKT 310, MKT 477; MKT 492; IS 496; IS 475

**Language Specialization (21 Hrs)**

The Language Concentration option allows students to acquire a professional level of fluency in a foreign language as a complement to their international studies training. The requirements are 21 hours of study in a selected foreign language. Students wishing to concentrate in language should consider the FL/IS double major described below. Note: This option may not be available for all languages.

**Personalized Pre-professional Program (21 Hrs)**

The Personalized Pre-professional Program is designed primarily for students who wish to pursue graduate study and need a special program tailored to the needs of their expected graduate area. A pre-professional program consisting of a minimum of 21 semester hours including at least one upper-level seminar, directed studies, or internship. Proposals for a personalized program, drawn up by the student in consultation with his or her advisor, must be submitted for approval to the Program Director and the Dean of Arts and Sciences before the first semester of the student's junior year.

# International Studies (BA) - Middle East Studies Concentration

## Degree Requirements

Majors in Arts and Sciences may be completed with a minimum of 120 semester hours unless designated otherwise. At least 30 hours of course work, which represents 25% of the required 120 hours, must be at the upper division level in order to fulfill the University's residency requirement. At least 15 of the 30 upper-division hours must be in the major or concentration area. An overall grade-point-average (GPA) of 2.0 is required for graduation. In addition, a minimum GPA of 2.0 is required in the student's major or concentration area.

### Requirements For A Major In International Studies

Students majoring in International Studies should complete the 15 hours of core courses, one of five tracks of study, and a pre-professional program. The pre-professional program takes the place of a traditional minor. IS majors must also take AN 100, GEO 114 and HY 102 as part of their general education requirements since these courses are prerequisites for upper division courses in the major.

Requirements	Course Title	Credit Hours
Core Courses (required of all majors)		15
IS 100	Global Issues	
PSC 250	Comparative Politics	
PSC 270	International Relations	
GEO 312	World Economic Geography	
IS 495	Senior Seminar (W)	
Middle East Studies		24
Six hours of 200-level Arabic language courses (LGS 221 and 222)		
HY 365 History of Islamic Civilization from 1453		
PSC 365 Politics of the Middle East (W)		
PSC 452 Muslim World		
9 hours of electives: HY 364 (W), HY 465, IS 492, IS 496 or any approved Special Topics course of Directed Studies focusing on contemporary Middle East or Middle Eastern country.		
General Education Requirements for International Studies Majors:		
Areas I, II, and III of the General Education Requirements for International Studies are specified in the College of Arts and Sciences section. Intermediate level language courses required for the major also help fulfill general requirements under Area II. International Studies majors must take AN 100, GEO 114 and HY 102 as partial fulfillment of Area IV General Education requirements.		

### Pre-professional Program

Students should complete one of the following programs to help prepare them for a career in international business or international affairs. The pre-professional course of study takes the place of a traditional minor. Students taking a double major are not required to take the pre-professional program.

**International Business (21 Hrs)**

The International Business option provides students with a basic foundation in business and best equips the student to enter the field of international business or related areas upon graduation.

- ECO 330 Global Economic Issues **OR** ECO 363 International Economics
- MKT 320 Principles of Marketing
- MKT 374 Consumer Behavior
- MKT 380 Integrated Market
- 9 hrs electives from the following: FIN 332; MGT 334; MGT 465; MKT 336; MKT 384; MKT 390; MKT 310, MKT 477; MKT 492; IS 496; IS 475

**Language Specialization (21 Hrs)**

The Language Concentration option allows students to acquire a professional level of fluency in a foreign language as a complement to their international studies training. The requirements are 21 hours of study in a selected foreign language. Students wishing to concentrate in language should consider the FL/IS double major described below. Note: This option may not be available for all languages.

**Personalized Pre-professional Program (21 Hrs)**

The Personalized Pre-professional Program is designed primarily for students who wish to pursue graduate study and need a special program tailored to the needs of their expected graduate area. A pre-professional program consisting of a minimum of 21 semester hours including at least one upper-level seminar, directed studies, or internship. Proposals for a personalized program, drawn up by the student in consultation with his or her advisor, must be submitted for approval to the Program Director and the Dean of Arts and Sciences before the first semester of the student's junior year.

# International Studies (BA) – Modern And Classical Languages And Literature /International Studies Double Major

## Degree Requirements

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Majors in Arts and Sciences may be completed with a minimum of 120 semester hours unless designated otherwise. At least 30 hours of course work, which represents 25% of the required 120 hours, must be at the upper division level in order to fulfill the University's residency requirement. At least 15 of the 30 upper-division hours must be in the major or concentration area. An overall grade-point-average (GPA) of 2.0 is required for graduation. In addition, a minimum GPA of 2.0 is required in the student's major or concentration area.

### Modern And Classical Languages And Literature/International Studies Double Major

This program allows students to maximize their international training and experience. In addition to completing the 39 hours requirements for the International Studies major, the student will complete the program of study set out by the Department of Modern and Classical Languages and Literature. This option allows the student to develop language skills well beyond the pre-professional component of the program. Moreover, Modern and Classical Languages and Literature majors enjoy additional and special opportunities to participate in study abroad program.

# Minor In International Studies

## Degree Requirements

If a minor is required in your degree program, at least 9 (lower and/or upper-division) hours of courses in the minor must be completed at the University.

Requirements for a Minor in International Studies	Credit Hours
A minimum of 21 hours, including at least 9 hours at the 300-400 level.	21
Students must complete:	9
IS 100	
PSC 250	
PSC 270	
GEO 312	
9 hours from the following:	9
AN 347	
GEO 314, 315, 316;	
HY 104, 228, 246, 303, 321, 323, 325, 326, 333, 334, 335, 336, 337, 338, 347, 348, 356, 357, 362, 367, 368, 405, 429, 457, 461	
IS 490, 492, 495; LG 200 or higher	
PHL 354, 355	
PSC 251, 360, 363, 364, 365, 368, 372, 450, 452, 470, 473, 475, 490 (appropriate area) or any IS-related course (upon approval of the Director).	

# Leadership/Teacher Education

## Department Information

Department of Leadership and Teacher Education	(251) 380-2175
Chair	Dr. Susan Santoli
Professors	Baxter, Giles, Green, Kent, Santoli, Tunks
Associate Professors	Bailey, Campbell, Martin, Maulding-Green
Assistant Professors	Allison, Brannan, Delmas, Gaillard, Johnson, Morton, Parrish, Reeves
Emeritus Professors	Cronis, Culp
Senior Instructor	Byrd, Simpson
Instructors	Holland, Szatkowski

Department of Leadership and Teacher Education web site <http://www.southalabama.edu/colleges/ceps/lte/>

### Undergraduate

The Department offers the Bachelor of Science degree in Education leading to Alabama Class B certification in the following areas: Elementary Education, Early Childhood Education, Secondary Education, and Special Education. The department offers the Bachelor of Science degree in Education with a major in Early Childhood Studies and Educational Studies.

### Graduate

The department offers the M.Ed. degree leading to Alabama Class A Certification in the following areas: Art Education, Instructional Leadership, Elementary Education, Early Childhood Education, English for Speakers of Other Languages, Secondary Education, and Special Education. The department also offers the Instructional Specialist degree (Ed.S.) leading to Alabama Class AA Certification in the following areas: Early Childhood Education, Elementary Education, Instructional Leadership, Reading Specialist, Secondary Education, Special Education and Teacher Leader. The department offers the Doctor of Education degree in Educational Leadership.

## Areas Of Study

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## Courses

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Elementary-Early Childhood.....	961
English Language Teaching.....	979
Higher Education.....	1005
Leadership and Teacher Educ.....	1030
Natural Science Education.....	1081
Reading Instruction.....	1128
Secondary Education.....	1132
Special Education.....	1141

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EDD, University of NC- Charlotte

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PHD, University of South Alabama

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PHD, Vanderbilt University

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PHD, Auburn University

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PHD, Virginia Polytechnic Inst and

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PHD, Auburn University

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PHD, University of South Alabama

# Early Childhood Education (Alt. M.Ed.)

## Degree Requirements

In general, the program requires a minimum of 42 graduate hours and such additional undergraduate courses or experiences as the Department may require. Please visit <http://www.southalabama.edu/colleges/ceps/programs.html> for specific requirements. See College of Education and Professional Studies general section for program admission requirements.

All prerequisites including those listed below are required for admission to the program. Equivalent courses or experiences may be substituted with written approval of the advisor and department chair.

### Prerequisites

EDU 330

Other courses as the Program may require.

Program	Credit Hours
The program for the Alternative M.Ed. in Elementary Education and Early Childhood Education is as follows: 42 minimum graduate hours requires (500 level).	
Curriculum and Teaching	6
EEC 522	
EEC 523	
Foundations/Special Education	6
SPE 500	
EPY 502	
Research and Evaluation	3
EPY 525	
Technology	3
EDM 510	
Teaching Field	15
EEC 532	
EEC 535	
EEC 537	
RED 531	
EEC 553	
Field Experience	3
EEC 548	
Clinical Field Experience	6
EEC 598 (Supervised practice in a school setting in the student's teaching field. The student will work full time in the school for an entire semester).	

**State Board Of Education Praxis II Test Information**

Applicants completing an Alternative Master program and applying for initial certification after the summer term 2012 will be required to pass Praxis II in their area of certification. Please see specific program requirements on advising sheets. Applicants applying for initial certification will be required to pass the appropriate Praxis II test and edTPA. Praxis II test requirements are subject to change as dictated by the ALSDE. Prior to registering for any Praxis II exam, please verify current requirements by going directly to the ALABAMA portion of the Praxis II website at <http://www.ets.org/praxis/al>

# Early Childhood Education (M.Ed.)

## Degree Requirements

The Master of Education (M.Ed.) program in Early Childhood Education provides advanced study for teachers working with children preschool through third grade. Upon completion of the program, students are eligible for the Class A Professional Early Childhood Education Certificate provided they already hold the Class B Professional Early Childhood Certificate.

**Note:** The appropriate course of study sheet and the assigned departmental advisor should be consulted in all program matters.

### Thesis

A student may elect to write a thesis as part of the program. If the student decides to write a thesis, a thesis committee will be appointed to work with the student and to evaluate the thesis. (IDE 510 and IDE 620 are required.)

Program	Credit Hours
The program for the M.Ed. in Early Childhood Education is as follows	30 minimum hours required (500 level)
Curriculum and Teaching	15
EEC 553	
EEC 522	
EEC 523	
RED 531 and EEC 532 or EEC 535 or EEC 537	
Diversity Elective	3
SPE 500 required if introductory special education course not previously taken	
Research & Evaluation**	3
IDE 510	
IDE 620 (Thesis Option Only with IDE 510)	
Technology	3
EDM 510	
Teaching Field	6
Advisor approved 500 level AED, EEC, RED courses	
All certification programs require an introductory special education course SPE 500 required under B above, if not completed at the undergraduate level.	
**Students who have previously not completed an evaluation course will be required to complete an approved evaluation course in addition to IDE 510.	

# Early Childhood Studies (BS)

## Degree Requirements

### Early Childhood Studies

The department offers the Bachelor of Science degree in Education, Early Childhood Studies to prepare individuals to work with young children (birth through age 8) as teachers, directors and other professionals in child care, Head Start, Early Head Start, other infant and toddler programs, private preschools, Early Intervention programs or other programs where teacher certification is not required.

Program Requirements	Credit Hours
General Education	60
Professional Studies	30
EDM 310, CIS 150 or CIS 250	3 hrs
EPY 251 or PSY 250	3 hrs
PSY 350	3 hrs
EDU 400	3 hrs
EEC 300	3 hrs
EEC 346	3 hrs
RED 334	3 hrs
EEC 496	3-9 hrs
Early Childhood Core	30 (min)
AED 301	3 hrs
MUE 301	3 hrs
PE 166	3 hrs
RED 348	3 hrs
HS 262 or 361	3 hrs
DRA 261 <b>OR</b> MUE 336	3 hrs
EDF 315	3 hrs
Approved electives/tracts	

### Criteria For Admission To Candidacy

Early Childhood Studies majors are required to meet the College of Education and Professional Studies criteria for admission to candidacy.

## Graduation Plan

### 4-Year Progression Early Childhood Education (NTC)

First Year	Credit Hours
Fall Semester	15

*EH 101 English Comp I (I)	3 hrs
Fine Art (II)	3 hrs
History (IV)	3 hrs
MA 110 or higher (III)	3 hrs
Social Science Elective (IV)	3 hrs
Spring Semester	16
*CA 110 Public Speaking (II)	3 hrs
*EH 102 English Comp II PR(I)	3 hrs
History/Social Science Elective (IV)	3 hrs
PE 100 Concepts of Health & Fitness (V)	3 hrs
Science + Lab (III)	4 hrs

Second Year		Credit Hours
Fall Semester		16
BLY 101 + Lab Life Science I (III)	4 hrs	
Elective/Minor	3 hrs	
Elective/Minor	3 hrs	
Literature <sup>PR</sup> (II)	3 hrs	
PE 166 Movement & Rhythms	3 hrs	
Spring Semester		15
*CIS 150, CIS 250 or EDM 310	3 hrs	
DRA 261 or MUE 336	3 hrs	
Elective/Minor	3 hrs	
Literature <sup>PR</sup> /Fine Art Elective (II)	3 hrs	
PSY 120 General Psychology	3 hrs	

Third Year		Credit Hours
Fall Semester		13
*EPY 351/PSY 250 Growth & Development	3 hrs	
Elective (EDU 330 Recommended)	3 hrs	
HS 262 or 361 Personal or School & Com Hlth	3 hrs	
MUE 301 Music for Elem Teachers (fall only)	3 hrs	
PE 101-157 PE Activity Course (V)	1 hr	

*Apply for Candidacy*

Spring Semester		15
EDU 400 Ed for Exceptional Children & Youth	3 hrs	
EEC 300 Creating Env for Learning Thr Play (spring only)	3 hrs	
Elective (MUE 236 Recommended)	3 hrs	
PSY 350 Child & Adolescent Development <sup>PR</sup>	3 hrs	
<b>RED 348 Lang Dev in EC (W) (spring only)</b>	3 hrs	
Summer Semester		3
AED 301 Art for Young Children	3 hrs	

**Fourth Year****Credit Hours**

Fall Semester		15
<b>EEC 346 Early Childhood Prog (W) (fall only)</b>	3 hrs	
EDF 315	3 hrs	
Elective/Minor	3 hrs	
Elective/Minor	3 hrs	
<b>RED 334 Lit for Young Child (W) (fall only)</b>	3 hrs	
<i>Apply for Graduation</i>		
Spring Semester		12
<b>EDU 496 Internship</b>	9 hrs	
Elective	3 hrs	

**Key**

<sup>PR</sup>=Prerequisite course required

\*= Prerequisite for Candidacy

Courses in **BOLD** indicate Candidacy required

(I)-(V) = General Education Area

(W) = Courses that satisfy USA writing requirement

(NTC) = Non-Teacher Certification

# Educational Administration (M.Ed.)

## Degree Requirements

The department offers the M.Ed in Educational Administration for higher education administrators and the M.Ed in Educational Administration leading to Alabama Class "A" certification in Instructional Leadership. Instructional Leadership courses empower students for advancement in educational service. Leadership programs emphasize growth from the knowledge base through simulations to practical application and career mobility.

### Special Admission Requirements for Instructional Leadership Certification

Applications for Master's programs in Instructional Leadership are reviewed for admission to the fall, spring and summer semesters. Readmission to some programs in Education (i.e. Educational Administration, Doctoral Program, and some AA/Ed.S. Programs) require review by program faculty. Deadline for receipt of all application materials is October 1, March 1 and July 1. In addition to the requirements listed in the College section of the bulletin, program specific requirements for admission to Instructional Leadership include:

1. An admission portfolio is required. Applicants should follow a specific format for organizing their admissions portfolio. A copy of this format may be obtained by accessing "Admissions Requirements" at <http://www.southalabama.edu/colleges/ceps/lte/edlead-eds.html>.
2. Successful completion of a structured interview with Educational Leadership faculty members.

Admission decisions involve evaluation of the applicant's grade-point average, scores on the GRE and MAT (Master's only), all materials in the admission portfolio, and structured interview. Program enrollment and availability will also be considered. The application, transcripts, test scores, and complete admissions portfolio must be received by the Office of Admissions, 2500 Meisler Hall, University of South Alabama, Mobile, AL, 36688-0002 by October 1, March 1 and July 1.

### Class A Certificate In Instructional Leadership And Master Of Education Degree

Students entering this program must have a bachelor's degree and Alabama Class B Certification in a teaching field. Program requirements include:

1. Completing a minimum of 30 semester hours as outlined below with at least a 3.25 grade-point average, including a grade of "B" or above in all courses with EDL prefix,
2. Passing the electronic portfolio assessment, and completing a School-based Residency focused on authentic assessments of performance on state standards.
3. Passing a written comprehensive examination.

The Class A Certificate is valid for 5 years and is renewable.

Class A Certificate In Instructional Leadership And Master Of Education Degree	Credit Hours
I. Instructional Leadership Core	18
EDL 501	
EDL 502	
EDL 503	
EDL 504	
EDL 505	
EDL 506	
II. Residency	6
EDL 598 Residency	
Students must have a passing score on the appropriate Praxis II exam prior to a recommendation for certification.	

III. Diversity/Special Education	Three semester hours minimum
*SPE 500 or EDU 567	
*If a survey course in special education was previously taken at the undergraduate or graduate level, EDU 567 is required in lieu of SPE 500.	
Research	Three semester hours minimum
IDE 510	
Instructional Leadership Add-on	18
EDL 501	
EDL 502	
EDL 503	
EDL 504	
EDL 505	
EDL 598 (3 hour)	
The option is referred to as the "Reduced Hour Option" and includes completing the 18-hour program and passing the appropriate Praxis Exam. It is available only for those already holding a master's degree and a valid Alabama "A" Certificate in another area.	
A survey of special education course is required if not previously completed. If a survey of special education course was previously completed, then an ALSDE-Approved diversity course is required. If an ALSDE-Approved diversity course was previously completed to meet requirements for Class A certification, then an additional diversity course is not required. These 3 hours, if required, would be in addition to the 18 hours.	

# Educational Leadership (Ed.D.)

## Degree Requirements

### Doctor Of Education Program In Educational Leadership

The Educational Leadership Executive Ed.D. program is an intensive 60 credit hour, three-year, cohort-based program designed for educators who wish to earn a terminal degree in educational leadership. Delivered in an executive format with online and blended courses, the Ed.D. program allows students to keep their current full-time jobs while also studying full-time.

The program is aligned with the recommendations of the Carnegie Project on the Education Doctorate (<http://cpedinitiative.org/>) to redesign the Ed.D. to make it a stronger and more relevant degree for the advanced preparation of school practitioners and clinical faculty, academic leaders, and professional staff for the nation's schools and colleges, and the learning organizations that support them. The program is intended to train an emerging generation of senior educational leaders with the knowledge and skills necessary to connect research, theory, and practice in leading high performing learning organizations to manage resources strategically, engage in evidence-based decision-making, promote continuous improvement, and encourage innovation.

The program includes courses in educational leadership, program assessment and evaluation, finance, ethics and legal issues, global education, and quantitative, qualitative, and mixed methods research. The dissertation process is structured and systematic, unfolding from the first course throughout the curriculum to make it possible to complete a dissertation study by the end of the program. The research courses in the curriculum are designed to build the expertise needed not only to complete the dissertation, but also to supervise, evaluate, and apply research to the management of complex educational organizations.

Because the program is explicitly designed to prepare educational leaders who can use research and theory to create change by solving a problem of practice, students complete a dissertation in practice.

The Doctor of Education degree has two concentrations. One area of focus is for K-12 practitioners, the other for aspiring Higher Education administrators. For information contact Dr. Ronald A. Styron, Jr., Department of Leadership and Teacher Education. The program accepts applications each March 15th for yearly cohorts starting the following May.

Upon admission, practicing K-12 administrators who hold an Educational Specialist degree in Educational Leadership may request coursework from their Specialist degree be considered for transfer credit into the Educational Leadership Doctoral Program.

### Minimum Graduate Hours Required: 60

**A 3.5 program and institutional GPA is required at graduation. Courses over 10 years old cannot be used in the program.**

#### Common Core (21 Hours) (To be taken for Higher Ed and K-12 options.)

EDL 695*	Mentoring Leadership	3
EDL 699*	Research Project	1
EDL 699a*	Research Project	1
EDL 699b*	Research Project	1
EDU/IDE 640*	Instructional Development	3
EDU/IDE 692*	Research Project Seminar	3
IDE 615**	Assessment & Evaluation for Leaders	3
IDE 620**	Quantitative Methods I	3
IDE 631*	Intro Qualitative/Mixed Methods Research	3

#### Higher Ed Concentration (27 hours) (To be taken only for Higher Ed option.)

EDL 720	Global Education	3
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HED 603	Current Problems in Higher Education	3
HED 611	Human Relations in Higher Ed	3
HED 621	Program and Curriculum Development	3
HED 631	Seminar in Higher Ed Management Skills	3
HED 701	Advanced Organizational Theory for Higher Ed	3
HED 702	Higher Ed Finance	3
HED 703	Advanced Leadership for Higher Ed	3
HED 732	Ethics and Law for Higher Ed	3

K-12 Concentration (27 hours) (To be taken only for K-12 option.)

EDL 603*	Current Problems & Issues in Ed Administration	3
EDL 611*	Human Relations Skills	3
EDL 621*	Seminar in Program & Curriculum	3
EDL 631*	Seminar in Ed Management Skills	3
EDL 701	Advanced Organizational Theory	3
EDL 702	School Finance	3
EDL 703	Advanced School Leadership	3
EDL 732	Ethics and Law for Ed Leadership	3
EDU/IDE 650*	Instructional Techniques	3

Dissertation Hours (12 hours minimum) (To be taken for Higher Ed and K-12 options.)

(If dissertation is not complete in 12 semester hours, student must register for 1 hr of EDL 799 each semester until dissertation is complete.)

EDL 799	Dissertation Hours	3
EDL 799	Dissertation Hours	3
EDL 799	Dissertation Hours	3
EDL 799	Dissertation Hours	3

\*Required courses for Ed.S. Instructional Leadership

\*\*Ed.S. Instructional Leadership program requires IDE 615 OR 620. Both are required for the Ed.D.

# Educational Specialist (Ed.S.)

## Degree Requirements

### Advanced Graduate Study: Sixth-year (Post-master's) Programs (Ed.S. and Class AA Certification)

Post-Master's or Sixth-Year Graduate Programs for Educational Specialist which lead to an (Ed.S.) Degree and Class AA (State of Alabama) Professional Certification for Instructional Specialist are available for qualified individuals in the areas listed below.

In addition to college requirements students seeking certification will have a graduate program committee plan a program based upon the student's training, experience and needs. This committee will determine if any prerequisite courses are needed.

Course Requirements	Credit Hours
<b>Core Courses required for all Educational Specialist program include</b>	12
EDU/IDE 620 or IDE 620	
EDU/IDE 650	
EDU/IDE 692	
Departmental 699	
SPE 500 is taken only if the student has not had a recent equivalent. The course then becomes an added course to the program.	
<b>Elementary Education</b>	18
EDF 615 or EPY 602	
EDU/IDE 640	
EEC 601	
EEC 610	
EEC 622	
EDL 607	
<b>Secondary Education</b>	18
EDU/IDE 640	
EDL 607	
12 semester hours from appropriate teaching field: English language arts, mathematics, science, or social science.	
<b>Instructional Leadership Support Field from</b>	18
EDL 603	
EDL 607	
EDL 611	
EDL 621	
EDL 631	
EDL 695	

<b>Reading Specialist</b>	18
EDL 607	
EDU/IDE 640	
<i>12 Credit Hours From:</i>	
RED 611	
RED 612	
RED 613	
RED 615	
RED 630	
RED 640	
RED 648	
<b>Teacher Leader</b>	18
EDL 607	
EDU/IDE 640	
LTE 645	
LTE 646	
LTE 647	
RED 648	
<b>Special Education</b>	18
EDU/IDE 640	
EDF 615 or EPY 602	
SPE 601	
9 hours of remaining course work to be approved by student's graduate program committee.	

# Elementary Education (Alt. M.Ed.)

## Degree Requirements

In general, the program requires a minimum of 42 graduate hours and such additional undergraduate courses or experiences as the Department may require. Please visit <http://www.southalabama.edu/colleges/ceps/programs.html> for specific requirements. See College of Education and Professional Studies general section for program admission requirements.

All prerequisites including those listed below are required for admission to the program. Equivalent courses or experiences may be substituted with written approval of the advisor and department chair.

### Prerequisites

EDU 330

Other courses as the Program may require.

Program	Credit Hours
The program for the Alternative M.Ed. in Elementary Education is as follows: 42 minimum graduate hours requires (500 level).	
Curriculum and Teaching	6
EEC 522	
EEC 523	
Foundations/Special Education Elective	6
SPE 500	
EPY 502	
Research and Evaluation	3
EPY 525	
Technology	3
EDM 510	
Teaching Field	15
EEC 532	
EEC 535	
EEC 537	
RED 531	
Choose 3 hours from the following: AED, EEC, RED	
Field Experience	3
EEC 557	
Clinical Field Experience	6
EEC 595 (Supervised practice in a school setting in the student's teaching field. The student will work full time in the school for an entire semester).	

**State Board Of Education Praxis II Test Information**

Applicants completing a Alternative Master programs and applying for initial certification after the summer term 2012 will be required to pass Praxis II in their area of certification. Please see specific program requirements on advising sheets. Applicants applying for initial certification will be required to pass the appropriate Praxis II test. Praxis II test requirements are subject to change as dictated by the ALSDE. Prior to registering for any Praxis II exam, please verify current requirements by going directly to the ALABAMA portion of the Praxis II website at <http://www.ets.org/praxis/al>

# Elementary Education (M.Ed.)

## Degree Requirements

The Master of Education (M.Ed.) program in Elementary Education provides advanced study for teachers working with children kindergarten through sixth grade. Upon completion of the program, students are eligible for the Class A Professional Elementary Education Certificate provided they already hold a Class B Professional Elementary Education Certificate.

**Note:** The appropriate course of study sheet and the assigned department advisor should be consulted in all program matters.

### Thesis

A student may elect to write a thesis as part of the program. If the student decides to write a thesis, a thesis committee will be appointed to work with the student and to evaluate the thesis. (IDE 510 and IDE 620 are required.)

Program	Credit Hours
The program for the M.Ed. in Elementary Education is the following	30 min (500 level)
Curriculum and Teaching	12
EEC 522	
EEC 523	
RED 531	
EEC 532 or EEC 535 or EEC 537	
Diversity Elective	3
SPE 500 required if introductory special education course not previously taken, or EDU 567 or ELT 525	
Research & Evaluation (3 semester hours)**	
IDE 510*	
IDE 620 (Thesis Option Only with IDE 510)	
Technology	3
EDM 510	
Teaching Field	9
Advisor approved 500 level AED, EEC, RED courses	
All certification programs require an introductory special education course SPE 500 required under B above, if not completed at the undergraduate level.	
**Students who have previously not completed an evaluation course will be required to complete an approved evaluation course in addition to IDE 510.	

# K-6 Teacher Education (BS)

## Degree Requirements

### Undergraduate Program Requirements

Minimum General Studies (60 semester hours) For K-6 Teacher Education

See College of Education and Professional Studies General Studies Requirement.

K-6 Teacher Education majors must take 12 semester hours in each of the following four disciplines: English language arts, mathematics (MA 110 or higher and MA 201), social science, and lab science (BLY 101 + lab and two lab science courses representing two areas from BLY, CH, GY, PH, or GEO 101, GEO 102) with a grade of "C" or higher in each course.

### K-6 Teacher Education

The program for K-6 Teacher Education is designed to prepare teachers for kindergarten through grade six. Satisfactory completion of the program requirements and accompanying tests leads to a recommendation for a Class B Certificate in Elementary Education and Special Education Collaborative K-6. Students may also qualify for a Class B Certificate in Early Childhood Education (P-3) and a Class B Certificate in Early Childhood Special Education through additional internship and course requirements.

Program requirements (no grade below C in professional studies or teaching field)	Credit Hours
In addition to General Studies, the requirements for a B.S. degree in Elementary Education with a K-6 Teacher Education major are:	
<b>Professional Studies</b>	27
Curriculum, Teaching, and Media	9
EDU 302	
EDU 345*	
EDU 346	
EDM 310	
Educational Foundations	6
EPY 351	
EDU 330	
Internship	12
EDU 430* (6 hrs)	
EDU 495* (6 hrs)	
<b>Teaching Field/Curriculum Area</b>	33
EDU 300*	
EDU 301	
EDU 303*	
EDU 311	
EDU 312	
EDU 313*	
EDU 331*	

EDU 335\*

EDU 336\*

EDU 337\*

EDU 362\*

HS 365

### State Board Of Education Praxis II Test Information

Praxis II test requirements are subject to change as dictated by the ALSDE. Prior to registering for any Praxis II exam, please verify current requirements by going directly to the ALABAMA portion of the Praxis II website at <http://www.ets.org/praxis/al>. Applicants completing a K-6 Teacher Education program and applying for initial certification after the summer term 2012 will be required to pass the following Praxis II tests for each of the four areas in which certification is sought in addition to Basic Skills test required for candidacy.

For Elementary Education the appropriate Alabama prescribed subject assessment, Teaching Reading, and the appropriate Principles of Learning and Teaching assessment,

For Early Childhood Education the appropriate Alabama prescribed subject assessment, Teaching Reading, and the appropriate Principles of Learning and Teaching assessment,

For Collaborative K-6 SPE, the appropriate Alabama prescribed subject assessment and the appropriate Principles of Learning and Teaching assessment,

For Early Childhood Special Education the appropriate Alabama prescribed subject assessment and the appropriate Principles of Learning and Teaching assessment.

## Graduation Plan

### 4-Year Progression K-6 Teacher Education

First Year	Credit Hours
Fall Semester	15
*EH 101 English Comp I (I)	3 hrs
Fine Art (II)	3 hrs
MA 110 or higher (III)	3 hrs
PE 100 Concepts of Health & Fitness (V)	3 hrs
PE 101-157 PE Activity Course (V)	1 hr
General Elective: EDU 100 Recommended (V)	2 hrs
Spring Semester	16
*CA 110 Public Speaking (II)	3 hrs
*EH 102 English Comp II PR(I)	3 hrs
BLY 101 + Lab Life Science I (III)	4 hrs
History (IV)	3 hrs
MA 201 Math for Elem Teachers <sup>PR</sup> (III)	3 hrs

<b>Second Year</b>		<b>Credit Hours</b>
Fall Semester		16
History/Social Science Elective (IV)	3 hrs	
Literature <sup>PR</sup> (II)	3 hrs	
MA 110 or higher (III)	3 hrs	
Science + Lab (III)	4 hrs	
Social Science Elective (IV)	3 hrs	
<i>Take Core Tests</i>		
Spring Semester		16
*EPY 351 Human Growth & Development	3 hrs	
HS 365 HPE Curr/Methods-Elem Teachers	3 hrs	
Literature <sup>PR</sup> /Fine Art Elective (II)	3 hrs	
Math Elective MA 110 or higher or ST 210 (III)	3 hrs	
Science + Lab (III)	4 hrs	
<i>Take PRAXIS II</i>		
<b>Third Year</b>		<b>Credit Hours</b>
Fall Semester		15
*EDM 310 Microcomputing Systems in Educ	3 hrs	
*EDU 330 Foundations of Reading Instrn (W)	3 hrs	
*EDU 346 K-6 Education	3 hrs	
EDU 301 Arts in Elem School	3 hrs	
Social Science Elective (IV)	3 hrs	
<i>Apply for Candidacy</i>		
Spring Semester		15
<b>EDU 300 Classroom Management I</b>	1 hr	
<b>EDU 400 Ed for Exceptional Children &amp; Youth</b>	2 hrs	
<b>EDU 312 Intellect and Physical Disabilities</b>	3 hrs	
<b>EDU 313 Learning &amp; Behavior Disorders</b>	3 hrs	
<b>EDU 331 Teaching Reading</b>	3 hrs	
<b>EDU 336 Teaching Social Studies</b>	3 hrs	
<b>Fourth Year</b>		<b>Credit Hours</b>
Fall Semester		15
<b>EDU 302 Classroom Management II</b>	1 hr	

<b>EDU 311 Partnerships in SPE</b>	3 hrs	
<b>EDU 335 Teaching Mathematics (W)</b>	3 hrs	
<b>EDU 337 Teaching Science</b>	3 hrs	
<b>EDU 345 Field Experience</b>	2 hrs	
<b>EDU 362 Behavior Management</b>	3 hrs	
<i>Apply for Graduation</i>		
Spring Semester		12
<b>EDU 430 K-6 Internship</b>	6 hrs	
<b>EDU 495 K-6 Internship SPE</b>	6 hrs	

### Key

<sup>PR</sup>=Prerequisite course required

\*= Prerequisite for Candidacy

Courses in **BOLD** indicate Candidacy required

(I)-(V) = General Education Area

(W) = Courses that satisfy USA writing requirement

# Reading Specialist Certification

## Degree Requirements

### Reading Specialist Class A Certification

1. Admission. Requirements for admission to the Class A Reading Specialist program shall include:
  - a. At least baccalaureate-level professional educator certification in any area of education and master's degree; Candidates without a master's degree may pursue the reading specialist certification along with the master's degree in Elementary or Early Childhood Education. See advising sheets for details.
  - b. Two years of successful classroom teaching experience; **AND**
  - c. Certification in Early Childhood Education, Elementary Education, Collaborative Teacher (K-6 or 6-12), **OR**
  - d. Certification in any other area of education and completion of two reading courses including an introduction to reading course.

**Note:** All certification programs require an introductory course, special education SPE 500, if not completed at the undergraduate level.

#### 2. Program Requirements.

Program Requirements	Credit Hours
Curriculum and Teaching	3
EEC 522 or SED 552	
EEC 522 (taken by those with an undergraduate secondary certificate)	
SED 552 (taken by those with an undergraduate elementary certificate)	
Foundations/Special Education Elective	0-3
SPE 500 required if introductory special education course not previously taken or an ALSDE-Approved diversity course if not completed with Class A certification.	
Research and Evaluation	3
IDE 510	
Teaching Field	18 hrs with a grade of "B" or above
EEC 532	
RED 531	
RED 533	
RED 534	
RED 541	
RED 548	
Internship	3
RED 595	

**State Board Of Education Praxis II Test Information**

Applicants completing coursework for Class A Reading Specialist certification are required to pass Praxis II in their area of certification. Please see specific program requirements on advising sheets. Praxis II test requirements are subject to change as dictated by the ALSDE. Prior to registering for any Praxis II exam, please verify current requirements by going directly to the ALABAMA portion of the Praxis II website at <http://www.ets.org/praxis/al>

# Secondary Education (Alt. M.Ed.)

## Degree Requirements

### Alternative M.Ed. In Secondary Education

This program is designed to provide initial teacher preparation at the graduate level primarily for students interested in pursuing a career in teaching but whose undergraduate degree did not include a teacher education program. See College of Education and Professional Studies general section for program admission requirements.

Requirements	Credit Hours
Secondary Grades 6-12	42 semester hours 500 level
Curriculum and Teaching	9
SED 555*	
SED 559	
Appropriate methods course for the teaching specialization.	
Foundations/Special Education Elective	3
SPE 500	
Evaluation	3
EPY 525	
Reading	3
RED 541	
Technology	3
EDM 510	
Teaching Field	15
Selected from approved electives in the student's teaching field. These fields are presently available in this program: Art Education English Language Arts Composite English for Speakers of Other Languages General Science Composite Mathematics Social Science Composite French German Spanish	
Internship*	6
AED 595 (Art Education), ELT 595 (ESOL), SED 595 (Language Arts), SED 593 (Foreign Language), SED 598 (Math), SED 597 (Science), SED 596 (Social Science) Supervised practice in a school setting in the student's teaching field. The student will be under the mentorship of a cooperating teacher full time in the school for an entire semester. *This course has a field component. See advisor for details.	

Each comprehensive teaching field of English language arts, general science, and general social science shall ensure that the candidate has completed at least one course in at least two of the comprehensive fields.

Successful completion of PRAXIS II test appropriate to the teaching field and grade level of certification sought is required PRIOR to enrollment in internship.

Student must take a comprehensive end of program examination during the semester in which the internship is completed.

Please visit <http://www.southalabama.edu/colleges/ceps/programs.html> for specific requirements.

# Secondary Education (BS)

## Degree Requirements

The Department offers degree programs to prepare middle/high school teachers for grades 6-12. Candidates are required to complete a content field major in the College of Arts and Sciences as well as the Secondary Education major.

Applicants applying for initial certification will be required to pass the appropriate Praxis II test. Praxis II test requirements are subject to change as dictated by the ALSDE. Prior to registering for any Praxis II exam, please verify current requirements by going directly to the ALABAMA portion of the Praxis II website at <http://www.ets.org/praxis/al>

Program requirements	Credit Hours
Minimum General Studies for Secondary Education (Grades 6-12)	64
Secondary Education (Grades 6-12) Option This option is designed to prepare students to teach in secondary level grades 6-12. *These courses include a field component. See advisor of details.	
<b>A. Professional Studies</b>	
EPY 351	
EDU 363	
EDU 400	
EDU 310	
EDU 340*	
EDU 341	
EDU 451	
EDU 342*	
One of the following appropriate methods courses:	
EDU 453	
EDU 454	
EDU 456	
EDU 457	
One of the following student teacher internships	
EDU 466	
EDU 467	
EDU 468	
EDU 469	
<b>B. Teaching Fields</b>	
Students must select one Comprehensive Teaching Field. One third of the course work in each teaching field must be in the upper-division. All programs require a double major in secondary education and in an Arts & Sciences content field.	
<b>(1) English Language Arts (Arts and Sciences - English Double Major)</b>	51
DRA 110	

CA 100

CA 220

EH 300

EH 371

EH 401

EH 215 or EH 216

EH 225 or EH 226

EH 235 or EH 236

One additional survey course to complete sequence: EH 215 or EH 216 or EH 225 or EH 226 or EH 235 or EH 236

The remaining coursework must come from the following areas

18

1. At least one course in literature prior to 1660 (EH 314, EH 315, EH 321, EH 322, EH 323, EH 324, EH 461, EH 465, EH 467, EH 470, EH 471, or EH 472).

2. At least one course in British or American literature from 1660-1900 (EH 331, EH 332, EH 334, EH 340, EH 342, EH 343, EH 351, EH 352, EH 353, EH 354, EH 462, EH 474, EH 475).

3. At least one course in twentieth-century literature (EH 360, EH 361, EH 362, EH 363, EH 364, EH 365, EH 366, EH 367, EH 369, EH 380, EH 463, EH 468, EH 476, EH 478, or EH 479)

4. One of the following courses: EH 402, EH 421, or EH 422.

5. At least two additional courses at the 400-level EH 400-499.

Must include at least 36 semester hours of English courses (excluding EH 101 and EH 102), with a minimum of 19 semester hours of English coursework at the 300-400 level to include a minimum of three (3) courses at the 400-level -- at least 15 of these upper division hours MUST be taken at USA. English Language Arts majors submit a writing portfolio in the student's senior year. See English Department for details and deadlines.

**(2) Mathematics (Arts and Sciences - Mathematics Double Major with Education)**

45

ST 210 or ST 315, and ST 335

MA 311

MA 320 (Fall)

MA 321 (Spring)

MA 410 (Fall)

MA 413

One 3-hour elective from MA 300-499 level;

One 3-hour elective from MA 400-499 level

MA 125

MA 126

MA 227

MA 237

MA 238

Must have a minimum of 19 semester hours of MA 300-400 level courses. At least 15 of these upper division hours must be taken at USA.

**(3) General Science Composite (Arts and Sciences - Biology Double Major with Education)**

75

GEO 101 and GEO 101L

PH 101 and PH 101L	
MA 125	
MA 238	
ST 210	
BLY 121 and 121L	
BLY 122 and 122L	
CH 131 and 131L	
CH 132 and 132L	
CH 201 and CH 201L	
PH 114 and PH 114L or PH 201 and PH 201L	
PH 115 and PH 115L or PH 202 and PH 202L	
BLY 301	
BLY 302	
BLY 303	
Twenty (20) hours from specified BLY 300-499 courses	
At least 15 of these upper division hours (6 hours at 400 levels and 9 hours at 300 or 400 level) MUST be taken at USA.	
(4) Social Science Composite (Arts and Sciences - Social Science Double Major with Education)	54
PSC 130, PSC 250 or PSC 270	
ECO 300 or ECO 215 and ECO 216	
GEO 114 or GEO 115	
PSY 120	
SY 109 or AN 100	
HY 101, HY 102, HY 135 and HY 136	
HY 103 or HY 104 or HY 228 or HY 321 or HY 323 or HY 325 or HY 326 or HY 362 or HY 364 or HY 365 or HY 366 or HY 367 or HY 368 or HY 429 or HY 461 or HY 465	
HY 432 or HY 433 or HY 434 or HY 435 or HY 436 or HY 437, HY 441 or HY 442 or HY 443, and fifteen (15) hours of approved upper-division History electives. (Check with Department.)	
At least 15 of these upper division hours (6 hours at 400 levels and 9 hours at 300 or 400 level) MUST be taken at USA.	
Certification options are also available for Secondary Biology, Chemistry, and Physics.	
Please visit <a href="http://www.southalabama.edu/colleges/ceps/programs.html">http://www.southalabama.edu/colleges/ceps/programs.html</a> for specific program requirements.	

## Graduation Plan

### 4-Year Progression Secondary Education 6-12 Biology

First Year	Credit Hours
Fall Semester	16

*EH 101 English Comp I (I)	3 hrs
BLY 121 + Lab General Biology	4 hrs
Fine Art (II)	3 hrs
MA 112 Precalculus Algebra PR	3 hrs
Social Science Elective (IV)	3 hrs
Spring Semester	16
*EH 102 English Comp II PR(I)	3 hrs
BLY 122 + Lab General Biology IIPR	4 hrs
History (IV)	3 hrs
MA 113 Precalculus Trigonometry PR	3 hrs
PE 100 Concepts of Health & Fitness (V)	3 hrs

Second Year		Credit Hours
Fall Semester		15
*CA 110 Public Speaking (II)	3 hrs	
CH 131 + Lab General Chemistry I <sup>PR</sup>	4 hrs	
GEO 101 + Lab Atmospheric Processes	4 hrs	
Literature <sup>PR</sup> (II)	3 hrs	
PE 101-157 PE Activity Course (V)	1 hr	
Spring Semester		16
BLY 301 Cell Biology <sup>PR</sup>	3 hrs	
BLY 302 Genetics <sup>PR</sup>	3 hrs	
CH 132 + Lab General Chemistry II <sup>PR</sup>	4 hrs	
Social Science Elective (IV)	3 hrs	
ST 210 Statistical Reasoning & App	3 hrs	
<i>Take AECTP</i>		

Third Year		Credit Hours
Fall Semester		15
*EDU 400 Ed of Exceptional Children & Youth	3 hrs	
BLY 303 Ecology & Evolution <sup>PR</sup>	3 hrs	
CH 201 + Lab Organic Chemistry I <sup>PR</sup>	4 hrs	
PH 114 + Lab Physics with Algebra-Trig I <sup>PR</sup>	5 hrs	
Spring Semester		16
*EPY 351 Human Growth & Development	3 hrs	
BLY 300-499 Elective	4 hrs	

BLY 300-499 Elective	4 hrs
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PH 115 + Lab Physics with Algebra-Trig II <sup>PR</sup>	5 hrs
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**Fourth Year****Credit Hours**

Fall Semester

15

*EDM 310 Microcomputing Systems In Edu	3 hrs
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BLY 300-499 Elective	4 hrs
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BLY 300-499 Elective	4 hrs
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PH 101 + Lab Intro to Astronomy	4 hrs
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*Apply for Candidacy*

Spring Semester

13

BLY 300-499 Elective	4 hrs
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<b>EDU 340 Fundamentals of Teaching (W)</b>	3 hrs
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History/Social Science Elective (IV)	3 hrs
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MA 113 Precalculus Trigonometry PR	3 hrs
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**Fifth Year****Credit Hours**

Fall Semester

15

<b>EDU 341 Teaching Skills (W)</b>	3 hrs
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<b>EDU 342 Secondary Field Experience</b>	3 hrs
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<b>EDU 363 Teaching Special Needs Learners</b>	3 hrs
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<b>EDU 451 Content Area Literacy</b>	3 hrs
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<b>EDU 456 Teaching Science (fall only)</b>	3 hrs
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*Apply for Graduation*

Spring Semester

9

<b>EDU 468 Internship - Science</b>	9 hrs
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**Key**<sup>PR</sup>=Prerequisite course required

\*= Prerequisite for Candidacy

Courses in **BOLD** indicate Candidacy required

(I)-(V) = General Education Area

(W) = Courses that satisfy USA writing requirement

Designed for students with an ACT-Math score of 22-25, SAT-Math score of 560-590, or Placement score of 70-89.

**4-Year Progression Secondary Education 6-12 English/Language Arts**

<b>First Year</b>		<b>Credit Hours</b>
Fall Semester		15
*EH 101 English Comp I (I)	3 hrs	
DRA 110 Intro to Drama (II)	3 hrs	
MA 110 or higher (III)	3 hrs	
PE 100 Concepts of Health & Fitness (V)	3 hrs	
Social Science Elective (IV)	3 hrs	
Spring Semester		16
*CA 110 Public Speaking (II)	3 hrs	
*EH 102 English Comp II <sup>PR</sup> (I)	3 hrs	
CA 100 Intro to Communication	3 hrs	
History (IV)	3 hrs	
Science + Lab (III)	4 hrs	
<b>Second Year</b>		<b>Credit Hours</b>
Fall Semester		16
CA 110 Public Speaking (II)	3 hrs	
CH 131 + Lab General Chemistry I <sup>PR</sup>	3 hrs	
EH 225 or EH 226 Survey of American Lit <sup>PR</sup>	3 hrs	
Science + Lab (III)	4 hrs	
Social Science Elective (IV)	3 hrs	
Spring Semester		16
***EH 314 Medieval Literature <sup>L</sup>	3 hrs	
***EH 371 Approaches to Eng Grammar (W)	3 hrs	
*EDU 400 Ed of Exceptional Children & Youth	3 hrs	
EH 235 or EH 236 Survey of World Lit <sup>PR</sup>	3 hrs	
EH 300 Intro to Literary Study <sup>PR</sup>	3 hrs	
PE 101-157 PE Activity Course (V)	1 hr	
<i>Take AECTP</i>		
<b>Third Year</b>		<b>Credit Hours</b>
Fall Semester		15
***EH 331 American Novel to 1900 <sup>L</sup>	3 hrs	
***EH 360 Anglo-Am Poetry since 1900 <sup>L</sup>	3 hrs	

***EH 401 Teaching Composition (W)	3 hrs
*EDM 310 Microcomputing Systems in Educ	3 hrs
*EPY 351 Human Growth & Development	3 hrs
<i>Apply for Candidacy</i>	
Spring Semester	15
<b>EDU 340 Fundamentals of Teaching (W)</b>	3 hrs
EH 400-499 Elective	3 hrs
EH 400-499 Elective	3 hrs
EH 402, 421, 422	3 hrs
Social Science Elective (IV)	3 hrs

Fourth Year		Credit Hours
Fall Semester		15
<b>EDU 341 Teaching Skills (W)</b>	3 hrs	
<b>EDU 342 Secondary Field Experience</b>	3 hrs	
<b>EDU 363 Teaching Special Needs Learners</b>	3 hrs	
<b>EDU 451 Content Area Literacy (fall only)</b>	3 hrs	
<b>EDU 453 Teaching Lang Sub in Sec Schools</b>	3 hrs	
<i>Apply for Graduation</i>		
Spring Semester		12
<b>EDU 466 Internship - English/LA</b>	9 hrs	
EH 215-236 Elective	3 hrs	

### Key

<sup>PR</sup>=Prerequisite course required

\*= Prerequisite for Candidacy

Courses in **BOLD** indicate Candidacy required

(I)-(V) = General Education Area

(W) = Courses that satisfy USA writing requirement

<sup>L</sup>=First course in list. See advising sheet for full list.

### 4-Year Progression Secondary Education 6-12 General Science

First Year		Credit Hours
Fall Semester		15
*EH 101 English Comp I (I)	3 hrs	
BLY 121 + Lab General Biology	4 hrs	
Social Science Elective (IV)	3 hrs	

MA 125 Calculus I <sup>PR</sup>	4 hrs
PE 101-157 PE Activity Course (V)	1 hr
Spring Semester	17
BLY 122 + Lab General Biology I <sup>PR</sup>	4 hrs
*EH 102 English Comp II PR(I)	3 hrs
History (IV)	3 hrs
MA 126 Calculus II <sup>PR</sup>	4 hrs
PE 100 Concepts of Health & Fitness (V)	3 hrs

Second Year		Credit Hours
Fall Semester		17
*CA 110 Public Speaking (II)	3 hrs	
CH 131 + Lab General Chemistry I <sup>PR</sup>	4 hrs	
Fine Art (II)	3 hrs	
Literature <sup>PR</sup> (II)	3 hrs	
MA 227 Calculus III <sup>PR</sup>	4 hrs	
Spring Semester		17
BLY 301 Cell Biology <sup>PR</sup>	3 hrs	
BLY 302 Genetics <sup>PR</sup>	3 hrs	
CH 132 + Lab General Chemistry II <sup>PR</sup>	4 hrs	
GEO 101 + Lab Atmospheric Processes	4 hrs	
MA 238 Differential Equations <sup>PR</sup>	3 hrs	
<i>Take AECTP</i>		

Third Year		Credit Hours
Fall Semester		15
BLY 303 Ecology & Evolution <sup>PR</sup>	3 hrs	
CH 201 + Lab Organic Chemistry I <sup>PR</sup>	4 hrs	
PH 114 + Lab Physics with Algebra-Trig I <sup>PR</sup>	5 hrs	
ST 210 Statistical Reasoning & App	3 hrs	
Spring Semester		16
BLY 300-499 Elective	4 hrs	
BLY 300-499 Elective	4 hrs	
PH 115 + Lab Physics with Algebra-Trig II <sup>PR</sup>	5 hrs	
Social Science Elective (IV)	3 hrs	

Fourth Year		Credit Hours
Fall Semester		17
*EDM 310 Microcomputing Systems In Edu	3 hrs	
*EDU 400 Ed of Exceptional Children & Youth	3 hrs	
*EPY 351 Human Growth & Development	3 hrs	
BLY 300-499 Elective	4 hrs	
PH 101 + Lab Intro to Astronomy	4 hrs	
<i>Apply for Candidacy</i>		
Spring Semester		17
BLY 300-499 Elective	4 hrs	
BLY 300-499 Elective	4 hrs	
History/Social Science Elective (IV)	3 hrs	
Literature <sup>PR</sup> /Fine Art Elective (II)	3 hrs	
<b>EDU 340 Fundamentals of Teaching (W)</b>	3 hrs	

Fifth Year		Credit Hours
Fall Semester		15
<b>EDU 341 Teaching Skills (W)</b>	3 hrs	
<b>EDU 342 Secondary Field Experience</b>	3 hrs	
<b>EDU 363 Teaching Special Needs Learners</b>	3 hrs	
<b>EDU 451 Content Area Literacy</b>	3 hrs	
<b>EDU 456 Teaching Science (fall only)</b>	3 hrs	
<i>Apply for Graduation</i>		
Spring Semester		9
<b>EDU 468 Internship - Science</b>	9 hrs	

### Key

<sup>PR</sup>=Prerequisite course required

\*= Prerequisite for Candidacy

Courses in **BOLD** indicate Candidacy required

(I)-(V) = General Education Area

(W) = Courses that satisfy USA writing requirement

Designed for students with an ACT-Math score of 22-25, SAT-Math score of 560-590, or Placement score of 70-89.

**4-Year Progression Secondary Education 6-12 Mathematics**

<b>First Year</b>		<b>Credit Hours</b>
Fall Semester		17
*EH 101 English Comp I (I)	3 hrs	
Fine Art (II)	3 hrs	
History (IV)	3 hrs	
MA 125 Calculus I <sup>PR</sup>	4 hrs	
Science + Lab (III)	4 hrs	
Spring Semester		17
EH 102 English Comp II PR(I)	3 hrs	
History/Social Science Elective (IV)	3 hrs	
MA 126 Calculus II <sup>PR</sup>	4 hrs	
Science + Lab (III)	4 hrs	
ST 210 Statistical Reasoning & App	3 hrs	
<b>Second Year</b>		<b>Credit Hours</b>
Fall Semester		16
*CA 110 Public Speaking (II)	3 hrs	
Literature <sup>PR</sup> (II)	3 hrs	
MA 227 Calculus III <sup>PR</sup>	4 hrs	
MA 237 Linear Algebra <sup>PR</sup>	3 hrs	
ST 335 Applied Regression Analysis <sup>PR</sup>	3 hrs	
Spring Semester		16
*EDU 400 Ed of Exceptional Children & Youth	3 hrs	
Literature <sup>PR</sup> /Fine Art Elective (II)	3 hrs	
MA 238 Differential Equations <sup>PR</sup>	3 hrs	
MA 320 Foundations of Mathematics <sup>PR</sup>	3 hrs	
PE 100 Concepts of Health & Fitness	3 hrs	
PE 101-157 PE Activity Course	1 hr	
<i>Take AECTP</i>		
<b>Third Year</b>		<b>Credit Hours</b>
Fall Semester		15
*EDM 310 Microcomputing Systems in Educ	3 hrs	
*EPY 351 Human Growth & Development	3 hrs	

MA 311 Intro to Number Theory <sup>PR</sup> (fall only)	3 hrs
MA 410 History of Mathematics <sup>PR</sup> (fall only)	3 hrs
MA 413 Abstract Algebra I <sup>PR</sup> (fall only)	3 hrs
<i>Apply for Candidacy</i>	
Spring Semester	15
EDU 340 Fundamentals of Teaching (W)	3 hrs
MA 300-499 Elective <sup>PR</sup>	3 hrs
MA 321 Elem Geometry <sup>PR</sup> (spring only)	3 hrs
MA 400-499 Elective <sup>PR</sup>	3 hrs
Social Science Elective (IV)	3 hrs

Fourth Year		Credit Hours
Fall Semester		15
<b>EDU 341 Teaching Skills (W)</b>	3 hrs	
<b>EDU 342 Secondary Field Experience</b>	3 hrs	
<b>EDU 363 Teaching Special Needs Learners</b>	3 hrs	
<b>EDU 451 Content Area Literacy</b>	3 hrs	
<b>EDU 454 Teaching Math (fall only)</b>	3 hrs	
<i>Apply for Graduation</i>		
Spring Semester		12
<b>EDU 469 Internship - Math</b>	9 hrs	
Social Science Elective	3 hrs	

### Key

<sup>PR</sup>=Prerequisite course required

\*= Prerequisite for Candidacy

Courses in **BOLD** indicate Candidacy required

(I)-(V) = General Education Area

(W) = Courses that satisfy USA writing requirement

Designed for students with an ACT-Math score of 27+, SAT-Math score of 665+, or Math Placement score of 90-100.

## 4-Year Progression Secondary Education 6-12 Social Science

First Year		Credit Hours
Fall Semester		15
*CA 110 Public Speaking (II)	3 hrs	
*EH 101 English Comp I (I)	3 hrs	

HY 101 Western Civ I	3 hrs	
MA 110 or higher (III)	3 hrs	
PSC 130 Intro to US Government	3 hrs	
Spring Semester		16
*EH 102 English Comp II PR(I)	3 hrs	
Fine Art (II)	3 hrs	
HY 135 US History to 1877	3 hrs	
PE 100 Concepts of Health & Fitness (V)	3 hrs	
Science + Lab (III)	4 hrs	

Second Year		Credit Hours
Fall Semester		16
Fine Art Elective (II)	3 hrs	
HY 102 Western Civ II	3 hrs	
HY 136 US History since 1877	3 hrs	
Literature <sup>PR</sup> (II)	3 hrs	
Science + Lab (III)	4 hrs	
Spring Semester		18
*EDM 310 Microcomputing Systems in Educ	3 hrs	
*EDU 400 Ed of Exceptional Children & Youth	3 hrs	
ECO 215 Prin of Microeconomics	3 hrs	
HY 103 Asian Civ I <sup>L</sup>	3 hrs	
PSC 250 or PSC 270	3 hrs	
PSY 120 Introduction to Psychology	3 hrs	
<i>Take AECTP</i>		

Third Year		Credit Hours
Fall Semester		18
*EPY 351 Human Growth & Development	3 hrs	
ECO 216 Prin of Macroeconomics	3 hrs	
HY 300-499 elective	3 hrs	
HY 300-499 elective	3 hrs	
HY 432 Colonial America <sup>L</sup>	3 hrs	
SY 109 or AN 100	3 hrs	
<i>Apply for Candidacy</i>		
Spring Semester		16

<b>EDU 340 Fundamentals of Teaching (W)</b>	3 hrs
GEO 114 or GEO 115	3 hrs
HY 300-499 elective	3 hrs
HY 300-499 elective	3 hrs
HY 441, 442 or 443 (Research Seminar) <sup>PR</sup>	3 hrs
PE 101-157 PE Activity Course (V)	1 hr

<b>Fourth Year</b>		<b>Credit Hours</b>
Fall Semester		15
<b>EDU 341 Teaching Skills (W)</b>	3 hrs	
<b>EDU 342 Secondary Field Experience</b>	3 hrs	
<b>EDU 363 Teaching Special Needs Learners</b>	3 hrs	
<b>EDU 451 Content Area Literacy</b>	3 hrs	
<b>EDU 457 Teaching Soc Stu in Sec Schools (fall)</b>	3 hrs	
<i>Apply for Graduation</i>		
Spring Semester		9
<b>EDU 467 Internship - Social Science</b>	9 hrs	
HY 300-499 elective	3 hrs	

### Key

<sup>PR</sup>=Prerequisite course required

\*= Prerequisite for Candidacy

Courses in **BOLD** indicate Candidacy required

(I)-(V) = General Education Area

(W) = Courses that satisfy USA writing requirement

<sup>L</sup>=First course in list. See advising sheet for full list.

# Secondary Education (M.Ed.)

## Degree Requirements

### Programs In Secondary Education - Master Of Education Degree Programs

M.Ed. programs are designed to enhance and extend the knowledge and qualifications of secondary teachers. See College of Education and Professional Studies general section for program admission requirements.

Program Requirements	Credit Hours
Programs in Secondary Education	30
Curriculum and Teaching	6
SED 552 or For ESOL - EEC 522 for those with secondary undergraduate cert	
AED 501	
ELT 530	
SED 561	
SED 563	
SED 564	
SED 562	
Foundations/Special Education Elective	3
SPE 500 required if introductory special education course not previously taken, or EDU 567 or ELT 525	
Research and Evaluation	6
IDE 510	
Research Seminar 560 (ESOL requires ELT 595 Internship instead of 560 Research Seminar)	
Teaching Field	12
Courses selected with advisor approval from student's teaching field.	
Language Arts: Courses selected from at least two of these fields with advisor approval: English, speech, communication, drama, and reading.	
English for Speakers of Other Languages (ESOL): ELT 525, ELT 545, ELT 553, ELT 558 and ELT 595	
Mathematics: Courses selected with advisor approval from Mathematics.	
Science Programs: Science Composite; Courses selected from at least two of these fields with advisor approval: biology, chemistry, geology, physics.	
Social Science Programs: Social Science Composite: Courses selected from at least two of these fields with advisor approval: economics, geography, history, political science, psychology and sociology.	
Technology	3
EDM 510	
Please visit <a href="http://www.southalabama.edu/colleges/ceps/programs.html">http://www.southalabama.edu/colleges/ceps/programs.html</a> for specific requirements.	
* All certification programs require an introductory special education course SPE 500, if not completed at the undergraduate level. This is in addition to the 30 semester hour requirement for the ESOL program.	



# Special Education (Alt. M.Ed.)

## Degree Requirements

### Alternative M.Ed. In Collaborative Teaching

This is a special alternative program for individuals with a baccalaureate degree in non-teacher education fields and individuals without Class "B" certification in an area of Education. In general the program requires a minimum of 42 graduate hours. See College of Education and Professional Studies general section for program admission requirements.

All prerequisites must be completed prior to admission to the program.

### Academic Standards And Student Responsibility

Students should be aware that the Special Education Program requires that certain courses be taken in sequence. Advisors should be consulted to obtain information about sequencing and prerequisite course work.

A committee consisting of graduate faculty members within the program will be selected by program advisors to assist the student in planning their courses of study following the schedule of course offerings. Such programs of study should be approved before the completion of nine semester hours of work.

The Special Education Program requires that students who receive a grade of "C" in a Special Education course, must repeat that course and attain a grade of "B" or better.

Satisfactory performance in all course work (GPA of 3.0 or greater) is required of all graduate Special Education majors; in the event of unsatisfactory performance (below "C") in a course not in their major area, a student's Graduate Program Committee selects the option of repeating the course and demonstrating satisfactory performance or demonstrating satisfactory performance in an approved alternate course. A minimum GPA of 3.25 is required for graduation.

Students may be permitted to do their internship/practicum during one of their two final semesters in residence. This is a joint decision between student and advisor.

Students are assigned to advisors in their respective program areas. The student has the sole responsibility for initiating applications and meeting test and other deadline requirements.

Course Requirements	Credit Hours
Foundation Requirements	15
EDM 510	
EPY 502	
EPY 525	
RED 531	
SPE 500	
Teaching Field	21
SPE 589	
SPE 512	
SPE 514	
SPE 515	
SPE 516	
SPE 591	

SPE 592

Internship

6

SPE 596 for 6-12 majors or SPE 595 for K-6 majors (Students must have a passing score on the appropriate Praxis II prior to enrollment in the internship). Current admission procedures require a passing score on the appropriate Praxis II prior to admission to the program.

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### **Praxis II Requirement For Both Class A And Alt A**

Applicants completing a special education program and applying for initial education certification are required to pass the Special Education Praxis II test and the Principles of Learning and Teaching (PLT) Praxis K-6 or 7-12.

Applicants applying for initial special education certification will be required to pass the appropriate Praxis II test. Praxis II test requirements are subject to change as dictated by the ALSDE. Prior to registering for any Praxis II exam, please verify current requirements by going directly to the ALABAMA portion of the Praxis II website at <http://www.ets.org/praxis/al>

# Special Education (BS)

## Degree Requirements

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The Department has three undergraduate Special Education Certification Options, each leading toward a Bachelor of Science Degree: Collaborative Teaching K-6, and Early Childhood Special Education, as certification options in K-6 Teacher Education and Collaborative Teaching 6-12.

The programs in Special Education are designed to prepare teachers to function in a variety of settings with birth-through-high-school-level students.

Students must obtain a minimum grade of "C" in each professional studies and teaching field course in the area of Special Education.

Non-majors seeking enrollment in courses should obtain permission from the department chair. Successful completion of the program and eligibility for the Bachelor of Science degree and/or teaching certificate necessitates that requirements of the Department, the College of Education and Professional Studies, the University of South Alabama, the Alabama State Department of Education, and National Council for Accreditation of Teacher Education be met.

### The Bachelor's Degree Program

Special Education undergraduate Collaborative Teacher 6-12 program include a minimum of 125 semester hours. Advisors provide the specific course information for each student. Professional courses are organized into blocks which must be taken in a specified sequence.

### Admission To Candidacy

Students must apply in the College of Education and Professional Studies Advising Center, for admission to teacher candidacy. Students must have satisfactorily completed 12 semester hours (as specified on the advising sheets or in PAWS) in each of the following disciplines: English language arts, mathematics, social sciences, and sciences with a grade of "C" or higher in each course, and professional studies courses. All previously listed requirements of the University and College must have been met also. Students must apply as early as possible preferably by the end of the sophomore year.

### Minimum General Studies (60 semester hours)

See College of Education and Professional Studies section or departmental advising sheets for general studies requirements.

### Professional Studies (33 semester hours minimum)

Visit the web for specific information at:

<http://www.southalabama.edu/colleges/ceps/programs.html>.

### Areas of Specialization (32 semester hours)

Collaborative Teaching

Visit the web for specific information at:

<http://www.southalabama.edu/colleges/ceps/programs.html>.

### Praxis II Requirement For Special Education

Praxis II test requirements are subject to change as dictated by the ALSDE. Prior to registering for any Praxis II exam, please verify current requirements by going directly to the ALABAMA portion of the Praxis II website at <http://www.ets.org/praxis/al>.

Applicants completing a special education program and applying for initial special education certification are required to pass the Special Education Praxis II test and the appropriate Principles of Learning and Teaching (PLT) Praxis.

# Graduation Plan

## 4-Year Progression Special Education Collaborative Teacher 6-12

First Year		Credit Hours
Fall Semester		16
*EH 101 English Comp I (I)	3 hrs	
BLY 101 + Lab Life Science I(III)	4 hrs	
Fine Art (II)	3 hrs	
MA 110 or higher (III)	3 hrs	
PE 100 Concepts of Health & Fitness (V)	3 hrs	
Spring Semester		16
*CA 110 Public Speaking (II)	3 hrs	
*EH 102 English Comp II PR(I)	3 hrs	
History (IV)	3 hrs	
MA 201 Math for Elementary Teachers <sup>PR</sup> (III)	3 hrs	
Science + Lab (III)	4 hrs	
Second Year		Credit Hours
Fall Semester		17
History/Social Science Elective (IV)	3 hrs	
Literature <sup>PR</sup> (II)	3 hrs	
MA 110 or higher (III)	3 hrs	
PE 101-157 PE Activity Course (V)	1 hr	
Science + Lab (III)	4 hrs	
Social Science Elective (IV)	3 hrs	
Spring Semester		18
*EDM 310 Microcomputing Systems In Educ	3 hrs	
Content Teaching Field 300-499	3 hrs	
Content Teaching Field 300-499	3 hrs	
Literature <sup>PR</sup> /Fine Art Elective (II)	3 hrs	
Math Elective MA 100 or higher or ST 210 (III)	3 hrs	
Social Science Elective (IV)	3 hrs	
<i>Take Core Tests</i>		

Third Year		Credit Hours
Fall Semester		16
*EDU 400 Ed of Exceptional Children & Youth	3 hrs	
*EPY 351 Human Growth & Development	3 hrs	
Content Teaching Field 300-499	3 hrs	
Content Teaching Field 300-499	3 hrs	
Content Teaching Field 300-499	3 hrs	
EDU 321 Field Experience	1 hr	
<i>Apply for Candidacy</i>		
Spring Semester		16
<b>EDU 322 Field Experience</b>	1 hr	
<b>EDU 340 Fundamentals of Teaching (W)</b>	3 hrs	
<b>EDU 354 Curriculum Methods</b>	3 hrs	
<b>EDU 372 Behavior Management</b>	3 hrs	
<b>EDU 410 Formal &amp; Informal Assessment</b>	3 hrs	
Content Teaching Field 300-499	3 hrs	
Fourth Year		Credit Hours
Fall Semester		15
<b>EDU 341 Teaching Skills (W)</b>	3 hrs	
<b>EDU 342 Secondary Field Experience</b>	3 hrs	
<b>EDU 363 Teaching Special Needs Learners</b>	3 hrs	
<b>EDU 451 Content Area Literacy</b>	3 hrs	
<b>EDU 453 or 454 or 456 or 457 Cont Methods</b>	3 hrs	
<i>Apply for Graduation</i>		
Spring Semester		12
<b>EDU 496 Student Teaching (6-12 SPE)</b>	9 hrs	
Content Teaching Field 300-499	3 hrs	
Key		
PR=Prerequisite course required		
*= Prerequisite for Candidacy		
Courses in <b>BOLD</b> indicate Candidacy required		
(I)-(V) = General Education Area		
(W) = Courses that satisfy USA writing requirement		

# Special Education (M.Ed.)

## Degree Requirements

### Special Education Graduate

The graduate program in Special Education prepares individuals with or without special education backgrounds to work with exceptional children and youth. Students seeking Alabama Class A Professional Certification may select programs of study in the areas of Collaborative Teaching K-6 or 6-12.

Post-master's or Sixth-Year Graduate Programs which lead to an Instructional Specialist Degree are available, and for qualified individuals, an Alabama Professional Certificate at the AA level.

### Academic Standards And Student Responsibility

Students should be aware that the Special Education Program requires that certain courses be taken in sequence. Advisors should be consulted to obtain information about sequencing and prerequisite course work.

A committee consisting of graduate faculty members within the program will be selected by program advisors to assist the student in planning their courses of study following the schedule of course offerings. Such programs of study should be approved before the completion of nine semester hours of work.

The Special Education Program requires that students who receive a grade of "C" in a Special Education course, must repeat that course and attain a grade of "B" or better.

Satisfactory performance in all course work (GPA of 3.0 or greater) is required of all graduate Special Education majors; in the event of unsatisfactory performance (below "C") in a course not in their major area, a student's Graduate Program Committee selects the option of repeating the course and demonstrating satisfactory performance or demonstrating satisfactory performance in an approved alternate course. A minimum GPA of 3.25 is required for graduation.

Students may be permitted to do their internship/practicum during one of their two final semesters in residence. This is a joint decision between student and advisor.

Students are assigned to advisors in their respective program areas. The student has the sole responsibility for initiating applications and meeting test and other deadline requirements.

### Master Of Education Degree Program In Special Education

The requirements for the Master of Education include a minimum of 30 semester hours in the program specialization. All graduate majors will have a graduate program committee plan the individual program of study based upon the student's training, experience, needs and schedule of course offerings.

Those students seeking teacher certification must complete one of the program areas detailed as follows:

### Program For Collaborative Teaching, K-6 Or 6-12

For students with a valid Class "B" certificate in an area of Education. The 30 semester hour minimum program for the M.Ed. in the area of Collaborative Teaching includes:

Courses Required	Credit Hours
Curriculum and Teaching	6
SPE 512	
SPE 516	
Educational Foundations	6*
EDM 510 SPE 500 (required if not previously taken) <b>OR</b> EPY 502	

Research and Evaluation	3
IDE 510 Educational Research and Evaluation	
Teaching Field	15
SPE 515	
SPE 591	
SPE 592	
K-6 majors take EEC 523 and Practicum (SPE 588)	
6-12 majors take SED 552 and Practicum (SPE 588)	
Students seeking certification in both K-6 and 6-12 must complete a practicum at each level.	

# MCOB Graduate Programs

## Department Information

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### Graduate

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In the event that a situation is not addressed below, the regulations governing that situation will be determined by the Graduate School.

### Master Of Business Administration

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The Mitchell MBA degree is accredited by the Association for the Advancement of Collegiate Schools of Business. It is a professional degree designed to enable individuals to study advanced concepts of business, industry, and government operations. The program is intended for the active manager or technical supervisor as well as the recent graduate who is interested in advanced study in the field of business. The business environment is constantly changing and the coursework in the MBA program is designed to facilitate decision making within ambiguous and changing conditions. The program requires ten (10) courses each carrying three semester hours of credit.

### The Master Of Accounting Degree Program

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Students may earn a Master of Accounting degree in the Mitchell College of Business. The admissions requirements, academic regulations, and general degree requirements are similar to those required for the MBA Degree.

Students seeking the Master of Accounting degree are required to complete any of the foundation courses as designated by the Director of Graduate Studies. In addition, students must complete six (6) graduate accounting courses, two (2) general business courses, and two (2) elective courses. MAcc courses will be available online beginning fall semester 2017. The entire program will be online beginning fall semester 2018.

### Admission Requirements For MBA And MAcc Programs

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The Mitchell MBA has a Fall only admission policy. The MAcc program will consider admissions at other times of the academic year.

To be admitted to the graduate programs within the Mitchell College of Business, the following are required:

1. A bachelor's degree from an institution accredited by the appropriate United States regional accreditation agency or equivalent for international institutions.
2. A minimal grade-point average of 3.0 on all undergraduate work (A=4.0), and
3. A minimum GMAT (Graduate Management Admissions Test) of 450 and
4. A combination of GPA and GMAT score that meets the requirements of the following formula:

A student who has a bachelor's degree with less than 3.0 but greater than a 2.5 (A=4.0) or a minimum grade-point average of 2.75 on the last 64 semester hours of college work may attain Provisional Admission provided the student meets the minimum GMAT score requirement and meets the requirements of one of the two following formula:

$$200 \times \text{GPA} + \text{GMAT} = 1100 \text{ or}$$

$$200 \times \text{UDGPA (last 64 hours)} + \text{GMAT} = 1100$$

International students must meet or exceed the University's standard for language proficiency.

There is a "non-degree seeking" category for registration. Students in this category must obtain permission of the Director of Graduate Studies before registering for any graduate courses in the Mitchell College of Business. A student must re-apply if no course work has been completed within one year after admission into the Master of Accounting or the Master of Business Administration programs.

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## **MBA Prerequisite Requirements**

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Four courses in the MBA program require prospective students without sufficient prior academic training to complete preparation materials: MBA 502 Managing Accounting Information requires Principles of Accounting (ACC 211) or an equivalent course; MBA 503 Managing in the Business Environment requires Microeconomics (ECO 215) or an equivalent course; MBA 505 Managing People requires Principles of Management (MGT 300) or an equivalent course; and MBA 506 Managing Finance and Capital requires Business Finance (FIN 315) or an equivalent course. Applicants may fulfill the prerequisite requirements by completing the undergraduate courses or self-study courses available from the University Bookstore. Prerequisites must be complete prior to starting the MBA Program.

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## **Requirements For Regular Standing**

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A Provisional Admission student will qualify for Regular Standing upon completion of a minimum of nine semester hours taken for graduate credit (500 level) toward degree requirements provided at least a "B" average is maintained in all such work attempted.

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## **Academic Regulations**

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The following regulations apply to all graduate students and encompass all work taken as a graduate student including all graduate degree courses (core, elective, concentration, business and accounting).

1. All students must earn an overall GPA of 3.0 or better
2. Students receiving a second grade of C will be dismissed
3. No D Grades will be awarded
4. Students receiving a grade of F will be dismissed
5. Students may not drop (WD) from any course more than one time.
6. Students may not repeat a course more than one time

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## **Transfer Credit**

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A maximum of 9 semester hours of graduate credit earned at another institution may be considered for credit toward a degree in the master programs. Transfer credit is approved only after completion of a minimum of nine (9) semester hours of graduate credit at the University of South Alabama and the student has qualified for Regular Standing. Only grades of "A" or "B" may be accepted as transfer credit. Transfer credits are not used in the calculation of the grade point average.

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## **Transient Approval**

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Students enrolled in the Master of Business Administration Program and the Master of Accounting Program are expected to complete all requirements at the University of South Alabama. Students transferring from other accredited graduate programs may transfer a maximum of nine credit hours (three courses) to be counted toward USA graduate requirements. Once enrolled at USA, students are expected to complete the degree requirements at USA. Transient student requests will be approved only under the following conditions:

1. The student is graduating and the specific course requirement is not offered at USA during that term.
2. The student is moving from the Mobile area and can complete the degree requirements at another accredited institution (a maximum of nine hours if the student has not transferred other graduate credit to USA).  
Transient approval will not be granted for students to enroll in graduate classes at other local (non-AACSB accredited) institutions.

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## **Failure Of A Course**

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A student receiving an "F" grade for a course will be dismissed.

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## **Time Limitation**

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All requirements for the MBA and MAcc programs must be completed within seven (7) calendar years from admission to the program.

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## Graduate Assistantships

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Graduate Assistantships are awarded on an annual basis and are granted for the academic year. The stipend is for two semesters totaling \$8,000 and a tuition waiver of up to 12 semester credit hours per semester. Out of state fees are also waived. Any additional fees or cost are paid by the student.

Application forms can be obtained from the Office of Graduate Programs in the Mitchell College of Business.

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## Requirements For Degrees

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MBA students must satisfactorily complete ten (10) three semester-hour graduate courses. Students seeking the Master of Accounting degree must complete ten (10) three semester-hour graduate accounting courses.

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## Doctor Of Business Administration (DBA)

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The Doctor of Business Administration (DBA) program in Management and the DBA program in Marketing are designed for individuals in business desiring to transition to an academic career. The program's weekend format is designed to allow students to complete classes in an intensive series of Friday through Sunday classes.

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## Minimum Requirements For Admission

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Applicants must have successfully completed an MBA, a specialized Master's degree in business, or a professional degree in related areas of study, from nationally accredited programs subject to the approval of the Director of Graduate Studies and the Admissions Committee; Applicants must have a minimum of five years of professional experience in business or other professional fields. Instructors from business schools or colleges who want to upgrade their academic status with a doctoral degree are also eligible to apply. Classes are admitted once per year, starting in May. International students must meet or exceed the University's standard for language proficiency.

Students may apply online at <http://www.southalabama.edu/colleges/mcob/dba/index.html>.

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## General Information

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### Required Credits

A minimum of 60 semester hours of approved graduate credit is required. Details about the curriculum are given below.

### Transfer Credit

Graduate courses taken at another accredited university in the same (or closely related) subject as that of the DBA program, may be considered in the DBA plan of study at the discretion of the Director of the DBA Program. Only grades of "A" or "B" may be accepted as transfer credit. The transfer credit is approved by the Dean of the Graduate School only after completion of a minimum of 9 semester hours of graduate work in the doctoral program at USA.

### Residence, Full-time Study, And Continuation Registration

A minimum of eight consecutive terms of full-time study in residence is required.

### Time Limit

All requirements for the DBA degree must be completed within 36 months from the date of matriculation. A student who has not satisfactorily completed the research component in a three year period must apply for a defined extension to complete the degree. This request must be recommended by the major professor, the Director of Graduate Studies, and approved by the Dean of the Graduate School.

A comprehensive examination is scheduled for the summer of the third year of the doctoral program. Failure to complete the work within the periods specified shall necessitate reevaluation of the student's program and may result in a recommendation for dismissal by the Director of Graduate Studies to the Graduate Dean.

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## Doctor Of Business Administration Degree Requirements

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The Doctor of Business Administration (DBA) degree is awarded in recognition of the student's demonstrated ability to conduct original, scholarly research at the highest levels without extensive supervision. The degree is not granted upon completion of a stated amount of course work, but rather after demonstration by the student of a comprehensive knowledge and research

capability in a specialized field of study. The student must demonstrate this ability in writing and by defending the research component based upon the result of an original investigation.

## Grade Requirements

---

1. All students must earn an overall GPA of 3.0 or better in the program in order to graduate.
2. All students must pass a course with a grade of no less than B.
3. Students may not drop (WD) from any course more than one time.
4. Students may not repeat a course more than one time.

## Requirements For Degree

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DBA students must satisfactorily complete a minimum of sixty (60) semester-hour graduate credit. A minimum of eight consecutive terms of full-time study is required.

## Areas Of Study

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### Degrees, Programs, Or Concentrations

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## Courses

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## Faculty

---

AFFUSO, ERMANNIO  
Assistant Professor  
MS, Polytechnic University of Bari  
PHD, Auburn University

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Assistant Professor  
BA, University of NC- Chapel Hill  
MBA, University of Mobile  
DBA, Kennesaw State University

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BSBA, University of South Alabama  
MAC, University of South Alabama

EASTBURN, RONALD W.  
Instructor  
BA, University of South Alabama  
MBA, University of Central Florida  
DMG, Case Western Reserve U

EDWARDS, JENNIFER L.  
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MS, University of Southern Miss

FINNEY, TREENA L.  
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BA, Clemson University  
MS, Clemson University  
PHD, Depaul University

GILLIS, WILLIAM E.  
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MBA, University of West Florida  
PHD, Florida State University

GRANT, CHARLES T.  
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BS, University of Alabama  
MPAC, University of Texas- Austin  
PHD, Florida State University

HARDIN, JAMES R.  
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BSBA, Appalachian State University  
MA, Appalachian State University  
PHD, University of Mississippi

HSU, KO-CHENG  
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BS, Illinois State University  
MS, Illinois State University  
MS, Iowa State University  
PHD, University of Memphis

HUANG, YING  
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MS, University of Memphis  
PHD, University of Memphis

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MS, Georgia State University  
PHD, Georgia State University

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MS, University of Dhaka  
MA, University of Arizona  
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PHD, University of Mississippi

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MS, Georgia Inst of Tech - Main  
PHD, University of Mississippi

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MAC, University of South Alabama  
DBA, Kennesaw State University

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MBA, Troy University-Main

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MA, University of West Florida  
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MBA, University of South Alabama

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MA, University of Florida  
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PHD, University of Alabama

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MBA, Claremont Graduate University

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BA, University of Rochester  
MS, Louisiana State University  
MS, Louisiana State University  
PHD, Louisiana State University

WOOD JR., BOB G.  
Professor  
BS, Arkansas State University-Main  
MBA, Arkansas State University-Main  
PHD, Louisiana State University

WOODFORD, KELLY C.  
Professor  
BS, Spring Hill College  
JD, Georgetown University



# Accounting (MAcc)

## Degree Requirements

### Master Of Accounting Degree Requirements

Students seeking the Master of Accounting degree must complete ten (10)-three semester-hour graduate courses. Students seeking the Master of Accounting degree are required to complete any of the following foundation courses as designated by the Director of Graduate Studies. In addition, students must complete six (6) graduate accounting courses, two (2) general business courses and two (2) elective courses. Macc courses will be available online beginning fall semester 2017. The program will be totally online beginning fall semester 2018.

Master of Accounting Degree Requirements	Course Title	Credit Hours
Undergraduate Foundation Courses		
All courses must be taken as an undergraduate student or transferred into the university before admission will be granted to the MAcc program. Courses must have been passed with a minimum grade of "C" to complete a prerequisite requirement. Prerequisites		
ACC 211	Principles of Accounting I	3
ACC 212	Principle of Accounting II	3
CIS 250	Computer Information Systems II	3
ACC 331	Taxation of Individuals	3
ACC 341	Accounting Information Systems	3
ACC 371	Financial Accounting I	3
ACC 372	Financial Accounting II	3
ACC 381	Cost Accounting	3
ACC 451	Auditing	3
MAcc Core Courses (18 Hours Required)		
ACC 511	Financial Accounting Theory	3
ACC 521	Advanced Managerial Accounting	3
ACC 531	Tax Planning and Research	3
ACC 535	Multi-Jurisdictional Tax	3
ACC 541	Advanced Accounting Systems	3
ACC 572	Fraud Examination and Forensic Accounting	3
MBA Core Courses (6 Hours Required)		
MBA 501	Analysis Using Information Systems	3
MGT 532	Legal and Ethical Environment of Business	3
Elective Courses (6 Hours) Students must select two (2) courses from the following list.		
ACC 532*	Taxation of Partnerships and Corporations	3
ACC 552*	Advanced Auditing	3

ACC 561*	Accounting of Governmental and NFPE	3
ACC 571	Professional Accounting	3
ACC 590	Special Topics	3
ACC 594	Independent Study in Accounting	3
Other Electives as approved by the Chair of the Department of Accounting		3

\* This course is dual-listed with a 400-level course. Students may not repeat dual-listed courses completed at the 400-level.

### CPA Eligibility

Persons seeking licensure as a CPA in the state of Alabama must have completed a minimum of 150 semester hours or 225 quarter hours of postsecondary education, including (1) a baccalaureate degree from an accredited university, and (2) evidence that he or she has satisfied either one of the following:

- a. At least 24 semester hours or equivalent quarter hours (excluding principles of accounting courses) at the upper division undergraduate and/or graduate level, including minimum requirements in each of the following areas: financial accounting - 9 hours; auditing - 3 hours; taxation - 6 hours; management accounting - 3 hours; governmental and not-for-profit accounting - 3 hours; at least 24 semester hours or equivalent quarter hours in business courses (other than accounting courses) at the undergraduate and/or graduate level, including at least 3 semester hours in business law, concentrating primarily on the Uniform Commercial Code.
- b. Awarded a graduate degree in accounting from a degree program separately accredited by AACSB International.

If you need any further information, see the Chair of the Department of Accounting.

# Business Administration (DBA)

## Degree Requirements

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### Doctor Of Business Administration (DBA)

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The Doctor of Business Administration (DBA) program in Management or Marketing is designed for individuals in business desiring to transition to an academic career or build skills for consulting occupations. The program weekend format is designed to allow students to complete the program through an intensive series of Friday through Sunday classes. In the event a situation is not addressed below, the regulations governing that situation will be determined by the Graduate School.

### Minimum Requirements For Admission

---

Applicants must have successfully completed an MBA, a specialized Master's degree in business, or a professional degree in related areas of study, from nationally accredited programs subject to the approval of the Director of Graduate Studies and the Admissions Committee; Applicants must have a minimum of five years of professional experience in business or other professional fields. Instructors from business schools or colleges who want to upgrade their academic status with a doctoral degree are also eligible to apply. Classes are admitted once each year, starting in May. Check the website for specific deadlines. International students must meet or exceed the University's standard for language proficiency.

Students may apply online at <http://www.southalabama.edu/colleges/mcob/dba/index.html>.

### General Information

---

#### Required Credits

A minimum of 60 semester hours of approved graduate credit is required. Details about the curriculum are given below.

#### Transfer Credit

Graduate courses taken at another accredited university in the same (or closely related) subject as that of the DBA program, may be considered in the DBA plan of study up to a maximum of 12 semester hours. Only grades of "A" or "B" may be accepted as transfer credit. The transfer credit is approved by the Dean of the Graduate School only after completion of a minimum of 9 semester hours of graduate work in the doctoral program at USA.

#### Residence, Full-time Study, And Continuation Registration

A minimum of eight consecutive terms of full-time study in residence is required.

#### Time Limit

All requirements for the DBA degree must be completed within 36 months from the date of matriculation. A student who has not satisfactorily completed the research component in a three year period must apply for a defined extension to complete the degree. This request must be recommended by the major professor, the Director of Graduate Studies, and approved by the Dean of the Graduate School.

A comprehensive examination is scheduled for the summer of the third year of the doctoral program. Failure to complete the work within the periods specified will necessitate reevaluation of the student's program and may result in a recommendation for dismissal by the Director of Graduate Studies to the Graduate Dean.

### Doctor Of Business Administration Degree Requirements

---

The Doctor of Business Administration (DBA) degree is awarded in recognition of the student's demonstrated ability to conduct original, scholarly research at the highest levels without extensive supervision. The degree is not granted upon completion of a stated amount of course work, but rather after demonstration by the student of a comprehensive knowledge and research capability in a specialized field of study. The student must demonstrate this ability in writing and by defending the research component based upon the result of an original investigation.

## Grade Requirements

1. All students must earn an overall GPA of 3.0 or better in the program in order to graduate.
2. Students must pass a course with a grade of no less than a B.
3. Students may not drop (WD) from any course more than one time.
4. Students may not repeat a course more than one time.

## Requirements For Degree

DBA students must satisfactorily complete a minimum of sixty (60) semester-hour graduate credit. A minimum of eight consecutive terms of full-time study is required.

To earn a Doctor of Business Administration degree in Marketing from the University, a student must satisfactorily complete the following graduate courses and research assignments.

Term	Required Courses and Assignments	Credit Hours
Year 1 / Summer		
	BUS 600 Fundamentals of Research	3
	BUS 602 Applied Statistics & Regression	3
	BUS 699 Research and Teaching Concepts	1
Year 1 / Fall		
	BUS 604 Multivariate Analysis	3
	MKT 601 Seminar in Marketing Management	3
	BUS 699 Research and Teaching Concepts	1
Year 1 / Spring		
	BUS 606 Research Methods	3
	MKT 603 Seminar in Supply Chain & Logistics	3
	BUS 699 Research and Teaching Concepts	1
Year 2 / Summer		
	BUS 608 Advanced Statistics and Applied Research	6
	BUS 699 Research and Teaching Concepts	1
	Conceptual paper presented to review team	
Year 2 / Fall		
	BUS 610 Structural Equation Modeling	3
	MKT 605 Seminar Marketing Communication	3
	BUS 699 Research and Teaching Concepts	1
Year 2 / Spring		
	MKT 609 Seminars in Special Topics	3
	MKT 607 Seminar Marketing Strategy	3
	BUS 699 Research and Teaching Concepts	1

		Paper submission to regional meeting	
Year 3 / Summer			
	MKT 799	Comprehensive Exam	3
		ABD status conditional on results of the comprehensive exam	
	MKT 799	Dissertation Research	3
Year 3 / Fall			
	MKT 799	Dissertation Research	6
		Paper submission to a national or international conference	
Year 3 / Spring			
	MKT 799	Dissertation Research	6
		Paper submission to a national or international conference	

To earn a Doctor of Business Administration degree in Management from the University, a student must satisfactorily complete the following graduate courses and research assignments.

Term		Required Courses and Assignments	Credit Hours
Year 1 / Summer			
	BUS 600	Fundamentals of Research	3
	BUS 602	Applied Statistics & Regression	3
	BUS 699	Research and Teaching Concepts	1
Year 1 / Fall			
	BUS 604	Multivariate Analysis	3
	MGT 601	Seminar in Organizational Behavior	3
	BUS 699	Research and Teaching Concepts	1
Year 1 / Spring			
	BUS 606	Research Methods	3
	MGT 603	Seminar in Organizational Theory & Change	3
	BUS 699	Research and Teaching Concepts	1
Year 2 / Summer			
	BUS 608	Advanced Statistics and Applied Research	6
	BUS 699	Research and Teaching Concepts	1
		Conceptual paper presented to review team	
Year 2 / Fall			
	BUS 610	Structural Equation Modeling	3

	MGT 605	Seminar Marketing Communication	3
	BUS 699	Research and Teaching Concepts	1
Year 2 / Spring			
	MGT 609	Seminars in Special Topics	3
	MGT 607	Seminar Strategic Management	3
	BUS 699	Research and Teaching Concepts	1
		Paper submission to regional meeting	
Year 3 / Summer			
	MGT 799	Comprehensive Exam	3
		ABD status conditional on results of the comprehensive exam	
	MGT 799	Dissertation Research	3
Year 3 / Fall			
	MGT 799	Dissertation Research	6
		Paper submission to a national or international conference	
Year 3 / Spring			
	MGT 799	Dissertation Research	6
		Paper submission to a national or international conference	

# Business Administration (MBA)

## Degree Requirements

### Master Of Business Administration Degree Requirements

The Mitchell MBA degree is accredited by the Association for the Advancement of Collegiate Schools of Business. It is a professional degree designed to enable individuals to study advanced concepts of business, industry, and government operations. The program is intended for the active manager or technical supervisor as well as the recent graduate who is interested in advanced study in the field of business. The business environment is constantly changing and the coursework in the MBA program is designed to facilitate decision making within ambiguous and changing conditions. The program requires ten (10) courses each carrying three semester hours of credit.

Master of Business Administration	Course Title
MBA 501	Quantitative Analysis Using Systems
MBA 502	Managing Accounting Information
MBA 503	Managing in the Business Environment
MBA 504	Managing Customers and Supply
MBA 505	Managing People
MBA 506	Managing Finance and Capital
MBA 507	Managing Strategic Decisions
Three MBA Electives (9 hours)	Courses must be approved by the Director of Graduate Programs
MGT 599*	MBA Comprehensive Exam (co-requisite with MGT 507. No credit hrs.)

# Management

## Department Information

Department of Management	(251) 460-6411
Chair	William Gillis
Professor Emeritus	Paul Pietri, Carl Moore, Robert Shearer, Donna Retzlaff-Roberts
Professors	Finney, Gillis, Maes, Mosley, Pearce, Turnipseed, Woodford
Associate Professors	Weldy
Assistant Professor	Eastburn, Nelson, Smith
Senior Instructors	King, Lambe
Instructor	Edwards, Wassenaar

Department of Management website

<http://www.southalabama.edu/colleges/mcob/management/index.html>

"Management is doing things right; leadership is doing the right things." - Peter Drucker

### Discover Management

A majority of our faculty has extensive practical experience in their fields. They've dealt first hand with the challenges businesses and corporations face, and have a passion for sharing their knowledge. They're committed to nurturing the professional development of students so they graduate with the skills, initiative, integrity and sense of teamwork required in the workplace.

The Department of Management has the following degree options: Entrepreneurship, General Management, and Human Resource Management. The department also manages the Online General Business Major.

### Entrepreneurship Concentration

Entrepreneurship is the key to economic growth for the United States and the Central Gulf Coast region. The Entrepreneurship concentration is designed to create an "innovation" focused mindset that produces entrepreneurs and entrepreneurial leaders in ALL sectors of the society including: starting businesses, working in financing careers, innovative educators, franchise owners, corporate intrepeneurs, economic development officials and social entrepreneurs. The concentration allows students to choose a combination of courses that best match their interests and entrepreneurial opportunities.

### General Management Concentration

The General Management concentration offers courses designed to give students a solid foundation in the field of Management and enable them to become effective managers, problem-solvers, and decision-makers in the world of business, industry, and government. Emphasis is placed upon problem solving, and managerial decision-making. The thrust of the curriculum is to give students insight into the means for improving the productivity and efficiency of modern organizations.

### Human Resource Management Concentration

Managers have become aware of the significant impact of effective utilization of the human resources in an organization. As a result, the Human Resource Manager has become a key person on the top management team. The Human Resource Management concentration provides students with the skills and knowledge to become a proficient practitioner in this leading organizational field. The Society of Human Resource Management (SHRM) has acknowledged that the MCOB Human Resource Management Concentration fully aligns with SHRM's HR Curriculum Guidebook and Templates.

## Online General Business Major

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The online general business major is designed for students that have completed, or are in the process of completing, the freshman and sophomore level degree requirements and who desire to complete a business degree through the online delivery of the junior and senior level requirements.

The program assumes the student has completed 62 credit hours of general education and sophomore level business requirements. Students enrolled in the general business online degree program must complete 60 credit hours of junior and senior requirements and all of these courses are available online each year, but not every semester.

The online courses curriculum allows the student to complete the program in two years or five semesters. Although the curriculum is set up for a five semester sequence, students are not required to complete the courses in the listed sequence. Additionally, students are not required to enroll in a certain number of courses each semester to participate in the online degree program.

For additional information about the online program or for academic advising, please contact the:

Office of Student Services  
 Mitchell College of Business  
 MCOB 110  
 Phone: (251) 460-7167  
 E-mail: [mcobadviser@southalabama.edu](mailto:mcobadviser@southalabama.edu)

## Areas Of Study

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### Degrees, Programs, Or Concentrations

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## Courses

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### Course Listing

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Business.....	888
Management.....	1033
Master of Bus Administration.....	1045

## Faculty

---

EASTBURN, RONALD W.  
 Instructor  
 BA, University of South Alabama  
 MBA, University of Central Florida  
 DMG, Case Western Reserve U

FINNEY, TREENA L.  
 Professor  
 BA, Clemson University  
 MS, Clemson University  
 PHD, DePaul University

ICENOGLA, MARJORIE L.  
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 Part-Time Instructor  
 BA, William Carey College  
 MS, University of Southern Miss

GILLIS, WILLIAM E.  
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MBA, Ball State University  
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PHD, University of Maryland-College Park

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STUPAVSKY, JANA  
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MBA, University of South Alabama  
PHD, University of South Alabama

WOODFORD, KELLY C.  
Professor  
BS, Spring Hill College  
JD, Georgetown University

# General Business (BSBA)

## Degree Requirements

### General Business Major Required Courses

To graduate, students complete a minimum of 122 semester hours with an overall institution grade-point average (GPA) of 2.0 (38 hours of general education requirements and 84 hours of business courses). In addition, a minimum grade of "C" is required in each of the Basic Business Techniques courses and a 2.0 GPA is required for the 300-level business core courses, and a 2.0 GPA is required for all courses counted in the General Business Major, which include the following:

Required General Business Major Courses*	Course Title	Credit Hours
Concentration credit hours in General Business		27
MGT 340	Organizational Behavior	3 hrs
MGT 351	Human Resource Management	3 hrs
MKT 385	Services Marketing	3 hrs
FIN 343	Money Markets and Financial Institutions	3 hrs
ECO 318	Managerial Economics	3 hrs
ACC 331	Taxation of Individuals	3 hrs
Choose three electives from the following:		9 hrs
ACC 382	Cost Accounting	
ECO 330	Current Global Economic Issues	
FIN 300	Personal Finance	
FIN 344	Real Estate	
MGT 311	Legal Environment of Business II	
MGT 390	Total Quality Management	
MGT 411	Service Management	
MKT 350	Internet Marketing	
MKT 380	Integrated Marketing Communications	

\*Course substitutions are possible with approval of the student's advisor or the Dean.

# Management (BSBA)

## Degree Requirements

### Bachelor Of Science In Business Administration Degree Requirements - Major In Management

To graduate, students complete a minimum of 122 semester hours with an overall institution grade-point average (GPA) of 2.0 (38 hours of general education requirements and 84 hours of business courses). In addition, a grade of at least C is required in each of the Basic Business Techniques courses and a 2.0 GPA is required in the 300-level business core courses, and a 2.0 GPA is required for all courses counted in the Management Major, which include the following:

Concentration in Entrepreneurship	Course Description	Credit Hours
MGT 334	International Management	3
MGT 340	Organizational Behavior	3
MGT 351	Human Resource Management	3
MGT 345	Innovation and Creativity	3
MGT 355	Legal and Financial Aspects of Entrepreneurship	3
MGT 365	New Venture Creation	3
MGT 483	Social Entrepreneurship	3
Choose two electives from the following:		6
MGT 347	Franchising	
MGT 356	Strategic Issues in Family Business	
MKT 384	Market Research	
MKT 350	Internet Marketing	
MKT 381	Sales Management and Personal Selling	
MGT 462	Negotiation and Dispute Resolution	
FIN 370	Working Capital Management	
Concentration credit hours in General Management		27

Concentration in General Management	Course Description	Credit Hours
MGT 334	International Management	3
MGT 340	Organizational Behavior	3
MGT 351	Human Resource Management	3
MGT 492	Management Analysis and Consulting	3
Choose five electives from the following:		15
MGT 311	Legal Environment of Business II	
MGT 345	Innovation and Creativity	
MGT 347	Franchising	

MGT 355	Legal and Financial Aspects of Entrepreneurship	
MGT 356	Strategic Issues in Family Business	
MGT 357	Leadership	
MGT 390	Total Quality Management	
MGT 430	Operations Research	
MGT 441	Service Operations	
MGT 450	Organizational Staffing	
MGT 451	Employee Training and Development	
MGT 452	Employment Law	
MGT 454	Compensation Administration	
MGT 455	Labor-Management Relations	
MGT 460	Organization Development and Change	
MGT 462	Negotiation and Dispute Resolution	
MGT 470	High Performance Organizations	
MGT 483	Social Entrepreneurship	
Concentration credit hours in General Management		27

<b>Concentration in Human Resources Management</b>	<b>Course Description</b>	<b>Credit Hours</b>
MGT 334	International Management	3
MGT 340	Organizational Behavior	3
MGT 351	Human Resource Management	3
MGT 450	Organizational Staffing	3
MGT 452	Employment Law	3
MGT 475	Strategic Human Resource Management	3
MGT 451	Employee Training and Development	
MGT 454	Employee Compensation	
MGT 455	Labor-Management Relations	
MGT 470	High Performance Organizations	
Concentration credit hours in General Management		27

# Marine Sciences

## Department Information

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Department of Marine Sciences web site

<http://www.southalabama.edu/marinesciences>

### Undergraduate Minor In Marine Sciences

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Seventy percent of the Earth's surface is occupied by oceans. This dominance means that oceans exert a major influence on atmospheric dynamics and terrestrial ecology. The societal and economic importance of healthy ocean ecosystems cannot be overstated or ignored. The Department of Marine Sciences welcomes qualified students who wish to better focus their academic training towards oceanography and marine biology. The undergraduate minor in marine sciences is designed to complement many science and non-science majors offered at USA. Ocean-related science is relevant to many contemporary environmental issues and problems and central to understanding earth-system evolution, dynamics, climate and sustainability. The minor consists of courses and research opportunities offered primarily by faculty and researchers in the Department of Marine Sciences and the Dauphin Island Sea Lab.

Requirements for a Minor in Marine Sciences include a minimum of 18 hours in Marine Sciences related classes. The student must take MAS 134 Ocean Science, MAS 134L Ocean Science Lab, MAS 331 Marine Sciences I and MAS 332 Marine Science II. In addition to these core requirements, students must take 2-3 elective courses (MAS 371, MAS 367, MAS 430, MAS 451, MAS 471, MAS 475 or other electives approved by the Chair). Up to 6 hours required by a student's major may be applied toward the minor. The Marine Science minor places a strong emphasis on a rigorous natural science foundation; thus, several of the upper division courses related to the minor have prerequisites. Students planning the minor should check catalog course descriptions carefully and should meet with advising staff in the Marine Science Program office.

### Master Of Science (M.S.) In Marine Sciences

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The Master of Science (MS) Program in marine sciences is designed to train and prepare superior students for a career in this field. The marine sciences program offers courses and opportunities for research in four main areas: biological, chemical, physical, and geological oceanography. Each MS student receives formal training in at least three of these disciplines while concentrating in a specific research area. Thus, the program is structured to develop the capacity for productive and innovative research, founded on a solid background of broad scientific knowledge. The requirements and procedures that follow are specifically for the Department of Marine Sciences. However, the general rules and policies of the Graduate School also apply.

### Minimum Requirements For Admission

Application before January 15 is encouraged; beginning February 1, the admission committee will make initial recommendations about applicants for the following Fall class, with formal letters sent to applicants by the end of April. Although students are normally admitted in the Fall Semester, depending on availability of space and funding, applications may be approved and students admitted throughout the year. In addition to the general admissions requirements of the Graduate School, minimal requirements for admission in full standing to the Marine Sciences MS Program are:

1. A baccalaureate degree in marine sciences or in a discipline related to marine sciences (e.g., biology, chemistry, geology, physics) from an accredited four year college or university
2. An undergraduate minimum grade-point average of 3.0 overall (4.0 point system)
3. A minimum score of 300 combined on the verbal and quantitative subtests of the Graduate Record Exam (GRE)

The applicant will be required to submit:

1. A completed application including a statement indicating the student's interests and professional goals
2. Official transcripts from all undergraduate institutions attended
3. Three letters of recommendation
4. Official scores from the Graduate Record Exam (General Test)

Assessment of credentials will be supplemented by evaluation of letters of recommendation and the educational background of the student. Foreign applicants will be required to pass the TOEFL exam with a score of 525 or greater, or equivalent score on computer administered tests.

Provisional admission may be granted upon recommendation of the departmental admissions committee. Full standing can be attained after conditional admission by satisfactorily completing (with a grade of no lower than "B") nine (9) semester hours of course work in marine sciences at USA.

To insure compatibility between the student's research interests and the faculty expertise in the Marine Sciences Department, particular attention will be given to the statements of research interests. A faculty member will be asked to act as a "mentor" for the applicant based on the statement of interest and, if necessary, a personal interview. Through this process the student's interests will be matched to the expertise available within the faculty. Moreover, the mentor also may be able to offer the student financial support if a departmental stipend is not available. Students whose interests do not correspond to those of a faculty member and/or have not identified a faculty willing to serve as a mentor, will not be admitted into the MS degree program in marine sciences.

Application forms for admission can be found at <http://www.southalabama.edu/departments/admissions/>. Applications for fellowships (see below) are obtained by writing to: Chair, Department of Marine Sciences, University of South Alabama, Mobile, AL 36688-0002 or visit the web site at <http://www.southalabama.edu/marinesciences>

### **Fellowships And Assistantships**

The Department of Marine Sciences offers a variable number of research assistantships that are sponsored by externally funded grants and contracts. The current stipend for MS students is \$17,000 per year. Additional funding for tuition fellowship may also be available through extramural grants. Information about assistantships is available from the Office of the Dean of the Graduate School, Mobile Townhouse 222, University of South Alabama, Mobile, AL 36688-0002.

### **Master Of Science (M.S.) In Marine Conservation And Resource Management**

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The MS in Marine Conservation and Resource Management is designed to provide a formal course of training and professional development in the marine sciences that will enable students to contribute to the sustainable management of marine resources. The program does not require thesis research, but instead offers professional development through group projects and professional internships with government agencies, NGOs, and environmental consulting firms. The curriculum and other requirements can accommodate students currently in the workforce.

#### **Minimum Requirements For Admission**

Applications for Fall admission are due by March 31 of each year. Enrollment normally begins in the fall semester; however spring admissions will be considered on a case by case situation. In addition to the general admissions requirements of the Graduate School, minimal requirements for admission in full standing to the MS Program in Marine Conservation and Resource Management are:

1. A baccalaureate degree in a discipline related to marine sciences (e.g., biology, chemistry, geology, physics, and engineering) or conservation biology (economics, sociology) from an accredited four year college or university
2. An undergraduate minimum grade-point average of 3.0 overall (4.0 point system)
3. A minimum score of 300 combined on the verbal and quantitative subtests of the Graduate Record Exam (GRE)

The applicant will be required to submit:

1. A completed application including a statement indicating the student's interests and professional goals
2. Official transcripts from all undergraduate institutions attended
3. Official scores from the Graduate Record Exam (General Test)

Provisional admission may be granted upon recommendation of the department chair. Full standing can be attained after conditional admission by satisfactorily completing (with a grade of no lower than "B") nine (9) semester hours of course work in marine sciences at USA.

### **Doctor Of Philosophy (Ph.D.) Program**

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The Doctor of Philosophy (Ph.D.) Program in marine sciences is designed to provide formal course work and advanced research in marine sciences that produces significant, original contributions to knowledge. The Ph.D. degree is awarded to students who have reached and formally demonstrated a level of competence and accomplishment that enables them to pursue careers as marine science professionals. The Ph.D. degree confers eligibility for many positions in academia, industry, and government. The marine sciences program offers courses and opportunities for research in multiple sub-disciplines: biological, chemical, physical, and geological oceanography as well as marine ecology and fisheries. Each student receives formal training in each of these disciplines while concentrating in a specific research area. The requirements and procedures that follow are specifically for the Department of Marine Sciences. However, the general rules and policies of the Graduate School also apply.

## Minimum Requirements For Admission

Students are normally admitted in the Fall Semester. Although applications for admission and fellowships are accepted throughout the year, application before February 1 is encouraged; beginning February 15 the admissions committee will make initial recommendations about applicants for the following Fall class, with formal letters sent to applicants by the end of April. Depending on availability of space and funding, applications may be approved and students admitted throughout the year. In addition to the general admissions requirements of the Graduate School, requirements for admission to the Marine Sciences Ph.D. program are:

1. A narrative statement indicating the student's research interests, professional goals and commitment to full-time study for completion of degree requirements
2. Three letters of recommendation
3. For students with baccalaureate degrees:
  - A. Official scores from the Graduate Record Examination General Test with a minimum score of 300 combined on the verbal and quantitative subtests
  - B. A baccalaureate degree in a discipline related to marine sciences (e.g., biology, chemistry, geology, physics) from an accredited four-year college or university
  - C. An undergraduate minimum grade-point average of 3.0 overall (A=4)
4. For students with MS degrees:
  - A. An MS degree in a discipline related to marine sciences (e.g., biology, chemistry, geology, physics) from an accredited college or university
  - B. A graduate minimum grade-point average of 3.25 overall (A=4)
5. International students must submit an official score of at least 525 on the Test of English as a Foreign Language (TOEFL), or equivalent score on computer administered tests

To ensure research compatibility between the student and the faculty in the marine sciences program, attention will be given to the statement of research interests. A faculty member will be asked to act as a mentor for the applicant based on the statement of interests and, if necessary, a personal interview. Through this process, the student's interests will be matched to the expertise available within the faculty. Moreover, the mentor may also be able to offer the student financial support if a stipend is not available. Students whose interests do not correspond to those of a particular faculty mentor, and have not identified a faculty member willing to serve as a mentor, will not be admitted into the Ph.D. degree program in marine sciences.

Application forms for admission to the program and for fellowships (see below) are obtained by writing to: Chair, Department of Marine Sciences, University of South Alabama, Mobile, AL 36688-0002.

## Fellowships And Assistantships

The Department of Marine Sciences offers at-large fellowships to Ph.D. students annually on a competitive basis. In addition, there are a variable number of doctoral assistantships that are sponsored by externally funded grants and contracts to faculty. The current stipend for Ph.D. fellowships is \$20,000 per year plus a tuition fellowship and waiver of out-of-state fees. Prospective students must submit applications by February 1 to receive consideration for at-large fellowships. Information about assistantships is available from the Office of the Dean of the Graduate School, Mobile Townhouse 222, University of South Alabama, Mobile, AL 36688-0002.

## Areas Of Study

### Degrees, Programs, Or Concentrations

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## Courses

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### Course Listing

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Marine Sciences..... 1037

## Faculty

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CARMICHAEL, RUTH H.  
Associate Professor  
BA, University of Chicago  
MA, Boston University  
PHD, Boston University

POWERS, SEAN P.  
Professor  
BS, Loyola University-New Orleans  
MS, University of New Orleans  
PHD, Texas A & M University

CEBRIAN, JUST  
Professor  
BS, University of Barcelona  
PHD, Polytech Univ of Catalonia

ROBERTSON, ALISON  
Assistant Professor  
BS, James Cook University  
BS, James Cook University  
PHD, James Cook University

DORGAN, KELLY M.  
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BS, University of CA-Santa Cruz  
PHD, University of Maine

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BA, University of Texas-Dallas  
PHD, University of Alabama

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BA, The College of New Jersey  
MS, University of Delaware  
PHD, University of Delaware

HECK, KENNETH  
Professor  
BS, University of West Florida  
MS, Florida State University  
PHD, Florida State University

KIENE, RONALD P.  
Professor  
BS, Saint Johns University  
MS, State University of New York  
PHD, State University of New York

KRAUSE, JEFFREY W.  
Assistant Professor  
BS, Long Island U-Southampton Col  
PHD, Oregon State University

LEHRTER, JOHN C.  
Associate Professor  
BS, University of North Alabama  
MS, University of Alabama  
PHD, University of Alabama

# Marine Science (MS) - Marine Conservation

## Degree Requirements

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### Master Of Science (M.S.) In Marine Conservation And Resource Management

The MS in Marine Conservation and Resource Management is designed to provide a formal course of training and professional development in the marine sciences that will enable students to contribute to the sustainable management of marine resources. The program does not require thesis research, but instead offers professional development through group projects and professional internships with government agencies, NGOs, and environmental consulting firms. The curriculum and other requirements can accommodate students currently in the workforce.

### Minimum Requirements For Admission

Applications for Fall admission are due by March 31 of each year. Enrollment normally begins in the fall semester; however spring admissions will be considered on a case by case situation. In addition to the general admissions requirements of the Graduate School, minimal requirements for admission in full standing to the MS Program in Marine Conservation and Resource Management are:

1. A baccalaureate degree in a discipline related to marine sciences (e.g., biology, chemistry, geology, physics, and engineering) or conservation biology (economics, sociology) from an accredited four year college or university.
2. An undergraduate minimum grade-point average of 3.0 overall (4.0 point system).
3. A minimum score of 300 combined on the verbal and quantitative subtests of the Graduate Record Exam (GRE).

The applicant will be required to submit:

1. A completed application including a statement indicating the student's interests and professional goals.
2. Official transcripts from all undergraduate institutions attended.
3. Official scores from the Graduate Record Exam (General Test).

Provisional admission may be granted upon recommendation of the departmental admissions committee. Full standing can be attained after conditional admission by satisfactorily completing (with a grade of no lower than "B") nine (9) semester hours of course work in marine sciences at USA.

### Degree Requirements

The Master of Science degree in Marine Conservation and Resource Management is awarded in recognition of the student's demonstrated ability to successfully complete a prescribed program of courses. Students are not required to undertake original scholarly research (thesis), but instead complete a capstone project (see below).

### General

#### Required Credit

A minimum of thirty (30) semester hours of course credit beyond the baccalaureate degree is required for students pursuing an MS degree. Details about the curriculum are given as follows.

#### Transfer Credit

A maximum of twelve (12) semester hours of graduate courses taken at another accredited university in the same (or closely related) subject as that of the masters program may be considered as part of the MS degree requirements at USA. Only grades of "A" or "B" may be accepted as transfer credits. The Chair or Graduate Coordinator will evaluate transfer credit; the transfer credit is approved by the Dean of the Graduate School only after completion of a minimum of eight semester hours of graduate course work in the MS program in marine conservation and resource management at USA.

Course work: All students must complete the four core courses of the program. At least two statistics courses will be required for the program. For students who have not had statistics courses as an undergraduate, ST 540 must be one of those courses taken. The remaining coursework (6 cr) requirement should be met through elective courses that are approved by the program coordinator.

Requirements	Course Title	Credit Hours
i. Core Curriculum Courses.		12
MAS 510	Essentials of Oceanography and Marine Biology	3 hrs
MAS 520	Marine Resource Management	3 hrs
MAS 521	Marine Conservation Biology	3 hrs
MAS 586	Marine Restoration Ecology	3 hrs
ii. Statistics (choose 2)		6
MAS 560	Marine Experimental Ecology	4 hrs
ST 540	Stats in Research	3 hrs
ST 550	Environmental Statistics	3 hrs
ST 560	Design of Experiments	3 hrs
iii. Seminars		2
MAS 592	Marine Science Seminar – Professional Development	1 hr
GIS 501	Responsible Conduct in Research/ Research Integrity	1 hr
iv. Directed Studies		
MAS 594	Directed Studies	1-4 4
Ideally these directed studies classes should be taken in Fall – Semester Year 2 –Directed Studies -Part 1; and Spring Year 2- Directed Studies Part II- Project completion		
v. Electives		6
Two courses of which at least one must be outside MAS to fulfill interdisciplinary requirement of the program must be taken.		
a) MAS courses that may be used as electives		
MAS 604	Biological Oceanography	4 hrs
MAS 602	Chemical Oceanography	4 hrs
MAS 555	Fisheries Oceanography	2 hrs
MAS 551	Quantitative Methods in Fisheries in Ecology	3 hrs
MAS 603	Geological Oceanography	4 hrs
MAS 601	Physical Oceanography	3 hrs
MAS 581	Advanced Marine Ecology	2 hrs
MAS 583	Field Marine Sciences	2 hrs
MAS 584	Oceanographic Experiences	1-3 hrs
MAS 560	Marine Experimental Ecology	4 hrs
b) Non-MAS Electives		
CE 579	Fundamentals of Environmental Engineering	3 hrs

CH 514	Environmental Chemistry	4 hrs
SY 567	Environmental Sociology	3 hrs
PHA 643	Molecular and Cellular Toxicology	3 hrs
These courses represent suggested electives. Other graduate level courses offered at USA can be used to fulfill the elective requirement provided approval of the Program coordinator is received		
d. MAS 594 directed studies. Up to four credits of directed studies may be earned once a student completes their capstone project.		

A key element of the program is the capstone project. The project is intended to allow the student to develop professional scientific skills necessary to address the complex problems facing marine and coastal systems. Students will have three options to fulfill this requirement:

1. Group project (between 4—5 individuals). Using a team approach we will encourage most of the incoming students to work as a small "think tanks" to resolve a pressing local or regional conservation or resource management problem. State, Federal and NGO agencies will be solicited for project ideas (1-2 page idea). The student group will then select from the project ideas. Through synthesis of existing literature as well as new analyses of existing data, students will develop a strategy to address the issues. Each student group will develop and maintain a project web site and allocate writing and presentation task equally among the group (the group will be supervised by a faculty member).
2. Students not able to participate in the Group project may design, with the help of the program coordinator an internship with a state/federal/ngo agency or in a research lab (including USA and DISL researchers). During the internship the student, with the help of a mentor and the program coordinator, will design a project to resolve a problem related to conservation and/or resource management. The internship should result in a paper of modest length (about the length of a journal article) and a formal presentation to the faculty. The Group projects and internships must be design to be completed in two semesters (during the second year).
3. Students may also complete the cap stone requirement by earning a professional certificate in a technical skill. For example a Geographical Information Systems (GIS) certificate.

### Time Limit

All requirements for the MS degree must be completed within five years from the date of matriculation. A student who has not satisfactorily completed a M.S. degree in a five-year period must apply for a defined extension to complete the degree. This request must be recommended by a major professor, the Chair, the Director of Graduate Studies, and approved by the Dean of the Graduate School. If the student does not complete the degree requirements in the defined extension period, the Director of Graduate Studies may recommend, and the Dean of the Graduate School may take, whatever action is necessary up to and including dismissal.

Failure to complete the work within the periods specified shall necessitate reevaluation of the student's program, and may result in a recommendation of dismissal by the Director of Graduate Studies to the Graduate Dean.

# Marine Science (MS) - Non-Thesis Option

## Degree Requirements

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### Degree Requirements

The Master of Science degree in Marine Sciences is awarded in recognition of the student's demonstrated ability to successfully complete a prescribed program of courses. It also is preferred that students undertake original scholarly research, which culminates in writing and defending an acceptable thesis.

### General

#### Required Credit

A minimum of thirty-two (32) semester hours of course credit beyond the baccalaureate degree is required for students pursuing an MS degree. Details about the curriculum are given as follows.

#### Transfer Credit

A maximum of eight (8) semester hours of graduate courses taken at another accredited university in the same (or closely related) subject as that of the masters program may be considered as part of the MS degree requirements at USA. Only grades of "A" or "B" may be accepted as transfer credits. The student's mentor (major professor), in consultation with the Chair, and if necessary, the student's advisory committee, will evaluate transfer credit; the transfer credit is approved by the Dean of the Graduate School only after completion of a minimum of eight semester hours of graduate course work in the MS program in marine sciences at USA.

#### Residence, Full-Time Study, And Continuous Registration

A minimum of two consecutive semesters of full-time study in residence is required. The residency requirements may be met at USA or the Dauphin Island Sea Lab.

Employment other than University activities directly associated with graduate study is not allowed during full-time study, unless specifically approved by the Chair.

#### Time Limit

All requirements for the MS degree must be completed within five years from the date of matriculation. A student who has not satisfactorily completed a M.S. degree in a five-year period must apply for a defined extension to complete the degree. This request must be recommended by a major professor, the Chair, the Director of Graduate Studies, and approved by the Dean of the Graduate School. If the student does not complete the degree requirements in the defined extension period, the Director of Graduate Studies may recommend, and the Dean of the Graduate School may take, whatever action is necessary up to and including dismissal.

Failure to complete the work within the periods specified shall necessitate reevaluation of the student's program, and may result in a recommendation of dismissal by the Director of Graduate Studies to the Graduate Dean.

#### Course Requirements

A field of specialization is required of all candidates for the MS degree. In addition, all students must have formal course work in at least three (3) of the following general areas of marine sciences; biological, chemical, geological, and physical oceanography. This requirement is normally met by completion of three of the four (4) core courses (see below), representing twelve (12) credit hours.

#### Core Courses

The four (4) core courses consist of four (4) semester hours each for a total of 16 semester hours in physical (MAS 601), chemical (MAS 602), geological (MAS 603), and biological oceanography (MAS 604), or equivalent transfer hours. At least two (2) semester hours of seminar (two, one (1) semester hour enrollments) are required.

The remaining course work will be determined by the student's advisory committee, but must include six (6) semester hours of marine sciences electives. Although a thesis is not an absolute requirement, this program is oriented toward research, and students will be expected to demonstrate research capability, preferably through completion of an acceptable thesis. For students

pursuing a thesis program, the MS degree program of study may include up to nine (9) hours of thesis credit toward the minimum requirements of thirty-two (32) semester hours.

Schematic of Typical Program	Credit Hours
Core Courses (3 of 4)	
MAS 601	4
MAS 602	4
MAS 603	4
MAS 604	4
Seminar (two enrollments)	2
Marine Sciences Electives (as determined by advisory committee, but at least six (6) semester hours)	6
Directed Studies	6 (maximum)
Thesis	9 (maximum)
Minimum of 32 hours	
Comprehensive examinations	
Grades of "B" or better in all core courses will satisfy the requirement of a comprehensive exam.	

### Non-thesis Program

Students pursuing the MS degree in Marine Sciences are encouraged to follow the thesis option. However, a non-thesis curriculum is available for students, upon agreement of the major professor and advisory committee, who so elect. The student will be required to complete the same degree requirements as those for a student who chooses the thesis option, with the following exceptions:

1. A thesis will not be required, consequently MAS 599 (Thesis) may not be taken, and the nine (9) semester hours normally associated with it must be earned through formal course work.
2. Course work must include all four core courses.
3. The student must take an oral comprehensive exam, to be given by the advisory committee, in addition to the written exam.
4. The student must complete MAS 594 (Directed Studies) under the direction of the major professor. The student must also have an advisory committee whose members will decide if the student's report relating to the directed study is satisfactory. The committee normally will consist of the major professor and two others. The student is required to present an open seminar about the directed study during the last semester of residency.

# Marine Science (MS) – Thesis Option

## Degree Requirements

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### Degree Requirements

The Master of Science degree in Marine Sciences is awarded in recognition of the student's demonstrated ability to successfully complete a prescribed program of courses. It also is preferred that students undertake original scholarly research, which culminates in writing and defending an acceptable thesis.

### General

#### Required Credit

A minimum of thirty-two (32) semester hours of course credit beyond the baccalaureate degree is required for students pursuing an MS degree. Details about the curriculum are given as follows.

#### Transfer Credit

A maximum of eight (8) semester hours of graduate courses taken at another accredited university in the same (or closely related) subject as that of the masters program may be considered as part of the MS degree requirements at USA. Only grades of "A" or "B" may be accepted as transfer credits. The student's mentor (major professor), in consultation with the Chair, and if necessary, the student's advisory committee, will evaluate transfer credit; the transfer credit is approved by the Dean of the Graduate School only after completion of a minimum of eight semester hours of graduate course work in the MS program in marine sciences at USA.

#### Residence, Full-Time Study, And Continuous Registration

A minimum of two consecutive semesters of full-time study in residence is required. The residency requirements may be met at USA or the Dauphin Island Sea Lab.

Employment other than University activities directly associated with graduate study is not allowed during full-time study, unless specifically approved by the Chair.

#### Time Limit

All requirements for the MS degree must be completed within five years from the date of matriculation. A student who has not satisfactorily completed a M.S. degree in a five-year period must apply for a defined extension to complete the degree. This request must be recommended by a major professor, the Chair, the Director of Graduate Studies, and approved by the Dean of the Graduate School. If the student does not complete the degree requirements in the defined extension period, the Director of Graduate Studies may recommend, and the Dean of the Graduate School may take, whatever action is necessary up to and including dismissal.

Failure to complete the work within the periods specified shall necessitate reevaluation of the student's program, and may result in a recommendation of dismissal by the Director of Graduate Studies to the Graduate Dean.

#### Course Requirements

A field of specialization is required of all candidates for the MS degree. In addition, all students must have formal course work in at least three (3) of the following general areas of marine sciences; biological, chemical, geological, and physical oceanography. This requirement is normally met by completion of three of the four (4) core courses (see below), representing twelve (12) credit hours.

#### Core Courses

The four (4) core courses consist of four (4) semester hours each for a total of 16 semester hours in physical (MAS 601), chemical (MAS 602), geological (MAS 603), and biological oceanography (MAS 604), or equivalent transfer hours. At least two (2) semester hours of seminar (two, one (1) semester hour enrollments) are required.

The remaining course work will be determined by the student's advisory committee, but must include six (6) semester hours of marine sciences electives. Although a thesis is not an absolute requirement, this program is oriented toward research, and students will be expected to demonstrate research capability, preferably through completion of an acceptable thesis. For students

pursuing a thesis program, the MS degree program of study may include up to nine (9) hours of thesis credit toward the minimum requirements of thirty-two (32) semester hours.

Schematic of Typical Program	Credit Hours
Core Courses (3 of 4)	
MAS 601	4
MAS 602	4
MAS 603	4
MAS 604	4
Seminar (two enrollments)	2
Marine Sciences Electives (as determined by advisory committee, but at least six (6) semester hours)	6
Directed Studies	6 (maximum)
Thesis	9 (maximum)
Minimum of 32 hours	
Comprehensive examinations	
Grades of "B" or better in all core courses will satisfy the requirement of a comprehensive exam.	

### Defense Of Thesis (When Applicable)

The final oral defense of the thesis is scheduled after the thesis is completed except for such revisions as may be necessary as a result of the defense. The final oral defense will not be given before all required course work has been completed or is currently in progress.

# Marine Science (Ph.D.)

## Degree Requirements

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### Doctor Of Philosophy (Ph.D.) Program

The Doctor of Philosophy (Ph.D.) Program in marine sciences is designed to provide formal course work and advanced research in marine sciences that produces significant, original contributions to knowledge. The Ph.D. degree is awarded to students who have reached and formally demonstrated a level of competence and accomplishment that enables them to pursue careers as marine science professionals. The Ph.D. degree confers eligibility for many positions in academia, industry, and government.

The marine sciences program offers courses and opportunities for research in multiple sub-disciplines: biological, chemical, physical, and geological oceanography as well as marine ecology and fisheries. Each student receives formal training in each of these disciplines while concentrating in a specific research area. The requirements and procedures that follow are specifically for the Department of Marine Sciences. However, the general rules and policies of the Graduate School also apply.

### Minimum Requirements For Admission

Students are normally admitted in the Fall Semester. Although applications for admission and fellowships are accepted throughout the year, application before February 1 is encouraged; beginning February 15 the admissions committee will make initial recommendations about applicants for the following Fall class, with formal letters sent to applicants by the end of April. Depending on availability of space and funding, applications may be approved and students admitted throughout the year. In addition to the general admissions requirements of the Graduate School, requirements for admission to the Marine Sciences Ph.D. program are:

1. A narrative statement indicating the student's research interests, professional goals and commitment to full-time study for completion of degree requirements.
2. Three letters of recommendation.
3. For students with baccalaureate degrees:
  - A. Official scores from the Graduate Record Examination General Test with a minimum score of 300 combined on the verbal and quantitative subtests.
  - B. A baccalaureate degree in a discipline related to marine sciences (e.g., biology, chemistry, geology, physics) from an accredited four-year college or university.
  - C. An undergraduate minimum grade-point average of 3.0 overall (A=4).
4. For students with MS degrees:
  - A. An MS degree in a discipline related to marine sciences (e.g., biology, chemistry, geology, physics) from an accredited college or university.
  - B. A graduate minimum grade-point average of 3.25 overall (A=4).
5. International students must submit an official score of at least 525 on the Test of English as a Foreign Language (TOEFL), or equivalent score on computer administered tests.

To ensure research compatibility between the student and the faculty in the marine sciences program, attention will be given to the statement of research interests. A faculty member will be asked to act as a mentor for the applicant based on the statement of interests and, if necessary, a personal interview. Through this process, the student's interests will be matched to the expertise available within the faculty. Moreover, the mentor may also be able to offer the student financial support if a stipend is not available. Students whose interests do not correspond to those of a particular faculty mentor, and have not identified a faculty member willing to serve as a mentor, will not be admitted into the Ph.D. degree program in marine sciences.

Application forms for admission to the program and for fellowships (see below) are obtained by writing to: Chair, Department of Marine Sciences, University of South Alabama, Mobile, AL 36688-0002.

### Fellowships And Assistantships

The Department of Marine Sciences offers at-large fellowships to Ph.D. students annually on a competitive basis. In addition, there are a variable number of doctoral assistantships that are sponsored by externally funded grants and contracts to faculty. The current stipend for Ph.D. fellowships is \$20,000 per year plus a tuition fellowship and waiver of out-of-state fees. Prospective students must submit applications by February 1 to receive consideration for departmental fellowships. Information about assistantships is available from the Office of the Dean of the Graduate School, Mobile Townhouse 222, University of South Alabama, Mobile, AL 36688-0002.

## **Degree Requirements**

The Doctor of Philosophy degree is awarded in recognition of the student's demonstrated ability to conduct original, scholarly research at the highest levels without extensive supervision. The degree is not granted upon completion of a stated amount of course work, but rather after demonstration by the student of a comprehensive knowledge and research capability in a specialized field of study. The student must demonstrate this ability in writing and by defending a dissertation based upon the results of an original investigation.

## **General**

### **Required Credit**

A minimum of 60 semester hours of approved graduate credit is required. Details about the curriculum are given below.

### **Transfer Credit**

Graduate courses taken at another accredited university, such as for students with MS degrees in the same (or a closely related) subject as that of the Ph.D. program, may be considered in the Ph.D. plan of study up to a maximum of 32 semester hours. Only grades of "A" or "B" may be accepted as transfer credit. The student's mentor, in consultation with the Chair, and if necessary, the advisory committee, will evaluate transfer credit; the transfer credit is approved by the Dean of the Graduate School only after completion of a minimum of eight semester hours of graduate course work in the doctoral program at USA.

### **Residence, Full-time Study, And Continuous Registration**

A minimum of two consecutive semesters of full-time study in residence is required. The residency requirement may be met at USA or the Dauphin Island Sea Lab.

Employment other than University activities directly associated with graduate study is not allowed during full-time study, unless specifically approved by the Chair.

### **Time Limit**

All requirements for the Ph.D. degree must be completed within eight years from the date of matriculation. A student who has not satisfactorily completed a dissertation in an eight-year period must apply for a defined extension to complete the degree. This request must be recommended by the major professor, the Chair of the Department, the Director of Graduate Studies, and approved by the Dean of the Graduate School.

If the student does not complete the degree requirements in the defined extension period, the Director of the Graduate Program may recommend and the Dean of the Graduate School may take whatever action is necessary up to and including dismissal.

The comprehensive examination must be passed within five years of the beginning of doctoral study, or within four years if the student entered with a master's degree in the same or a closely related field.

Failure to complete the work within the periods specified shall necessitate reevaluation of the student's program and may result in a recommendation for dismissal by the Director of Graduate Studies to the Graduate Dean.

## **Course Requirements**

### **Core Courses**

A field of specialization is required of all candidates for the Ph.D. degree. All students must have formal course work in all of the core marine science subdisciplines. This requirement is normally met by completion of four (4) core courses (see below) and seminar, representing eighteen (18) credit hours.

The four (4) core courses consist of four (4) semester hours each for a total of 16 semester hours in physical (MAS 601), chemical (MAS 602), geological (MAS 603), and biological oceanography (MAS 604), or equivalent transfer courses.

### **Other Required Courses**

At least 46 semester hours in courses beyond the baccalaureate degree are required in addition to the core courses, at least half of which must be taken in formal courses exclusive of directed studies or directed research. No more than 18 hours of dual-listed courses (400- and 500- level listing for the same course) may be counted toward meeting the minimum hours required for a degree. Graduate students will only receive graduate credit for the 500 level version of dual-listed courses.

At least 12 semester hours of dissertation course credit is required. Not more than 15 hours in this category can be counted toward the minimum requirement of 60 semester hours.

At least two (2) semester hours of seminar (two, one (1) semester hour enrollments) are required.

Schematic of Typical Program	Credit Hours
Core Courses (4 of 4)	16
MAS 601	4
MAS 602	4
MAS 603	4
MAS 604	4
Seminar (two enrollments)	2
Marine Science Electives at least 23	23
Directed Studies	8 (maximum)
Dissertation (1-5 per semester) 15 (maximum) at least 12	12

### Comprehensive Examinations

Written and oral examinations in marine sciences are required of all students seeking the Ph.D. degree in marine sciences. These examinations are given after at least two full years but before five full years of graduate study are completed. The written comprehensive examination is taken first and normally is more general in scope than the oral comprehensive examination. The examinations may be taken no more than twice.

### Candidacy

A doctoral student is admitted to candidacy upon passing both the written and oral comprehensive examinations and after completing all formal course work requirements. The doctoral candidate is a student who has fulfilled all preliminary requirements for the Ph.D. and has only completion of the dissertation research as the remaining requirement.

### Defense Of Dissertation

The final oral defense of the dissertation is scheduled after the dissertation is completed except for such revisions as may be necessary as a result of the defense. The final oral defense will not be given earlier than one semester after admission to candidacy and not before all required course work has been completed or is currently in progress.

# Minor In Marine Sciences

## Degree Requirements

The Department of Marine Sciences welcomes qualified students who wish to better focus their academic training towards oceanography and marine biology. The undergraduate minor in marine sciences is designed to complement many science and non-science majors offered at USA. Ocean-related science is relevant to many contemporary environmental issues and problems and central to understanding earth-system evolution, dynamics, climate and sustainability. The minor consists of courses and research opportunities offered primarily by faculty and researchers in the Department of Marine Sciences and the Dauphin Island Sea Lab.

Requirements for a Minor in Marine Sciences include a minimum of 18 hours in Marine Sciences related classes. The student must take MAS 134 Ocean Science, MAS 134L Ocean Science Lab, MAS 331 Marine Sciences I and MAS 332 Marine Science II. In addition to these core requirements, students must take 2-3 elective courses (MAS 371, MAS 367, MAS 430, MAS 451, MAS 471, MAS 475 or other electives approved by the Chair). Up to 6 hours required by a student's major may be applied toward the minor. The Marine Science minor places a strong emphasis on a rigorous natural science foundation; thus, several of the upper division courses related to the minor have prerequisites. Students planning the minor should check catalog course descriptions carefully and should meet with advising staff in the Marine Science Program office.

**If a minor is required in your degree program, at least 9 (lower and/or upper-division) hours of courses in the minor must be completed at the University.**

Minor in Marines Sciences	Credit Hours
<i>A. Required Courses</i>	10
1. MAS 134* Ocean Science (3 cr) with AS 134 L Ocean Science Lab (1 cr).	
2. MAS 331 Marine Science I (3 cr)	
3. MAS 332 Marine Science II (3 cr)	
<i>B. Electives (choose 2-3 courses, 8 credits needed).</i>	8
MAS 371 Shark and Ray Biology	
MAS 367 Marine Biology	
MAS 430 Marine Botany	
MAS 451 Marine Vertebrate Zoology	
MAS 475 Marine Ecology	
MAS 471 Marine Invertebrate Zoology	
Other DISL offered courses will be considered for elective.	
<b>Course of Study</b>	
<i>A. Freshmen/Sophomore</i>	
On Campus- MAS 134 Ocean Science (3 cr) and MAS 134L (1 cr)	
<i>B. Junior/Senior Level</i>	
On Campus - MAS 331 Advance Marine Sciences I (3 cr lecture)	

On Campus - MAS 332 Advance Marine Sciences II (3 cr lecture)

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Two-three MAS listed electives at the Dauphin Island Sea Lab (DISL).

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# Marketing And Quantitative Methods

## Department Information

Department of Marketing and Quantitative Methods	(251) 460-6412
Chair	Alvin J. Williams
Distinguished Professor of Marketing	Williams, Hair
Professor Emeritus	Lynn Robinson, Julie Sneath
Professors	Finney, Sharland
Associate Professor	Chow
Assistant Professors	Dadzie, Howard, Kim
Instructor	Loes

Department of Marketing and Quantitative Methods website  
<http://www.southalabama.edu/colleges/mcob/marketing/index.html>

Office of Student Services  
 Mitchell College of Business  
 MCOB 110  
 Phone: (251) 460-7167  
 E-mail: [mcobadviser@southalabama.edu](mailto:mcobadviser@southalabama.edu)

"Business has only two functions - marketing and innovation." - Milan Kundera

### Discover Marketing

Marketing is a dynamic process that creates and delivers value in competitive environments through customer-focused and market-driven actions. The Marketing major provides an integrative and substantive approach to marketing strategy development and implementation based on learning experiences that combine concepts and managerial practice. A well-designed, market-based curriculum allows students to experience the core of marketing through interactive courses, internships, directed study programs, and special topics courses designed to focus on specific areas of marketing interest. These goals are achieved through the Marketing Management, International Business, and Professional Sales concentrations.

### Marketing Management Concentration

The Marketing Management concentration offers a holistic view of the marketing function, with special focus on consumer analysis, value creation and delivery, marketing segmentation, and marketing strategy development and execution, within the context of changing and competitive business environments. The Marketing Management concentration prepares students for career in sales, advertising and marketing communication, retailing, supply chain management, market research and related areas. It is good preparation for positions in health care marketing, sports marketing, tourism and hospitality, non-profit marketing, financial services marketing and a host of other growth industries.

### Professional Sales Concentration

In globally-competitive organizations, sales professionals are increasingly responsible for market growth, value creation, customer relationship management, branding, and communication of product, service, and organizational benefits. The sales function is the engine that propels every aspect of the organization. The Professional Sales Concentration prepares students for rewarding careers in sales and related areas. Students completing this concentration have some proficiency in relationship selling, buyer behavior, value creation and delivery, prospecting, sales call planning, communications skills, negotiating win/win solutions, and customer relationship management.

## Supply Chain Management Concentration

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Supply Chain Management (SCM) embraces the full range of processes required to get good and services from vendors and to deliver finished products to customers worldwide. The concentration highlights the management of activities from sourcing/procurement, conversion into finished goods, and related logistics. The area encompasses the coordination and collaboration with all channel partners namely suppliers, intermediaries, third party service providers, and customers. The SCM Concentration prepares students for entry-level jobs in logistics, transportation, warehousing and distribution, purchasing/procurement, port management, supply management, demand management, and customer service.

## International Business Major

---

A degree in International Business prepares students for management positions in U.S. based companies that serve global markets and foreign based companies that provide products and services in the U.S. and other countries. Students will learn how conducting business on a global scale differs from domestic operations and will develop sensitivity and understanding of cultural differences and business etiquette to allow them to effectively negotiate and conduct business in a variety of cultures.

The curriculum requires proficiency in a foreign language and includes courses in management, marketing, economics, finance, accounting, and business law to prepare students for a variety of jobs in multinational companies.

Students majoring in International Business must participate in a study abroad experience. Short-term study abroad immersion experiences are available in the May semester and summer semester and students may also choose longer-term study abroad experiences for one or more semesters at one of our partner universities, which are accredited by the AACSB.

Students must complete an internship with an international focus. This is accomplished by completing an internship with a multinational company operating in the U.S. or by completing an internship with an U.S. or foreign based firm operating in another country.

## Proficiency In A Second Language

Students majoring in International Business are required to demonstrate introductory-level proficiency in a second language by passing a foreign language proficiency examination as administered by the University of South Alabama Department of Foreign Languages and Literature or by successfully completing the second semester of any approved elementary sequence in a foreign language.

## Areas Of Study

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### Degrees, Programs, Or Concentrations

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Marketing (BSBA)..... 615

## Courses

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### Course Listing

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Marketing..... 1043

## Faculty

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CHOW, ALAN F.  
Associate Professor  
BS, Louisiana State University  
MS, Louisiana State University  
PHD, University of South Alabama

DADZIE, CHARLENE A.  
Assistant Professor  
AB, University of Georgia  
MS, Cornell U-Ny St Statutory Cols  
PHD, University of North Texas

FINNEY, ROBERT Z.  
Professor  
BS, Auburn University  
MBA, University of Mississippi  
PHD, University of Alabama

HAIR JR., JOSEPH F.  
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BA, University of Florida  
MA, University of Florida  
PHD, University of Florida

HOWARD, MATTHEW C.  
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BA, Virginia Polytechnic Inst and  
BS, Virginia Polytechnic Inst and  
MS, Pennsylvania State University  
PHD, Pennsylvania State University

KIM, JINHAK  
Assistant Professor  
BS, Chonnam National University  
MS, Purdue University-Main Campus  
MS, Purdue University-Main Campus  
PHD, Purdue University-Main Campus

LOES, MARIANNE C.  
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BSBA, University of South Alabama  
MBA, Auburn University

SHARLAND, ALEXANDER P.  
Professor  
BA, University of Stirling  
MBA, Virginia Polytechnic Inst and  
PHD, Florida State University

WILLIAMS, ALVIN J.  
Professor  
BSBA, University of Southern Miss  
MA, University of Alabama  
PHD, University of Arkansas- Fayette

# Marketing (BSBA)

## Degree Requirements

### Marketing Concentrations

Three concentrations are available within the Marketing major: Marketing Management, Professional Sales, and Supply Chain Management. The Marketing Department also manages the International Business Major.

#### Marketing Management Concentration

The Marketing Management Concentration prepares students for entry-level positions in sales and sales management, supply chain management, retailing, advertising, and market research.

To graduate, students complete a minimum of 122 semester hours with an overall institution grade-point average (GPA) of 2.0 (38 hours of general education requirements and 84 hours of business courses). In addition, a grade of at least C is required in each of the Basic Business Techniques courses and a 2.0 GPA is required in the 300-level business core courses, and a 2.0 GPA is required for all courses counted in the Marketing Major, which include the following:

Marketing Management Concentration	Course Title	Credit Hours
MKT 336	International Marketing	3
MKT 374	Buyer Behavior	3
MKT 375	Supply Chain Management	3
MKT 380	Integrated Marketing Communication	3
MKT 382	Brand Management	3
MKT 384	Market Research	3
MKT 385	Services Marketing	3
MKT 479	Marketing Policy (W)	3
Choose one elective from the following:		3
MKT 340	Marketing Analytics	
MKT 350	Internet Marketing	
MKT 376	Business to Business Marketing	
MKT 379	Retailing	
MKT 381	Sales Management and Personal Selling	
<b>Credit hours in Marketing Management</b>		<b>27</b>

#### Supply Chain Management

The Supply Chain Management Concentration (SCM) prepares students for entry-level jobs in logistics, transportation, warehousing and distribution, purchasing/procurement, port management, supply management, demand management, and customer service.

To graduate, students complete a minimum of 122 semester hours with an overall institution grade-point average (GPA) of 2.0 (38 hours of general education requirements and 84 hours of business courses). In addition, a grade of at least C is required in each of the Basic Business Techniques courses and a 2.0 GPA is required in the 300-level business core courses, and a 2.0 GPA is required for all courses counted in the Marketing Major, which include the following:

Supply Chain Management Concentration	Course Title	Credit Hours
MKT 336	International Marketing	3
MKT 340 or MKT 355	Marketing Analytics or Customer Relationship Management	3
MKT 374	Buyer Behavior	3
MKT 375	Supply Chain Management	3
MKT 376	Business to Business Marketing	3
MKT 384	Marketing Research	3
MKT 405	Current Issues in Supply Chain Management	3
MKT 479	Marketing Policy (W)	3
Choose one elective from the following:		3
MKT 310	Introduction to International Business	
MKT 350	Internet Marketing	
MKT 381	Sales Management and Personal Selling	
MKT 385	Services Marketing	
<b>Credit hours in Supply Chain Management</b>		<b>27</b>

### Marketing- Professional Sales Concentration

Professional selling is one of the most rewarding career fields in business. Few careers allow for the flexibility, financial rewards, personal satisfaction and overall sense of achievement enjoyed by sales professionals. A high percentage of marketing and business graduates identify the sales field as a career of choice upon graduation.

In globally-competitive organizations, sales professionals are increasingly responsible for market growth, value creation, customer relationship management, branding, and communication of product, service, and organizational benefits. The sales function is the engine that propels every aspect of the organization.

After completing the sales concentration, students are competitively positioned for jobs in a cross-section of firms across the globe. Specifically, you can 'market' yourself to organizations as having some degree of proficiency in relationship selling, buyer behavior, value creation and delivery, prospecting, sales call planning, presenting the core sales message, communications skills, negotiating win/win solutions, customer relationship management, management of high-impact sales teams, and understanding of sales force performance. These skill sets are among the most widely sought of any among successful professional marketers.

To graduate, students complete a minimum of 122 semester hours with an overall institution grade-point average (GPA) of 2.0 (38 hours of general education requirements and 84 hours of business courses). In addition, a grade of at least C is required in each of the Basic Business Techniques courses and a 2.0 GPA is required in the 300-level business core courses, and a 2.0 GPA is required for all courses counted in the Marketing Major, which include the following:

Professional Sales Concentration	Course Title	Credit Hours
MKT 336	International Marketing	3
MKT 374	Buyer Behavior	3
MKT 384	Market Research	3
MKT 376	Business to Business Marketing	3
MKT 381	Sales Management and Personal Selling	3
MKT 479	Marketing Policy	3
Choose three electives from the following:		9

MKT 340	Marketing Analytics
MKT 355	Consumer Relationship Management
MKT 379	Retailing
MKT 380	Integrated Marketing Communications
MKT 382	Brand Management
MKT 385	Services Marketing
<b>Credit hours in Professional Sales</b>	
<b>27</b>	

### International Business (BSBA)

A degree in International Business prepares students for management positions in U.S. based companies that serve global markets and foreign based companies that provide products and services in the U.S. and other countries. Students will learn how conducting business on a global scale differs from domestic operations and will develop sensitivity and understanding of cultural differences and business etiquette to allow them to effectively negotiate and conduct business in a variety of cultures.

The curriculum requires proficiency in a foreign language and includes courses in management, marketing, economics, finance, accounting, and business law to prepare students for a variety of jobs in multinational companies.

Students majoring in International Business must participate in a study abroad experience. Short-term study abroad immersion experiences are available in the May semester and summer semester and students may also choose longer-term study abroad experiences for one or more semesters at one of our partner universities, which are accredited by the AACSB.

Students must complete an internship with an international focus. This is accomplished by completing an internship with a multinational company operating in the U.S. or by completing an internship with an U.S. or foreign based firm operating in another country.

### Proficiency In A Second Language

Students majoring in International Business are required to demonstrate introductory-level proficiency in a second language by passing a foreign language proficiency examination as administered by the University of South Alabama Department of Foreign Languages and Literature or by successfully completing the second semester of any approved elementary sequence in a foreign language.

International Business Major	Course Title	Credit Hours
MKT 310	Introduction to International Business	3
ECO 330	Current Global Issues	3
ECO 363	International Economics	3
FIN 332	International Finance	3
MGT 334	International Management	3
MKT 336	International Marketing	3
BUS 440	Business in Regional and Emerging Markets	3
MKT 492	Seminar in International Business	3
Choose one elective from the following:		3
MGT 462	Negotiation and Dispute Resolution	
MKT 475	Supply Chain Management	
<b>Credit hours in International Business</b>		<b>27</b>

# Mathematics And Statistics

## Department Information

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Department of Mathematics and Statistics web site  
<http://www.southalabama.edu/colleges/artsandsci/mathstat/>

### Developmental Studies

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The courses and academic support through an on-demand tutoring center offered by the developmental studies in mathematics provide students with the opportunity to strengthen the basic mathematical skills necessary to progress to college-level mathematics courses.

Credits earned in courses with a DS prefix do not meet degree requirements within the University. The credits earned do carry institutional, non-degree credit and allow students to qualify for financial aid. Grades earned are computed into the overall GPA in most colleges and hours are counted toward classification (sophomore, etc.). Credits earned in courses with a MTH prefix count as free electives.

#### Math Lab Information

Location

The Math Technology Lab is located in ASC 1301.

Resources:

- 137 computer workstations with Internet access
- Separate testing area and private tutoring rooms
- Study room for one-on-one or group tutoring
- Tutors and instructors available during all operating hours to assist students

### Undergraduate Studies

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The purpose of the Department of Mathematics and Statistics is to provide a well-rounded program for students majoring in the mathematical sciences and to fulfill the mathematical science needs of students in other fields of study. To this end, the department emphasizes excellence in teaching, and encourages the professional growth of its faculty through study, research, and consulting.

The Department offers a major leading to the Bachelor of Science Degree in Mathematics and Statistics. We also offer a minor in mathematics and a minor in applied statistics. Students pursuing a degree in Mathematics and Statistics also must have a minor in another discipline.

All first-time freshmen must successfully complete CAS 100: First Year Experience as a degree requirement. Students must enroll during their first term at USA, except for summer-entry students who must enroll in the fall semester following entry. ST 335 will fulfill the technology proficiency requirement.

#### Where To Begin In The Mathematics Courses

Students must begin at the proper level and in the proper track in mathematics. Students who lack college level credit in mathematics should take the placement exam at least 48 hours prior to registering for a mathematics course. Students must call (251) 460-6264 to register to take the test. Times and days of the test are available at the department website.

### Graduate Studies

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A Master of Science degree in Mathematics is offered by the Department of Mathematics and Statistics. The program has been designed to meet the varied needs and goals of most students seeking advanced degrees in mathematics. The course of study accommodates students interested in traditional and modern mathematics, applied mathematics, statistics, and computer science.

## Requirements For Admission

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Students are admitted each semester. The following criteria supplement the Graduate School criteria (see Categories of Admission).

### Regular Admission

1. A bachelor's degree in mathematics or in a mathematics-related field from an accredited institution of higher education with a concentration of upper-level mathematics courses including a sequence in advanced calculus or real analysis.
2. Submission of scores on the General Test of the Graduate Record Examination. A minimum combined score of 297 (or 1000 on exam taken prior to July 2011 - good till July 2016) on the verbal and quantitative sections or a minimum score of 148 (or 600 on exam taken prior to July 2011 - good until July 2016) on the quantitative section (without regard to the score on the verbal section). An advanced degree or other standardized test score may be considered in lieu of a GRE score.

### Provisional Admission

Applicants who do not meet all requirements for regular admission, but who do meet the Graduate School requirements for provisional admission, will be considered for provisional admission. Applicants must have an undergraduate major in mathematics or a closely related field with a concentration of upper-level mathematics courses. Applicants who are deficient in their undergraduate preparation may be denied admission or may be required to take undergraduate courses in the areas of deficiency without graduate credit in addition to the normal degree requirements listed below.

### Non-Degree Admission

Applicants who do not meet all the conditions for provisional admission or who are not interested in earning a graduate degree may apply for non-degree admission. Adequate undergraduate preparation in mathematics which indicates a reasonable chance of success in graduate mathematics courses is required for non-degree admission. After admission, permission of the department graduate coordinator is required for each course taken. In cases where undergraduate preparation is inadequate for a particular graduate course, a plan of study including additional undergraduate courses can be worked out in consultation with the graduate coordinator.

### Graduate Assistantships

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Graduate students holding assistantships are usually assigned duties such as tutoring or supervising recitation sections in the Department of Mathematics and Statistics. Awards are normally made for the academic year, but positions occasionally become available during the year. An assistantship application can be obtained from the Graduate Coordinator in the department and online. Three letters of recommendation sent directly to the Graduate Coordinator are required. Graduate Assistants are required to enroll in MA 592 (Seminar) each semester.

### Policies And Procedures

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The document "Department Policies and Procedures for the MS Degree Program in Mathematics" is posted on the departmental web site. It contains details concerning advising, the comprehensive examination, graduate assistant duties, student meetings and colloquia.

## Areas Of Study

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### Degrees, Programs, Or Concentrations

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# Courses

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Mathematics.....	1052
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## Faculty

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BS, Univ of Colombo  
MS, Louisiana State University  
PHD, Louisiana State University

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BS, Spring Hill College  
MS, University of South Alabama

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BS, University of South Alabama  
MED, University of South Alabama

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MS, University of Szeged  
PHD, University of South Florida  
PHD, University of Szeged

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MS, Marien Ngouabi University  
MS, Internatl Centre for Theo Phys  
PHD, Auburn University

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BS, University of South Alabama  
MED, University of South Alabama

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BA, University of California-Berk  
MA, University of California-Berk  
PHD, University of California-Berk

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PHD, University of Notre Dame

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PHD, Yale University

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BS, Kakatiya University  
MS, Osmania University

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BS, Auburn University  
MS, Auburn University  
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MS, University of South Alabama  
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MS, University of Florida  
PHD, Kansas State University

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BS, University of South Alabama  
MS, University of South Alabama

FARMER, SONNA L.  
Senior Instructor  
BS, Mississippi State University  
MS, Mississippi State University

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MA, Univ Hamburg  
DNS, Univ Hamburg

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BA, Thomas A Edison State College  
MS, University of South Alabama

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BS, University of Florida  
MS, Louisiana State University

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BS, Univ of Toronto  
MS, Univ of Toronto  
PHD, York University

LEWIS, ANDREW M.  
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MA, Washington University  
PHD, Washington University

LIN, CHRISTOPHER C.  
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MS, University of California-Irvin  
PHD, University of California-Irvin

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BS, Univ of Sc and Tech of China  
MS, Univ of Sc and Tech of China  
PHD, Case Western Reserve U

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BS, University of Mumbai  
MS, University of Mumbai  
PHD, Oklahoma State University

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XCTF, Immaculata College  
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000000, Johns Hopkins University  
BA, University of Bucharest  
MPHIL, University of Pennsylvania  
PHD, University of Southern CA

PAVELESCU, ELENA  
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MS, University of Mass-Amherst  
PHD, University of Mass-Amherst

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Professor  
MS, Moscow State University  
PHD, Steklov Mathematical Institute  
DSC, Steklov Mathematical Institute

STRAUB, ARMIN  
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PHD, Tulane University

TULAPURKAR MISHRA, NUTAN  
Associate Professor  
BS, Devi Ahilya Vishwavidyalaya  
MS, Devi Ahilya Vishwavidyalaya  
PHD, Devi Ahilya Vishwavidyalaya  
MS, University of South Alabama

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BS, University of South Alabama  
MS, University of South Alabama

# Minor In Applied Statistics

## Degree Requirements

If a minor is required in your degree program, at least 9 (lower and/or upper-division) semester hours of courses in the minor must be completed at the University.

Minor in Applied Statistics	Credit Hours
Requirements	18
ST 210 OR ST 315 (not both)	
ST 335	
ST 340	
At least three courses selected from:	
ST 345	
ST 350	
ST 355	
ST 415	
ST 425	
ST 450	
ST 475	
ST 460	
MA 451	
ST 550	
One statistics oriented course from any other discipline may be counted toward this requirement with the approval from the department chair.	

### Where To Begin In The Mathematics Courses

Students must begin at the proper level and in the proper track in mathematics. Students who lack college level credit in mathematics should take the placement exam at least 48 hours prior to registering for a mathematics course. Students must call (251) 460-6264 to register to take the test. Times and days of the test are available at the department website.

**Note 1.** To Avoid Duplication:

1. Credit for both MA 112 and MA 115 is not allowed.
2. Credit for both MA 113 and MA 115 is not allowed.
3. Credit for both MA 120 and MA 125 is not allowed.
4. Students may receive credit for only one of the following: ST 310, ST 315 or ST 320.

**Note 2.** MA 110 is not a prerequisite course for any other course required by mathematics and statistics major.

# Mathematics (MS) - Non-Thesis Option

## Degree Requirements

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### Mathematics (Non-Thesis)

A minimum of 32 semester hours of course work including MA 535 and MA 536.

In addition to MA 535 and MA 536, at least one two-course sequence must be completed.

Complete a comprehensive examination covering a collection of courses specified by the graduate coordinator.

Complete MA 592 (Seminar) during at least two semesters.

MA 501, MA 502, MA 503, MA 504, MA 505, MA 506 do not satisfy degree requirements.

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### Policies And Procedures

The document "Department Policies and Procedures for the MS Degree Program in Mathematics" is posted on the departmental web site. It contains details concerning advising, the comprehensive examination, graduate assistant duties, student meetings and colloquia.

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# Mathematics (MS) - Non-Thesis Option With Computer Science Emphasis

## Degree Requirements

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### Computer Science Emphasis (Non-Thesis)

A minimum of 23 semester hours of Mathematics courses including MA 535 and MA 536.

MA 521 or MA 525.

A minimum of 9 semester hours of Computer Science courses approved by the Mathematics Graduate Committee.

Complete a comprehensive examination covering a collection of courses specified by the Graduate Coordinator.

Complete MA 592 (Seminar) during at least two semesters.

MA 501, MA 502, MA 503, MA 504, MA 505, MA 506 do not satisfy degree requirements except as stated below.

### Policies And Procedures

The document "Department Policies and Procedures for the MS Degree Program in Mathematics" is posted on the departmental web site. It contains details concerning advising, the comprehensive examination, graduate assistant duties, student meetings and colloquia.

# Mathematics (MS) - Thesis Option

## Degree Requirements

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### Mathematics (Thesis Option)

A minimum of 32 semester hours of course work including MA 535, MA 536 and MA 599.

In addition to MA 535 and MA 536, at least one two-course sequence must be completed.

Complete a thesis. A maximum of six semester hours of credit will be granted for the thesis. A student may not enroll in MA 599 (Thesis) until a thesis prospectus has been approved by the Graduate Coordinator and the Director of Graduate Studies in the College of Arts and Sciences.

Complete a comprehensive examination covering a collection of course work specified by the Graduate Coordinator.

Complete MA 592 (Seminar) during at least two semesters.

MA 501, MA 502, MA 503, MA 504, MA 505, MA 506 do not satisfy degree requirements.

### Policies And Procedures

The document "Department Policies and Procedures for the MS Degree Program in Mathematics" is posted on the departmental web site. It contains details concerning advising, the comprehensive examination, graduate assistant duties, student meetings and colloquia.

# Minor In Mathematics

## Degree Requirements

If a minor is required in your degree program, at least 9 (lower and/or upper-division) hours of courses in the minor must be completed at the University.

### Requirements for the Minor in Mathematics are:

The requirements for a minor in mathematics are:

MA 125

MA 126

Plus four additional courses from among the following courses.

MA 227

MA 237

MA 238

MA 267

MA 311

MA 316

MA 320

MA 321

MA 332

MA 334

MA 335

MA 354

MA 367

MA 410

MA 413

MA 414

MA 434

MA 436

MA 437

MA 451

MA 458

MA 467

MA 481

MA 490

ST 315

At least two of the courses chosen for the minor must be 300 level or higher.

### **Where To Begin In The Mathematics Courses**

Students must begin at the proper level and in the proper track in mathematics. Students who lack college level credit in mathematics should take the placement exam at least 48 hours prior to registering for a mathematics course. Students must call (251) 460-6264 to register to take the test. Times and days of the test are available at the department website.

#### **Note 1: To Avoid Duplication:**

1. Credit for both MA 112 and MA 115 is not allowed.
2. Credit for both MA 113 and MA 115 is not allowed.
3. Credit for both MA 120 and MA 125 is not allowed.
4. Students may receive credit for only one of the following: ST 310, ST 315 or ST 320.

**Note 2: MA 110 is not a prerequisite course for any other course required by mathematics and statistics major.**

# Mathematics And Statistics Major (BS)

## Degree Requirements

Majors in Arts and Sciences may be completed with a minimum of 120 semester hours unless designated otherwise. At least 30 hours of course work, which represents 25% of the required 120 hours, must be at the upper division level in order to fulfill the University's residency requirement. At least 15 of the 30 upper-division hours must be in the major or concentration area. An overall grade-point-average (GPA) of 2.0 is required for graduation. In addition, a minimum GPA of 2.0 is required in the student's major or concentration area.

The core requirements for this major provide the student with a balanced program of undergraduate mathematics and statistics in areas that have proven applications. The program produces a graduate who is employable based on good inductive and deductive inferential, problem formulating and solving, and communication skills.

Requirements for the Major are:	
Introductory courses:	
Calculus I	MA 125
Calculus II	MA 126
Statistics	ST 210 OR ST 315
Intermediate courses:	
Multivariable Calculus	MA 227
Linear Algebra	MA 237
Quantitative modeling courses:	
Differential Equations	MA 238
Regression	ST 335
Upper division courses:	
21 additional hours of 300 level or above courses in mathematics or statistics, including at least three courses chosen from MA 334; MA 335, or 400 and 500 level courses.	
Students who wish to concentrate in a specific area should choose these additional courses accordingly.	
Recommended concentrations are available at <a href="http://www.southalabama.edu/mathstat/css-undergrad.shtml">http://www.southalabama.edu/mathstat/css-undergrad.shtml</a>	
Students in the major are encouraged to take MA 320 as soon as possible after taking MA 125.	
The program also requires an approved minor.	

### General Education Requirements For Mathematics And Statistics Majors

General Education Requirements for Mathematics and Statistics are specified on the College of Arts and Sciences section. Note that the Mathematics section of Area III is satisfied by the major requirements specified above.

### Where To Begin In The Mathematics Courses

Students must begin at the proper level and in the proper track in mathematics. Students who lack college level credit in mathematics should take the placement exam at least 48 hours prior to registering for a mathematics course. Students must call (251) 460-6264 to register to take the test. Times and days of the test are available at the department website.

### Note 1: To Avoid Duplication:

1. Credit for both MA 112 and MA 115 is not allowed.
2. Credit for both MA 113 and MA 115 is not allowed.
3. Credit for both MA 120 and MA 125 is not allowed.
4. Students may receive credit for only one of the following: ST 310, ST 315 or ST 320.

**Note 2: MA 110 is not a prerequisite course for any other course required by mathematics and statistics major.**

# Mechanical Engineering

## Department Information

Department of Mechanical Engineering	(251) 460-6168
Chair	David A. Nelson
Professors	Hsiao, Nelson, Phan
Associate Professors	Cauley
Assistant Professors	Kar, Kim, Montalvo, Poole, Richardson, Tambe, Yazdani
Professors Emeritus	Donovan, Engin
Instructors	Northington, Kramer, Roberts

Department of Mechanical Engineering web site

<http://www.southalabama.edu/colleges/engineering/me/index.html>

Mechanical Engineering is one of the broadest engineering disciplines. Mechanical engineers invent, analyze and design systems that produce power or convert energy. This encompasses such diverse applications as designing next-generation aircraft and automobiles, inventing novel methods of generating energy from renewable sources, and developing sophisticated new medical devices and systems. Mechanical engineers are in the forefront of exciting new technological fields, including nano-engineering, biomedical engineering, and energy research.

The basic fields of study for mechanical engineers include:

- Materials science, which is the study of the relationship between structure, properties, and processing of materials.
- Thermodynamics and heat transfer deal with basic concepts and applications of work, energy, and power. Applications include power generation from fossil fuels, from renewable sources (solar, wind energy) and fuel cells.
- Engineering mechanics is the study of static and dynamic effects of forces applied to rigid and flexible solid bodies.
- Fluid mechanics, the study of the forces and motions of liquids and gases. Included in this area of study are hydraulics, gas dynamics, aerodynamics, and design and application of pumps, compressors, and turbines.
- Control systems including studies of transient and steady-state response of systems to external inputs.
- Design synthesis which integrates all fields of engineering in the production of safe, practical, efficient, and economically feasible solutions to real problems.

All BSME students complete a senior-year "capstone" design project, in which a team of students defines and solves a unique, real-world engineering problem.

The curriculum leading to the Bachelor of Science in Mechanical Engineering (BSME) is designed so that graduates can work in any Mechanical Engineering field, or continue their educations at the graduate level.

BSME Program Educational Objectives:

Alumni of the Bachelor of Science in Mechanical Engineering (BSME) program should demonstrate the following traits and accomplishments within five years following graduation:

1. Graduates will achieve professional advancements or promotions with progressively higher levels of responsibility, competency, professional and ethical judgment and analysis. They will apply creative and innovative techniques to solve significant problems. They will apply team assimilation skills to successfully manage cross-disciplinary, collaborative projects that require global and multicultural perspectives.
2. Graduates will demonstrate effective written and oral communication skills in presenting, documenting and conveying their work. They will use these skills in creating and supporting new or improved designs, inventions, and intellectual property, thereby contributing to the social, economic, and environmental well-being of local and global communications.

3. Graduates will demonstrate commitment to lifelong and continuous professional development through activities such as mentoring, participating in professional societies, completing advanced degrees and achieving professional registration or other certifications.

Mechanical Engineering graduates will accomplish these objectives in the course of professional employment, entrepreneurship, military or public service and postgraduate education.

#### **BSME Student Outcomes:**

By the time of graduation from the BSME program, a student will have demonstrated attainment of the following outcomes:

- a. An ability to apply knowledge of mathematics, science, and engineering.
- b. An ability to design and conduct experiments, as well as to analyze and interpret data.
- c. An ability to design a system, component or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability.
- d. An ability to function on multidisciplinary teams.
- e. An ability to identify, formulate, and solve engineering problems.
- f. An understanding of professional and ethical responsibility.
- g. An ability to communicate effectively.
- h. The broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context.
- i. A recognition of the need for, and an ability to engage in life-long learning.
- j. A knowledge of contemporary issues.
- k. An ability to use techniques, skills, and modern engineering tools necessary engineering practice.

**The BSME curriculum is designed to ensure the attainment of the student outcomes.**

The Bachelor of Science in Mechanical Engineering program is accredited by the Engineering Accreditation Commission of ABET, <http://www.abet.org>.

#### **Exam-Complaint Calculator Policy**

Every Mechanical Engineering (ME) student must have an exam-compliant calculator for use in those ME courses which allow calculator usage. Only those calculators which are acceptable for use in the Fundamentals of Engineering (FE) exam are considered to be exam-compliant and may be used in those Mechanical Engineering classes which allow calculator usage. Use of a calculator which is NOT exam complaint in an ME test, quiz, or exam will be considered to be in academic misconduct. For a list of exam-complaint calculator models, see <http://ncees.org/exams/calculator/>.

## **Areas Of Study**

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### **Degrees, Programs, Or Concentrations**

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Doctor of Philosophy (Ph.D.) in Biomedical Engineering/ Basic Medical Sciences .....	633
Mechanical Engineering (BS).....	634
Mechanical Engineering (MS).....	640

## **Courses**

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### **Course Listing**

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Engineering.....	969
Mechanical Engineering.....	1059
Systems Engineering.....	1151

## Faculty

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CAULEY, LANIER S.

Associate Professor

BS, Virginia Polytechnic Inst and  
MS, Virginia Polytechnic Inst and  
PHD, Clemson University

CLOUTIER, ROBERT J.

Professor

BS, United States Naval Academy  
MBA, Eastern University  
PHD, Stevens Inst of Technology

HSIAO, KUANG-TING

Professor

BS, Natl Taiwan University  
PHD, University of Delaware

KAR, JULIA

Assistant Professor

ME, The University of Auckland  
MS, University of Louisville  
PHD, University of Louisville

KIM, HEE SEOK

Assistant Professor

BSME, Sungkyunkwan Univ - Korea  
MSME, Sungkyunkwan Univ - Korea  
PHD, University of Washington

LESTER, HENRY D.

Assistant Professor

BS, Embry-Riddle Aeronautical U  
MS, University of Arkansas- Fayette  
MSCE, University of Alabama  
MS, University of Alabama  
PHD, University of Alabama

MONTALVO, CARLOS J.

Assistant Professor

BS, Georgia Inst of Tech - Main  
MS, Georgia Inst of Tech - Main  
PHD, Georgia Inst of Tech - Main

NELSON, DAVID A.

Professor

BS, Duke University  
MS, Ohio State U-Main Campus  
PHD, Duke University

NORTHINGTON, JAY S.

Instructor

BSME, Auburn University  
MSME, Auburn University

PHAN, ANH-VU

Professor

BS, Ho Chi Minh City Univ of Tech  
MS, Grenoble Inst of Technology  
PHD, University of Montreal

POOLE, GREGORY M.

Assistant Professor

BS, University of Alabama  
MS, University of Alabama  
PHD, University of Alabama

RICHARDSON, JOSEPH D.

Assistant Professor

BSME, University of Mississippi  
MS, University of Mississippi  
PHD, Vanderbilt University

TAMBE, DHANANJAY T.

Assistant Professor

MS, Brown University  
PHD, Brown University

YAZDANI, SAAMI K.

Assistant Professor

BS, Virginia Polytechnic Inst and  
MS, Virginia Polytechnic Inst and  
PHD, Wake Forest University

# Doctor Of Philosophy (Ph.D.) In Biomedical Engineering/ Basic Medical Sciences

## Degree Requirements

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Students may pursue a doctorate in Biomedical Engineering through the Interdisciplinary Graduate Program in Basic Medical Sciences. This program is offered in collaboration with faculty of the USA College of Medicine. The program combines an interdisciplinary core curriculum with advanced coursework and research in biomedical engineering.

Students must meet requirements established for the Basic Medical Sciences graduate program in the College of Medicine. Prospective students should contact Dr. Silas Leavesley, Director, Biomedical Engineering Graduate Program.

# Mechanical Engineering (BS)

## Degree Requirements

First Year		Credit Hours
Fall		16
EH 101	3 hrs	
MA 125	4 hrs	
CH 131	4 hrs	
EG 101	2 hrs	
Gen Ed*	3 hrs	
Spring		17
EH 102	3 hrs	
MA 126	4 hrs	
PH 201	4 hrs	
CA 110	3 hrs	
ME 135	3 hrs	
Second Year		Credit Hours
Fall		17
MA 227	4 hrs	
MA 237	3 hrs	
PH 202	4 hrs	
EG 283	3 hrs	
Gen Ed*	3 hrs	
Spring		15
MA 238	3 hrs	
EG 220	3 hrs	
EG 231	3 hrs	
EG 284	3 hrs	
EG 315	3 hrs	
Third Year		Credit Hours
Fall		16
EG 270	3 hrs	
EG 360	3 hrs	
ME 326	3 hrs	

ME 328	4 hrs
Science Elect+	3 hrs
Spring	
	16
ME 312	3 hrs
ME 314	3 hrs
ME 316	3 hrs
ME 317	3 hrs
ME 336	1 hr
Gen Ed	3 hrs
<b>Fourth Year*****</b>	
<b>Credit Hours</b>	
Fall	
	14
ME 412	1 hr
ME 410	3 hrs
ME 426	3 hrs
ME 429	1 hr
Gen Ed	3 hrs
Tech Elect I***	3 hrs
Tech Elect II***	3 hrs
Spring	
	15
ME 414	1 hr
ME 416	2 hr
ME 472	3 hrs
ME Elect I**	3 hrs
ME Elect II**	3 hrs
Gen Ed*	3 hrs

General education requirements consist of nine (9) credit hours in Humanities and nine (9) credit hours in Social Sciences. Humanities credits must include one approved literature course, one approved fine arts course, and CA 110 (Public Speaking). Social Sciences credits must include one approved history course, one approved social and behavioral science course, and one course from either history or social and behavioral sciences.

\*Select from the list of approved science electives

\*Select from the list of approved technical electives

\*\*Select from the list of approved Mechanical Engineering electives

### Professional Component Standing (PCS)

It is important that students make adequate progress in the Mechanical Engineering program. Satisfactory completion of a set of fundamental courses is required before a student is allowed to take advanced courses. Professional Component Standing (PCS) is awarded by the chair of the department when the student completes the College of Engineering PCS requirements and the ECE departmental PCS requirements.

Mechanical Engineering PCS Courses			
Course Number	Course Title	Credit Hours	Minimum Grade
MA 227	Calculus III	3	C
MA 237	Linear Algebra I	3	C
PH 202	Calculus-Based Physics II + Lab	4	C
EG 283	Statics	3	C
ME 135	Engr Graphics and Comm	3	C

College of Engineering PCS Courses			
Course Number	Course Title	Credit Hours	Minimum Grade
EH 101	English Composition I	3	C
EH 102	English Composition II	3	C
CH 131	General Chemistry I + Lab	4	C
MA 125	Calculus I	4	C
MA 126	Calculus II	4	C
PH 201	Calculus-Based Physics I + Lab	4	C

Students who fail to maintain at least a 2.00 GPA overall at the University of South Alabama will lose PCS and may be required to take or repeat appropriate courses as specified by the department chair to correct their deficiencies and may not be permitted to continue in 300- and 400-level engineering courses.

## Major Milestones

### MECHANICAL ENGINEERING SAMPLE 4-YEAR PLAN WITH MILESTONES

Term 1	Course Description	Pre-req	Cr Hrs	Milestone Notes
EH 101*	English Composition I		3	Must complete at least 12 hours with a 2.0 or higher GPA
MA 125	Calculus I	ACT Math 27	4	
CH 131/131L	General Chemistry I	ACT Math 24	4	
EG 101	Freshman Seminar	ACT Math 24	2	
<b>Fine Arts Elective</b>			3	
			<b>16</b>	

Term 2	Course Description	Pre-req	Cr Hrs	Milestone Notes
EH 102	English Composition II	EH 101 or test score	3	MA 125
MA 126	Calculus II	MA 125	4	CH 131/131L
PH 201/201L	Physics I	MA 125 and MA 126 (cc)	4	EH 101 or EH 105*
ME 135	Engineering Graphics and Communication	MA 125 (cc)	3	
<b>History (US or Western Civ.)</b>			3	
			<b>17</b>	

Term 3	Course Description	Pre-req	Cr Hrs	Milestone Notes
MA 227	Calculus III	MA 126	4	PH 201/201L
MA 237	Linear Algebra I	MA 126	3	MA 126
PH 202/202L	Physics II	PH 201	4	EH 102
EG 283	Statics	MA 126 and PH 201	3	ME 135
<b>CA 110</b>			3	
			<b>17</b>	

Term 4	Course Description	Pre-req	Cr Hrs	Milestone Notes
MA 238	Differential Equations	MA 227 (cc)	3	MA 227
EG 284	Dynamics	EG 283	3	PH 202/202L
EG 315	Mechanics of Materials	EG 283 and MA 227	3	EG 283
EG 231	Engineering Economics and Ethics	EG 283	3	MA 237
EG 220	Electrical Circuits	PH 202	3	
			<b>15</b>	

Term 5	Course Description	Pre-req	Cr Hrs	Milestone Notes
EG 360	Fluid Mechanics	EG 284 and MA 238	3	MA 238
ME 326	Materials Science	EG 315	3	
Science Elective	See advisor for approved course list		3	
EG 270	Thermodynamics	PH 201 and	3	

		MA 126		
ME 328	Mechanical Analysis II	MA 227 and MA 238	4	
				<b>16</b>

Term 6	Course Description	Pre-req	Cr Hrs	Milestone Notes
ME 317	Heat Transfer	EG 270, EG 360, and ME 328	3	Apply for graduation
ME 336 (W)	Materials Science Lab	ME 326	1	Apply for FE Exam
ME 314	Machine Component Design	EG 284 and EG 315	3	
ME 312	ME Thermodynamics	EG 270	3	
ME 316	Instrumentation and Experimental Method	MA 238 and EG 220	3	
<b>English Literature</b>			3	
				<b>16</b>

Term 7	Course Description	Pre-req	Cr Hrs	Milestone Notes
ME 410 (W)	Principles of Design	ME 314	3	FE Exam
ME 429	Controls and Instrumentation Lab		1	
ME 426	Controls	ME 316	3	
ME 412	Thermodynamics Lab	ME 316	1	
Technical Elective I	See advisor for approved course list		3	
Technical Elective II	See advisor for approved course list		3	
<b>Social/ Behavioral Elective</b>			3	
				<b>14</b>

Term 8	Course Description	Pre-req	Cr Hrs	Milestone Notes
ME 414	Capstone II	ME 410	1	
ME 416	Capstone Project	ME 410	2	
ME Elective I	See advisor for approved course list		3	
ME Elective II	See advisor for approved course list		3	

ME 472	Vibrations	EG 284, EG 315, and ME 316	3
<b>Social/ Behavioral Elective</b>			3
			<b>15</b>
		<b>**TOTAL</b>	<b>126</b>

All bolded courses meet general education requirements.

Courses listed as Milestones are required to obtain the Professional Component Standing (PCS).

Prerequisite courses denoted (cc) may be taken concurrently.

\*Students who earn an English ACT score of 27, or a written SAT score of 550, can opt out of EH 101.

\*\*Students not Term 1 - Calculus I ready will exceed the 126 hours required for this degree. If math is not started prior to Fall -Year 1, you are likely extending your four-year graduation time table. Students with ACT Math scores 21 and below should begin math courses in the summer before Fall - Year 1.

Two designated writing (W) courses are required with at least one course chosen from offerings in the student's major or minor. Courses carrying this required credit are identified in the University Bulletin by a (W) after the course title.

The Sample 4-year plan is designed as a guide for students preparing for their course selections. This information provides only a suggested schedule. Actual course selections should be made in consultation with an advisor.

# Mechanical Engineering (MS)

## Degree Requirements

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Admission and MS Degree requirements in Mechanical Engineering as well as three plans of study (thesis option, project option, course work only option) are stated at the beginning under College of Engineering section. Some graduate courses in Mechanical Engineering are offered at night for the benefit of full-time employed engineers within commuting distance of the campus.

The program leading to the degree of Master of Science in Mechanical Engineering has several possible specializations: biomechanics, materials engineering, heat transfer, fluid mechanics, computational mechanics, vibrations, dynamics, simulation and controls.

### Admission To The MSME Program

The following criteria supplement the College of Engineering admission criteria ([see Admission To Graduate Programs](#)):

#### I. Regular Admission

- A. A grade-point average of 3.0 or greater (A=4.0) on all undergraduate work is required.
- B. A minimum of 151 on the quantitative GRE and a minimum score of 138 on the verbal GRE are required.
- C. For foreign students, a minimum score of 79 on the internet-based TOEFL or a minimum IELTS band score of 6.5 is required.

#### II. Provisional Admission

- A. A minimum grade-point average of 2.5 (A=4.0) on all undergraduate work is required.
- B. A minimum score of 151 on the quantitative GRE and a minimum score of 138 on the verbal GRE are required.
- C. For foreign students, a minimum score of 79 on the internet-based TOEFL or a minimum IELTS band score of 6.5 is required.

Applicants to the MSME program must submit official scores on the Graduate Record Exam (GRE). This requirement is waived for students who received the BSME degree from USA. Those students may need to present GRE scores to be eligible for some assistantships or fellowships however.

### Degree Requirements For MSME

The minimum credit hour requirements for the different options pertaining to the MSME degree are:

- Thesis Option: 31 credit hours
- Project Option: 34 credit hours
- Course Option: 33 credit hours

Master of Science students in Mechanical Engineering must complete at least three approved core courses, including one in solid mechanics, one in fluid mechanics, and one in thermal sciences. Students in the Course Work or Project Option must take a fourth core course which may be selected from any of the three areas mentioned above. All candidates for the MSME degree also must complete MA 507 and MA 508. Students selecting the project or thesis option must complete EG 501.

# Military Science

## Department Information

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Department of Military Science website  
<http://www.southalabama.edu/armyrotc>

### Military Science

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Our Mission: To commission the future officer leadership of the United States Army. The Military Science Department offers a progressive program which will enhance student education regardless of academic endeavor. The program is designed to improve the leadership abilities of students, develop managerial skills, inform students concerning the roles, missions, and capabilities of the Army, and train qualified ROTC students to become commissioned officers in the National Guard, U.S. Army Reserve, or the U.S. Army. Military Science is an accredited field of minor study. National Guardsmen, reservists, veterans and former JROTC students may receive advanced placement by requesting it through the department chair.

### Requirements For Enrollment And Continuance

The general requirements for enrollment and continuance in the Army ROTC program are as follows:

1. Basic course students must:
  - Be a citizen of the United States
  - Be physically qualified
  - Have freshman or sophomore standing. Students with higher standing require consent of PMS.
2. Basic course Cadets applying for enrollment in the advanced course who seek a commission must:
  - Have successfully completed MS 101, MS 102, MS 201, MS 202 or have accomplished one of the following: prior military service, ROTC basic military studies; Cadet Initial Entry Training; three-year high school JROTC basic course.
  - Have two years remaining at the university (either undergraduate, graduate or in pursuit of additional course work).
  - Have completed a minimum of 30 hours to contract.
  - Be under 31 years old during year of graduation and commissioning (waiverable to 39).
  - Be enrolled as a full-time student, either at the University of South Alabama, or affiliate college or university.
  - Meet military screening and physical requirements.
  - Maintain a minimum 2.0 G.P.A.
  - Maintain B average in military science and leadership courses.

Regularly enrolled students who meet the academic prerequisites may take individual courses as electives with the permission of the department head and academic advisor.

### Basic Course

The purpose of the Army ROTC Basic Course is to introduce students to Army ROTC, to give them general information about the Army and to introduce them to basic skills which have both military and civilian application. Courses and practical exercises in land navigation, orienteering, and leadership round out the student's academic life, provide a challenge, develop confidence, and break the classroom monotony. With this initial exposure, the students will have experience upon which to base their decisions to continue into the Advanced Course and into the Army as commissioned officers. There is no military obligation in connection with the Basic Course. Basic Course scholarship students earn \$300-\$350 a month upon contracting. Contracted cadets are required to pass an Army Physical Fitness Test and meet the Army Height and Weight standards at least once a semester.

MS I (MS 101-102). Meets for one hour per week. Students are required to attend a two hour leadership lab every week and are encouraged to attend physical training lab three times per week for 1 hour per session. During leadership laboratory, students will participate in adventure training, and other military activities.

MS II (MS 201-202). Meets for two hours per week. All students are required to attend a two hour leadership lab every week. In addition, students are required to attend physical training lab three times per week for 1 hour per session. During leadership laboratory, students will participate in adventure training, and other military activities.

## Basic Camp

Army ROTC Basic Camp will be conducted during the summer session between a student's sophomore and junior year. Basic Camp is a challenging four-week training course designed to provide a base knowledge of Army skills in order to give the students the ability to handle themselves and others in new and demanding situations. Throughout the program, the student is provided with the fundamentals of soldiering which include physical training, marksmanship, tactical operations, map reading, and orienteering. Students are provided transportation to and from Basic Camp, fees, room and board, as well as approximately \$700 in pay and allowances. Attendance at the Basic Camp does not necessarily obligate the student to military service; it does, however, qualify the student for continuation in the Army ROTC Courses as a contracted Cadet provided eligibility criteria are met, a student can compete for a 2-year or 3-year scholarship upon graduation. See the scholarship section that follows for more information.

## Advanced Course

Upon completion of the Basic Course or Basic Camp (above), ROTC students entering the Advanced Course continue to develop their ability in evaluating situations, making decisions, and practicing traits considered essential in a leader. The ability to motivate subordinates, to win their confidence, and to supervise them effectively has been attributed by many civilian and military leaders to training received through ROTC in college. The ROTC Program uses and extends the intellect, education, and special abilities of college students. Its primary purpose is to produce Army officers needed for the defense of our nation in time of crisis; but, in the process, it also develops the kind of Leader or Junior Executive or manager needed in every field of civilian endeavor.

All Advanced Course students earn \$450-\$500 a month (upon contracting) beginning the first month of their junior year and continuing until they complete the Advanced Course. Additional pay and travel allowances for the 33-day Advance Camp training between the junior and senior years, makes the total received approximately \$10,000.

MS III (MS 301-302). Meets for three hours per week. All students are required to attend a two hour leadership lab once per week. In addition, students are required to attend physical training lab three times per week for 1 hour per session. Three training activities off campus will be scheduled during the school year.

MS IV (MS 401-402). Meets for three hours per week. All students are required to attend a two-hour leadership lab once per week. In addition, students are required to attend physical training lab three times per week for 1 hour per session. Three training activities off campus will be scheduled during the school year.

## Simultaneous Membership Program

The simultaneous membership program option combines the Army ROTC living allowance with membership in the Army Reserve or Army National Guard and allows the student to receive pay from both programs. ROTC Cadets serve as officer trainees in direct leadership/management positions. Simultaneous membership program participation with National Guard or Reserve forces is one weekend per month and two weeks each year. Cadets participating in the simultaneous membership program are eligible for tuition assistance reimbursement up to \$4,500 per year.

## Branch Selection

The curriculum of the Army ROTC program is designed to qualify the Cadet for appointment as an officer. Selection for assignment to the various branches of the Army is based upon the personal interests of the Cadet, the major course of study, academic accomplishments, leadership potential, and the needs of the service. Under this system a Cadet may be commissioned in any branch for which he or she is qualified and in which a need for officers exists. After graduation and commissioning, the officer will attend a service school for further specialized military training which will qualify him or her for the branch to which he or she is assigned.

## ROTC Scholarship Program

See information provided in the chapter on financial aid.

## Army ROTC Scholarships

These competitive scholarships are awarded solely on potential rather than financial need and cover the costs of tuition, fees, and a flat-rate book allowance (of \$600 per semester) plus a monthly subsistence allowance of \$300 for freshman; \$350 sophomores; \$450 for juniors; \$500 for seniors. This allowance is tax-free. Four-year scholarships are available to designated freshmen, who applied and were selected during their senior year in high school. Three and two-year scholarships are available to eligible students, enrolled in the ROTC program. Two-year undergraduate or graduate school scholarships are available to students who successfully complete Basic Camp. For members of the Army Reserves and National Guard, ROTC has Guaranteed Reserve Forces Duty Scholarships (GRFD) providing the same benefits listed above.

## Activities

In an effort to develop maximum leadership qualities among cadets, the following organizations and activities are sponsored by ROTC as an integral part of the Army Cadet Corps:

Color Guard: The official color guard for the University of South Alabama. Present the colors for USA and civic organizations in Mobile.

Ranger Challenge: Students are trained in small-unit tactics and participate in ranger-type operations and competitions.

Running Club: Participation is open to all students. Runs from 3k to 26.2 mile marathons and triathlons.

Scabbard and Blade: Honor Society for Cadets. Cadets must meet national requirements to be a member.

## Academic Credit

Academic credit is granted for the completion of Military Science course requirements as follows:

Basic Course 1st Year (MS 101-102)  
1st and 2nd Semester - 1 hour each - Total 2

Basic Course 2nd Year (MS 201-202)  
1st and 2nd Semester - 3 hours each - Total 6 (Basic Camp  
in lieu of Basic Course) (6)

Advanced Course 1st Year (MS 301-302)  
1st and 2nd Semester - 3 hours each - Total 6

Advanced Course 2nd Years (MS 401-402)  
1st and 2nd Semester - 3 hours each - Total 6

## Auditing

Students who do not meet qualifications for Army contracting and commissioning may be allowed to audit a Military Science course. Students desiring to audit must receive the permission of the department chair. Auditing students may not participate in leadership laboratory, field training exercises, or other physical activities. Non-U.S. students must have written permission from their government prior to taking an ROTC course.

## Requirements For A Commission As A Second Lieutenant In The United States Army

Students desiring a commission must complete a minimum of 23 hours of course work to include:

1. 20 hours of Military Science, including
  1. MS 101 and 102;
  2. MS 201 and 202;
  3. Students can receive placement credit for the 100- and 200-level courses for prior military service, Junior ROTC, ROTC Basic Camp, and equivalent military training with PMS approval;
  4. MS 301 and 302;
  5. MS 401 and 402.
2. A 3 hour Military History Course.
3. In addition to the required courses, students must contract and attend the ROTC Advance Camp for 33 days of training between the junior and senior year.

## Areas Of Study

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### Degrees, Programs, Or Concentrations

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Minor in Military Science ..... 645

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# Courses

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## Course Listing

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Military Science..... 1069

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# Faculty

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MORRIS, ERWIN C.  
Professor  
BS, Jacksonville State University  
MS, Naval Postgraduate School

REY, TIMOTHY S.  
Assistant Professor  
BS, University of Southern Miss

SCHUSTER, OLIVER J.  
Instructor  
BA, University of Minn-Twin Cities  
MH, George Washington University

# Minor In Military Science

## Degree Requirements

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If a minor is required in your degree program, at least 9 (lower and/or upper-division) hours of courses in the minor must be completed at the University.

### Requirements For A Minor

Completion of the 20 semester hours of MS course work and one military history elective (3) are required for a minor in Military Science. Placement credit may be awarded for the Basic Course for prior military service, attendance at ROTC Leadership Training Course, or three or four years of JROTC. Students who are already commissioned officers are not eligible to receive a minor in military science. Non-contracted students are not eligible to receive a minor in Military Science.

# Modern And Classical Languages And Literature

## Department Information

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Department of Modern and Classical Languages and Literature web site  
<http://southalabama.edu/colleges/artsandsci/languages/>

The department contributes to the liberal education of all students by helping them to improve their ability to communicate with and understand other cultures in an increasingly interdependent world. The language study provides direct insight into other ways of thinking and perceiving reality, and enables a fresh perspective on students' own language and culture. The department offers a major in Modern and Classical Languages and Literature with concentrations in French, German, Russian, and Spanish. Minors in those four languages, as well as a Minor in Applied Linguistics, are available. An interdisciplinary Minor in Classical Studies is offered in cooperation with the Philosophy Department. Introductory and intermediate level courses in Arabic, ASL, Chinese, Classical and Modern Greek, Hindi, Italian, Japanese, Korean, Latin and Portuguese are also provided.

In the first-year sequences (Introductory) the student is given a basic foundation in listening, speaking, reading, and writing. Typically, the emphasis is on listening and oral practice followed by development of reading and writing skills. The second-year courses (Intermediate) build upon the skills acquired in the first year. Upper-level courses provide students with more in-depth knowledge of the countries' language, culture, literature and history. Students with previous language training will be placed at the appropriate level.

All first-time freshmen must successfully complete CAS 100: First Year Experience as a degree requirement. Students must enroll during their first term at USA, except for summer-entry students who must enroll in the fall semester following entry. Modern and Classical Languages and Literature majors are required to take LG 480 to fulfill the technology proficiency requirement, which was formerly known as the computer proficiency requirement.

### Retroactive Credit Policy

It is to the advantage of students to begin their study of a foreign language at the highest possible level because they can gain college credits through appropriate placement. The Department of Modern and Classical Languages and Literature offers an online language placement exam to assist students with enrollment at the appropriate levels. Please contact the department for details. Students who place into the second semester of the introductory sequence, or either semester of the intermediate sequence, may qualify for retroactive credit. By earning a "C" or better in the higher level course the student may petition the department for either 3 or 6 semester hours of introductory-level credit. Native speakers are not eligible. Students who have had three to five years of a foreign language in high school may wish to take the CLEP examination in that language and earn as many as (12) semester hours of lower-division credit based on the qualifying scores established by CLEP. Students participating in the International Baccalaureate Program (IB) will be granted 6 semester hours of credit in the corresponding language Freshman Language Sequence with a score of "5" or higher on the International Baccalaureate Program examinations.

### Lesser Taught Languages Program (LTLS)

Besides its four main languages, the Department also offers four semesters of instruction for several other languages as part of its Lesser Taught Languages Program. LTLS classes meet three times a week and are conducted by native-speaker coaches. Mid-term and final student performance evaluations are administered by nationally certified external examiners. As in all language classes, success in these courses requires a high degree of motivation, self-discipline, and a long-term commitment to developing oral/aural proficiency in the target language. Students must be willing to assume responsibility for learning appropriate listening and speaking skills. Before enrolling in a LTLS course students are urged to discuss course requirements and testing procedures with the program coordinator. Call (251) 460-6291 for more information.

### Graduate Studies

Although the Department of Modern and Classical Languages and Literature has no graduate degree program, graduate-level course work is offered in several languages under the rubrics of "Special Topics," "Seminar," and "Directed Studies" in conjunction with completing requirements in the Alternative or Innovative Master of Education Programs.

## Areas Of Study

### Degrees, Programs, Or Concentrations

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## Faculty

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Senior Instructor  
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MA, University of CA-Santa Bar

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MA, University of Alabama

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MA, University of Texas- Austin  
PHD, University of Texas- Austin

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MA, Jawaharlal Nehru University  
MA, University of Michigan-Ann Arb  
PHD, University of Michigan-Ann Arb

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BA, Babes-Bolyai University  
MA, Babes-Bolyai University  
PHD, Tulane University

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MA, University of Pennsylvania  
PHD, University of Pennsylvania

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MA, Pennsylvania State University  
PHD, Pennsylvania State University

RICE, TERRI W.  
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BA, Auburn University  
MAHS, Auburn University

RINNE, CHRISTINE R.  
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BA, Valparaiso University  
MA, Indiana University-Bloomington  
PHD, Indiana University-Bloomington

ROBLES VALENCIA, ROBERTO  
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BA, Universidad de Burgos  
MA, Western Michigan University  
PHD, University of Michigan-Ann Arb

RODDY JR., HARRY L.  
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BS, Tulane University  
MA, University of Texas- Austin  
PHD, University of Texas- Austin

TER HORST, ELEANOR E.  
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MA, University of Michigan-Ann Arb  
PHD, University of Michigan-Ann Arb

WHITENER, BRIAN S.  
Assistant Professor  
BA, New College of Florida  
MA, University of Chicago  
CERTG, University of Michigan-Ann Arb  
PHD, University of Michigan-Ann Arb

# Modern And Classical Languages And Literature (BA) - German Concentration

## Degree Requirements

Majors in Arts and Sciences may be completed with a minimum of 120 semester hours unless designated otherwise. At least 30 hours of course work, which represents 25% of the required 120 hours, must be at the upper division level in order to fulfill the University's residency requirement. At least 15 of the 30 upper-division hours must be in the major or concentration area. An overall grade-point-average (GPA) of 2.0 is required for graduation. In addition, a minimum GPA of 2.0 is required in the student's major or concentration area.

### Requirements For A Major In Modern And Classical Languages And Literature

#### Requirements For A Major In Modern and Classical Languages and Literature

In addition to fulfilling the general education requirements specified, students majoring in Modern and Classical Languages and Literature will complete 24 hours of core courses and 24 hours of study in German. The required core courses include:

IS 100

LG 110

LG 205

EH 235

LG 394 or IST 300

IS 391

LG 480

### Study Abroad Component

As part of their core requirement majors will earn a minimum of 9 semester hours at the upper level in the language of their concentration in an approved study abroad program. During their stay abroad students will be required to maintain on-line contact with their advisors, keep a journal of their activities, and gather materials to be used in LG 480 Senior Seminar upon their return. Subject to availability of funding, grants are awarded to help off-set some of the costs of the Study Abroad program to qualified majors.

### Requirements For A German Concentration

A minimum of 24 semester hours in German is required, in addition to the 9 hour upper-level study abroad component. After completing the lower-division courses (Introductory and Intermediate sequences) the following specific upper-division courses are required: German - Six hours from each of the following groups: LG 366, 367, 368, and LG 361, 362, 363, 364.

### General Education Requirements For Modern And Classical Languages And Literature Majors

Areas I, III, and IV of the General Education Requirements for Modern and Classical Languages and Literature majors are specified in the College of Arts and Sciences section. Note that a portion of Area II requirements for Foreign Language Proficiency, Intermediate Language courses and EH 235 are fulfilled by the major requirements specified above.

### Minor Requirement For Modern And Classical Languages And Literature Majors

Language Majors can fulfill the College's minor requirement by taking either 1) another language concentration, or 2) a minor in a program outside of the Department of Modern and Classical Languages and Literature.

# Minor In Applied Linguistics

## Degree Requirements

If a minor is required in your degree program, at least 9 (lower and/or upper-division) hours of courses in the minor must be completed at the University.

### Requirements For A Minor In Applied Linguistics

Applied Linguistics is an interdisciplinary field that investigates and offers solutions to language-related problems in the world. Applied linguistics relies on the theories and findings of linguistics, together with the experiences and needs of language users, to engage real-world issues at the intersections of language and society, language and education, and language and power. The Minor in Applied Linguistics exposes students to a field of study that allows them to think critically about the language learning process, and to build a deeper understanding of how languages are both learned and taught successfully.

No more than 6 hours from the student's major can be counted towards the Minor in Applied Linguistics

Minor In Applied Linguistics		Credit Hours
Requirements		21
Core Courses		12
LG or LGS 200-level sequence*		
LNG 300	Introduction to Linguistics	
LNG 400	Applied Linguistics	
Electives (choose 3)		9
LG 110	World Languages	
AN 200	Language and Culture	
LNG 305	History of European Languages	
EH 370	History of the English Language	
EH 371	Approaches to English Grammar (W)	
LG 326	Advanced French Grammar and Conversation	
LG 366	Advanced German Grammar	
LG 374	Advanced Russian Grammar	
LG 334	Advanced Spanish Grammar and Composition (W)	
LNG 465	Foreign Language Pedagogy	
LNG 490	Special Topics in Applied Linguistics	
LNG 494	Directed Study in Applied Linguistics	
LNG 496	Internship in Applied Linguistics	
*Foreign Language majors may not use the language of their first concentration to fulfill this requirement		

# Minor In French

## Degree Requirements

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If a minor is required in your degree program, at least 9 (lower and/or upper-division) hours of courses in the minor must be completed at the University.

### Requirements For Minor In French

Students must complete a minimum of nine semester hours beyond the Introductory and Intermediate sequences. The student must complete the following upper-division courses in French - LG 326 and 327 and either 311 or 312. Native or near-native speakers of a language may not enroll in upper-level conversation courses.

**Note:** The Minor in Language cannot fulfill the minor requirement for Language Majors.

# Minor In German

## Degree Requirements

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If a minor is required in your degree program, at least 9 (lower and/or upper-division) hours of courses in the minor must be completed at the University.

### Requirements For Minor In German

Students must complete a minimum of nine semester hours beyond the Introductory and Intermediate sequences. The student must complete the following upper-division courses in German – nine credits of upper-division courses. Native or near-native speakers of a language may not enroll in upper-level conversation courses.

**Note:** The Minor in Language cannot fulfill the minor requirement for Language Majors.

# Minor In Russian

## Degree Requirements

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If a minor is required in your degree program, at least 9 (lower and/or upper-division) hours of courses in the minor must be completed at the University.

### Requirements For Minor In Russian

Students must complete a minimum of nine semester hours beyond the Introductory and Intermediate sequences. The student must complete the following upper-division courses in Russian - LG 374 or 376. Remaining credits are to be selected from the upper-division courses in Russian. Native or near-native speakers of a language may not enroll in upper-level conversation courses.

**Note:** The Minor in Language cannot fulfill the minor requirement for Language Majors.

# Minor In Spanish

## Degree Requirements

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If a minor is required in your degree program, at least 9 (lower and/or upper-division) hours of courses in the minor must be completed at the University.

### Requirements For Minor In Spanish

Students must complete a minimum of nine semester hours beyond the Introductory and Intermediate sequences. The student must complete the following upper-division courses in Spanish - three upper division courses LG 333 and LG 334 are recommended. Remaining credits are to be selected from the upper-division courses in Spanish. Native or near-native speakers of a language may not enroll in upper-level conversation courses.

**Note:** The Minor in Language cannot fulfill the minor requirement for Language Majors.

# Modern And Classical Languages And Literature (BA) - French Concentration

## Degree Requirements

Majors in Arts and Sciences may be completed with a minimum of 120 semester hours unless designated otherwise. At least 30 hours of course work, which represents 25% of the required 120 hours, must be at the upper division level in order to fulfill the University's residency requirement. At least 15 of the 30 upper-division hours must be in the major or concentration area. An overall grade-point-average (GPA) of 2.0 is required for graduation. In addition, a minimum GPA of 2.0 is required in the student's major or concentration area.

### Requirements For A Major In Modern And Classical Languages And Literature

#### Major In Modern and Classical Languages and Literature

In addition to fulfilling the general education requirements specified, students majoring in Modern and Classical Languages and Literature will complete 24 hours of core courses and 24 hours of study in French. The required core courses include:

IS 100

LG 110

LG 205

EH 235

LG 394 or IST 300

IS 391

LG 480

### Study Abroad Component

As part of their core requirement majors will earn a minimum of 9 semester hours at the upper level in the language of their concentration in an approved study abroad program. During their stay abroad students will be required to maintain on-line contact with their advisors, keep a journal of their activities, and gather materials to be used in LG 480 Senior Seminar upon their return. Subject to availability of funding, grants are awarded to help off-set some of the costs of the Study Abroad program to qualified majors.

### Requirements For A French Concentration

A minimum of 24 semester hours in French is required, in addition to the 9 hour upper-level study abroad component. After completing the lower-division courses (**Introductory** and **Intermediate** sequences) the following specific upper-division courses are required: **French** - LG 326, 327, and six hours from among the following: LG 311, 312, 314, 412, 415, 416, 492.

### General Education Requirements For Modern And Classical Languages And Literature Majors

Areas I, III, and IV of the General Education Requirements for Modern and Classical Languages and Literature majors are specified in the College of Arts and Sciences section. Note that a portion of Area II requirements for Foreign Language Proficiency, Intermediate Language courses and EH 235 are fulfilled by the major requirements specified above.

### Minor Requirement For Modern And Classical Languages And Literature Majors

Language Majors can fulfill the College's minor requirement by taking either 1) another language concentration, or 2) a minor in a program outside of the Department of Modern and Classical Languages and Literature.

# Modern And Classical Languages And Literature (BA) - French Concentration

## Degree Requirements

Majors in Arts and Sciences may be completed with a minimum of 120 semester hours unless designated otherwise. At least 30 hours of course work, which represents 25% of the required 120 hours, must be at the upper division level in order to fulfill the University's residency requirement. At least 15 of the 30 upper-division hours must be in the major or concentration area. An overall grade-point-average (GPA) of 2.0 is required for graduation. In addition, a minimum GPA of 2.0 is required in the student's major or concentration area.

### Requirements For A Major In Modern And Classical Languages And Literature

#### Major In Modern and Classical Languages and Literature

In addition to fulfilling the general education requirements specified, students majoring in Modern and Classical Languages and Literature will complete 24 hours of core courses and 24 hours of study in French. The required core courses include:

IS 100

LG 110

LG 205

EH 235

LG 394 or IST 300

IS 391

LG 480

### Study Abroad Component

As part of their core requirement majors will earn a minimum of 9 semester hours at the upper level in the language of their concentration in an approved study abroad program. During their stay abroad students will be required to maintain on-line contact with their advisors, keep a journal of their activities, and gather materials to be used in LG 480 Senior Seminar upon their return. Subject to availability of funding, grants are awarded to help off-set some of the costs of the Study Abroad program to qualified majors.

### Requirements For A French Concentration

A minimum of 24 semester hours in French is required, in addition to the 9 hour upper-level study abroad component. After completing the lower-division courses (**Introductory** and **Intermediate** sequences) the following specific upper-division courses are required: **French** - LG 326, 327, and six hours from among the following: LG 311, 312, 314, 412, 415, 416, 492.

### General Education Requirements For Modern And Classical Languages And Literature Majors

Areas I, III, and IV of the General Education Requirements for Modern and Classical Languages and Literature majors are specified in the College of Arts and Sciences section. Note that a portion of Area II requirements for Foreign Language Proficiency, Intermediate Language courses and EH 235 are fulfilled by the major requirements specified above.

### Minor Requirement For Modern And Classical Languages And Literature Majors

Language Majors can fulfill the College's minor requirement by taking either 1) another language concentration, or 2) a minor in a program outside of the Department of Modern and Classical Languages and Literature.

# Modern And Classical Languages And Literature (BA) - Russian Concentration

## Degree Requirements

Majors in Arts and Sciences may be completed with a minimum of 120 semester hours unless designated otherwise. At least 30 hours of course work, which represents 25% of the required 120 hours, must be at the upper division level in order to fulfill the University's residency requirement. At least 15 of the 30 upper-division hours must be in the major or concentration area. An overall grade-point-average (GPA) of 2.0 is required for graduation. In addition, a minimum GPA of 2.0 is required in the student's major or concentration area.

### Requirements For A Major In Modern And Classical Languages And Literature

#### Major In Modern and Classical Languages And Literature

In addition to fulfilling the general education requirements specified, students majoring in Modern and Classical Languages and Literature will complete 24 hours of core courses and 24 hours of study in Russian. The required core courses include:

IS 100

LG 110

LG 205

EH 235

LG 394 or IST 300

IS 391

LG 480

### Study Abroad Component

As part of their core requirement majors will earn a minimum of 9 semester hours in the language of their concentration in an approved study abroad program. During their stay abroad students will be required to maintain on-line contact with their advisors, keep a journal of their activities, and gather materials to be used in LG 480 Senior Seminar upon their return. Subject to availability of funding, grants are awarded to help off-set some of the costs of the Study Abroad program to qualified majors.

### Requirements For A Russian Concentration

A minimum of 24 semester hours in Russian is required, in addition to the 9 hour study abroad component. Courses taken abroad are generally at the 300 level or above. If courses below the 300 level are taken abroad, the student must take an equal number of upper-level credits on campus to constitute the 24 hours that are required in the concentration. After completing the lower-division courses (Introductory and Intermediate sequences) the following specific upper-division courses are required: Russian - LG 374 and/or LG 376 and the remaining six to nine hours selected from the following courses: LG 374, 376, 381 and 375 (to be taken three times for a minimum of three course credits), 372 and 380.

### General Education Requirements For Modern And Classical Languages And Literature Majors

Areas I, III, and IV of the General Education Requirements for Modern and Classical Languages and Literature majors are specified in the College of Arts and Sciences section. Note that a portion of Area II requirements for Foreign Language Proficiency, Intermediate Language courses and EH 235 are fulfilled by the major requirements specified above.

### Minor Requirement For Modern And Classical Languages And Literature Majors

Language Majors can fulfill the College's minor requirement by taking either 1) another language concentration, or 2) a minor in a program outside of the Department of Modern and Classical Languages and Literature.

# Modern And Classical Languages And Literature (BA) - Spanish Concentration

## Degree Requirements

Majors in Arts and Sciences may be completed with a minimum of 120 semester hours unless designated otherwise. At least 30 hours of course work, which represents 25% of the required 120 hours, must be at the upper division level in order to fulfill the University's residency requirement. At least 15 of the 30 upper-division hours must be in the major or concentration area. An overall grade-point-average (GPA) of 2.0 is required for graduation. In addition, a minimum GPA of 2.0 is required in the student's major or concentration area.

### Requirements For A Major In Modern And Classical Languages And Literature

#### Major In Modern and Classical Languages And Literature

In addition to fulfilling the general education requirements specified, students majoring in Modern and Classical Languages and Literature will complete 24 hours of core courses and 24 hours of study in Spanish. The required core courses include:

IS 100

LG 110

LG 205

EH 235

LG 394 or IST 300

IS 391

LG 480

### Study Abroad Component

As part of their core requirement majors will earn a minimum of 9 semester hours in the language of their concentration in an approved study abroad program. During their stay abroad students will be required to maintain on-line contact with their advisors, keep a journal of their activities, and gather materials to be used in LG 480 Senior Seminar upon their return. Subject to availability of funding, grants are awarded to help off-set some of the costs of the Study Abroad program to qualified majors.

### Requirements For A Spanish Concentration

A minimum of 24 semester hours in Spanish is required, in addition to the 9 hour study abroad component. Courses taken abroad are generally at the 300 level or above. If courses below the 300 level are taken abroad, the student must take an equal number of upper-level credits on campus to constitute the 24-27 hours that are required in the concentration. After completing the lower-division courses (Introductory and Intermediate sequences) the following specific upper-division courses are required: Spanish - LG 333 (may be taken abroad), 334, 336, 431, and one of the following: LG 432, or 433. Please note: LG 335 and LG 337 do not count toward the concentration in Spanish.

### General Education Requirements For Modern And Classical Languages And Literature Majors

Areas I, III, and IV of the General Education Requirements for Modern and Classical Languages and Literature majors are specified in the College of Arts and Sciences section. Note that a portion of Area II requirements for Foreign Language Proficiency, Intermediate Language courses and EH 235 are fulfilled by the major requirements specified above.

### Minor Requirement For Modern And Classical Language And Literature Majors

Language Majors can fulfill the College's minor requirement by taking either 1) another language concentration, or 2) a minor in a program outside of the Department of Modern and Classical Languages and Literature.

# Museum Studies

## Department Information

Museum Studies Staff	(251) 460-6907
Co-Directors	Dr. Philip J. Carr, Dr. Marsha Hamilton
Affiliates	Dr. Kara Burns Ms. Candice Cravins Dr. Kern Jackson Dr. Christina Lindeman Dr. Elizabeth Rivenbark

### Museum Studies

<http://www.southalabama.edu/colleges/artsandsci/museumstudies/>

Museums, institutions dedicated to the acquisition, preservation, study, and exhibition of works of artistic, historical, or scientific value, play an integral role in today's societies through the act of discovery and the preservation of knowledge of both the past and present. The Museum Studies Program, using an interdisciplinary approach (e.g. humanities, social sciences, visual arts), offers a minor that allows students to gain a firm understanding of the histories, theories and skills involved in museum work. The minor in Museum Studies provides basic preparation to enter the museum industry by introducing students to both the variety of roles played by museums in today's societies and the diversity of museum careers.

For additional information about the program, please contact Dr. Philip Carr, Museum Studies Program, Archaeology Museum, ARCM 107, 6052 USA Drive South, University of South Alabama 36688-0001. Phone (251) 460-6907; E-mail address [pcarr@southalabama.edu](mailto:pcarr@southalabama.edu); or Dr. Marsha Hamilton, Department of History, 5991 USA Drive North, Room 344, University of South Alabama, Mobile, AL 36688-0001; email address [mhamilton@southalabama.edu](mailto:mhamilton@southalabama.edu)

## Areas Of Study

### Degrees, Programs, Or Concentrations

Minor in Museum Studies..... 659

## Courses

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# Minor In Museum Studies

## Degree Requirements

If a minor is required in your degree program, at least 9 (lower and/or upper-division) hours of courses in the minor must be completed at the University.

### Core Requirements

1. Twenty-one (21) credit hours in approved courses; nine (9) hours must be taken at the University of South Alabama.
2. At least one (1) course must be taken in each of the three primary disciplines of anthropology, art history and history.
3. MUM 201: Introduction to Museum Studies
4. EH 372: Technical Writing
5. At least three (3) and no more than six (6) credit hours from AN 496: Anthropology Internship, ARH 360: Traineeship in Museum Work, or HY 498: Internship in History
6. Two (2) of the following courses: AN 435 Museum Methods in Archaeology, ARH 493: Methodology of Art History, HY 496: Introduction to Public History.

Core Courses	Course Title
Anthropology	
AN 220	Archaeology Around the World
AN 313	New World Archaeology
AN 340	Native American Cultures
AN 344	SE Asian Cultures and Society
AN 347	Latin American Cultures and Societies
AN 442	Cultural Resources Management
Art History	
ARH 304	Ancient Greek Art and Architecture
ARH 306	Roman Art
ARH 332	Baroque Art
ARH 335	Eighteenth-Century Art
ARH 340	Early Modern Art
ARH 344	Contemporary Art
ARH 345	American Art 1600=1940
ARH 423	Italian Renaissance Art
ARH 480	Women in Art
History	
HY 228	Latin America
HY 432	Colonial America
HY 433	American Revolution
HY 436	Modern US I, 1877-1845
HY 437	Modern US II, Since 1945

HY 477

Old South

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HY 478

New South

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HY 479

Modern South

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Other periods and topics in all disciplines must be approved by the Museum Studies Committee and Director.

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# Music

## Department Information

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Department of Music website

<http://www.southalabama.edu/colleges/music/>

The Department of Music of the University of South Alabama is an accredited institutional member of the National Association of Schools of Music, 11250 Roger Bacon Drive, Suite 21, Reston, Virginia 20190; 703-437-0700. Degree programs are offered for those students pursuing careers in music performance, music education, music business, and those who wish to combine studies in music with other academic disciplines.

All first-time freshmen must successfully complete CAS 100: First Year Experience as a degree requirement. Students must enroll during their first term at USA, except for summer-entry students who must enroll in the fall semester following entry.

### Placement In Music Theory

Transfer students intending to take music theory must take a Theory Placement Examination. Contact the Music Office for details.

### Placement In Applied Music Classes

All students not previously enrolled in private music study at the University of South Alabama must audition prior to enrolling. Contact the Music Office for audition requirements and scheduling.

All students enrolled in private music study must fill out a Teacher Preference form for each Applied Music course in which they are enrolled. These forms must be filed on-line to the Music Office before registration begins. Once a student is registered and knows their schedule, they must submit their schedule information to their Applied teacher.

### Applied Music

Applied music is an integral and vital part of the total education in the field of music. In addition to performing in recitals, full-time music students are also required to attend concerts and recital class (MUA 100) for six semesters and take part in various programs given during their course of study.

Students choosing a minor in music must include applied music courses at the 200 level.

Credit for applied music is based on the minimum practice time per week, not on the length of the lesson period. Courses that show one hour's credit require one 30-minute lesson per week with a minimum practice period of 30 minutes per day. A two-hour course requires 60 minutes of lesson time a week and at least 60 minutes of practice time per day. Those that show three hours' credit require 60 minutes of lesson time per week with a minimum of two hours per day for practice. Satisfactory achievement and development are best achieved by practicing twice the above minimum requirements.

A student may take no more than two applied music courses in any given semester unless permission is obtained from the student's advisor, major applied teacher, and department chair.

### Senior Recital Requirements

A public senior recital (MUA 400) is required for the BM degree. Specific requirements vary according to the chosen concentration. See the Department of Music Student Handbook for details.

### Applied Music Levels

Students must audition in order to enroll in Applied Music courses. Contact the Department of Music for information.

100 Level (Elective) is designated for students majoring in other academic disciplines (when possible) or music majors who wish to study in a secondary applied area.

200 Level (Major/Lower Division) is designated for the first four semesters of study as a music major. A student must pass an examination at the end of the fourth semester in order to enroll at the 300 or 400 level. Music minors will also enroll at the 200 level.

300 Level (Major/Upper Division) is designated for the junior and senior music major in all concentrations except Performance.

400 Level (Major/Performance) is designated for the junior and senior music major with a concentration in Performance.

## Minor

Students pursuing a Bachelor of Music degree are not required to have an academic minor with the exception of the Bachelor of Music with Elective Studies in Outside Fields.

## Music Organizations

The Department of Music sponsors performing organizations open to all students of the University, providing satisfactory audition requirements have been met. Ensemble participation is recognized as an essential literature class in music and music education. The appropriate MAJOR ensemble (Wind Ensemble, Chorale, Orchestra, Marching Band, Symphony Band or Concert Choir) must be elected each semester that a student is enrolled as a full-time student in music. Lower division credit is for 1st and 2nd year students. Upper division credit is for 3rd and 4th year students and reflects increased responsibility and leadership within the section and/or ensemble as assigned by the conductor/director. Graduate credit requires assisting the conductor/director with logistics, rehearsals, and presentation of concerts. Each course number is to be repeated four times for a two-year sequence of the course. All Bachelor of Music degree majors in guitar and piano must satisfactorily complete a minimum of six semester hours in a major ensemble, to be taken for three consecutive years and one semester hour in another ensemble in which they will play their principal performing instrument. Students are, in addition, encouraged to elect additional hours in both major and small ensembles. Consult the appropriate curriculum in the section entitled Music Organizations for the requirements. The organizations include the Concert Choir; University Chorale; Marching Band; University Symphony Band; Wind Ensemble; Orchestra; Jazz Band; Woodwind, Brass, Guitar, Percussion, and Piano Ensembles; and Opera and Musical Theatre Workshop.

## Master Of Music Graduate Studies

The Master of Music degree offers concentrations in Collaborative Keyboard, Music Education and Performance (Piano, Vocal, Brass, Percussion and Woodwinds). The program is designed to provide professional advancement for musician living and working along the Gulf Coast, produce research and/or performances, qualify students for admission to doctoral programs, and fulfill the mission of the University by offering high-quality teaching and public service that increases the education level of Alabama citizens, who can better participate in a global community and attain a higher quality of life.

The department's graduate faculty engage students to think critically as they address music practices and issues. Courses examine how music creates, sustains and changes personal lives, organizations, cultural institutions and society.

Each concentration consists of 32 credits hours, which culminate in performances, portfolios, recordings, or projects representing pedagogical work.

## Requirement For Admission

All applications must receive approval from the Graduate Coordinator of Music, the Director of Graduate Studies for the College of Arts and Sciences, and the Graduate Dean. The Office of Admissions should receive a resume limited to one page and three letters of recommendation addressing academic or professional abilities. Students are admitted each semester and must meet the following additional requirements:

## Regular Admission

### GRE/GMAT Scores

Students must submit a satisfactory score on the general portion of the Graduate Record Examination or the Graduate Management Admissions Test. The scores required for regular admission are:

- GRE score on file. USA College code of GRE is 1880.
- GMAT - A combined score of 800 or more when calculated as follows:  
 $200 \times \text{undergraduate GPA} + \text{GMAT score}$ .

## Undergraduate Requirements

Students must submit official copies of undergraduate transcripts indicating the following:

- A bachelor's degree in music.
- A minimum grade-point average of 3.0

### International Students:

- International students must submit documentation of TOEFL test scores of 525 or above (197 on computer based test or 71 on internet based test).
- Students who are required to take the English Language Proficiency Examination and whose scores suggest an English language deficiency must take the appropriate English as a Second Language courses. These courses are not counted as part of the 32-hour degree program.

#### Departmental Admissions Requirements:

- Passing score in Graduate Music Theory and Music History Diagnostic Exam or Bachelor of Music degree from USA.
- Admittance requirements per area of specialization:
  - Collaborative Keyboards
    - Audition - recording or live. Admittance determined by area faculty
    - Contact Piano Area Coordinator for date, time and location
  - Music Education
    - Teaching Certificate
    - Video of teaching: 10 - 25 minutes. Acceptability determined by music education faculty
    - Contact Music Education Area Coordinator for date, time and location
  - Performance Piano, Brass, Percussion and Woodwinds
    - Audition - recording or live. Admittance determined by area faculty
    - Contact Area Coordinator for date, time and location
  - Performance: Voice
    - Audition - recording or live. Admittance determined by area faculty
    - Diagnostic exam in vocal diction (Italian, German, and French)
    - Contact Vocal Area Coordinator for date, time and location
- Diagnostic Exams
  - Students admitted to graduate degree programs in the USA Department of Music must take graduate diagnostic exams in music theory and history. USA graduates are exempt. Diagnostic exams are administered twice a year, in August and January. The results of the exams are advisory only; however, students may not take graduate-level history and theory courses until students have earned a passing score on the exams. Advisors receive the results of the diagnostic exams. Students consult with their advisors to determine appropriate history and theory studies.
- Remedial Courses
  - Students who do not pass the diagnostic exams will be required to pass remedial courses) before enrolling in the graduate-level core course.

#### **Non-degree Admission**

Students may register for and complete up to 12 hours without formal entrance into the program.

#### **Provisional Admission**

Students who do not meet the requirements for the regular admission may apply for provisional admission if they meet the following standards:

#### **Undergraduate Requirements**

Students must submit official copies of undergraduate transcripts indicating the following:

- A minimum grade-point average of 2.5 on all undergraduate work. Students with a GPA below 2.5 may want to consider enrolling in undergraduate classes to increase their GPA average before applying to graduate school. USA course work completed after graduation is automatically averaged into the final GPA. The USA Office of Academic Records computes transfer credit averages and can advise students in determining when the minimum GPA has been met.

#### **Degree Requirements And Courses**

Students must complete a minimum of 32 semester hours of credit in approved 500-level courses. A minimum of 20 semester hours must be completed at the University of South Alabama. Up to 12 hours of USA courses taken while in another program (or non-degree status) may be applied. Only courses not applied to another degree may count. Maximum of 12 hours with grades of "A", "B", or "S" of approved transfer credit is allowed. If the university is non-accredited, the individual USA graduate program will determine if the quality and content of the courses meet the standards of the program.

#### **Grade Requirements**

- A minimum of a 3.0 GPA on all work attempted is required for graduation.
- Courses in which a student receives a "D" or below will not be counted toward the degree program.
- A maximum of two courses with a grade of "C" will be counted toward the degree program.
- Students receiving four grades of "C" or below, regardless of the overall GPA will be dismissed from the program.

- A student who receives a failing grade in a course for graduate credit may be dismissed from the program.

### Time Limitations

- All degree requirements must be completed within seven calendar years.
- Most students who take nine hours per semester complete the degree within a two-year period.
- The time required for degree completion depends on how many courses a student can take each semester and the ability of that student to complete the recital(s) or final project(s).

### Course Load

Six to ten credit hours per semester constitute a full-time course load.

Note: No more than twelve credits in this area are applicable toward a degree.

## Areas Of Study

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### Degrees, Programs, Or Concentrations

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Music (MM) - Collaborative Keyboard Concentration.....	685
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Music (MM) - Performance Concentration (Piano, Voice, Brass, Percussion, Woodwinds).....	687

## Courses

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### Course Listing

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Music Education.....	1070
Music Literature.....	1073
Music Organization.....	1074
Music Studio.....	1078
Music Theory.....	1080

## Faculty

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BOHNET, ANDRA C.  
Professor  
BM, University of The Pacific  
MM, University of Southern CA  
PHD, Texas Tech University

DURANT, DAVID Z.  
Professor  
BM, University of Florida  
MM, University of Florida  
DMA, University of Alabama

FRANKLIN, KIP E.  
Assistant Professor  
BM, Central Michigan University  
MM, Michigan State University  
MM, Michigan State University  
DMA, Michigan State University

FRESNE, JEANNETTE  
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BM, University of Texas- Austin  
MM, Texas State Univ - San Marcos  
PHD, Arizona State University-Main

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BME, New Mexico State U-Main  
Campus  
MME, Indiana University-Bloomington  
DA, Ball State University

HEAVNER, TRACY L.  
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BME, Appalachian State University  
MME, Appalachian State University  
DME, University of Northern CO

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Professor  
BA, Point Loma Nazarene University  
MM, University of Illinois-Urbana  
DMA, University of Illinois-Urbana

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MM, University of Colorado-Boulder  
DMA, University of Colorado-Boulder

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MM, Johns Hopkins University  
MM, University of NC- Greensboro  
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DM, Indiana University-Bloomington

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BM, Texas Tech University  
MM, Southern Methodist University  
DMA, University of Missouri-KC

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BME, University of Central Florida  
MM, University of SC-Columbia  
DM, Florida State University

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BM, Union University  
MM, Austin Peay State University  
DMA, Southwestern Bap Theolog Sem

WOOD, PETER J.  
Professor  
BS, University of Illinois-Urbana  
MM, University of Wisconsin-Madis  
DM, Indiana University-Bloomington

ZOGHBY, LINDA V.  
Assistant Professor  
BM, Florida State University  
MM, Florida State University

# Minor In Music

## Degree Requirements

If a minor is required in your degree program, at least 9 (lower and/or upper-division) hours of courses in the minor must be completed at the University.

Requirements For A Minor in Music	Credit Hours
A minimum of 23 semester hours in music, including the following	23
MUT 112 and MUT 113	
MUL 235	
MUL 236	
Applied Music (six hrs. at 200 level)	
MUO 111, MUO 115, MUO 117, MUO 127, MUO 130 or MUO 133 (four hours)	
Three hours of electives in music at 300 level or above.	

# Music (BM) - Elective Studies In Business Concentration

## Degree Requirements

Majors in Arts and Sciences may be completed with a minimum of 120 semester hours unless designated otherwise. At least 30 hours of course work, which represents 25% of the required 120 hours, must be at the upper division level in order to fulfill the University's residency requirement. At least 15 of the 30 upper-division hours must be in the major or concentration area. An overall grade-point-average (GPA) of 2.0 is required for graduation. In addition, a minimum GPA of 2.0 is required in the student's major or concentration area.

### Requirements For A Bachelor Of Music Degree(BM)

A total of 120-124 semester hours is required for the B.M. degree. All students are required to complete the Music Core and General Requirements. In addition, they will complete the requirements in their chosen Concentration: Music Education, Elective Studies in Business and/ or Elective Studies in Specific Outside Fields, or Performance. Only those students pursuing a degree in outside fields must have a minor in another discipline. An audition is required for acceptance into a music degree program. Contact the Department (460-6136 or [www.southalabama.edu/music](http://www.southalabama.edu/music)) for audition requirements.

University residency requirements stipulate that at least 30 semester hours, including 15 hours in the major, must be completed in residence at the 300 and/or 400 level. An overall GPA of 2.0 is required for graduation as well as a minimum GPA of 2.0 in the major.

Bachelor of Music (BM) – Elective Studies in Business Concentration		Credit Hours
Music Core		54
Music Theory	16 hrs of MUT as required by advisor.	
MUT 361	3 hrs	
Music Literature	10 hrs of MUL as required by advisor.	
Major Ensemble	7 hrs in appropriate instrumental or vocal area. Concert Choir, Symphony Band, Chorale, Wind Ensemble, Orchestra, or Marching Band	
Applied Music (MUA or MUB) 200 level - 8 hours 300 or 400 level - 6 hours	14 hrs	
Piano MUE 102 or MUE 212 MUE 103 or MUE 213 MUE 202 or MUE 312 MUE 203 or MUE 313	4 hrs or equivalent proficiency examination (MUE 010).	
Recital Class MUA 100 (repeat six times with grade of "S")		
Senior Recital MUA 400		
General Education Requirements		35
Written and Oral Communication EH 101, EH 102, CA 110	9 hrs	
Humanities	3 hrs	

One literature course required, select from EH 215, EH 216, EH 225, EH 226, EH 235, EH 236

History, Social & Behavioral Sciences Select from at least two disciplines, a minimum of three hours of history required. AN 100, AN 101, GEO 114, GEO 115, HY 101, HY 102, HY 135, HY 136, IS 100, PSC 130, PSY 120, PSY 250, ECO 215, ECO 216, SY 109, SY 112	12 hrs
Select a six-hour sequence in literature or history: EH 215 and EH 216, EH 225 and EH 226, EH 235, and EH 236, HY 101 and HY 102, HY 135 and HY 136	
Mathematics MA 110 or higher	3 hrs
Natural Sciences Select two: BLY 101, BLY 102, CH 101, CH 103, CH 131, CH 132/CH 141, GEO 101, GEO 102, GY 111, GY 112, PH 101, PH 104, PH 114/PH 201, PH 115/PH 202	8 hrs
Elective Studies in Business	35
MUS 204	
MUS 304	
MUS 305	
MUS 404	
MUS 470	
ACC 211	
ACC 212	
ECO 215	
ECO 216	
MKT 320	

## Additional Information For Music Majors

### Technology Proficiency

Music majors will satisfy the University of South Alabama requirement for Technology Proficiency through the successful completion of MUT 112, 3 cr., Basic Music Theory I. This is a required course for all music majors.

### Piano Proficiency

1. The piano proficiency is attained by successfully completing the class piano sequence (MUE 102, MUE 103, MUE 202, MUE 203) and achieving a passing score on the final exam of MUE 203.
2. Students with piano as their principal instrument, or others who have sufficient piano background may be placed in the Advanced Keyboard Musicianship Sequence (MUE 212, MUE 213, MUE 312, MUE 313) after an audition for the piano faculty.
3. Excess hours in piano required to complete the piano proficiency examination may not be counted toward graduation in music. Additional hours in piano beyond the proficiency may be counted toward graduation.
4. The piano proficiency must be completed before a student may enroll in Senior Recital, Student Teaching, or Internship.

### **Placement In Music Theory**

Transfer students intending to take music theory must take a Theory Placement Examination. Contact the Music Office for details.

### **Placement In Applied Music Classes**

All students not previously enrolled in private music study at the University of South Alabama must audition prior to enrolling. Contact the Music Office for audition requirements and scheduling.

All students enrolled in private music study must fill out a Teacher Preference form for each Applied Music course in which they are enrolled. These forms must be filed on-line to the Music Office before registration begins. Once a student is registered and knows their schedule, they must submit their schedule information to their Applied teacher.

### **Applied Music**

Applied music is an integral and vital part of the total education in the field of music. In addition to performing in recitals, full-time music students are also required to attend concerts and recital class (MUA 100) for six semesters and take part in various programs given during their course of study.

Students choosing a minor in music must include applied music courses at the 200 level.

Credit for applied music is based on the minimum practice time per week, not on the length of the lesson period. Courses that show one hour's credit require one 30-minute lesson per week with a minimum practice period of 30 minutes per day. A two-hour course requires 60 minutes of lesson time a week and at least 60 minutes of practice time per day. Those that show three hours' credit require 60 minutes of lesson time per week with a minimum of two hours per day for practice. Satisfactory achievement and development are best achieved by practicing twice the above minimum requirements.

A student may take no more than two applied music courses in any given semester unless permission is obtained from the student's advisor, major applied teacher, and department chair.

### **Senior Recital Requirements**

A public senior recital (MUA 400) is required for the BM degree. Specific requirements vary according to the chosen concentration. See the Department of Music Student Handbook for details.

### **Applied Music Levels**

Students must audition in order to enroll in Applied Music courses. Contact the Department of Music for information.

100 Level (Elective) is designated for students majoring in other academic disciplines (when possible) or music majors who wish to study in a secondary applied area.

200 Level (Major/Lower Division) is designated for the first four semesters of study as a music major. A student must pass an examination at the end of the fourth semester in order to enroll at the 300 or 400 level. Music minors will also enroll at the 200 level.

300 Level (Major/Upper Division) is designated for the junior and senior music major in all concentrations except Performance.

400 Level (Major/Performance) is designated for the junior and senior music major with a concentration in Performance.

### **Minor**

Students pursuing a Bachelor of Music degree are not required to have an academic minor with the exception of the Bachelor of Music with Elective Studies in Outside Fields.

# Music (BM) - Vocal Music Education Concentration

## Degree Requirements

Majors in Arts and Sciences may be completed with a minimum of 120 semester hours unless designated otherwise. At least 30 hours of course work, which represents 25% of the required 120 hours, must be at the upper division level in order to fulfill the University's residency requirement. At least 15 of the 30 upper-division hours must be in the major or concentration area. An overall grade-point-average (GPA) of 2.0 is required for graduation. In addition, a minimum GPA of 2.0 is required in the student's major or concentration area.

### Requirements For A Bachelor Of Music Degree (BM)

A total of 120-124 semester hours is required for the B.M. degree. All students are required to complete the Music Core and General Requirements. In addition, they will complete the requirements in their chosen Concentration: Music Education, Elective Studies in Business and/ or Elective Studies in Specific Outside Fields, or Performance. Only those students pursuing a degree in outside fields must have a minor in another discipline. An audition is required for acceptance into a music degree program. Contact the Department (460-6136 or [www.southalabama.edu/music](http://www.southalabama.edu/music)) for audition requirements.

University residency requirements stipulate that at least 30 semester hours, including 15 hours in the major, must be completed in residence at the 300 and/or 400 level. An overall GPA of 2.0 is required for graduation as well as a minimum GPA of 2.0 in the major.

Music (BM) - Vocal Music Education Concentration		Credit Hours
Music Core		54
Music Theory	16 hrs of MUT as required by advisor.	
MUT 361	3 hrs	
Music Literature	10 hrs of MUL as required by advisor.	
Major Ensemble	7 hrs in appropriate instrumental or vocal area. Concert Choir, Symphony Band, Chorale, Wind Ensemble, Orchestra, or Marching Band	
Applied Music (MUA or MUB) 200 level - 8 hours 300 or 400 level - 6 hours	14 hrs	
Piano MUE 102 or MUE 212 MUE 103 or MUE 213 MUE 202 or MUE 312 MUE 203 or MUE 313	4 hrs or equivalent proficiency examination (MUE 010).	
Recital Class MUA 100 (repeat six times with grade of "S")		
Senior Recital MUA 400		
General Education Requirements		35
Written and Oral Communication EH 101, EH 102, CA 110	9 hrs	
Humanities	3 hrs	

One literature course required, select from  
EH 215, EH 216, EH 225, EH 226, EH  
235, EH 236

History, Social & Behavioral Sciences Select from at least two disciplines, a minimum of three hours of history required. AN 100, AN 101, GEO 114, GEO 115, HY 101, HY 102, HY 135, HY 136, IS 100, PSC 130, PSY 120, PSY 250, ECO 215, ECO 216, SY 109, SY 112	12 hrs
Select a six-hour sequence in literature or history: EH 215 and EH 216, EH 225 and EH 226, EH 235, and EH 236, HY 101 and HY 102, HY 135 and HY 136	
Mathematics MA 110 or higher	3 hrs
Natural Sciences Select two: BLY 101, BLY 102, CH 101, CH 103, CH 131, CH 132/CH 141, GEO 101, GEO 102, GY 111, GY 112, PH 101, PH 104, PH 114/PH 201, PH 115/PH 202	8 hrs
Music Education	32
MUA 181 (repeat for two semesters)	
MUE 444	
MUE 448	
MUE 455	
EDM 310 or MUS 201	
MUS 202	
MUS 203	
MUT 364	
EPY 351	
EDU 400	
SED 470	

## Additional Information For Music Majors

### Technology Proficiency

Music majors will satisfy the University of South Alabama requirement for Technology Proficiency through the successful completion of MUT 112, 3 cr., Basic Music Theory I. This is a required course for all music majors.

### Piano Proficiency

1. The piano proficiency is attained by successfully completing the class piano sequence (MUE 102, MUE 103, MUE 202, MUE 203) and achieving a passing score on the final exam of MUE 203.
2. Students with piano as their principal instrument, or others who have sufficient piano background may be placed in the Advanced Keyboard Musicianship Sequence (MUE 212, MUE 213, MUE 312, MUE 313) after an audition for the piano faculty.
3. Excess hours in piano required to complete the piano proficiency examination may not be counted toward graduation in music. Additional hours in piano beyond the proficiency may be counted toward graduation.

4. The piano proficiency must be completed before a student may enroll in Senior Recital, Student Teaching, or Internship.

### **Placement In Music Theory**

Transfer students intending to take music theory must take a Theory Placement Examination. Contact the Music Office for details.

### **Placement In Applied Music Classes**

All students not previously enrolled in private music study at the University of South Alabama must audition prior to enrolling. Contact the Music Office for audition requirements and scheduling.

All students enrolled in private music study must fill out a Teacher Preference form for each Applied Music course in which they are enrolled. These forms must be filed on-line to the Music Office before registration begins. Once a student is registered and knows their schedule, they must submit their schedule information to their Applied teacher.

### **Applied Music**

Applied music is an integral and vital part of the total education in the field of music. In addition to performing in recitals, full-time music students are also required to attend concerts and recital class (MUA 100) for six semesters and take part in various programs given during their course of study.

Students choosing a minor in music must include applied music courses at the 200 level.

Credit for applied music is based on the minimum practice time per week, not on the length of the lesson period. Courses that show one hour's credit require one 30-minute lesson per week with a minimum practice period of 30 minutes per day. A two-hour course requires 60 minutes of lesson time a week and at least 60 minutes of practice time per day. Those that show three hours' credit require 60 minutes of lesson time per week with a minimum of two hours per day for practice. Satisfactory achievement and development are best achieved by practicing twice the above minimum requirements.

A student may take no more than two applied music courses in any given semester unless permission is obtained from the student's advisor, major applied teacher, and department chair.

### **Senior Recital Requirements**

A public senior recital (MUA 400) is required for the BM degree. Specific requirements vary according to the chosen concentration. See the Department of Music Student Handbook for details.

### **Applied Music Levels**

Students must audition in order to enroll in Applied Music courses. Contact the Department of Music for information.

100 Level (Elective) is designated for students majoring in other academic disciplines (when possible) or music majors who wish to study in a secondary applied area.

200 Level (Major/Lower Division) is designated for the first four semesters of study as a music major. A student must pass an examination at the end of the fourth semester in order to enroll at the 300 or 400 level. Music minors will also enroll at the 200 level.

300 Level (Major/Upper Division) is designated for the junior and senior music major in all concentrations except Performance.

400 Level (Major/Performance) is designated for the junior and senior music major with a concentration in Performance.

### **Minor**

Students pursuing a Bachelor of Music degree are not required to have an academic minor with the exception of the Bachelor of Music with Elective Studies in Outside Fields.

# Music (BM) – Elective Studies In Specific Outside Fields Concentration

## Degree Requirements

Majors in Arts and Sciences may be completed with a minimum of 120 semester hours unless designated otherwise. At least 30 hours of course work, which represents 25% of the required 120 hours, must be at the upper division level in order to fulfill the University's residency requirement. At least 15 of the 30 upper-division hours must be in the major or concentration area. An overall grade-point-average (GPA) of 2.0 is required for graduation. In addition, a minimum GPA of 2.0 is required in the student's major or concentration area.

### Requirements For A Bachelor Of Music Degree (BM)

A total of 120-124 semester hours is required for the B.M. degree. All students are required to complete the Music Core and General Requirements. In addition, they will complete the requirements in their chosen Concentration: Music Education, Elective Studies in Business and/ or Elective Studies in Specific Outside Fields, or Performance. Only those students pursuing a degree in outside fields must have a minor in another discipline. An audition is required for acceptance into a music degree program. Contact the Department (460-6136 or [www.southalabama.edu/music](http://www.southalabama.edu/music)) for audition requirements.

University residency requirements stipulate that at least 30 semester hours, including 15 hours in the major, must be completed in residence at the 300 and/or 400 level. An overall GPA of 2.0 is required for graduation as well as a minimum GPA of 2.0 in the major.

Music (BM) – Elective Studies in Specific Outside Fields Concentration		Credit Hours
Music Core		54
Music Theory	16 hrs of MUT as required by advisor.	
MUT 361	3 hrs	
Music Literature	10 hrs of MUL as required by advisor.	
Major Ensemble	7 hrs in appropriate instrumental or vocal area. Concert Choir, Symphony Band, Chorale, Wind Ensemble, Orchestra, or Marching Band	
Applied Music (MUA or MUB) 200 level - 8 hours 300 or 400 level - 6 hours	14 hrs	
Piano MUE 102 or MUE 212 MUE 103 or MUE 213 MUE 202 or MUE 312 MUE 203 or MUE 313	4 hrs or equivalent proficiency examination (MUE 010).	
Recital Class MUA 100 (repeat six times with grade of "S")		
Senior Recital MUA 400		
General Education Requirements		35
Written and Oral Communication EH 101, EH 102, CA 110	9 hrs	
Humanities	3 hrs	

One literature course required, select from EH 215, EH 216, EH 225, EH 226, EH 235, EH 236

History, Social & Behavioral Sciences Select from at least two disciplines, a minimum of three hours of history required. AN 100, AN 101, GEO 114, GEO 115, HY 101, HY 102, HY 135, HY 136, IS 100, PSC 130, PSY 120, PSY 250, ECO 215, ECO 216, SY 109, SY 112	12 hrs
Select a six-hour sequence in literature or history: EH 215 and EH 216, EH 225 and EH 226, EH 235, and EH 236, HY 101 and HY 102, HY 135 and HY 136	
Mathematics MA 110 or higher	3 hrs
Natural Sciences Select two: BLY 101, BLY 102, CH 101, CH 103, CH 131, CH 132/CH 141, GEO 101, GEO 102, GY 111, GY 112, PH 101, PH 104, PH 114/PH 201, PH 115/PH 202	8 hrs
Elective Studies in Outside Fields	24-36
MUA/MUB 300 level	2 hrs
MUO 411/417	
3 hours of electives in music at 300 level or above	3 hrs
Additional Major or Minor specific requirements determined by academic area (approximately 18-21 hrs.)	18-21 hrs
Electives - variable to complete 120 hr. degree total	

## Additional Information For Music Majors

### Technology Proficiency

Music majors will satisfy the University of South Alabama requirement for Technology Proficiency through the successful completion of MUT 112, 3 cr., Basic Music Theory I. This is a required course for all music majors.

### Piano Proficiency

1. The piano proficiency is attained by successfully completing the class piano sequence (MUE 102, MUE 103, MUE 202, MUE 203) and achieving a passing score on the final exam of MUE 203.
2. Students with piano as their principal instrument, or others who have sufficient piano background may be placed in the Advanced Keyboard Musicianship Sequence (MUE 212, MUE 213, MUE 312, MUE 313) after an audition for the piano faculty.
3. Excess hours in piano required to complete the piano proficiency examination may not be counted toward graduation in music. Additional hours in piano beyond the proficiency may be counted toward graduation.
4. The piano proficiency must be completed before a student may enroll in Senior Recital, Student Teaching, or Internship.

### Placement In Music Theory

Transfer students intending to take music theory must take a Theory Placement Examination. Contact the Music Office for details.

## Placement In Applied Music Classes

All students not previously enrolled in private music study at the University of South Alabama must audition prior to enrolling. Contact the Music Office for audition requirements and scheduling.

All students enrolled in private music study must fill out a Teacher Preference form for each Applied Music course in which they are enrolled. These forms must be filed on-line to the Music Office before registration begins. Once a student is registered and knows their schedule, they must submit their schedule information to their Applied teacher.

## Applied Music

Applied music is an integral and vital part of the total education in the field of music. In addition to performing in recitals, full-time music students are also required to attend concerts and recital class (MUA 100) for six semesters and take part in various programs given during their course of study.

Students choosing a minor in music must include applied music courses at the 200 level.

Credit for applied music is based on the minimum practice time per week, not on the length of the lesson period. Courses that show one hour's credit require one 30-minute lesson per week with a minimum practice period of 30 minutes per day. A two-hour course requires 60 minutes of lesson time a week and at least 60 minutes of practice time per day. Those that show three hours' credit require 60 minutes of lesson time per week with a minimum of two hours per day for practice. Satisfactory achievement and development are best achieved by practicing twice the above minimum requirements.

A student may take no more than two applied music courses in any given semester unless permission is obtained from the student's advisor, major applied teacher, and department chair.

## Senior Recital Requirements

A public senior recital (MUA 400) is required for the BM degree. Specific requirements vary according to the chosen concentration. See the Department of Music Student Handbook for details.

## Applied Music Levels

Students must audition in order to enroll in Applied Music courses. Contact the Department of Music for information.

100 Level (Elective) is designated for students majoring in other academic disciplines (when possible) or music majors who wish to study in a secondary applied area.

200 Level (Major/Lower Division) is designated for the first four semesters of study as a music major. A student must pass an examination at the end of the fourth semester in order to enroll at the 300 or 400 level. Music minors will also enroll at the 200 level.

300 Level (Major/Upper Division) is designated for the junior and senior music major in all concentrations except Performance.

400 Level (Major/Performance) is designated for the junior and senior music major with a concentration in Performance.

## Minor

Students pursuing a Bachelor of Music degree are not required to have an academic minor with the exception of the Bachelor of Music with Elective Studies in Outside Fields.

# Music (BM) – Instrumental Music Education Concentration

## Degree Requirements

Majors in Arts and Sciences may be completed with a minimum of 120 semester hours unless designated otherwise. At least 30 hours of course work, which represents 25% of the required 120 hours, must be at the upper division level in order to fulfill the University's residency requirement. At least 15 of the 30 upper-division hours must be in the major or concentration area. An overall grade-point-average (GPA) of 2.0 is required for graduation. In addition, a minimum GPA of 2.0 is required in the student's major or concentration area.

### Requirements For A Bachelor Of Music Degree (BM)

A total of 120-124 semester hours is required for the B.M. degree. All students are required to complete the Music Core and General Requirements. In addition, they will complete the requirements in their chosen Concentration: Music Education, Elective Studies in Business and/ or Elective Studies in Specific Outside Fields, or Performance. Only those students pursuing a degree in outside fields must have a minor in another discipline. An audition is required for acceptance into a music degree program. Contact the Department (460-6136 or [www.southalabama.edu/music](http://www.southalabama.edu/music)) for audition requirements.

University residency requirements stipulate that at least 30 semester hours, including 15 hours in the major, must be completed in residence at the 300 and/or 400 level. An overall GPA of 2.0 is required for graduation as well as a minimum GPA of 2.0 in the major.

Music (BM) – Instrumental Music Education Concentration		Credit Hours
Music Core		54
Music Theory	16 hrs of MUT as required by advisor.	
MUT 361	3 hrs	
Music Literature	10 hrs of MUL as required by advisor.	
Major Ensemble	7 hrs in appropriate instrumental or vocal area. Concert Choir, Symphony Band, Chorale, Wind Ensemble, Orchestra, or Marching Band	
Applied Music (MUA or MUB) 200 level - 8 hours 300 or 400 level - 6 hours	14 hrs	
Piano MUE 102 or MUE 212 MUE 103 or MUE 213 MUE 202 or MUE 312 MUE 203 or MUE 313	4 hrs or equivalent proficiency examination (MUE 010).	
Recital Class MUA 100 (repeat six times with grade of "S")		
Senior Recital MUA 400		
General Education Requirements		35
Written and Oral Communication EH 101, EH 102, CA 110	9 hrs	
Humanities	3 hrs	

One literature course required, select from EH 215, EH 216, EH 225, EH 226, EH 235, EH 236

History, Social & Behavioral Sciences Select from at least two disciplines, a minimum of three hours of history required. AN 100, AN 101, GEO 114, GEO 115, HY 101, HY 102, HY 135, HY 136, IS 100, PSC 130, PSY 120, PSY 250, ECO 215, ECO 216, SY 109, SY 112	12 hrs
Select a six-hour sequence in literature or history: EH 215 and EH 216, EH 225 and EH 226, EH 235, and EH 236, HY 101 and HY 102, HY 135 and HY 136	
Mathematics MA 110 or higher	3 hrs
Natural Sciences Select two: BLY 101, BLY 102, CH 101, CH 103, CH 131, CH 132/CH 141, GEO 101, GEO 102, GY 111, GY 112, PH 101, PH 104, PH 114/PH 201, PH 115/PH 202	8 hrs
Music Education - Instrumental	32
MUO 111/411 or MUO 115/415	
MUE 240	
MUE 241	
MUE 242	
MUE 243	
MUE 346	
MUE 444	
MUE 455	
EDM 310 or MUS 201	
MUT 362	
EPY 351	
EDU 400	
SED 470	
Completion of a Music Education concentration and teacher certification requires a grade-point average of at least 2.5 on all course work attempted, no grade below a "C" in professional teacher education, and at least a 2.75 grade-point average on all work attempted in the teaching specialization (music).	

## Additional Information For Music Majors

### Technology Proficiency

Music majors will satisfy the University of South Alabama requirement for Technology Proficiency through the successful completion of MUT 112, 3 cr., Basic Music Theory I. This is a required course for all music majors.

### Piano Proficiency

1. The piano proficiency is attained by successfully completing the class piano sequence (MUE 102, MUE 103, MUE 202, MUE 203) and achieving a passing score on the final exam of MUE 203.

2. Students with piano as their principal instrument, or others who have sufficient piano background may be placed in the Advanced Keyboard Musicianship Sequence (MUE 212, MUE 213, MUE 312, MUE 313) after an audition for the piano faculty.
3. Excess hours in piano required to complete the piano proficiency examination may not be counted toward graduation in music. Additional hours in piano beyond the proficiency may be counted toward graduation.
4. The piano proficiency must be completed before a student may enroll in Senior Recital, Student Teaching, or Internship.

### **Placement In Music Theory**

Transfer students intending to take music theory must take a Theory Placement Examination. Contact the Music Office for details.

### **Placement In Applied Music Classes**

All students not previously enrolled in private music study at the University of South Alabama must audition prior to enrolling. Contact the Music Office for audition requirements and scheduling.

All students enrolled in private music study must fill out a Teacher Preference form for each Applied Music course in which they are enrolled. These forms must be filed on-line to the Music Office before registration begins. Once a student is registered and knows their schedule, they must submit their schedule information to their Applied teacher.

### **Applied Music**

Applied music is an integral and vital part of the total education in the field of music. In addition to performing in recitals, full-time music students are also required to attend concerts and recital class (MUA 100) for six semesters and take part in various programs given during their course of study.

Students choosing a minor in music must include applied music courses at the 200 level.

Credit for applied music is based on the minimum practice time per week, not on the length of the lesson period. Courses that show one hour's credit require one 30-minute lesson per week with a minimum practice period of 30 minutes per day. A two-hour course requires 60 minutes of lesson time a week and at least 60 minutes of practice time per day. Those that show three hours' credit require 60 minutes of lesson time per week with a minimum of two hours per day for practice. Satisfactory achievement and development are best achieved by practicing twice the above minimum requirements.

A student may take no more than two applied music courses in any given semester unless permission is obtained from the student's advisor, major applied teacher, and department chair.

### **Senior Recital Requirements**

A public senior recital (MUA 400) is required for the BM degree. Specific requirements vary according to the chosen concentration. See the Department of Music Student Handbook for details.

### **Applied Music Levels**

Students must audition in order to enroll in Applied Music courses. Contact the Department of Music for information.

100 Level (Elective) is designated for students majoring in other academic disciplines (when possible) or music majors who wish to study in a secondary applied area.

200 Level (Major/Lower Division) is designated for the first four semesters of study as a music major. A student must pass an examination at the end of the fourth semester in order to enroll at the 300 or 400 level. Music minors will also enroll at the 200 level.

300 Level (Major/Upper Division) is designated for the junior and senior music major in all concentrations except Performance.

400 Level (Major/Performance) is designated for the junior and senior music major with a concentration in Performance.

### **Minor**

Students pursuing a Bachelor of Music degree are not required to have an academic minor with the exception of the Bachelor of Music with Elective Studies in Outside Fields.

# Music (BM) – Instrumental Performance Concentration

## Degree Requirements

Majors in Arts and Sciences may be completed with a minimum of 120 semester hours unless designated otherwise. At least 30 hours of course work, which represents 25% of the required 120 hours, must be at the upper division level in order to fulfill the University's residency requirement. At least 15 of the 30 upper-division hours must be in the major or concentration area. An overall grade-point-average (GPA) of 2.0 is required for graduation. In addition, a minimum GPA of 2.0 is required in the student's major or concentration area.

### Requirements For A Bachelor Of Music Degree (BM)

A total of 120-124 semester hours is required for the B.M. degree. All students are required to complete the Music Core and General Requirements. In addition, they will complete the requirements in their chosen Concentration: Music Education, Elective Studies in Business and/ or Elective Studies in Specific Outside Fields, or Performance. Only those students pursuing a degree in outside fields must have a minor in another discipline. An audition is required for acceptance into a music degree program. Contact the Department (460-6136 or [www.southalabama.edu/music](http://www.southalabama.edu/music)) for audition requirements.

University residency requirements stipulate that at least 30 semester hours, including 15 hours in the major, must be completed in residence at the 300 and/or 400 level. An overall GPA of 2.0 is required for graduation as well as a minimum GPA of 2.0 in the major.

Music (BM) – Instrumental Performance Concentration		Credit Hours
Music Core		54
Music Theory	16 hours of MUT as required by advisor.	
MUT 361	3 hrs	
Music Literature	10 hours of MUL as required by advisor.	
Major Ensemble	7 hours in appropriate instrumental or vocal area. Concert Choir, Symphony Band, Chorale, Wind Ensemble, Orchestra, or Marching Band	
Applied Music (MUA or MUB) 200 level - 8 hours 300 or 400 level - 6 hours	14 hrs	
Piano MUE 102 or MUE 212 MUE 103 or MUE 213 MUE 202 or MUE 312 MUE 203 or MUE 313	4 hours or equivalent proficiency examination (MUE 010).	
Recital Class MUA 100 (repeat six times with grade of "S")		
Senior Recital MUA 400		
General Education Requirements		35
Written and Oral Communication EH 101, EH 102, CA 110	9 hrs	
Humanities	3 hrs	

One literature course required, select from EH 215, EH 216, EH 225, EH 226, EH 235, EH 236

History, Social & Behavioral Sciences Select from at least two disciplines, a minimum of three hours of history required. AN 100, AN 101, GEO 114, GEO 115, HY 101, HY 102, HY 135, HY 136, IS 100, PSC 130, PSY 120, PSY 250, ECO 215, ECO 216, SY 109, SY 112	12 hrs
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Select a six-hour sequence in literature or history:  
EH 215 and EH 216, EH 225 and EH 226, EH 235, and EH 236, HY 101 and HY 102, HY 135 and HY 136

Mathematics MA 110 or higher	3 hrs
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Natural Sciences Select two: BLY 101, BLY 102, CH 101, CH 103, CH 131, CH 132/CH 141, GEO 101, GEO 102, GY 111, GY 112, PH 101, PH 104, PH 114/PH 201, PH 115/PH 202	8 hrs
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Electives (8 hrs.)

Performance - Instrumental	23
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MUA 300, Applied Music 400 level (6 hours)

MUE 4\*\* Pedagogy

MUL4\*\* Literature

MUO 411/MUO 417

4 semesters of small ensemble

9 hours of electives in music at 300 level or above

## Additional Information For Music Majors

### Technology Proficiency

Music majors will satisfy the University of South Alabama requirement for Technology Proficiency through the successful completion of MUT 112, 3 cr., Basic Music Theory I. This is a required course for all music majors.

### Piano Proficiency

1. The piano proficiency is attained by successfully completing the class piano sequence (MUE 102, MUE 103, MUE 202, MUE 203) and achieving a passing score on the final exam of MUE 203.
2. Students with piano as their principal instrument, or others who have sufficient piano background may be placed in the Advanced Keyboard Musicianship Sequence (MUE 212, MUE 213, MUE 312, MUE 313) after an audition for the piano faculty.
3. Excess hours in piano required to complete the piano proficiency examination may not be counted toward graduation in music. Additional hours in piano beyond the proficiency may be counted toward graduation.
4. The piano proficiency must be completed before a student may enroll in Senior Recital, Student Teaching, or Internship.

### Placement In Music Theory

Transfer students intending to take music theory must take a Theory Placement Examination. Contact the Music Office for details.

## Placement In Applied Music Classes

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## Applied Music

Applied music is an integral and vital part of the total education in the field of music. In addition to performing in recitals, full-time music students are also required to attend concerts and recital class (MUA 100) for six semesters and take part in various programs given during their course of study.

Students choosing a minor in music must include applied music courses at the 200 level.

Credit for applied music is based on the minimum practice time per week, not on the length of the lesson period. Courses that show one hour's credit require one 30-minute lesson per week with a minimum practice period of 30 minutes per day. A two-hour course requires 60 minutes of lesson time a week and at least 60 minutes of practice time per day. Those that show three hours' credit require 60 minutes of lesson time per week with a minimum of two hours per day for practice. Satisfactory achievement and development are best achieved by practicing twice the above minimum requirements.

A student may take no more than two applied music courses in any given semester unless permission is obtained from the student's advisor, major applied teacher, and department chair.

## Senior Recital Requirements

A public senior recital (MUA 400) is required for the BM degree. Specific requirements vary according to the chosen concentration. See the Department of Music Student Handbook for details.

## Applied Music Levels

Students must audition in order to enroll in Applied Music courses. Contact the Department of Music for information.

100 Level (Elective) is designated for students majoring in other academic disciplines (when possible) or music majors who wish to study in a secondary applied area.

200 Level (Major/Lower Division) is designated for the first four semesters of study as a music major. A student must pass an examination at the end of the fourth semester in order to enroll at the 300 or 400 level. Music minors will also enroll at the 200 level.

300 Level (Major/Upper Division) is designated for the junior and senior music major in all concentrations except Performance.

400 Level (Major/Performance) is designated for the junior and senior music major with a concentration in Performance.

## Minor

Students pursuing a Bachelor of Music degree are not required to have an academic minor with the exception of the Bachelor of Music with Elective Studies in Outside Fields.

# Music (BM) – Vocal Performance Concentration

## Degree Requirements

Majors in Arts and Sciences may be completed with a minimum of 120 semester hours unless designated otherwise. At least 30 hours of course work, which represents 25% of the required 120 hours, must be at the upper division level in order to fulfill the University's residency requirement. At least 15 of the 30 upper-division hours must be in the major or concentration area. An overall grade-point-average (GPA) of 2.0 is required for graduation. In addition, a minimum GPA of 2.0 is required in the student's major or concentration area.

### Requirements For A Bachelor Of Music Degree (BM)

A total of 120-124 semester hours is required for the B.M. degree. All students are required to complete the Music Core and General Requirements. In addition, they will complete the requirements in their chosen Concentration: Music Education, Elective Studies in Business and/ or Elective Studies in Specific Outside Fields, or Performance. Only those students pursuing a degree in outside fields must have a minor in another discipline. An audition is required for acceptance into a music degree program. Contact the Department (460-6136 or [www.southalabama.edu/music](http://www.southalabama.edu/music)) for audition requirements.

University residency requirements stipulate that at least 30 semester hours, including 15 hours in the major, must be completed in residence at the 300 and/or 400 level. An overall GPA of 2.0 is required for graduation as well as a minimum GPA of 2.0 in the major.

Music (BM) – Vocal Performance Concentration		Credit Hours
Music Core		54
Music Theory	16 hrs of MUT as required by advisor.	
MUT 361	3 hrs	
Music Literature	10 hrs of MUL as required by advisor.	
Major Ensemble	7 hrs in appropriate instrumental or vocal area. Concert Choir, Symphony Band, Chorale, Wind Ensemble, Orchestra, or Marching Band	
Applied Music (MUA or MUB) 200 level - 8 hours 300 or 400 level - 6 hours	14 hrs	
Piano MUE 102 or MUE 212 MUE 103 or MUE 213 MUE 202 or MUE 312 MUE 203 or MUE 313	4 hrs or equivalent proficiency examination MUE (010).	
Recital Class MUA 100 (repeat six times with grade of "S")		
Senior Recital MUA 400		
General Education Requirements		35
Written and Oral Communication EH 101, EH 102, CA 110	9 hrs	
Humanities One literature course required, select from EH 215, EH 216, EH 225, EH 226, EH 235, EH 236	3 hrs	
History, Social & Behavioral Sciences	12 hrs	

Select from at least two disciplines, a minimum of three hours of history required. AN 100, AN 101, GEO 114, GEO 115, HY 101, HY 102, HY 135, HY 136, IS 100, PSC 130, PSY 120, PSY 250, ECO 215, ECO 216, SY 109, SY 112

Select a six-hour sequence in literature or history:  
EH 215 and EH 216, EH 225 and EH 226, EH 235, and EH 236, HY 101 and HY 102, HY 135 and HY 136

Mathematics 3 hrs  
MA 110 or higher

Natural Sciences 8 hrs  
Select two: BLY 101, BLY 102, CH 101, CH 103, CH 131, CH 132/CH 141, GEO 101, GEO 102, GY 111, GY 112, PH 101, PH 104, PH 114/PH 201, PH 115/PH 202

Electives (6 hrs.)

Performance - Vocal 25

MUA 300

MUA 423, (6 hours)

MUE 448

MUO 411

MUO 416 (4 semesters)

MUS 202

MUS 203

LG 111

LG 151

6 hours of electives in music at 300 level or above

## Additional Information For Music Majors

### Technology Proficiency

Music majors will satisfy the University of South Alabama requirement for Technology Proficiency through the successful completion of MUT 112, 3 cr., Basic Music Theory I. This is a required course for all music majors.

### Piano Proficiency

1. The piano proficiency is attained by successfully completing the class piano sequence (MUE 102, MUE 103, MUE 202, MUE 203) and achieving a passing score on the final exam of MUE 203.
2. Students with piano as their principal instrument, or others who have sufficient piano background may be placed in the Advanced Keyboard Musicianship Sequence (MUE 212, MUE 213, MUE 312, MUE 313) after an audition for the piano faculty.
3. Excess hours in piano required to complete the piano proficiency examination may not be counted toward graduation in music. Additional hours in piano beyond the proficiency may be counted toward graduation.
4. The piano proficiency must be completed before a student may enroll in Senior Recital, Student Teaching, or Internship.

### Placement In Music Theory

Transfer students intending to take music theory must take a Theory Placement Examination. Contact the Music Office for details.

## Placement In Applied Music Classes

All students not previously enrolled in private music study at the University of South Alabama must audition prior to enrolling. Contact the Music Office for audition requirements and scheduling.

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## Applied Music

Applied music is an integral and vital part of the total education in the field of music. In addition to performing in recitals, full-time music students are also required to attend concerts and recital class (MUA 100) for six semesters and take part in various programs given during their course of study.

Students choosing a minor in music must include applied music courses at the 200 level.

Credit for applied music is based on the minimum practice time per week, not on the length of the lesson period. Courses that show one hour's credit require one 30-minute lesson per week with a minimum practice period of 30 minutes per day. A two-hour course requires 60 minutes of lesson time a week and at least 60 minutes of practice time per day. Those that show three hours' credit require 60 minutes of lesson time per week with a minimum of two hours per day for practice. Satisfactory achievement and development are best achieved by practicing twice the above minimum requirements.

A student may take no more than two applied music courses in any given semester unless permission is obtained from the student's advisor, major applied teacher, and department chair.

## Senior Recital Requirements

A public senior recital (MUA 400) is required for the BM degree. Specific requirements vary according to the chosen concentration. See the Department of Music Student Handbook for details.

## Applied Music Levels

Students must audition in order to enroll in Applied Music courses. Contact the Department of Music for information.

100 Level (Elective) is designated for students majoring in other academic disciplines (when possible) or music majors who wish to study in a secondary applied area.

200 Level (Major/Lower Division) is designated for the first four semesters of study as a music major. A student must pass an examination at the end of the fourth semester in order to enroll at the 300 or 400 level. Music minors will also enroll at the 200 level.

300 Level (Major/Upper Division) is designated for the junior and senior music major in all concentrations except Performance.

400 Level (Major/Performance) is designated for the junior and senior music major with a concentration in Performance.

## Minor

Students pursuing a Bachelor of Music degree are not required to have an academic minor with the exception of the Bachelor of Music with Elective Studies in Outside Fields.

# Music (MM) - Collaborative Keyboard Concentration

## Degree Requirements

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### Degree Requirements And Courses

Students must complete a minimum of 32 semester hours of credit in approved 500-level courses. A minimum of 20 semester hours must be completed at the University of South Alabama. Up to 12 hours of USA courses taken while in another program (or non-degree status) may be applied. Only courses not applied to another degree may count. Maximum of 12 hours with grades of "A", "B", or "S" of approved transfer credit is allowed. If the university is non-accredited, the individual USA graduate program will determine if the quality and content of the courses meet the standards of the program.

### Grade Requirements

- A minimum of a 3.0 GPA on all work attempted is required for graduation.
- Courses in which a student receives a "D" or below will not be counted toward the degree program.
- A maximum of two courses with a grade of "C" will be counted toward the degree program.
- Students receiving four grades of "C" or below, regardless of the overall GPA will be dismissed from the program.
- A student who receives a failing grade in a course for graduate credit may be dismissed from the program.

### Time Limitations

- All degree requirements must be completed within seven calendar years.
- Most students who take nine hours per semester complete the degree within a two-year period.
- The time required for degree completion depends on how many courses a student can take each semester and the ability of that student to complete the recital(s) or final project(s).

### Course Load

Six to ten credit hours per semester constitute a full-time course load.

**Note:** No more than twelve credits in this area are applicable toward a degree.

# Music (MM) - Music Education Concentration

## Degree Requirements

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### Degree Requirements And Courses

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Students must complete a minimum of 32 semester hours of credit in approved 500-level courses. A minimum of 20 semester hours must be completed at the University of South Alabama. Up to 12 hours of USA courses taken while in another program (or non-degree status) may be applied. Only courses not applied to another degree may count. Maximum of 12 hours with grades of "A", "B", or "S" of approved transfer credit is allowed. If the university is non-accredited, the individual USA graduate program will determine if the quality and content of the courses meet the standards of the program.

### Grade Requirements

- A minimum of a 3.0 GPA on all work attempted is required for graduation.
- Courses in which a student receives a "D" or below will not be counted toward the degree program.
- A maximum of two courses with a grade of "C" will be counted toward the degree program.
- Students receiving four grades of "C" or below, regardless of the overall GPA will be dismissed from the program.
- A student who receives a failing grade in a course for graduate credit may be dismissed from the program.

### Time Limitations

- All degree requirements must be completed within seven calendar years.
- Most students who take nine hours per semester complete the degree within a two-year period.
- The time required for degree completion depends on how many courses a student can take each semester and the ability of that student to complete the recital(s) or final project(s).

### Course Load

Six to ten credit hours per semester constitute a full-time course load.

**Note:** No more than twelve credits in this area are applicable toward a degree.

# Music (MM) - Performance Concentration (Piano, Voice, Brass, Percussion, Woodwinds)

## Degree Requirements

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### Degree Requirements And Courses

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Students must complete a minimum of 32 semester hours of credit in approved 500-level courses. A minimum of 20 semester hours must be completed at the University of South Alabama. Up to 12 hours of USA courses taken while in another program (or non-degree status) may be applied. Only courses not applied to another degree may count. Maximum of 12 hours with grades of "A", "B", or "S" of approved transfer credit is allowed. If the university is non-accredited, the individual USA graduate program will determine if the quality and content of the courses meet the standards of the program.

### Grade Requirements

- A minimum of a 3.0 GPA on all work attempted is required for graduation.
- Courses in which a student receives a "D" or below will not be counted toward the degree program.
- A maximum of two courses with a grade of "C" will be counted toward the degree program.
- Students receiving four grades of "C" or below, regardless of the overall GPA will be dismissed from the program.
- A student who receives a failing grade in a course for graduate credit may be dismissed from the program.

### Time Limitations

- All degree requirements must be completed within seven calendar years.
- Most students who take nine hours per semester complete the degree within a two-year period.
- The time required for degree completion depends on how many courses a student can take each semester and the ability of that student to complete the recital(s) or final project(s).

### Course Load

Six to ten credit hours per semester constitute a full-time course load.

**Note:** No more than twelve credits in this area are applicable toward a degree.

# Nursing

## Department Information

College of Nursing Administrative Staff		(251) 445-9400
Dean	Debra C. Davis	
Senior Associate Dean for Academic Affairs	Rosemary Rhodes	
Associate Dean for Research/ Development		
Associate Dean Baldwin County	Rosemary Rhodes	
Associate Dean for Academic Affairs	Heather Hall	
Assistant Dean for Clinical Affairs	Tracey Taylor	
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College of Nursing web site

<http://www.southalabama.edu/colleges/con/>

The College of Nursing is dedicated to the education of professional nurses who provide the highest quality health care to the communities they serve. The practice of nursing is both an art and a science; the focus of nursing is the diagnosis and treatment of human responses to actual or potential health problems.

The College of Nursing has two locations, one is on the USA main campus, and the other is on the USA Baldwin County campus in downtown Fairhope. The resources of the University, the USA Hospitals and clinics, and the numerous clinical agencies provide excellent opportunities for students to acquire the knowledge and skills essential for professional nursing.

### **Mission**

The mission of the College of Nursing is to provide quality innovative educational programs to a diverse student body, to participate in research and scholarly activities, and to provide service to the University, the profession, and the public. The College accomplishes this by providing a caring, engaging environment for the empowerment of student learning potential, the professional development of faculty, and the promotion of the nursing profession.

### **Goals**

1. Cultivate a caring, innovative, and engaging environment to facilitate teaching, learning, scholarship, and service.
2. Deliver innovative quality nursing programs that meet the needs of a diverse student body and other communities of interest.
3. Promote the discovery, communication, and preservation of knowledge through scholarly activities and leadership.
4. Provide service to the University, the profession, and the public.
5. Develop community partnerships to promote nursing and the enhancement of the health care delivery system using interprofessional approaches.

### **Accreditation**

The baccalaureate program is approved by the Alabama Board of Nursing and the baccalaureate, master's, doctor of nursing practice, and post-graduate APRN certificate programs are accredited by the Commission on Collegiate Nursing Education (One Dupont Circle, NW, Suite 530, Washington, D.C. 20036-1120: Telephone (202)877-6791.

### **Application Procedures**

Application forms are available on the College of Nursing's web site. A (\$50.00 for BSN; \$100.00 for MSN or DNP) non-refundable application fee must be submitted with the application. Money orders or personal checks (\$20.00 fee on returned checks) are acceptable. MSN and DNP applicants are also required to complete a primary application in Nursing CAS at [www.Nursingcas.org](http://www.Nursingcas.org). Fall semester admission applications should be submitted by March 15 for the BSN program and February 15 for the MSN and DNP programs.

Spring semester admission applications should be submitted by July 15 for the BSN, MSN, DNP, and Post-Graduate Certificate programs.

Summer semester admission applications should be submitted by January 15 for BSN program and November 15 for the MSN program.

Applications received at other times will be considered on a space available basis for RN-BSN track only.

Students who choose not to attend during the term in which they are accepted, are not permitted to roll admission status to another semester. Students who wish to be considered for a future semester must reapply, pay another application fee, and compete with other applicants without guarantee of acceptance. Students who drop out of the program for two or more consecutive semesters must apply for readmission through the Office of the Registrar. Readmission is not automatic.

Students not accepted during a certain term who choose to roll their application to the following semester will not be assessed another application processing fee. Students who choose to roll their application a second time, or if the length of time between applications is greater than one semester, then an application processing fee will be collected in order for the application to be considered for the given term.

### **Student Responsibility**

While the University of South Alabama will endeavor to provide timely and accurate advisement, it is the responsibility of the student to know and satisfy the degree requirements of the academic program, to be aware of the University calendar, <http://www.southalabama.edu/academiccalendar/index.html> and to understand and comply with University academic policies and procedures.

## Degrees Offered

The College of Nursing offers the Bachelor of Science in Nursing (BSN) degree, the Master of Science in Nursing (MSN) degree, and the Doctor of Nursing Practice (DNP) degree.

## Certificates Offered

Post-Graduate Certificates are awarded to students completing planned programs of study in a nursing specialty area and subspecialty areas.

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# Nursing (BS) - Accelerated

## Degree Requirements

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### Accelerated BSN/MSN Pathway

The College of Nursing has a special Accelerated BSN/MSN Pathway for academically-qualified and highly-motivated individuals that have a bachelor's degree in another field. The preprofessional component, as listed below, must be completed prior to admission to the professional component. The professional component of the curriculum, which normally takes 5 semesters to complete, can be completed in 12 months of full-time study.

The curriculum and contact hours are the same as required for the traditionally-taught BSN degree offered by the College, except that the course schedule is accelerated and is not confined by the traditional academic calendar. Students in the first 12 months of the Accelerated BSN/MSN Pathway follow the same promotion/progression policies as the students in the traditionally-taught BSN. Students having difficulty maintaining the pace of the program may request a transfer to the traditional program if they are in good academic standing.

At the end of the 12-months of study, students are awarded the BSN degree and are prepared for the RN licensure (NCLEX) examination. During the first 12 months of the accelerated BSN/MSN Pathway, students complete 3 courses that taught at the graduate level. These 3 courses "bridge" undergraduate and graduate knowledge in pharmacology, pathophysiology, and health assessment. Two of these courses may be applied towards a graduate degree if grades received in the course comply with graduate progression policies.

Students then begin the specialty component of the curriculum to prepare for a career in informatics, executive nursing administration, as a clinical nurse leader, or clinical nurse specialist in adult/gerontological nursing. Students who wish to pursue nurse practitioner preparation must obtain a minimum of 2 years of clinical experience before beginning clinical nurse practitioner specialty courses. Courses for the specialty component of the curriculum are offered online. Clinical requirements are completed in faculty-facilitated preceptorships.

# Nursing (BSN) - RN-BSN

## Degree Requirements

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### **RN To BSN Pathway For Associate Degree And Diploma Nurses**

The College of Nursing has a Pathway designed especially for registered nurses pursuing the Bachelor of Science in Nursing Degree. The college also offers a Pathway for diploma and associate degree RNs who want the MSN degree (see MSN section). Once prerequisites are completed (see prerequisite professional component section on the BSN curriculum model) the professional component of the nursing curriculum can be completed in one calendar year. Courses are offered online and practice integration requirements can be completed in the student's home community if approved by faculty. Thirty-six hours of nursing credit are awarded the semester students graduate.

# Nursing (BSN) - Traditional

## Degree Requirements

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The BSN program prepares graduates for professional nursing practice. Upon completion of the program graduates are eligible to apply for the National Council Licensure Examination (NCLEX) to become licensed as a Registered Nurse.

The BSN program is offered in a traditional four-year format with nursing courses concentrated in the junior and senior years. The BSN program is also offered in an accelerated format and there is a special track for Associate Degree and diploma prepared nurses.

### BSN Program Learning Outcomes

Upon completion of the Baccalaureate Program, graduates should be able to:

1. Deliver professional nursing care for diverse populations across the lifespan to optimize health care outcomes.
2. Apply theory and evidence from contemporary nursing science and related disciplines as a basis for clinical reasoning, management, and evaluation of professional nursing care.
3. Model responsibility and accountability for one's personal and delegated nursing care and lifelong learning to ensure excellence in nursing practice.
4. Translate evidence into professional nursing practice to individualize patient care designed to improve care outcomes.
5. Select principles of leadership and management that guide nursing, influence health policy, and transform health care delivery systems.
6. Collaborate with inter-professional health care teams and consumers in delivering and advocating for safe and effective use of health care resources.
7. Integrate professional nursing values in meeting current and emerging health needs in a dynamic, global society.
8. Evaluate effective use of technology and information management to provide patient centered care across the lifespan in a variety of environments.

# Nursing (MSN) - BSN-Prepared RN's

## Degree Requirements

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### Degree Requirements For The MSN Pathway For BSN- Prepared RN's

The MSN program must be completed within 5 years of matriculation. A minimum of 45 semester credits are required for the MSN degree with preparation in a nurse practitioner track. Minimum credits for preparation in Executive Nursing Administration and Nursing Informatics require 37 semester credits; Clinical Nurse Leader and Clinical Nurse Specialist require 36 semester credits.

### Master Of Science In Nursing Program Learning Outcomes

Upon completion of the Master of Science in Nursing Program, graduates should be able to:

1. Integrate advanced knowledge and theories from nursing and related disciplines into a specialized area of advanced nursing practice.
2. Demonstrate competence in advanced nursing roles to meet current and emerging health needs of a global changing society.
3. Use scientific inquiry to identify problems and individualize patient care designed to improve care outcomes.
4. Apply advanced knowledge of leadership and management to influence health policy to transform care delivery systems.
5. Contribute to the focus and direction of the nursing profession.

# Nursing (MSN) - RN To BSN/MSN

## Degree Requirements

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### **RN-bSN/MSN Pathway For RN's Who Do Not Hold A Baccalaureate Degree**

The College of Nursing has a special program to facilitate associate and diploma-prepared registered nurses attain the Master of Science in Nursing degree.

Upon completion of the first phase of the program, students will be awarded a BSN degree. Upon completion of the second phase of the program, the student will earn the MSN degree.

### **Program Completion Requirements For The RN - BSN/MSN Pathway For Registered Nurses Who Do Not Hold A Baccalaureate Degree**

Students in this pathway complete the following 31 credit curriculum for the BSN phase of the program. Undergraduate courses - NU 410, CMN 411, NU 404, NU 415, NU 422 and NU 461; Graduate Level Bridge Courses - NU 530 and NU 531.

The Master of Science in Nursing phase of the program consist of core courses, research courses, support courses, and specialty courses for each track. See curriculum.

# Nursing (MSN) - RN-MSN With Non-Nursing Baccalaureate

## Degree Requirements

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### **RN - MSN Pathway For RN's With A Non-nursing Baccalaureate Degree**

This pathway is available to persons who are registered nurses and have a baccalaureate degree from an accredited institution in a discipline other than nursing.

### **Progression Requirements For RN - MSN Pathway For Nurses With Non-nursing Baccalaureate Degrees**

The following nursing courses must be completed with a GPA of at least 2.75 prior to enrolling in graduate nursing specialty courses: NU 410, CMN 411, NU 404, NU 425 or NU 530. Students who have earned a GPA of less than 2.5 will be academically dismissed from the Graduate School. Students in the RN to MSN track follow the same progression as students in the regular MSN program.

### **Program Completion Requirements For RN - MSN For Registered Nurses With Non-nursing Baccalaureate Degrees**

Students in the RN - MSN pathway follow the same degree requirements and progression policies as students in the MSN track for BSN prepared RN's with the addition of the above listed courses.

# Nursing Practice (DNP) - BSN To DNP

## Degree Requirements

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### BSN To DNP Curriculum

The BSN to DNP curriculum consist of 69 to 87 credits. The program can be completed in 9 semesters of full-time study or in 12 semesters of part-time study. Full-time study is defined as 6 or more credits per semester. Permission to take more than 12 credits per semester must be obtained from the Associate Dean of Academic Affairs prior to the student enrolling. The program must be completed within 7 years of matriculation.

Course work is offered online and students are required to come to campus one time when they begin the clinical portion of their specialty program for an intensive classroom and evaluation sessions. Specialty tracks within the College of Nursing's graduate program require a practice component. Although faculty assists students in locating a site and preceptor if it is indicated. Students who are unsuccessful in being accepted by an agency in their home community may have to travel to another area to complete practice requirements or withdraw from the program. Please review the list of clinical affiliations found under the "Current Student" tab on the College of Nursing Web Site at <http://www.southalabama.edu/colleges/con/students/index.html>. If there is not a clinical site listed near you or you are interested in a site not listed, negotiations should be initiated as soon as you begin the program through the Specialty Coordinator for your specialty.

The program does not require a thesis or dissertation; however, students are required to complete a major synthesis project that results in a quality improvement change and has a substantial effect on health care outcomes. Residency requirements for the synthesis project can be completed in the student's home region with an approved mentor.

# Nursing Practice (DNP) - MSN To DNP

## Degree Requirements

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### Master Of Science In Nursing To DNP Curriculum For Advanced Nursing Practice

The DNP curriculum consists of 36 credits for the student holding a Master of Science in Nursing degree with preparation in an area of advanced practice nursing. Students who graduated with an MSN from the University of South Alabama College of Nursing and completed the following courses NU 607, NU 608, NU 610, and NU 613 during the MSN coursework may complete the DNP program with an additional 24 credits if the previous coursework is within the seven year limit. The MSN to DNP program can be completed in three semesters of full-time study. Full-time study is defined as six or more credits per semester. Permission to take more than 12 credits per semester must be obtained from the Associate Dean of Academic Affairs. Part-time study is also available. The program must be completed in five years of matriculation for the MSN to DNP program.

Course work for the MSN to DNP program is offered completely online. Students are not required to come to campus during the MSN to DNP program. Electives can be taken but are not required. The program does not require a thesis or dissertation; however, students are required to complete a major synthesis project that results in a quality improvement change and has a substantial effect on health care outcomes. Residency requirements for the synthesis project can be completed in the student's home region with an approved mentor.

### Doctor Of Nursing Practice Program Learning Outcomes

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Upon completion of the Doctor of Nursing Practice program, graduates should be able to:

1. Assume organizational and system leadership in the analysis, delivery, and management of nursing care.
2. Implement the highest level of advanced nursing care to produce high-quality, cost-effective outcomes for diverse patient outcomes.
3. Use theories, concepts, and analytic methodologies to design, implement, and evaluate practice by applying evidence to transform nursing systems.
4. Contribute to the knowledge of best-practices and dissemination of outcomes through professional writing and presentations.
5. Develop practice standards based on the integration of ethics and evidence-based nursing care.

# Nursing Practice (DNP) - MSN To DNP Adding A New Certification Area

## Degree Requirements

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The MSN to DNP program may be completed by adding a new certification area. When retooling to a new specialty area, students will earn a post-graduate certificate in the process of completion of the DNP. The post-graduate certificate coursework must be completed within 2 years from the semester the specialty option coursework begins. The retooling to a new specialty plus the MSN to DNP program must be completed in seven years of matriculation.

# Nursing Practice (DNP) - MSN To DNP Bridge Pathway For Clinical Nurse Leader To Executive Nursing Administration

## Degree Requirements

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(MSN/CNL to DNP/ENA) is for students who completed their MSN in the area of CNL and want to complete their DNP in the specialty area of Executive Nursing Administration.

Students may pursue a DNP in the specialty area of Nursing Executive Administration after receiving an MSN degree and successfully passing the CNL certification.

Students would be required to complete 36 credit hours of the DNP program and two bridge courses to matriculate from the Clinical Nurse Leader to the Nursing Executive Administration specialty. Graduates of this program would complete a total of 42 credits.

The following bridge courses are required for the CNL to matriculate to the DNP Nurse Executive Administration specialty option:

NU 560: Administration and Management for Advanced Nursing Practice

NU 565: Nursing Administration Finance

# Nursing Subspecialty Options

## Degree Requirements

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The following subspecialties can be added to specific APRN pathways as designated:

- Cardiovascular - students who are in Adult-Gerontological Acute Care NP can add these 8 credits.
- Oncology - students who are in Adult-Gerontological Primary Care NP, Adult-Gerontological Acute Care NP, Dual Role specialty, Clinical Nurse Specialist-Adult Gerontological Health, Family NP, Psychiatric (Family) NP or Women's Health NP can add these 11 credits.
- Palliative Care - students who are in Adult-Gerontological Primary Care NP, Adult-Gerontological Acute Care NP, Clinical Nurse Specialist-Adult Gerontological Health, or Family NP can add these 9 credits.
- Nurse Educator - any student can add these 11 credits to their curriculum.
- Clinical Lipidology - students who are in Adult-Gerontological Acute Care NP, Adult-Gerontological Primary Care NP, Family NP, Women's Health NP, Clinical Nurse Specialist - Adult Gerontological Health, or Dual Role specialty can add these 8 credits.

# Post-Graduate Certificate

## Degree Requirements

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### **Progression Requirements For The Post-graduate Certificate**

Students follow the progression policies for the MSN Pathway for BSN prepared RN's. The Post-Graduate Certificate Program must be completed within 2 years from the semester the specialty option coursework begins.

### **Program Completion Requirements For The Post Graduate Certificate Pathway**

Students are required to complete all specialty courses and any support courses not previously completed. Post-Graduate certificate students are not required to complete graduate core or research courses (see the MSN Curriculum section for the BSN prepared RN for a listing of courses for each specialty area).

# Occupational Therapy

## Department Information

Department of Occupational Therapy Staff	
	(251) 445-9222
Chair	Donna A. Wooster, PhD.
Associate Professor	Wooster
Assistant Professors	O'Connor, Taylor
Instructors	Deacy, Thompson

Department of Occupational Therapy web site  
<http://www.southalabama.edu/colleges/alliedhealth/ot>

Occupational Therapy is a health care profession devoted to providing skilled treatment that helps individuals achieve independence in all aspects of their lives. Occupational therapists work with persons with acute and chronic physical, psychosocial, mental and developmental disabilities. An occupational therapist may aid in the growth and development of premature babies; create a learning environment for physically and mentally challenged children; adapt home environments for persons with stroke, cerebral palsy, spinal cord injury and other disabilities; or create activities that are designed to restore mental health for persons with emotional, mental, or substance abuse problems. Occupational therapy focuses on "skills for the job of living" which includes all of the necessary skills for individuals to "live life to its fullest" and lead independent and satisfying lives.

**The Master of Science degree program in Occupational Therapy (MSOT)** is an entry-level professional program designed to enable the student to develop advanced critical reasoning skills and to prepare the graduate for professional practice in a variety of settings. Graduates will also have the capability of assuming responsibilities in the areas of administration, program development, consultation and research in occupational therapy.

The program consists of 95 semester hours and is seven consecutive semesters in length. This includes 24 weeks of full-time Level II Fieldwork as required by accreditation standards. Level II Fieldwork is available in a variety of medical and community sites representing a diverse range of learning opportunities for students. All Level II Fieldwork must be completed within 12 months following completion of academic requirements.

The program is designed to accommodate applicants who have a baccalaureate degree in another field.

### Criteria For Admission

A new class of MSOT students begins each year in the fall semester. All applicants must apply to OTCAS (Occupational Therapy Central Application Service) and submit a supplemental application to the OT program. Applications are available in July each year for fall of the following year. Supplemental applications with appropriate processing fees should be submitted directly to the Occupational Therapy Department. Selected applicants, who meet all academic admission requirements, may be invited for an interview. Students offered admission may choose to guarantee a seat by submitting a matriculation fee (applied toward tuition) or be placed on the alternate list. All students accepted to the program must complete a criminal background check. Admission is contingent on the background check being clear of criminal charges.

The candidate is expected to satisfy the following minimum criteria for admission:

- Completion of a Baccalaureate degree from an accredited college or university by June 1 of the year of admittance.
- Completion of all prerequisite courses with a grade of "A" or "B" by application deadline.
- A minimum 3.0 (A=4.0) overall cumulative GPA; minimum 3.0 GPA in the prerequisite courses; minimum 3.0 GPA in the last 60 hours of coursework taken.
- Minimum of 25 documented OT observation hours.
- Minimum GRE score of 290 on combined verbal and quantitative sections, and 3.0 writing score reported from same exam date.

Program Prerequisite Courses ALL applicants must complete:

Abnormal Psychology – 3 hrs

Life Span Development Psychology – 3 hrs

Anatomy & Physiology I – 4 hrs

Anatomy & Physiology II – 4 hrs  
 Statistics – 3 hrs  
 Kinesiology (biomechanics) or Physics – 3 or 4 hrs

Note: AP and CLEP credits are not accepted for any prerequisite courses.

Applications will be reviewed for academic qualifications on receipt of application, processing fee, transcripts and GRE results. Selected applicants who meet all academic admission requirements may be invited for personal interviews.

Admission is offered to the top students who apply after consideration of the admission score.

Applicants are strongly encouraged to observe occupational therapy practice in a variety of settings. A minimum of 25 documented OT observation hours are required. Documentation forms for observation are included in the application packet.

These forms may also be downloaded from the university web site at

<http://www.southalabama.edu/departments/eforms/colleges/alliedhealth/otobservationform.pdf> or may be obtained from the occupational therapy department.

Core Performance Standards, which are fundamental tasks that must be performed to successfully complete the program, have been outlined and are available on the website or upon request from the program.

Applicants who are interested in whether courses from other universities will meet prerequisite requirements may contact the department by e-mail for an unofficial review of their course descriptions.

## Areas Of Study

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### Degrees, Programs, Or Concentrations

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Occupational Therapy (MS)..... 709

## Courses

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### Course Listing

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Occupational Therapy..... 1090

## Faculty

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DEACY, ROBIN M.  
 Instructor  
 BS, Univ of Alabama-Birmingham  
 MS, Univ of Alabama-Birmingham

O'CONNOR, TRACY L.  
 Assistant Professor  
 BS, Auburn University  
 MS, Auburn University  
 BS, Tuskegee University  
 DOT, University of St Augustin- HS

TAYLOR, CANDRA  
 Assistant Professor  
 BS, Samford University  
 CERT, Univ of Alabama-Birmingham  
 MBA, Auburn University

THOMPSON, TARA J.  
 Instructor  
 BGS, Univ of Louisiana at Monroe  
 MSOT, University of South Alabama

WOOSTER, DONNA M.  
 Associate Professor  
 AS, Quinsigamond Community  
 College  
 BS, Worcester State College  
 MS, University of Connecticut  
 PHD, University of South Alabama

# Occupational Therapy (MS)

## Degree Requirements

Requirements For The Master Of Science Degree In Occupational Therapy		Credit Hours
The Master of Science degree program consists of the following courses:		
OT 500	Occupation in Context	3
OT 502	Occupational Development I	3
OT 503	History and Philosophy of OT	3
OT 504	Neuroscientific Basis of Occup Perf	3
OT 505	Scientific Inquiry I	2
OT 506	Research Design I	1
OT 510	Theoretical Foundations of OT - W	3
OT 512	Occupational Development II - W	3
OT 517	Occupational Evaluation I	3
OT 519	Professional Dev Seminar I	2
OT 520	Occupational Intervention I	3
OT 521	Practicum I	1
OT 522	OT Int. I Lab	1
OT 523	OT Int. I CBL	1
OT 524	Biomed & Phenomenol Persp on Disability I	3
OT 525	Documentation	3
OT 527	Occupational Evaluation II	3
OT 530	Occupational Intervention II	3
OT 531	Practicum II	1
OT 532	Int. II Lab	1
OT 533	Int. II CBL	1
OT 534	Biomed & Phenomenol Persp on Disability II	3
OT 536	Management	3
OT 538	Group Dynamics	2
OT 539	Professional Dev Seminar III	2
OT 540	Occupational Intervention III	3
OT 541	Practicum III	1
OT 542	Int. III Lab	1

OT 543	Int. III CBL	1
OT 544	Musculoskeletal Assessment	2
OT 545	Scientific Inquiry II	2
OT 546	Supervision	2
OT 547	Research Implementation	1
OT 550	Level II Fieldwork (A)	6
OT 551	Practicum IV Psychosocial	1
OT 555	Level II Fieldwork (B)	6
OT 558	Technology & Environ Interventions in OT	3
OT 559	Professional Leadership	3
OT 570	Community-Based Intervention	3
OT 575	Advanced Professional Writing	2
OT 576	Research Publication	1

During the Summer and Fall semesters of the last year students participate in fieldwork education at special fieldwork sites affiliated with the program. Students should be prepared to relocate to two different out-of-town fieldwork centers during these two semesters.

## Expenses

Students admitted in the Occupational Therapy program will be charged a matriculation deposit of \$300 required to secure a seat in the entering class. This amount is not refundable but will be applied towards tuition expenses after classes begin. Students should be prepared for extra expenses associated with professional studies including books, local travel to and from fieldwork sites and out-of-town travel and living expenses during Level II Fieldwork assignments. Special lab fees are assessed for the following courses:

- OT 500 Occupation in Context \$30.00
- OT 504 Neuroscientific Basis of Occupational Performance \$70.00
- OT 510 Theoretical Foundations of OT \$30.00
- OT 517 Occupational Evaluation I \$50.00
- OT 520 Occupational Intervention I \$50.00
- OT 527 Occupational Evaluation II \$50.00
- OT 530 Occupational Intervention II \$50.00
- OT 540 Occupational Intervention III \$50.00
- OT 544 Musculoskeletal Assessment \$30.00
- OT 545 Scientific Inquiry II \$25.00
- OT 550 Level II Fieldwork (A) \$ 5.00
- OT 555 Level II Fieldwork (B) \$ 5.00
- OT 558 Technology and Environmental Intervention in OT \$50.00

## Retention Policies

In accordance with the Policies of the University of South Alabama Graduate School:

1. A minimum overall 3.0 GPA on all work attempted in the student's specific program of study is required. A maximum of two courses with the grade of "C" may be counted toward a degree program.
2. Any term in which a graduate student drops below a 3.0 GPA, the student is placed on probationary status and has a period of two terms to attain a 3.0 GPA or be dismissed from the Graduate School.

In addition, the following Departmental Retention Policies apply:

1. Students in the Master of Science in Occupational Therapy degree program are required to achieve a minimum grade of "C" in each course in the occupational therapy curriculum. This minimum grade of "C" reflects only the letter grade since many courses will require an 80% or 90% competency in order to be considered passing level.
2. A student who receives a grade below "C" will be academically dismissed.
3. Any combination of nine (9) semester hours of grades of "C" in OT courses will result in academic dismissal.
4. If for any reason a student must withdraw from the occupational therapy program, re-admission will require approval of the department chairperson and the Dean of the Pat Capps Covey College of Allied Health Professions.
5. All occupational therapy coursework taken prior to Level II Fieldwork must be successfully completed with a grade of "C" or better and a minimum GPA of 3.0 in order for a student to be eligible to proceed with Level II Fieldwork.
6. Level II Fieldwork will be graded as Pass/Fail using the criterion scores developed by the American Occupational Therapy Association. A student will be allowed to withdraw from fieldwork, without penalty, under special circumstances, for example, a serious illness/newly acquired disability. Withdrawal from Level II Fieldwork requires the recommendation of the Academic Fieldwork Coordinator and the permission of the Department Chairperson. All repeat fieldwork experiences must be completed within one year.
7. If a student fails a Level II Fieldwork course (OT 550, OT 555), a "U" or unsatisfactory will be recorded as the grade. IF the student is permitted to repeat the Level II Fieldwork course, the student may be required to complete remediation tasks prior to repeating the course. The Academic Fieldwork Coordinator will schedule the repeated fieldwork at the earliest available time, but no later than 12 months following completion of all other academic requirements. A student failing to satisfactorily complete two out of three attempts of the 12 week fieldwork placements (OT 550, OT 555) shall be dismissed from the program.

**Note:** In some semesters, courses may not start and/or finish during the regular University beginning and ending dates for the semester. For example, one course may start at the beginning of a semester and finish at the semester midpoint, while another course starts at the midpoint of the semester and finishes at the semester's end.

### Accreditation

The Department of Occupational Therapy MSOT Program is accredited by the Accreditation Council for Occupational Therapy Education (ACOTE) of the American Occupational Therapy Association (AOTA), located at 4720 Montgomery Lane, Suite 200, Bethesda, MD 20814. ACOTE's phone number is (301) 652-6611 (x2914). Graduates of the program will be eligible to sit for the national certification examination for the occupational therapist administered by the National Board for Certification in Occupational Therapy (NBCOT). After successful completion of this exam, the individual will be an Occupational Therapist, Registered (OTR). Most states require licensure in order to practice; however, state licenses are usually based on the results of NBCOT Certification Examination. A felony conviction may adversely affect a graduate's ability to sit for the NBCOT certification examination or attain state licensure.

## Graduation Plan

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# Philosophy

## Department Information

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Department of Philosophy web site  
<http://www.southalabama.edu/philosophy>

### Undergraduate Studies

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Through reasoned reflection, philosophy seeks to understand human experience in all its various aspects. Courses examine the moral, social, political, aesthetic, and religious dimensions of human existence, topics in special fields such as science, and the historical development of philosophy. In these courses students can develop skills in the presentation, interpretation, analysis, and evaluation of differing viewpoints, and refine their own beliefs about deeply important issues. Philosophy majors can choose from three concentrations: Philosophy, Religion, or Classics.

#### General Education Requirements For Philosophy Majors

General Education Requirements for Philosophy are specified on the College of Arts and Sciences section.

All first-time freshmen must successfully complete CAS 100: First Year Experience as a degree requirement. Students must enroll during their first term at USA, except for summer-entry students who must enroll in the fall semester following entry. PHL 461 will fulfill the technology proficiency requirement for Philosophy majors.

Philosophy Majors can now fulfill the Minor requirement by taking one of the other concentrations offered.

Majors concentrating in Classics can fulfill the Minor requirement by using Philosophy or Religion concentration.

Majors concentrating in Philosophy can fulfill the Minor requirement by using Religion or Classics concentration.

Majors concentrating in Religion can fulfill the Minor requirement by using Philosophy or Classics concentration.

### Graduate Studies

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Although the Department of Philosophy has no graduate program, graduate-level courses are offered for those students who need such work.

## Areas Of Study

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### Degrees, Programs, Or Concentrations

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Minor in Classics.....	714
Minor in Philosophy.....	715
Minor in Religion.....	716
Philosophy (BA) Classics Concentration.....	717
Philosophy (BA) Philosophy Concentration.....	718
Philosophy (BA) Religion Concentration.....	719

## Courses

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### Course Listing

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Argument.....	865
Classics.....	905

Philosophy.....	1099
Religion.....	1130

## Faculty

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BAKER, SAMUEL H.

Assistant Professor

BA, Yale University

MPHIL, University of Cambridge UK

PHD, Princeton University

HILLMAN, TIMOTHY A.

Associate Professor

BA, Millsaps College

MA, University of Mississippi

PHD, Purdue University-Main Campus

JEFFREY, ANNE M.

Assistant Professor

BA, Baylor University

PHD, Georgetown University

LOOMIS, ERIC J.

Associate Professor

BA, University of Wyoming

PHD, University of Texas- Austin

MEEKER, KEVIN M.

Professor

BA, Wheaton College

MA, University of Notre Dame

PHD, University of Notre Dame

POSTON, TED L.

Professor

BA, The Baptist College of Florida

MA, Trinity International U

MA, University of Wisconsin-Milwau

PHD, University of Missouri-Columb

# Minor In Classics

## Degree Requirements

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**If a minor is required in your degree program, at least 9 (lower and/or upper-division) hours of courses in the minor must be completed at the University.**

A minimum of 18 hours must be taken in Classics (CLA) courses. At least two courses must be taken in residence. No more than two 100-level courses may be counted toward the Classics minor. Students minoring in Classics must fulfill the Foreign Language requirement by taking either 2 semesters of Latin or 2 semester of Ancient Greek.

Philosophy Majors can now fulfill the Minor requirement by taking one of the other concentrations offered.

Majors concentrating in Classic can fulfill the Minor requirement by using Philosophy or Religion concentration.

Majors concentrating in Philosophy can fulfill the Minor requirement by using Religion or Classics concentration.

Majors concentrating in Religion can fulfill the Minor requirement by using Philosophy or Classics concentration.

# Minor In Philosophy

## Degree Requirements

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**If a minor is required in your degree program, at least 9 (lower and/or upper-division) hours of courses in the minor must be completed at the University.**

A minimum of 18 semester hours in Philosophy, to include a logic course (PHL 121 or 321). At least nine hours must be taken in residence. No more than two 100-level courses may be counted toward the minor.

Philosophy Majors can now fulfill the Minor requirement by taking one of the other concentrations offered.

- Majors concentrating in Classic can fulfill the Minor requirement by using Philosophy or Religion concentration.
- Majors concentrating in Philosophy can fulfill the Minor requirement by using Religion or Classics concentration.
- Majors concentrating in Religion can fulfill the Minor requirement by using Philosophy or Classics concentration.

# Minor In Religion

## Degree Requirements

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If a minor is required in your degree program, at least 9 (lower and/or upper-division) hours of courses in the minor must be completed at the University.

A minimum of 18 semester hours in Religion. No more than two 100 level may be counted toward the minor. 9 hours of coursework must be taken as REL courses. 9 hours of coursework must be taken at the 300 and/or 400 level at the University of South Alabama.

Philosophy Majors can now fulfill the Minor requirement by taking one of the other concentrations offered.

- Majors concentrating in Classic can fulfill the Minor requirement by using Philosophy or Religion concentration.
- Majors concentrating in Philosophy can fulfill the Minor requirement by using Religion or Classics concentration.
- Majors concentrating in Religion can fulfill the Minor requirement by using Philosophy or Classics concentration.

### Minor in Religion

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# Philosophy (BA) Classics Concentration

## Degree Requirements

**Majors in Arts and Sciences may be completed with a minimum of 120 semester hours unless designated otherwise. At least 30 hours of course work, which represents 25% of the required 120 hours, must be at the upper division level in order to fulfill the University's residency requirement. At least 15 of the 30 upper-division hours must be in the major or concentration area. An overall grade-point-average (GPA) of 2.0 is required for graduation. In addition, a minimum GPA of 2.0 is required in the student's major or concentration area.**

All majors in Philosophy, whether concentrating in Philosophy, or in Classics, or in Religion, must complete 30 semester credit hours of course work, of which 15 hours must be in the common core. In addition, all majors in Philosophy, whether concentrating in Philosophy, Religion and Classics, must complete 15 semester hours of course work in the major at the 300 and/or 400 level. All majors in Philosophy, whether concentrating in Classics, Philosophy, or in Religion, must either 1) minor in another discipline, or 2) minor in a different concentration offered by the Department of Philosophy.

### Major in Philosophy - Classics Concentration

The Common Core

PHL 120 (Critical Thinking)

PHL/CLA 240 (Western Philosophy: Classical)

PHL 245 (Western Philosophy: Renaissance/Enlightenment)

PHL 321 (Symbolic Logic) or CLA/PHL/REL 310 (Classical Mythology)

PHL/REL/CLA 461: (Metaphysics)

The following further courses are required for the Classics Concentration:

3 additional Classics (CLA) courses at the 300 or 400 level

2 additional Classics (CLA) courses at any level

Fulfill Foreign Language Requirement by taking 1 year of Latin or 1 year of Ancient Greek

PHL 240 and 245 do not have to be taken in sequence and should be taken early in the major. Credit for PHL 499, Honors Thesis, is only given as an addition to the hours required for the major.

# Philosophy (BA) Philosophy Concentration

## Degree Requirements

**Majors in Arts and Sciences may be completed with a minimum of 120 semester hours unless designated otherwise. At least 30 hours of course work, which represents 25% of the required 120 hours, must be at the upper division level in order to fulfill the University's residency requirement. At least 15 of the 30 upper-division hours must be in the major or concentration area. An overall grade-point-average (GPA) of 2.0 is required for graduation. In addition, a minimum GPA of 2.0 is required in the student's major or concentration area.**

All majors in Philosophy, whether concentrating in Philosophy, or in Classics, or in Religion, must complete 30 semester credit hours of course work, of which 15 hours must be in the common core. In addition, all majors in Philosophy, whether concentrating in Philosophy, Religion and Classics, must complete 15 semester hours of course work in the major at the 300 and/or 400 level. All majors in Philosophy, whether concentrating in Classics, Philosophy, or in Religion, must either 1) minor in another discipline, or 2) minor in a different concentration offered by the Department of Philosophy.

### Major in Philosophy - Philosophy Concentration

The Common Core

PHL 120 (Critical Thinking)

PHL/CLA 240 (Western Philosophy: Classical)

PHL 245 (Western Philosophy: Renaissance/Enlightenment)

PHL 321 (Symbolic Logic) or CLA/PHL/REL 310 (Classical Mythology)

PHL/REL/CLA 461: (Metaphysics)

The following further courses are required for the Philosophy Concentration:

3 additional Philosophy (PHL) courses at the 300/400 level, with at least one being either PHL 431 (Advanced Ethical Theory) or PHL 441 (Theory Knowledge)

2 additional PHL courses at any level

PHL 321

PHL 240 and 245 do not have to be taken in sequence and should be taken early in the major. Credit for PHL 499, Honors Thesis, is only given as an addition to the hours required for the major.

# Philosophy (BA) Religion Concentration

## Degree Requirements

**Majors in Arts and Sciences may be completed with a minimum of 120 semester hours unless designated otherwise. At least 30 hours of course work, which represents 25% of the required 120 hours, must be at the upper division level in order to fulfill the University's residency requirement. At least 15 of the 30 upper-division hours must be in the major or concentration area. An overall grade-point-average (GPA) of 2.0 is required for graduation. In addition, a minimum GPA of 2.0 is required in the student's major or concentration area.**

All majors in Philosophy, whether concentrating in Philosophy, or in Classics, or in Religion, must complete 30 semester credit hours of course work, of which 15 hours must be in the common core. In addition, all majors in Philosophy, whether concentrating in Philosophy, Religion and Classics, must complete 15 semester hours of course work in the major at the 300 and/or 400 level. All majors in Philosophy, whether concentrating in Classics, Philosophy, or in Religion, must either 1) minor in another discipline, or 2) minor in a different concentration offered by the Department of Philosophy.

### Major in Philosophy - Religion Concentration

The Common Core

PHL 120 (Critical Thinking)

PHL/CLA 240 (Western Philosophy: Classical)

PHL 245 (Western Philosophy: Renaissance/Enlightenment)

PHL 321 (Symbolic Logic) or CLA/PHL/REL 310 (Classical Mythology)

PHL/REL/CLA 461: (Metaphysics)

The following further courses are required for the Religion Concentration:

3 additional Religion (REL) courses at the 300 or 400 level

2 additional Religion (REL) courses at any level

PHL 240 and 245 do not have to be taken in sequence and should be taken early in the major. Credit for PHL 499, Honors Thesis, is only given as an addition to the hours required for the major.

# Physical Therapy

## Department Information

Physical Therapy Administrative Staff	(251) 445-9330
Chair	Dennis W. Fell
Professors	Fell
Associate Professors	Dale, Gubler
Assistant Professors	Day, Eaton, Fletcher, Saale, White, Waldheim
Emeritus	Gray, Kennedy, Wall

Department of Physical Therapy web site  
<http://www.southalabama.edu/colleges/alliedhealth/pt>

A physical therapist, also called a PT, is a health care professional who provides direct patient care to persons who have disorders of movement, mechanical, physiological and developmental impairment and functional limitations, whether caused by injury, disease, or pain to help them achieve maximum physical function and mobility. Physical therapists have the necessary training to meet the total range of primary patient care responsibilities involved in preventing disabilities and promoting restoration of function to the physically impaired, including musculoskeletal, neuromuscular, cardiovascular/pulmonary and integumentary disorders that interfere with physical function. The Physical Therapist performs an examination and then uses clinical reasoning to plan and implement patient-centered PT intervention. Physical Therapists practice in rehabilitation centers, private practices, hospital-based and outpatient-based centers, home health care, sports medicine centers, school systems, and in universities to restore movement and function.

As its mission: The Department of Physical Therapy is: "Committed to high quality education and advancement of the professions through scholarship and service".

## Areas Of Study

### Degrees, Programs, Or Concentrations

Physical Therapy (DPT)..... 722

## Courses

### Course Listing

Physical Therapy..... 1102

## Faculty

DALE, ROBERT BARRY  
Associate Professor  
BSPT, University of South Alabama  
MA, Univ of Alabama-Birmingham  
PHD, University of Alabama  
DPT, University of Tennessee-Chatt

DAY, JOSEPH M.  
Assistant Professor  
BS, Murray State University  
MS, University of Kentucky  
PHD, University of Kentucky

EATON, KAREAION D.  
Assistant Professor  
BS, Auburn University  
MS, University of Mobile  
DPT, Alabama State University

FLETCHER, JEREMY C.  
Assistant Professor  
BS, Univ of Louisiana at Monroe  
DPT, University of South Alabama

GUBLER, CORAL M.  
Associate Professor  
BS, State University of New York  
MS, United States Sports Academy  
MPT, University of Delaware  
PHD, University of Montana

SAALE, BLAIR P.  
Assistant Professor  
BA, Furman University  
DPT, Belmont University

WALDHELM, ANDREW G.  
Assistant Professor  
BS, Baylor University  
MPT, Nova Southeastern University  
PHD, Louisiana State University

WHITE, LAURA W.  
Assistant Professor  
BS, Baylor University  
MS, Univ of Alabama-Birmingham  
DSCPT, Univ of Alabama-Birmingham

# Physical Therapy (DPT)

## Degree Requirements

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The degree offered by the department is the Doctor of Physical Therapy (DPT), designed as a first-professional degree for students who want to enter the physical therapy profession.

The entry-level Doctor of Physical Therapy (DPT) program consists of eight consecutive semesters of full-time professional graduate study. The curriculum plan, by semester, of courses required once admitted to the DPT program can be found on the department website: <http://www.southalabama.edu/colleges/alliedhealth/pt/courses.html>. The DPT is a clinical doctorate degree, not a research degree, and is awarded after successful completion of the prescribed sequence of 121 semester hours (listed below) including classroom and clinical laboratory coursework and 34 weeks of full-time physical therapy internships. As an entry-level program, the DPT is designed as a first PT degree and is not appropriate for students who already hold a PT degree. The goals and objectives of the program are guided by the criteria and guidelines set forth by the Evaluative Criteria for Accreditation of Educational Programs for the Preparation of Physical Therapists (Commission on Accreditation in Physical Therapy Education). Graduates of the program are eligible to take the National Physical Therapy Exam for licensure.

The program begins each year in the Fall semester. The application deadline for Fall semester is December 1st of the previous year. All applicants must apply through the Physical Therapy Centralized Application Service (PTCAS) <http://www.ptcas.org/ptcas/public/Listing.aspx?seqn=405&navid=10737426783> and submit a supplemental application and supplemental application fee directly to the PT department. International Students should carefully review earlier deadlines and additional requirements listed after Minimal requirements for all applicants (see below).

### DPT Early Acceptance Program (DPTEAP)

The DPT Early Acceptance Program (DPTEAP) allows for some highly qualified high school seniors who meet the qualifications to gain early provisional acceptance to the graduate program prior to starting college. Details are described in the Early Acceptance Program section of the Office of Admissions website at <http://www.southalabama.edu/departments/admissions/earlyacceptance/index.html>

In addition, a link to the application for this program is also found on this webpage and the "Special Programs" section of the Office of Admissions Website. The application deadline for this program is February 1 of the senior year in high school.

### Regular Graduate Applicants

It is required, that applicants complete a bachelor's degree prior to starting the PT program. These applicants must hold a bachelor's degree (or be able to complete the degree prior to starting the PT program) in any field from a regionally accredited college or university and complete all prerequisites for regular graduate admission as listed below with a GPA > 3.00. These applicants may apply by December 1st if they will complete their bachelor's degrees before the upcoming Fall semester.

### Minimum Requirements For All Applicants

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1. The applicant must declare one of the above categories on the application form (deadline December 1st) and meet all requirements including prerequisites.
2. Graduate Record Exam (GRE) scores must be officially reported to the University of South Alabama Office of Admissions by December 1st with a minimum score of 290 on the 'new' GRE (use institution code 7799). The GRE must have been taken within the last 5 years. Verbal, Quantitative and Analytical Writing sections will be utilized.
3. Regular Graduate applicants must have a minimum 3.0 (A=4.0) overall grade point average (GPA).
4. All applicants must have a minimum grade of "C" in each of the prerequisite courses.
5. Observation or work experience in Physical Therapy (50 hours minimum) under the supervision of a licensed Physical Therapist must be documented and submitted to PTCAS by the December 1st deadline. A form is available for download from the PTCAS website (<http://www.ptcas.org/PTHours/>)
6. Applicants may only have a maximum of 2 science course prerequisites remaining by the application deadline. The remaining prerequisites must be completed in the spring and summer prior to the start of the program.

**International applicants** must have a TOEFL score = 600 (250 on computer based or 100 on Internet based tests), TSE = 60 and TWE = 4.5 and must submit the following to the Department of Physical Therapy by **October 15 of the year prior to admission: TOEFL score, official transcripts with certified translations of transcripts, supplemental application and non-refundable**

**supplemental application processing fee of \$75.00. In addition, international students must submit PTCAS application and official GRE scores by December 1st.** Materials being sent by mail carrier must be **postmarked NO later than December 1st.** This DPT program is not ideal for students who already have a physiotherapy degree.

NOTE: If selected for interview, the applicant must achieve a satisfactory interview score, and if accepted into the program, must submit a health form and physical examination which includes required immunizations.

### **Program Prerequisites<sup>a</sup> (For Optimal Preparation, Online Science Labs Are Discouraged)**

Prerequisites Required For All Applicants:

- English Composition (2 courses)
- Social Sciences (3 courses--at least two of which must be Psychology)
- Precalculus Algebra/Trigonometry or Higher Mathematics (1 course)
- Statistics (1 course)
- College Physics - with labs (2 semester or 3 quarter sequence)
- General Chemistry for science majors - with labs (2 semester or 3 quarter sequence)
- General or Cell Biology for science majors - with labs<sup>b</sup> (2 semester or 3 quarter sequence)
- Human Physiology, Mammalian Physiology OR a course sequence in Anatomy and Physiology (minimum 6 credits). Human Physiology is preferred.

<sup>a</sup>For all prerequisite courses, credit older than ten years from the application deadline must be repeated or validated by examination or other appropriate mechanism.

<sup>b</sup>Botany may not be used to satisfy this prerequisite.

Electives should be concentrated in a back-up major of the student's choice.

### **Essential Functions**

Core Performance Standards, which are fundamental tasks that must be performed to successfully complete the program, have been outlined and are available upon request from the program and on the department web site.

### **Expenses**

Students admitted in the Physical Therapy program will be charged a matriculation deposit of \$300 required to secure a seat in the entering class. This amount is not refundable but will be applied towards tuition expenses after registration.

Students should be prepared for extra expenses (estimates available on the web site) associated with professional studies including books, local travel to and from clinical facilities and for out-of-town travel and living expenses during the 34 weeks of clinical internship in the first year and the final year. It is highly recommended that students have a laptop computer. Special lab fees are assessed for the following courses:

Abbr	Course Description	Fee
PT 600	Human Anatomy	\$75.00
PT 601	Human Anatomy II	\$200.00
PT 603	Neuroscience	\$15.00
PT 612	Research Project	\$50.00
PT 621	Introductory PT Skills	\$20.00
PT 625	Therapeutic Intervention	\$20.00

PT 675	Comprehensive Capstone	\$81.00
PT 682	PT Internship	\$75.00

A Resource Fee of \$133/semester is charged to all health professions students.

A \$25.00 professional liability fee is assessed annually (\$12.00 each in fall and spring and \$1.00 in summer).

## Scholarships

The Department of Physical Therapy currently has eight scholarships that are awarded to students after admission to the program, in year-1, year-2 and year-3. These scholarships are listed on the department webpage.

## Accreditation And Licensure

The entry-level Doctor of Physical Therapy program at the University of South Alabama is accredited by the Commission on Accreditation in Physical Therapy Education (CAPTE). 1111 N. Fairfax Street, Alexandria, VA 22314; Telephone: (703) 706-3245; Web site: <http://www.capteonline.org> Email: [accreditation@apta.org](mailto:accreditation@apta.org);

Graduates of the program are eligible to sit for the National Physical Therapy Examination (NPTE) to gain licensure. Applicants are hereby informed that a history of felony conviction, use of drugs or intoxicating liquors, which affects professional competence, or narcotic law conviction will prevent physical therapy licensure.

See Alabama Board of Physical Therapy site: <http://www.pt.alabama.gov/>

## DPT Curriculum Sequence

Doctor of Physical Therapy (DPT)

After admission, the Doctor of Physical Therapy (DPT) degree requires the following course sequence to complete the professional degree:

First Year	Course Description	Cr Hrs
Fall Semester		18
PT 600	Human Anatomy I*	3 hrs
PT 601	Human Anatomy II*	3 hrs
PT 610	Principles of Research	2 hrs
PT 621	Introductory PT Skills*	4 hrs
PT 622	Exercise Physiology*	4 hrs
PT 689	Professional PT Practice; W	2 hrs
Spring Semester		18
PT 604	Pathophysiology I	2 hrs

PT 620	Clinical Kinesiology *	3 hrs
PT 625	Therapeutic Intervention (EPA/Manual Therapy)*	4 hrs
PT 631	PT in Musculoskeletal Disorders I*	4 hrs
PT 632	PT in Musculoskeletal Disorders II*	3 hrs
PT 681	Clinical Practice Issues; W	2 hrs
Summer Semester		12
PT 607	Pathophysiology II	2 hrs
PT 633	PT in Musculoskeletal Disorders III*	4 hrs
PT 682	PT Internship I	6 hrs
<b>Second Year</b>	<b>Course Description</b>	<b>Cr Hrs</b>
Fall Semester		17
PT 602	Life Span Human Development	2 hrs
PT 603	Neuroscience*	3 hrs
PT 606	Pharmacology	2 hrs
PT 611	Research Proposal	2 hrs
PT 634	PT in Musculoskeletal Disorders IV*	3 hrs
PT 650	PT in Integumentary Disorders*	4 hrs
PT 671	PT Internship I	1 hr
Spring Semester		16
PT 612	Research Project	2 hrs
PT 628	Mobility, Orthotics, and Prosthetics*	2 hrs
PT 640	Neuromuscular PT Adult*	4 hrs
PT 641	Neuromuscular Pt Pediatrics*	2 hrs

PT 660	PT in Cardiovascular and Pulmonary Disorders*	4 hrs	
PT 672	Clinical Case Studies II	1 hr	
PT 687	Professional Behaviors	1 hr	
Summer Semester			9
PT 627	Medical Screening	2 hrs	
PT 635	PT in Musculoskeletal Disorders V*	2 hrs	
PT 642	Neuromuscular PT Intervention*	4 hrs	
PT 673	Clinical Case Studies III	1 hr	
<b>Third Year</b>			
<b>Course Description</b>			<b>Cr Hrs</b>
Fall Semester			16
PT 605	Human Learning	1 hr	
PT 614	Measurement in PT	1 hr	
PT 626	Health Promotion and Prevention in PT	2 hr	
PT 674	Clinical Synthesis and Patient Management	1 hr	
PT 683	PT Internship II	8 hrs	
PT 685	Management of PT Practice	3 hrs	
Spring Semester			15
PT 614	Clinical Case Reports	2 hrs	
PT 675	Comprehensive Capstone	1 hr	
PT 684	PT Internship III	6 hrs	
PT 686	PT Internship IV	6 hrs	
<b>Curriculum Total</b>			<b>121</b>



# Physician Assistant Studies (MHS)

## Department Information

Physician Assistant Studies Administrative Staff	(251) 445-9334
Chair Interim	Erin McAdams, PA-C, MHS
Medical Director	Shannon Tyler, M.D.
Associate Professor	
Assistant Professor	Kestler, McAdams, Pelekanos, Risling-de Jong

Department of Physician Assistant Studies web site  
<http://www.southalabama.edu/colleges/alliedhealth/pa>

## Physician Assistant Program Master Of Health Science Degree

### What Is A Physician Assistant?

Physician Assistants (PAs) are highly skilled nationally certified and state-licensed medical professionals who practice medicine on healthcare teams with physicians and other members of the health professions. The quality and value of the services they provide is well recognized in virtually all medical and surgical specialties and subspecialties to include: physicians practices (private and group, institutional settings, correctional institutions, rural and urban community health centers, the uniformed services and other federal government agencies, nursing homes, schools and other university-based facilities and retail clinics.

Physician Assistants take medical histories, perform physical examinations, order and analyze diagnostic data(i.e. laboratory and imaging studies), and perform major and minor therapeutic procedures. The Physician Assistant develops and implements a patient-centered treatment plan, to include appropriate decisions regarding referral and interprofessional collaborative with other members of the healthcare team. Physician Assistants prescribe medications in all 50 states, the District of Columbia and all U.S. territories, with the exception of Puerto Rico; to include scheduled pharmaceuticals per State law.

Culturally appropriate patient education and counseling are important aspects of a physician assistant's daily activities. Physician Assistants advise patients concerning health promotion and disease prevention, with special emphasis on social determinants of health, health screenings, health disparities and health risk behaviors.

To perform at this level of responsibility, the education of Physician Assistants is provided by physicians and highly skilled physician assistants to assure patient-care functions provided by the Physician Assistant are equivalent in quality to those of the physician who delegates them.

### Mission, Vision, And Goals

#### Mission

The mission of the University of South Alabama Physician Assistant Program is to educate compassionate and competent individuals from diverse backgrounds to become highly qualified physician assistants in accordance with the highest professional standards to provide a broad spectrum of preventative and curative health care to patients in various communities and clinical settings with physician supervision including underserved populations in Alabama both rural and urban. The emphasis of the program is one of primary care, including a broad foundation in the medical and surgical specialties.

#### Vision

The Physician Assistant Studies program curriculum is closely related to the goals of the University of South Alabama as well as to the degree. The program fosters an environment that promotes the acquisition and application of culturally sensitive, patient-oriented clinical knowledge and skills to produce a diverse workforce of primary care physician assistants who practice medicine with competence, professionalism, and compassion, driven by academic excellence and a spirit of service to the community.

#### Goals

The goals of the program are to:

1. Emphasize primary care and a desire among physician assistants toward service in rural and medically underserved communities; especially in Alabama
2. Promote excellence in health care by preparing competent physician assistants to practice evidence-based medicine in all clinical settings; especially in Alabama
3. Ensure opportunities for placement of qualified military veterans through participation as a PAEA Member Program offering assistance for veteran entry into physician assistant programs;
4. To recruit, select, and educate a highly qualified diverse student body, (to include underrepresented minorities, environmentally or economically disadvantaged, rural, racially, ethnically, culturally, etc), and provide fair and equitable admission criteria;
5. Prepare physician assistant students to provide patient-centered health care services as part of an inter-professional, collaborative team in a variety of clinical settings;
6. Charge physician assistant students to become graduates who reflect high standards of legal, ethical, and moral conduct;
7. Foster the growth and development of PA education by preparing physician assistant graduates who possess depth of knowledge, clinical skills and abilities for excellence in practice;
8. Promote in our physician assistant students the importance of lifelong learning skills and ongoing professional development to meet and/or exceed contemporary standards within their area(s) of clinical practice.

## Areas Of Study

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### Degrees, Programs, Or Concentrations

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Physician Assistant Studies (MHS)..... 730

## Courses

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### Course Listing

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Physician Assistant Studies..... 1106

## Faculty

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KESTLER, BRIANNE E.  
 Assistant Professor  
 BS, University of Portland  
 MMSC, Wake Forest University

MCADAMS, ERIN N.  
 Assistant Professor  
 BS, University of South Alabama  
 MHS, University of South Alabama

RISLING-DE JONG, ROBIN D.  
 Assistant Professor  
 BA, California State U-Fullerton  
 MHS, University of South Alabama

# Physician Assistant Studies (MHS)

## Degree Requirements

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### The Program

#### Physician Assistant Studies (MHS)

Degree Earned: Master of Health Science

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Length of Program: 27 months

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Matriculation Date: Annually in mid-May

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Class Type: On site, no online classes

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Curriculum: 121 Credit Hours

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### Advanced Placement, Deceleration, Dismissal

The program does not offer advanced placement or deceleration. Transfer credits, or credit for experiential learning cannot be substituted for any course in the program, and no transfer credit is accepted from other PA programs. In addition, any grade of D or lower will result in academic dismissal from the program, and withdrawal from any course will automatically result in dismissal from the program.

### Clinical Rotations

Clinical rotations take place in Mobile, with other locations in Pensacola and the Mississippi Gulf Coast. Elective rotations may be considered in other locations. Rural rotations for Primary Care and Pediatrics are required. Other core rotations in rural Alabama and our service area are also considered commutable.

### Employment

Program policies strictly prohibit the program and all its academic and clinical affiliates and preceptors from employing any PA students, or utilizing them in lieu of administrative office, or clinical staff, while attending the program. PA students are also strongly discouraged from accepting any other employment while attending the program. Employment while in the program has the potential to negatively impact the student's rigorous PA training curriculum.

### Measures Of Success

Please visit our web site for information about the program's success at <http://www.southalabama.edu/colleges/alliedhealth/pa/mission.html>

### Mandatory Remediation

Mandatory remediation will be required of any student(s) who are in danger of not meeting the educational goals of the program as stated in student handbooks. The criteria for remediation are set in the "Goal" section below. The student's progress will be subsequently monitored to assure improvement in deficient areas and future remediation will be arranged as needed.

The goal of the didactic remediation policy of the Department of Physician Assistant Studies is to remediate students who are not performing at the optimal level which is defined as any student who has an average of <80% on two consecutive examinations or a single score of <75%, student cited for lack of professionalism, student receives an end of term grade of less than 80% or fails the Clinical Skills Practicum. The goal of the clinical remediation policy of the Department of Physician Assistant Studies is to remediate students who are not performing at the optimal level during the clinical year, which is defined in three areas:

1. Individual "Average," or less, score on mid-rotation evaluation
2. End-of-rotations exam scores less than 65%
3. A grade of "C" on a final clinical rotation grade.
4. Lack of professionalism

## Residency:

Those who live in Alabama and in specific counties in Mississippi and Florida are automatically considered residents. These counties, defined as Service Areas, include:

- Mississippi: George, Greene, Harrison, Jackson, Perry and Stone
- Florida: Escambia and Santa Rosa

**Additional documents may be required by the Office of the Registrar to verify residency regardless of state or county of residence.** If you have residency questions or wish to establish residency, please visit <http://www.southalabama.edu/departments/registrar/residency.html> or call the Office of the Registrar.

## Tuition And Expenses

In addition to USA tuition and fees, students can expect expenses associated with textbooks, food and lodging. Students will also be required to purchase uniforms, laboratory coats, stethoscopes, otoscopes, ophthalmoscopes, sphygmomanometers and blood pressure cuffs, soft reflex hammers, and tuning forks. Also, students should anticipate extra expenses, particularly related to housing, transportation, living expenses, and the patient logging system (Typhon) during the clinical year.

For a detailed list of tuition and expenses related to the program, please visit our web site at <http://www.southalabama.edu/colleges/alliedhealth/pa/tuition.html>

For a list of university tuition rates and fees, please visit

<http://www.southalabama.edu/departments/financialaffairs/studentaccounting/tuition.html>

For payment and refund policies, visit <http://www.southalabama.edu/departments/financialaffairs/studentaccounting/feepaymentfall.html>.

The University reserves the right to change tuition and fees, as deemed necessary by the Board of Trustees, without prior notice.

## Accreditation

The Accreditation Review Commission on Education for the Physician Assistant (ARC-PA) has granted **Accreditation-Continued** status to the **University of South Alabama Physician Assistant Program** sponsored by the **University of South Alabama**. Accreditation-Continued is an accreditation status granted when a currently accredited program is in compliance with the ARC-PA *Standards*.

Accreditation remains in effect until the program closes or withdraws from the accreditation process or until accreditation is withdrawn for failure to comply with the Standards. The approximate date for the next validation review of the program by the ARC-PA will be **September 2024**. The review date is contingent upon continued compliance with the Accreditation Standards and ARC-PA policy.

## Competencies For The Physician Assistant Profession

Graduates are expected to demonstrate the highest level of professionalism, be able to provide excellent comprehensive patient care and have the highest level of medical knowledge and communication skills as outlined at <http://www.nccpa.net/uploads/docs/PACompetencies.pdf>

## Matriculation Requirements

1. Acknowledgement of acceptance by deadline on notification, and submission of a signed Statement of Intent Form and a nonrefundable \$500 matriculation deposit which will be applied toward the first semester's tuition to guarantee a seat in the class, to be received no later than the deadline stated in acceptance letter.
2. Completion of outstanding required prerequisite course work with a grade of "C" or higher prior to matriculation into the program. Failure to make a grade of "C" or higher in any required prerequisite course will result in nullification of acceptance into the PA program. Updated transcripts will be required.
3. Submission to criminal background checks and urine drug screens before matriculation and prior to beginning clinical rotations. The fees are the student's responsibility. Failure to submit to and satisfactorily pass both screenings can result in dismissal from the program.
4. Completion of immunizations and a physical exam upon acceptance and prior to entering clinical rotations. Forms will be provided after receipt of signed statement of intent and matriculation deposit.
5. Maintenance of the American Heart Association Health Care Providers BLS Certification throughout the program.
6. Maintenance of adequate health insurance throughout the program. Information regarding health insurance will be provided upon acceptance, and the fees are the student's responsibility.

7. Understanding of and the abilities to adhere to the **Technical Standards for Physician Assistants as stated**. (See below.)

### Physician Assistant National Certifying Examination (PANCE) Pass Rates

Please visit our web site at

<http://www.southalabama.edu/colleges/alliedhealth/pa/accreditation.html>

### Program Completion Requirements

The program consists of preclinical and clinical components. The preclinical component is designed to provide a solid foundation for the clinical component. During the clinical component the student refines the medical knowledge and clinical skills needed for professional practice.

Successful completion of the program requires that the student be able to:

1. Complete 121 hours of graduate course work consisting of 70 credit hours of didactic course work and 51 credit hours of clinical course work.
2. Obtain an accurate and detailed patient history.
3. Perform complete and focused physical examinations
4. Establish working and differential diagnosis
5. Order and interpret diagnostic evaluations to include: laboratory tests (blood, urine, spinal fluids, cultures); imaging studies (plain film radiography, radiographic contrast studies, ultrasound studies, computerized tomography studies, MRI studies & electrocardiogram.
6. Develop and manage a treatment plan.
7. Record patient data: (a) Written notes and charting, and (b) Electronic medical record.
8. Order and/or administer therapeutic medications (a) in hospitals and clinics and (b) via written or electronic prescription.
9. Perform therapeutic medical interventions and procedures.
10. Counsel and educate patients regarding medical, therapeutic, and behavioral problems.
11. Interact with patients and the medical community in a professional manner.
12. Make appropriate referrals.

### Technical Standards

Students in the USA Physician Assistant program must be able to fulfill the program's Technical Standards, which include General, Observational, Communication, Motor, Critical Thinking, and Interpersonal abilities as well as possessing certain Behavioral and Social Attributes. To evaluate whether you meet the criteria, please visit our web site at <http://www.southalabama.edu/colleges/alliedhealth/pa/technical.html> for details.

### Minimum Requirements

Applicants who wish to apply to the USA PA program must meet the following minimum requirements. Please note that admission to the USA PA program is very competitive and accepted students typically exceed the minimum requirements.

1. **Completion of a Baccalaureate degree in any field** from a regionally accredited institution prior to the starting date of the program is required.
2. **A minimum cumulative undergraduate GPA of 3.0** on a 4.0 scale as calculated by CASPA (includes post-baccalaureate undergraduate work).
3. **Completion of prerequisite course work completed with a grade of "C" or higher** from a regionally accredited institution. These courses must be completed successfully by matriculation, failure to do so will result in the student losing their seat in the program. Unless specified, prerequisite courses should be one semester of at least 3 credit hours. Prerequisite required courses are:  
General Biology plus lab (4 credits). General Chemistry I and II plus lab (8 credits). Human Anatomy and Human Physiology OR Anatomy and Physiology I and II. Microbiology. Organic Chemistry. Mathematics (College Algebra minimum). Statistics. General Psychology. Medical Terminology (2 credits). For guidelines on courses accepted, please visit <http://www.southalabama.edu/colleges/alliedhealth/pa/admissions.html>
4. **Completion of the General Graduate Record Examination (GRE)** within the past five (5) years. We require a minimum score of 145 in both the Verbal and Quantitative sections and completion of the Analytical Writing section in one test date.
5. **Completion of at least 500 hours direct patient care experience is required.** Applicants will document these hours on their CASPA application. Please see website (<http://southalabama.edu/alliedhealth/pa/>) for definition, details and examples.

6. **Submission of at least three (3) reference letters, one of which must be from a Physician Assistant (PA), Medical Doctor (MD), or Doctor of Osteopathic Medicine (DO)** submitted to CASPA. Up to five (5) letters will be accepted by CASPA. Reference letters sent directly to our office will not be accepted.
7. Submission of completed and verified application materials by October 1. The program will not review applications that are incomplete, received after the deadline, or do not meet the minimum standards. Please see the website for details <http://www.southalabama.edu/colleges/alliedhealth/pa/applications.html>.

### Application Screening Criteria And Interviews

Please see our website for more detailed information: <http://www.southalabama.edu/colleges/alliedhealth/pa>

Applicants are selected based on a holistic evaluation. Many factors are taken into consideration:

- **GPA cumulative undergraduate GPA, science undergraduate GPA. Last 60 hour GPA (both undergraduate and master's level work).**
- **GRE**
- **Direct Patient Care/Health Care/PA Experience**
- **Community Service**
- **Bonus Courses:** Points will be added or course work completed with a grade of "C" or higher in Immunology, Genetics, Biochemistry, Physics, Pathophysiology, and Pharmacology.
- **Background and Experience:** Points will be awarded for four areas of background and experience, as documented on the CASPA application.
  - **Rural/Underserved:** born in, graduated high school from, or resided in any rural county as referenced at <https://datawarehouse.hrsa.gov/tools/analyzers/geo/Rural.aspx>.
  - **Additional Degree or Training:** additional degree (Master's or Doctorate), or three or more current basic health training certifications or registrations, e.g., CPR, EMT, CNA, MA.
  - **Military or Government Service:** includes all branches of service, AmeriCorps and Peace Corps, U.S. Public Health Service.
  - **Disadvantaged Background:**
    - Economically and/or environmentally disadvantaged, as defined by HRSA and detailed on the CASPA application.
- Please see website for more details, <http://www.southalabama.edu/colleges/alliedhealth/pa>.

### Residency Preference

Preference is shown to Alabama residents, however, highly qualified Service Area and out-of-state applicants whose academics and experiences indicate that they may be a success in both the program and the PA profession will be given the same consideration as residents. Non-residents will be required to pay the non-resident tuition and fees as set by the University. For information on residency please contact the Office of the Registrar at <http://www.southalabama.edu/departments/registrar/residency.html>.

### Interviews

The applicant will attend **one** interview session to be held in the fall prior to matriculation. Notification of applicant status may be emailed at any time during the interview cycle until the class positions are filled. All applicants should know their status by the end of January.

Our program provides opportunities for placement of qualified military veterans through participation as a PAEA Member Program offering assistance for veteran entry into physician assistant programs. A program goal is also to recruit, select, and educate a highly qualified diverse student body, (to include underrepresented minorities, environmentally or economically disadvantaged, rural, racially, ethnically, culturally, etc.), and provide fair and equitable admission criteria.

### How To Apply

All application materials must be received by the deadline. The program will not review applications that are incomplete, received after the deadline, or do not meet the minimum requirements.

The application cycle begins annually on May 1, and those who meet the minimum requirements can apply by completing the following three-step process:

1. Apply through the Centralized Application Service of Physician Assistants (CASPA). Official transcripts are considered part of the CASPA application and must be sent directly to them. Applications will not be verified until all official

transcripts have been received. The CASPA application must be e-submitted, completed and VERIFIED by October 1. Please allow up to four weeks for verification. Contact CASPA for more information.

2. Submission of at least three (3) reference letters, one of which be from a Physician Assistant (PA), Medical Doctor (MD) or Doctor of Osteopathic Medicine (DO) submitted to CASPA. Up to five (5) letters will be accepted by CASPA. Reference letters sent directly to our office will not be accepted.
3. Mail the completed Supplemental Application, downloadable on our web site at <http://www.southalabama.edu/departments/eforms/colleges/alliedhealth/>, along with a check or money order for \$110.00. All fees are nonrefundable.
4. Submit the Graduate Record Examination Score directly and electronically to USA PA Studies Code 2169. For details, visit <http://www.ets.org/>.

## International Students

**If an international student, the applicant must also:**

1. Have all international coursework and degrees evaluated by World Education Services (WES) for submission with CASPA.
2. Have international degree and WES transcript evaluated by the USA Office of International Services to verify that it meets the USA equivalency of a Baccalaureate degree by the October 1 deadline.
3. Contact the Office of International Services at time of application to verify needed documents for admission to the University of South Alabama. Proof of having required documentation must be presented to the Department of PA Studies by the October 1 deadline to have your application considered for admittance into the program. Application to USA through the Office of International Services is required in addition to completing the Department of Physician Assistant Studies requirements to be admitted into the program.
4. Take all prerequisites in the U.S. to establish a USA GPA.
5. TOEFL –International Students, whose native language is not English, must submit a score of 100 or above on the Test of English as a Second Language (TOEFL-IBT) for admission no later than the October 1 deadline.

**Students who are U.S. Citizens with international coursework will follow the same procedures as international students if applicable (steps 1, 2 and 4 only),** the applicant should consult CASPA instructions for clarification on evaluations and submission: [CASPA Instructions and FAQs](#). Coursework as part of a regionally accredited institution study abroad program that appears on the transcript as credit granted by that university will not require further evaluation.

**It is the applicant's responsibility to monitor the delivery of all materials to the program office and to CASPA and to address any issues with them.** For convenience, CASPA now offers a smartphone app for monitoring your application at <https://www.caspa.liaisoncas.com/applicant-ux/#/login>

## Graduation Plan

Physician Assistant Studies (MHS)	Credit Hours
Preclinical Component	
Summer	17
PA 510	3 hrs
PA 510 L	1 hr
PA 511	4 hrs
PA 512	6 hrs
PA 513	2 hrs
PA 514	1 hr
Fall	19
PA 520	6 hrs
PA 520 L	1 hr

PA 521	4 hrs	
PA 522	4 hrs	
PA 523	2 hrs	
PA 525	2 hrs	
Spring		19
PA 530	6 hrs	
PA 530 L	1 hr	
PA 531	4 hrs	
PA 532	4 hrs	
PA 533	2 hrs	
PA 534	2 hrs	
Summer		15
PA 540	6 hrs	
PA 540 L	1 hr	
PA 541	2 hrs	
PA 542	2 hrs	
PA 543	2 hrs	
PA 544	2 hrs	
Clinical Component		
Fall, Spring and Summer		51
PA 550 (4 wks)	4 hrs	
PA 555 (4 wks)	4 hrs	
PA 560 (8 wks)	8 hrs	
PA 570 (8 wks)	8 hrs	
PA 580 (4 wks)	4 hrs	
PA 590 (4 wks)	4 hrs	
PA 591 (4 wks)	4 hrs	
PA 592 (4 wks)	4 hrs	
PA 593 (4 wks)	8 hrs	
PA 595	3 hrs	

At least 16 weeks of the clinical rotations must serve rural/urban under served populations. The USA PA program is a participant with Alabama Statewide Area Health Education Center Program (AHEC) to assist with rural/MUA rotation placement.

# Physics

## Department Information

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Department of Physics web site

<http://www.southalabama.edu/physics/>

The curriculum in the Department of Physics serves three groups of students: those preparing for careers in physics, those pursuing professional fields such as medicine and engineering, and those electing physics and astronomy as part of the natural science requirement for Bachelor of Arts or Bachelor of Science Degrees. The degree program in physics allows for flexibility to the extent that the serious student can select related courses in biology, chemistry, geology, computer science, and engineering to prepare for a career in such interdisciplinary areas as biophysics, geophysics, oceanography, and environmental science. Three options for a Bachelor of Science degree in Physics are offered. One option (the Premedical Option) is for those students pursuing medicine as a career. Links to sample programs and requirements for each option are given in the degree General Comments sections of each Area of Study. Students pursuing a degree in Physics also must have a minor in another discipline. In addition, the Department of Physics offers a double major with the Meteorology program within the Department of Earth Sciences.

All first-time freshmen must successfully complete CAS 100: First Year Experience, as a degree requirement. Students must enroll during their first term at USA, except for summer-entry students who must enroll in the fall semester following entry.

The Physics Pre-Medical Option requires a minimum of 129 hours, while the other Physics options require a minimum of 120 hours.

## Areas Of Study

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### Degrees, Programs, Or Concentrations

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## Courses

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## Faculty

---

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Senior Instructor  
BS, University of West Georgia  
MS, University of Kentucky

BURRESS, JACOB W.  
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MS, University of Missouri-Columb  
PHD, University of Missouri-Columb

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PHD, Baylor University

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HAN, JIANING  
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MS, Hebei University  
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MS, Florida State University  
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BS, University of NIS  
MS, Louisiana Tech University

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Associate Professor  
BS, Texas A & M University  
PHD, Kansas State University

# Physics (BS) - Meteorology Double Major

## Degree Requirements

Majors in Arts and Sciences may be completed with a minimum of 120 semester hours unless designated otherwise. At least 30 hours of course work, which represents 25% of the required 120 hours, must be at the upper division level in order to fulfill the University's residency requirement. At least 15 of the 30 upper-division hours must be in the major or concentration area. An overall grade-point-average (GPA) of 2.0 is required for graduation. In addition, a minimum GPA of 2.0 is required in the student's major or concentration area.

The Meteorology program, with the Department of Earth Sciences, and the Department of Physics jointly offer a double major in Meteorology and Physics. This curriculum is intended for students who anticipate graduate study in Atmospheric Science, yet wish a very strong background in Physics. As constructed, this curriculum will require the student to complete an extra seventeen (17) hours over the maximum 120 hours required for either major alone. The changes from the current Option B: General Physics curriculum for a student intending to pursue graduate study in Meteorology include: removal of six (6) Physics Elective hours, two courses, and the addition of PH 366. Requirements removed from the regular Meteorology curriculum are the completion of Meteorology electives and the satisfaction of one of the four Meteorology Tracks; the Physics Major will replace the normal requirements for a Meteorology track and the electives. Only Meteorology-Physics double majors may have these track and elective requirements waived. The double major satisfies the minor requirement for the College of Arts and Sciences.

### Meteorology Major Requirements:

MET 353

MET 341

MET 354

MET 355

MET 356\*

MET 357

MET 454

MET 455

MET 456 (W)\*

For students ultimately planning to find employment with the National Weather Service these electives are highly recommended:

GY 475\*

MET 492

\*Note: GY 475, MET 456(W), and MET 356 are only offered in the summer

### Physics Major Requirements:

PH 107

PH 201

PH 202

PH 303

PH 348

PH 366

PH 367

PH 385(W)

PH 411

PH 448

PH 463

The following additional technical courses are required in these three areas:

Mathematics and Statistics:

MA 125

MA 126

MA 227

MA 238

ST 315

Chemistry:

CH 131

CH 132

Computer and Information Sciences:

CIS 210 **OR**

CIS 227

All Physics majors will be required to take an assessment test, at no cost to the student, and an exit interview before graduation as directed by the department.

### General Education Requirements For Physics Majors (All Options)

Areas I, II, and IV of the General Education Requirements for Physics are specified in the College of Arts and Sciences section. Note that Area III requirements (Mathematics and Natural Sciences) are fulfilled by the major requirements specified above.

### General Comments

- A sample program may be found at [http://www.southalabama.edu/departments/academicsuccess/fyac/advisingguides/resources/A%20PH\\_DoubleMajorPhysMet\\_4%20Year%20Plan.pdf](http://www.southalabama.edu/departments/academicsuccess/fyac/advisingguides/resources/A%20PH_DoubleMajorPhysMet_4%20Year%20Plan.pdf)
- PH 114 and PH 115 with either PH 201 or PH 202 may be substituted for PH 201 and PH 202 with the prior approval of the physics department chair.
- The sequences PH 114, PH 115 and PH 201, PH 202 may not both be taken for credit.

### Double Major in Meteorology and Physics (137 Hours)

Total	Hours
Physics	34
Mathematics/Stat	18
Meteorology	33
Chemistry	8
CAS	2
Art/Humanities	12
Social Sciences	12
Communication	9
Language	6
CIS	3
<b>Total</b>	<b>137</b>



# Minor In Physics

## Degree Requirements

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If a minor is required in your degree program, at least 9 (lower and/or upper-division) hours of courses in the minor must be completed at the University.

**Requirements for the Minor in Physics are:**

A minimum of 20 semester hours in Physics including:

PH 303

Plus at least six additional hours at the 300 level or above.

# Physics (BS) - General Physics

## Degree Requirements

Majors in Arts and Sciences may be completed with a minimum of 120 semester hours unless designated otherwise. At least 30 hours of course work, which represents 25% of the required 120 hours, must be at the upper division level in order to fulfill the University's residency requirement. At least 15 of the 30 upper-division hours must be in the major or concentration area. An overall grade-point-average (GPA) of 2.0 is required for graduation. In addition, a minimum GPA of 2.0 is required in the student's major or concentration area.

Major in Physics (General Physics Option) is designed for a student intending no graduate study in Physics. This option emphasizes applied Physics and has a large number of elective hours so that a student may tailor an interdisciplinary degree.

The degree allows for flexibility to the extent that the serious student can select related courses in biology, chemistry, geology, computer science, and engineering to prepare for a career in such interdisciplinary areas as biophysics, geophysics, oceanography, and environmental science. This degree option can be a final degree for the student or preparation for graduate studies in other fields, such as the ones mentioned above.

### General Physics course requirements include:

PH 107

PH 201

PH 202

PH 303

PH 348

PH 354

PH 366

PH 385(W)

PH 411

PH 448

PH 463

Nine (9) hours of Physics electives must be taken from among the following

PH 301

PH 311

PH 346

PH 349

PH 367

PH 390

PH 449

PH 494

PH 499

The following additional technical courses are required:

CH 131

CH 132

CIS 210 or CIS 227

In addition, the following math courses are prerequisites for upper division Physics courses:

MA 125

MA 126

MA 227

MA 238

With the exception of PH 303 and PH 448, which are offered every year, all upper division Physics courses are offered every other year.

All Physics majors will be required to take an assessment test, at no cost to the student, and an exit interview before graduation as directed by the department.

### General Education Requirements For Physics Majors (All Options)

Areas I, II, and IV of the General Education Requirements for Physics are specified in the College of Arts and Sciences section. Note that Area III requirements (Mathematics and Natural Sciences) are fulfilled by the major requirements specified above.

### General Comments

- A sample program may be found at [http://www.southalabama.edu/departments/academicsuccess/fyac/advisingguides/resources/A%20PH\\_General\\_4%20Year%20Plan.pdf](http://www.southalabama.edu/departments/academicsuccess/fyac/advisingguides/resources/A%20PH_General_4%20Year%20Plan.pdf)
- PH 114 and PH 115 with either PH 201 or PH 202 may be substituted for PH 201 and PH 202 with the prior approval of the physics department chair.
- The sequences PH 114, PH 115 and PH 201, PH 202 may not both be taken for credit.

#### Required Courses for General Physics Option (120 Hours)

Totals:	Hours	Physics Electives
Physics	43	PH 301
Mathematics	15	PH 311
Chemistry	8	PH 346
CAS 100	2	PH 349
Art/Humanities	12	PH 367
Social Sciences	12	PH 390
Communication	9	PH 449
Language	6	PH 494
CIS	3	PH 499
Electives	10	
<b>Total</b>	<b>120</b>	

# Physics (BS) - Graduate School Prep

## Degree Requirements

Majors in Arts and Sciences may be completed with a minimum of 120 semester hours unless designated otherwise. At least 30 hours of course work, which represents 25% of the required 120 hours, must be at the upper division level in order to fulfill the University's residency requirement. At least 15 of the 30 upper-division hours must be in the major or concentration area. An overall grade-point-average (GPA) of 2.0 is required for graduation. In addition, a minimum GPA of 2.0 is required in the student's major or concentration area.

**Grad School Prep:** Physics Graduate School Preparation is designed for a student anticipating graduate study in Physics. This option gives the student a solid foundation in basic Physics.

### Physics Graduate School Preparation course requirements include:

PH 107

PH 201

PH 202

PH 303

PH 348

PH 349

PH 366

PH 367

PH 385(W)

PH 411

PH 448

PH 449

PH 463

Six (6) hours of Physics electives must be taken from among the following

PH 301

PH 311

PH 346

PH 354

PH 390

PH 494

PH 499

The following additional technical courses are required:

CH 131

CH 132

CIS 210 or CIS 227

In addition, the following math courses are prerequisites for upper division Physics courses:

MA 125

MA 126

MA 227

MA 238

With the exception of PH 303 and PH 448, which are offered every year, all upper division Physics courses are offered every other year.

All Physics majors will be required to take an assessment test, at no cost to the student, and an exit interview before graduation as directed by the department.

### General Education Requirements For Physics Majors (All Options)

Areas I, II, and IV of the General Education Requirements for Physics are specified in the College of Arts and Sciences section. Note that Area III requirements (Mathematics and Natural Sciences) are fulfilled by the major requirements specified above.

### General Comments

- A sample program may be found at [http://www.southalabama.edu/departments/academicsuccess/fyac/advisingguides/resources/A%20PH\\_Prof\\_4%20Year%20Plan.pdf](http://www.southalabama.edu/departments/academicsuccess/fyac/advisingguides/resources/A%20PH_Prof_4%20Year%20Plan.pdf)
- The sequences PH 114, PH 115 and PH 201, PH 202 may not both be taken for credit. PH 114 and PH 115 with either PH 201 or PH 202 may be substituted for PH 201 and PH 202 with the prior approval of the physics department chair.

#### Required Courses for Graduate School Preparation Option (120 Hours)

Totals:	Hours	Physics Electives
Physics	46	PH 301
Mathematics	15	PH 311
Chemistry	8	PH 346
CAS	2	PH 354
Art/Humanities	12	PH 390
Social Sciences	12	PH 494
Communication	9	PH 499
Language	6	
CIS	3	
Electives	7	
<b>Total</b>	<b>120</b>	

# Physics (BS) - Premedical Option

## Degree Requirements

Majors in Arts and Sciences may be completed with a minimum of 120 semester hours unless designated otherwise. At least 30 hours of course work, which represents 25% of the required 120 hours, must be at the upper division level in order to fulfill the University's residency requirement. At least 15 of the 30 upper-division hours must be in the major or concentration area. An overall grade-point-average (GPA) of 2.0 is required for graduation. In addition, a minimum GPA of 2.0 is required in the student's major or concentration area.

Major in Physics (Premedical Option) is designed for a student intending a career in a health professional field such as Medicine. Besides Physics, the Curriculum includes extra courses in Chemistry and recommended courses in Biology, Psychology and the Social Sciences to prepare the student for the MCAT exam. Because of these additional requirements there are relative few elective hours in this program and the overall hours total is 129 hours instead of the nominal 120 hours.

### Premedical Option course requirements include:

PH 107

PH 201

PH 202

PH 303

PH 348

PH 366

PH 385(W)

PH 448

PH 463

Three (3) hours of Physics electives must be taken from among the following:

PH 311

PH 346

PH 349

PH 354

PH 367

PH 390

PH 411

PH 449

PH 494

PH 499

The following additional technical courses are required:

CH 131

CH 132

CH 201

CH 202

BLY 121

BLY 122

BLY302 or BMD 350

BMD 321

BMD 322

Requirements from the Social and Behavioral Sciences include:

PSY 120

SY 109 or SY 112

In addition, the following math courses are prerequisites for upper division Physics courses:

MA 125

MA 126

MA 227

MA 238

The Premedical Option includes the statistics course:

ST 210

With the exception of PH 303 and PH 448, which are offered every year, all upper division Physics courses are offered every other year.

All Physics majors will be required to take an assessment test, at no cost to the student, and an exit interview before graduation as directed by the department.

### General Education Requirements For Physics Majors (All Options)

Areas I, II, and IV of the General Education Requirements for Physics are specified in the College of Arts and Sciences section. Note that Area III requirements (Mathematics and Natural Sciences) are fulfilled by the major requirements specified above.

### General Comments

- A sample program may be found at [http://www.southalabama.edu/departments/academicsuccess/fyac/advisingguides/resources/A%20PH\\_Premed\\_4%20Year%20Plan.pdf](http://www.southalabama.edu/departments/academicsuccess/fyac/advisingguides/resources/A%20PH_Premed_4%20Year%20Plan.pdf)
- PH 114 and PH 115 with either PH 201 or PH 202 may be substituted for PH 201 and PH 202 with the prior approval of the physics department chair.
- The sequences PH 114, PH 115 and PH 201, PH 202 may not both be taken for credit.

#### Required Courses for Premedical Option (129 Hours)

Totals:	Hours	Physics Electives
Physics	31	PH 311
Mathematics	18	PH 346
Chemistry	16	PH 349
Biology	17	PH 354
Art/Humanities	12	PH 367

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Social Sciences	12	PH 390
Communication	9	PH 411
Language	6	PH 449
Electives	6	PH 494
CAS	2	PH 499
<b>Total</b>	<b>129</b>	

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# Political Science And Criminal Justice

## Department Information

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Department of Political Science and Criminal Justice web site  
<http://www.southalabama.edu/colleges/artsandsci/poliscie/index.html>

### Undergraduate Studies

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The courses offered in the Department of Political Science and Criminal Justice are designed to achieve three important objectives:

1. To help students attain a liberal education
2. To encourage and prepare students to participate actively in public affairs
3. To help students advance toward professional careers in such fields as education, law and government.

### Political Science

Political Science is a broad discipline in both content and methods. Political Science includes philosophical, historical, and analytical studies of governments, politics, and policies. Political scientists may focus on political behavior, decision making, processes, organizations, and public policies. Inquiry in political science addresses the domestic and international policies of the United States and all other countries and regions. Political scientists study the political values, attachments, and activities of people, individually and in groups. Political science examines both what preferences people share and how they differ according to their personal attributes and positions in the economy and society. Political science also studies how people regard and trust each other as well as their leaders and governments. Consequently, political science has many facets and offers opportunities for many different concentrations.

All first-time freshmen must successfully complete CAS 100: First Year Experience as a degree requirement. Students must enroll during their first term at USA, except for summer-entry students who must enroll in the fall semester following entry.

### Technological Competency Requirement

Research Methods (PSC 310/CJ 310) will satisfy the technology competency requirement for both political and criminal justice majors. This is a requirement course for both majors.

### Departmental Honors

The Department of Political Science and Criminal Justice offers an opportunity for students in Political Science or Criminal Justice who are not in the University's Honors College to graduate with departmental honors. In order to graduate with departmental honors, the student needs to have at least a 3.50 grade point average (overall and in the major) and maintain that average upon graduation. In addition, the student must take a two-semester departmental honors thesis project with a faculty mentor and a committee.

### Criminal Justice

The curriculum in Criminal Justice provides students interested in law enforcement, criminal law, corrections, and the criminal court system with a broad educational background emphasizing social science and the University's general education skills of critical thinking, writing and analysis. At the same time, students in the department gain basic knowledge of the criminal justice field to the extent of specialization compatible with University and College requirements. The curriculum leads to the Bachelor of Arts degree. The mission of the program must be conceived as interdisciplinary in nature, since no traditional discipline covers the wide spectrum of expertise required. The undergraduate program addresses issues respecting the entire criminal justice system, from the nature of crime and delinquency to society's varied responses to crime. Such a focus includes the organization and operation of each of the functional components in the field.

All first-time full-time freshmen are required to successfully complete CAS 100: First Year Experience.

## Graduate Studies

The Master of Public Administration degree (MPA) curriculum in the Department of Political Science and Criminal Justice is a professional degree program designed principally for present and future administrators and officers in government and other public related organizations. It is open, however, to other qualified students as well.

Students entering the program come from varied academic and vocational backgrounds. Accordingly, no specific undergraduate major is required for admission to the MPA Program. However, certain course prerequisites must be satisfied prior to enrollment in any of the required core courses of the curriculum.

### Requirements For Admission

Students are admitted each semester. The following criteria supplement the Graduate School criteria (see Categories of Admission).

#### Regular Admission

1. Students must have a minimum undergraduate GPA of 3.0 on all undergraduate work (on a 4-point scale).
2. Satisfactory GRE scores (at least 300 combined score on the Verbal and the Quantitative Sub tests).
3. The GRE requirement may be waived for holders of earned advanced degrees on the recommendation of the program coordinator. GRE scores must be submitted prior to any category of admission- except for the person with an earned advanced degree from an accredited institution.

#### Provisional Admission

In addition to the minimum standards required by the Graduate School, the student must have a minimum undergraduate GPA of 2.7, or 3.0 (on a 4-point scale) for the last 60 hours of undergraduate work and submit GRE general test scores.

## Areas Of Study

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### Degrees, Programs, Or Concentrations

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## Courses

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### Course Listing

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Criminal Justice.....	932
Political Science.....	1115

## Faculty

---

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MA, Cornell U-Ny St Statutory Cols  
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PHD, Florida State University

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BGS, University of New Orleans  
MA, University of New Orleans  
PHD, Louisiana State University

FISHER, SAMUEL H.  
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MA, University of Alabama  
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HOLLINGSWORTH, MICHAEL A.  
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BA, University of Alabama  
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MS, University of Alabama

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MA, University of Pennsylvania  
MA, University of Pennsylvania  
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BA, University of Missouri-Columb  
MA, Pennsylvania State University  
PHD, Pennsylvania State University

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MS, University of Bridgeport  
MS, Florida State University  
PHD, Florida State University

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MA, University of New Orleans  
PHD, University of New Orleans

SHAW, THOMAS C.  
Associate Professor  
BS, University of Southern Miss  
MA, University of Southern Miss  
PHD, University of New Orleans

# Criminal Justice (BA)

## Degree Requirements

Majors in Arts and Sciences may be completed with a minimum of 120 semester hours unless designated otherwise. At least 30 hours of course work, which represents 25% of the required 120 hours, must be at the upper division level in order to fulfill the University's residency requirement. At least 15 of the 30 upper-division hours must be in the major or concentration area. An overall grade-point-average (GPA) of 2.0 is required for graduation. In addition, a minimum GPA of 2.0 is required in the student's major or concentration area.

### Requirements For A Major In Criminal Justice

The major in criminal justice requires 42 semester hours, including PSC 130, CJ 205, CJ 310, CJ 320, CJ 330, CJ 340, and CJ 360, and CJ 492, plus 18 semester hours of criminal justice electives. CJ 205 is a prerequisite to all CJ courses and must be passed with a grade of "C" or higher before enrolling in any other CJ course. CJ majors must earn a grade of "C" or higher in all core courses and the capstone seminar (PSC 130, CJ 205, CJ 310, CJ 320, CJ 330, CJ 340 and CJ 360, and CJ 492). Students must complete 15 hrs of the 39 hrs. at the 300/400 level at the University of South Alabama. Students pursuing a degree in Criminal Justice also must have a minor in another discipline. In addition, all Criminal Justice majors must take the ETS major field test in criminal justice and receive a satisfactory score (standards for passing is determined by the Department of Political Science and Criminal Justice). The ETS test is a national standardized examination in criminal justice that is administered by the Educational Testing Service in Princeton, New Jersey. Students with unsatisfactory scores on the ETS test can retake the test, or they may be required to repeat foundation classes in criminal justice.

All Criminal Justice majors must take the Capstone Seminar and the ETS test during the Fall Semester of their senior year. Failure to do so may prevent you from graduating. Also all core classes should be successfully completed prior to taking CJ 492 and CJ 492 is offered in the Fall Semester only.

All criminal justice majors must show competency in oral communication. This requirement can be satisfied through paper presentations in the required capstone seminar in criminal justice.

Criminal Justice Major		Credit Hours
Requirements:		42
PSC 130	3 hrs	
CJ 205	3 hrs	
CJ 310	3 hrs	
CJ 320	3 hrs	
CJ 330	3 hrs	
CJ 340	3 hrs	
CJ 360	3 hrs	
CJ 492	3 hrs	
CJ Electives	18 hrs	

### General Education Requirements For Criminal Justice Majors

General Education Requirements for Criminal Justice majors are specified in the College of Arts and Sciences section.

# Public Administration (MPA)

## Degree Requirements

Master of Public Administration (MPA)	Credit Hours
To qualify for the degree of Master of Public Administration, all candidates must satisfactorily complete a minimum of thirty-six semester hours, as follows:	36
PSC 130, Introduction to US Government, or its equivalent is a prerequisite for the core curriculum	
Twenty-four hours in the following eight core courses: (Note: The Core Curriculum Cycle Should Ideally Commence in the Fall Semester)	
PSC 500	
PSC 510	
PSC 520	
PSC 530	
PSC 540	
PSC 550	
PSC 570	
PSC 580	
Students must select one of the following four concentrations to complete the remaining twelve hours of graduate electives:	
Non-thesis Concentration: Students must take an additional twelve hours of graduate electives as approved by the MPA coordinator.	
Health Care Concentration: In addition to the core courses, students must take 12 hours of PSC health care administration and policy graduate courses.	
Geographical Information Technology (GIT) Concentration: In addition to the courses, students must take 12 hours of GIT graduate courses.	
Thesis Concentration: In addition to core courses, students must take 6 to 9 hours of graduate elective courses as approved by the MPA coordinator and 3 to 6 hours of PSC 599 (Thesis). Students must have a minimum of 12 hours of graduate elective and thesis credit combined. They must also complete a thesis in compliance with Graduate School requirements.	
Any substitutions for the above requirements must be approved in writing by the Coordinator of the MPA Program.	
A candidate for the MPA degree must complete successfully a comprehensive written examination covering the eight core courses listed previously. To be eligible to take this examination, a student must have achieved at least a 3.00 (B) grade-point average on the core curriculum course work. Normally, the examination will be administered during the Fall and Spring Semesters. The comprehensive examination may be attempted no more than twice.	

### Internship

Students in the MPA Program who are not suitably employed full-time in public agencies may be allowed to enroll in PSC 596, Graduate Internship in Public Administration, for a maximum of six semester hours.

Normally, admission to the Internship Program will be dependent upon the following prerequisites:

1. Satisfactory completion of at least six of the required core courses;
2. Approval by the internship professor of the prospective intern's qualifications and proposed project; and
3. Placement of the student in an appropriate agency of the government or other public service institution.

The length of the internship and corresponding credit (at the rate of three to six hours per semester), not to exceed a total of six hours, will be determined for each student on the basis of the student's particular needs and opportunities.

Each intern will be required, in consultation with the intern professor, to develop a research design for the project to be undertaken during the internship. Each intern will also be required to write a paper showing how that research design has been carried out. Particular emphasis will be placed in the paper upon the relationship between the internship experience and academic course work. Close and continuing supervision of each intern's progress will be provided by the intern professor.

# Minor In Criminal Justice

## Degree Requirements

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If a minor is required in your degree program, at least 9 (lower and/or upper-division) hours of courses in the minor must be completed at the University.

### Requirements For A Minor In Criminal Justice

The minor in Criminal Justice requires 18 semester hours, including PSC 130 and CJ 205, plus 12 semester hours of criminal justice electives. CJ 205 is a prerequisite to all CJ courses and must be passed with a grade of "C" or higher before enrolling in any other CJ course. Students must complete 9 hrs. of the 18 hrs. at the University of South Alabama. Also, at least 9 hours of CJ courses must be completed at 300-level or above.

Criminal Justice Minor		Credit Hours
Requirements:		18
PSC 130	3 hrs	
CJ 205	3 hrs	
CJ Electives	12 hrs	

# Minor In Political Science

## Degree Requirements

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If a minor is required in your degree program, at least 9 (lower and/or upper-division) hours of courses in the minor must be completed at the University.

### Requirements For A Minor In Political Science

For a minor in political science a student must take a minimum of 18 semester hours in political science, of which 6 hours are required (PSC 130, PSC 250 or PSC 270), and 9 hours of 300/400 level PSC electives and 3 hours of 400 level PSC electives. Students must complete 9 hrs. of the 18 hrs. at the University of South Alabama.

Political Science Minor		Credit Hours
Requirements		18
PSC 130	3 hrs	
PSC 250 or PSC 270	3 hrs	
400 level PSC elective	3 hrs	
300/400 level PSC electives	9 hrs	

# Political Science (BA)

## Degree Requirements

Majors in Arts and Sciences may be completed with a minimum of 120 semester hours unless designated otherwise. At least 30 hours of course work, which represents 25% of the required 120 hours, must be at the upper division level in order to fulfill the University's residency requirement. At least 15 of the 30 upper-division hours must be in the major or concentration area. An overall grade-point-average (GPA) of 2.0 is required for graduation. In addition, a minimum GPA of 2.0 is required in the student's major or concentration area.

### Requirements For A Major In Political Science

The major in political science requires 36 semester hours, of which 12 hours come from the core political science courses, 15 hours of PSC electives at the 300/400 level, and 6 hours of PSC electives at the 400 level, and the capstone seminar in political science. A grade of "C" or higher is required for PSC majors in all core classes and the capstone seminar (PSC 130, PSC 250, PSC 270, PSC 310, and PSC 492). Students must complete 15 hrs. of the 36 hrs. at the 300/400 level at the University of South Alabama. Students pursuing a degree in Political Science also must have a minor in another discipline.

In addition, all political science majors must take the ETS major field test in political science and receive a satisfactory score (standard for passing is determined by the Department of Political Science and Criminal Justice). The ETS test is a standardized national examination in political science that is administered by the Educational Testing Service in Princeton, New Jersey. Students with unsatisfactory scores on the ETS test can retake the test, or they may be required to repeat foundation classes in political science.

All Political Science majors must take the Capstone Seminar and the ETS test during the Fall Semester of their senior year. Failure to do so may prevent you from graduating.

All political science majors must show competency in oral communication. This requirement can be satisfied through paper presentations in the required capstone seminar in political science.

Political Science Major		Credit Hours
Requirements		36
PSC 130	3 hrs	
PSC 250	3 hrs	
PSC 270	3 hrs	
PSC 310	3 hrs	
PSC 492	3 hrs	
400 level PSC electives	6 hrs	
300/400 level PSC elective	15 hrs	

### General Education Requirements For Political Science Majors

General Education Requirements for Political Science majors are specified in the College of Arts and Sciences section.

# Psychology

## Department Information

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Department of Psychology web site  
<http://www.southalabama.edu/psychology>

### Undergraduate Studies

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The objective of psychology, as a science, is to understand, explain, and predict the behavior of organisms. The Department of Psychology has developed and organized its course offerings to meet three major goals:

1. To provide a strong foundation for those students who plan to enter a graduate school of psychology after completing their undergraduate degree requirements.
2. To assist those students who are planning careers in psychology or in related fields by providing a flexible curriculum that can be designed to meet the career goals of individual students.
3. To meet the needs of those students who are taking psychology courses as part of their liberal arts education.

All first-time freshmen must successfully complete CAS 100: First Year Experience as a degree requirement. Students must enroll during their first term at USA, except for summer-entry students who must enroll in the fall semester following entry.

### Graduate Study In Psychology

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The Department of Psychology accepts applicants to the Master of Science program (non-Clinical/Counseling) and to the Doctor of Philosophy program in Clinical/Counseling Psychology (CCP). Students admitted to the CCP program with a Bachelor's degree will complete the Master of Science program (Clinical and Counseling Psychology).

The Master of Science degree program in Psychology (non-Clinical/Counseling) is designed to provide individuals with knowledge of current theories, principles, and methods of psychology in preparation for future work toward a doctoral degree, employment in a research setting or employment in a college teaching position. The Department of Psychology currently accepts applicants to the Master of Science degree program, with an interest in one or more areas of concentration in the Behavioral and Brain Sciences Psychology Program. The available areas of concentration include: Behavioral Statistics/Computational Modeling, Personality and Measurement, Cognitive and Perceptual Processing, Psychophysiology, Social/Developmental Psychology, and College Teaching Preparation.

Students enrolled in the Doctor of Philosophy in Clinical and Counseling Psychology have the opportunity to earn a Master's of Science in Psychology as they progress towards completion of the doctoral degree. Students interested in a graduate degree in Clinical and Counseling Psychology are encouraged to see the full program description of the doctoral program in Clinical and Counseling Psychology under the heading "The Graduate School" for more information [www.southalabama.edu/ccp/](http://www.southalabama.edu/ccp/).

### Requirements For Admission

Students are admitted Fall Semester only. Applications to the Doctoral CCP Graduate Program should be completed by December 15. Applications to the Masters program in Behavioral and Brain Sciences should be completed by February 15. Late applications will be considered only if there are still openings available. Please note that the Psychology Graduate Program is a competitive program with a limited capacity and admits students to begin in the Fall Semester only.

In addition to the Graduate School application form and required supporting documentation, the Department of Psychology requires submission of a Psychology Department application form, statement of purpose, and three letters of recommendation. The following criteria supplement the Graduate School criteria for admission (see Categories of Admission).

### Regular Admission

In addition to meeting graduate school requirements for regular admission (see Categories of Admission), applicants to the Master of Science program must meet the following criteria:

1. Completion of at least 21 semester hours of psychology courses on the undergraduate level including at least one statistics course and one course in experimental methods/research design. In addition, the following courses are highly recommended: abnormal psychology, biological psychology, learning, personality, social psychology, developmental psychology, and history/systems of psychology.

2. Summed score of 300 or better (1000 or better based on previous scores) on the verbal and quantitative sub tests of the General Test of the Graduate Record Examination.
3. Three letters of recommendation and a statement of purpose.

Please note that these are the minimum requirements for admission. Admission is competitive and students who are admitted to the program may far surpass these minimums.

### **Provisional Standing**

Applicants who do not meet all requirements for regular admission but who show evidence of promise as a graduate student may, in exceptional cases, be considered for provisional admission if space is available in the program. The graduate admissions committee will consider provisional admission on an individual basis. Students admitted provisionally may be required to make up deficiencies in their undergraduate course work without graduate credit in addition to completing the normal degree requirements listed below.

Provisional students may apply for regular standing after satisfactory completion of the first nine semester hours of recommended graduate course work in psychology. Students must also remove any undergraduate deficiencies before being approved for change of status. Students in provisional standing who receive a grade lower than "B" in any graduate or undergraduate psychology course will be recommended to the Dean of the Graduate School for academic dismissal.

### **Non-degree Students**

Applicants for non-degree status in psychology are considered only in exceptional cases and will normally be admitted only if they meet regular admission standards. That is, they must have a 3.0 GPA overall and in psychology, a score of 300 or better on the verbal plus quantitative sub tests of the Graduate Record Examination, and must have completed the required undergraduate course work. Following admission, non-degree students must have permission of the department chair and director of graduate studies of the college for each course they wish to enroll in. Enrollment will be approved on a space-available basis with preference being given to degree students. Non-degree students must satisfy the same prerequisites and corequisites as degree students.

### **Progress Toward Degree**

All graduate students will be evaluated each semester to determine if they are making satisfactory progress toward completion of degree requirements. Students will be given written reports, including specific deficits, if they are not making satisfactory progress. Such students will have one semester to remedy the specific deficits listed or will be subject to dismissal from the program.

### **Graduate Assistantships**

Each year the Psychology Department recommends qualified applicants to the Dean of Graduate School for graduate assistantships. Applicants must be students in Regular Standing. Application forms for graduate assistantships may be obtained from the Graduate School. The deadline for receipt of completed doctoral assistantship applications is December 15, and for the masters assistantships is February 15.

## **Areas Of Study**

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### **Degrees, Programs, Or Concentrations**

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## **Courses**

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### **Course Listing**

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## Faculty

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BROWN, CHARLES H.

Professor

BA, Western Michigan University

MA, Michigan State University

PHD, Michigan State University

CURRIER, JOSEPH M.

Assistant Professor

BA, University of St Thomas

MA, Wheaton College

PHD, University of Memphis

FOSTER, JOSHUA D.

Associate Professor

BS, Old Dominion University

MA, Towson University

PHD, University of Georgia

HILL, BENJAMIN D.

Associate Professor

BS, Coastal Carolina University

MA, Wake Forest University

PHD, Louisiana State University

ISEN, JOSHUA D.

Assistant Professor

BA, University of California-Berk

MA, University of Southern CA

PHD, University of Southern CA

JETT, STEPHANIE E.

Part-Time Instructor

BA, University of South Alabama

MS, University of South Alabama

PHD, University of Southern Miss

LABBE-COLDSMITH, ELISE E.

Professor

BA, Loyola University-New Orleans

MA, Louisiana State University

PHD, Louisiana State University

LANGHINRICHSEN-ROHLING, JENNIFER

Professor

BS, Brown University

MS, University of Oregon

PHD, University of Oregon

POWELL, LAURA A.

Assistant Professor

BA, University of South Alabama

MS, University of South Alabama

PHD, University of Southern Miss

ROHLING, MARTIN L.

Professor

BS, University of Illinois-Urbana

BA, Southern Illinois U-Carbondale

MA, University of Alabama

PHD, University of Alabama

SHELLEY-TREMBLAY, JOHN F.

Professor

BS, Colorado State University

MA, The New School-A University

PHD, Cuny City College

SMITH, PHILLIP N.

Assistant Professor

BA, Gettysburg College

MS, Villanova University

MA, Texas Tech University

PHD, Texas Tech University

TURNER, LISA A.

Professor

BS, University of Alabama

MA, University of Alabama

PHD, University of Alabama

YATES, MARK C.

Associate Professor

BS, Louisiana State University

MS, Univ of Louisiana at Monroe

PHD, University of Kansas

ZLOMKE, KIMBERLY

Associate Professor

BA, Saint Louis U-Main Campus

MS, Southern Illinois U-Carbondale

PHD, Louisiana State University

# Minor In Psychology

## Degree Requirements

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If a minor is required in your degree program, at least 9 (lower and/or upper-division) hours of courses in the minor must be completed at the University.

Minor in Psychology	Credit Hours
A minimum of 21 semester hours in Psychology, including	21
PSY 120 or PSY 121	
PSY 220	
PSY 221	
14 semester hours of electives (twelve of those must be in courses numbered 300 or above)	

# Psychology (BA)

## Degree Requirements

Majors in Arts and Sciences may be completed with a minimum of 120 semester hours unless designated otherwise. At least 30 hours of course work, which represents 25% of the required 120 hours, must be at the upper division level in order to fulfill the University's residency requirement. At least 15 of the 30 upper-division hours must be in the major or concentration area. An overall grade-point-average (GPA) of 2.0 is required for graduation. In addition, a minimum GPA of 2.0 is required in the student's major or concentration area.

Psychology (BA)	Credit Hours
A minimum of 38 semester hours in psychology including 32 hours from the undergraduate core and six hours of electives.	38
Undergraduate Core Topic Area Course Number Required	
Basic PSY 120 or PSY 121	
PSY 220	
PSY 221	
PSY 310	
PSY 320	
PSY 321	
PSY 412	
Experimental/Learning PSY 416, PSY 317 or 420, PSY 428, PSY 475 Any Two	
Personality/Social and Abnormal PSY 340, PSY435, PSY 440 Any Two	
Developmental PSY 350, PSY 456 Any One	
The remaining six hours of electives needed for a major may be taken from any courses not taken previously (excluding PSY 250).	

Students who are preparing for graduate study are encouraged to take all courses listed in the undergraduate core and any additional courses recommended by their faculty advisor. Student research is encouraged by the faculty and students may obtain course credit for individual student research projects in PSY 494. Students pursuing a degree in Psychology also must have a minor in another discipline.

### General Education Requirements For Psychology Majors

General Education Requirements for Psychology majors are specified on the College of Arts and Sciences section. Note that Area IV is partially satisfied by the major requirements specified above.

# Psychology (MS)

## Degree Requirements

### Graduate Curriculum

#### Behavioral and Brain Sciences Concentration

Students admitted to the Master of Science in Psychology Behavioral and Brain Sciences concentration must complete the curriculum described below and appropriate electives. A minimum of 36 hours of graduate courses are required.

Psychology (MS)	Credit Hours
Curriculum	36
Research Methodology/Statistics	
PSY 500	
PSY 501	
PSY 502	
Biopsychology	
PSY 510 OR PSY 528 OR PSY 575	
Social	
PSY 520 OR PSY 522	
Cognition	
PSY 514 OR PSY 516	
Developmental	
PSY 524 OR PSY 570	
Electives	
Thesis (PSY 599 - 6 to 9 hours) optional	

#### Clinical and Counseling Psychology Concentration

**Only students admitted into the Clinical and Counseling Doctoral program with a Bachelor's degree** will complete the following courses as requirements for a Master of Science degree in Psychology. In addition, students must complete either a major project in psychology (minimum of three hours required) or a theses (minimum of six hours required). Satisfactory completion of PSY 530 with a minimum grade of "B" is required before a student is allowed to enroll in any practicum course.

Curriculum	50
PSY 500	2 hrs
PSY 501	3 hrs

PSY 502	3 hrs
PSY 510	3 hrs
PSY 516	3 hrs
PSY 522	3 hrs
PSY 524	3 hrs
PSY 530	3 hrs
PSY 532	3 hrs
PSY 540	3 hrs
PSY 542	3 hrs
PSY 544	3 hrs
PSY 550	3 hrs
PSY 556	9 hrs
Electives	
Thesis (PSY 599 - 6 to 9 hours) or Psychology Project (PSY 598 - 3 hours minimum)	

# Radiologic Sciences

## Department Information

<b>Department of Radiologic Sciences Administrative Staff</b>		<b>(251) 445-9346</b>
Chair	Dale Smith, Interim	
Medical Advisor	Maria S. Figarola M.D.	
Associate Professor		
Instructors	Brewer, Cleveland, Cooper, Jalkh, Pohlmann, Smith	
Teaching Technologists	Davis, Blow	

Department of Radiologic Sciences web site  
<http://www.southalabama.edu/colleges/alliedhealth/radiologicsciences>

### Programs Offered:

#### Bachelor Of Science In Radiologic Sciences

Since its inception in 1976, the Department of Radiologic Sciences has provided a quality educational program with a sustained emphasis upon graduating competent and compassionate healthcare professionals. In so doing, our graduates are prepared to practice their profession in the often complex and global society of the 21st century.

The baccalaureate program is designed to provide graduates with enhanced career opportunities in radiology as administrators, educators, and advanced imaging specialists. The curriculum provides a broad education in liberal arts and basic sciences and an in-depth study in radiologic sciences.

Educational opportunities in diagnostic imaging and advanced imaging modalities such as mammography, magnetic resonance imaging, vascular radiography, computed tomography, radiology administration, ultrasound, and radiation therapy are offered. Following completion of the pre-professional component and admission to the professional component of the program, students will study general radiography for three semesters. At the end of this first year in the professional component, students will select one of the following tracks to complete: general radiography to include one advanced imaging modality, ultrasound, or radiation therapy.

The general radiography track curriculum includes diagnostic radiology and either mammography, computed tomography, magnetic resonance imaging, vascular radiography, and/or radiology administration. Students completing didactic and clinical requirements in these tracks will be eligible to seek certification through the American Registry of Radiologic Technologists (ARRT) in radiography and the advanced modality studied (excluding radiology administration).

The other two baccalaureate tracks allow students completing the first year of general radiography curriculum to select either ultrasound or radiation therapy during their senior year. Those who choose one of these tracks will not be eligible to seek ARRT certification in radiography, but will be eligible for ARRT certification in radiation therapy or ARRT and American Registry of Diagnostic Medical Sonographers (ARDMS) certification as an ultrasonographer upon completion of didactic and clinical requirements.

#### Pre-professional Component

Degree seeking students must complete the 53-63 semester hour pre-professional component prior to enrolling in professional component courses.

#### Professional Component

The professional component (junior and senior years) consists of two years of academic and clinical study in Radiologic Sciences. The program is six semesters in length, including two summer terms. All candidates must have satisfied the pre-professional component to qualify for the degree-seeking professional component, but completion of that component does not guarantee

admission to the professional component. Enrollment in the professional component is limited by the number of clinical positions available, which is equally true for the advanced modalities. During the professional component, students must be prepared to travel up to 90 miles from campus in order to participate in the clinical education component of the curriculum.

## Program Accreditation

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The radiography and radiation therapy programs are accredited by the Joint Review Committee on Education in Radiologic Technology, 20 North Wacker Drive, Suite 2850, Chicago, Illinois, 60706-3182. For more information go to [www.jrcert.org](http://www.jrcert.org).

## ADMISSION REQUIREMENTS FOR THE BACHELOR OF SCIENCE IN RADIOLOGIC SCIENCES PROGRAM

1. Completion of all required pre-professional courses by the end of the summer semester prior to desired admission for Fall semester. Students are admitted to the professional component in the Fall semester only.
2. Completion of a Department of Radiologic Sciences application, available at <http://www.southalabama.edu/colleges/alliedhealth/radiologicsciences>.
3. Acceptance to the University of South Alabama.
4. Submit official college transcripts for all coursework not completed at the University of South Alabama. Transcripts are not required if the coursework has already been transferred to USA.
5. Application deadline is May 1.
6. Submit official ACT or SAT scores, regardless of previous educational background. If individual scores for Math, English and Natural Sciences on the ACT are below 18, it is strongly advised that the test be retaken. ACT or SAT scores must be submitted by the application deadline of May 1.
7. Submission of three (3) completed personal reference forms by the application deadline. Reference forms are available at <http://www.southalabama.edu/colleges/alliedhealth/radiologicsciences>.
8. Have a minimum cumulative GPA of 2.0 ("C" average) on previously completed college-level courses. Transcripts must be submitted by the application deadline. For students who are attending or have attended USA, the USA GPA will be used. GPA's from outside courses are not averaged into the USA GPA.
9. Students applying for admission to the professional component must complete four (4) hours of observation in a hospital Radiology department prior to reporting for the admission interview. Following submission of the departmental application, applicants may call the Department of Radiologic Sciences at (251) 445-9346 any time after January 10th during the year in which they plan to apply, and schedule a hospital observation appointment. Observation form and instructions are available at <http://www.southalabama.edu/colleges/alliedhealth/radiologicsciences>.
10. Meet program technical/core performance standards. Core performance standards are fundamental tasks and skills that are required for successful completion of the program. They have been outlined and are available upon request and on the department web site under Frequently Asked Questions (FAQ).
11. Complete a brief writing assignment conducted on the day of interview.
12. Complete a personal interview with members of the Radiologic Sciences Admissions Committee.
13. Applicants will be screened on the basis of past educational performance and the potential for the number of openings available. Therefore, acceptance into the University does not guarantee admission into the program. Likewise, admission into the program does not guarantee a position in a particular track/modality for one's senior year.
14. Student acceptance into the program is provisional pending completion of a drug screen and background check requirements as specified in the acceptance letter. Refusal to submit will result in nullification of acceptance into the program.
15. Proof of medical insurance must be provided following official notification of acceptance into the program. Due date will be specified in the acceptance letter.
16. ARRT certified radiographers who have completed the pre-professional component and are seeking the baccalaureate degree may apply for admission into the second year (senior year) of the professional component.
17. International students must score a minimum of 76 on the TOEFL exam to include the following minimum sub-scores on the IBT:

Listening 20 Speaking 20 Reading 18 Writing 18

The IELTS exam will not be used as an admission requirement to the Radiologic Sciences Program

## Special Fees

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Special lab fees are assessed for the following courses:

RAD 304 - \$130  
 RAD 307 - \$15  
 RAD 308 - \$15  
 RAD 309 - \$15  
 RAD 417 - \$15  
 RAD 418 - \$15  
 RAD 460 - \$130  
 Trajecsys computer fee - \$150.00

## Areas Of Study

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### Degrees, Programs, Or Concentrations

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Radiologic Sciences (BS)..... 768

## Courses

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### Course Listing

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Radiologic Sciences..... 1123

## Faculty

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BREWER, PATRICIA A.  
 Senior Instructor  
 BS, University of St Francis  
 MPA, University of South Alabama

SMITH, MELTON D.  
 Instructor  
 BS, University of South Alabama  
 MHAI, University of Phoenix

CLEVELAND, DONNA G.  
 Instructor  
 BS, University of South Alabama  
 MED, University of South Alabama

COOPER, CATHERINE M.  
 Senior Instructor  
 BSRS, University of South Alabama  
 MS, University of South Alabama

JALKH, CHUCRI M.  
 Senior Instructor  
 BS, University of South Alabama  
 MS, University of South Alabama

POHLMANN, CHERIE L.  
 Senior Instructor  
 AS, Mississippi Gulf Coast CC  
 BS, William Carey College  
 MS, University of South Alabama

# Radiologic Sciences (BS)

## Degree Requirements

Requirements For A Bachelor Of Science In Radiologic Sciences	Credit Hours
Pre-Professional Component	53-63
<b>AREA I. Written Composition</b>	6
English Composition (EH 101)	3 hrs
English Composition (EH 102)	3 hrs
<b>AREA II. Humanities and Fine Arts</b>	12
Public Speaking Choose - CA 110	3 hrs
Approved Fine Arts Course - Choose from ARH 100, ARH 103, ARH 123, ARS 101, DRA 110, or MUL 101	3 hrs
Literature Elective* - Choose from EH 215, 216, 225, 226, 235, or 236	3 hrs
Literature sequence* or Humanities Elective* - Choose from AFR 101, AIS 105, ARH 100, 103, 123, ARS 101, 121, 123, 124, DRA 110, EH 215, 216, 225, 226, 235, 236, Foreign Language except 190, 290 or 390, or PHL 110, 121, 131, 231, 240, or MUL 101	3 hrs
*Student must have one history elective and one literature elective to graduate. In addition, student must choose a second history or literature to complete a two-part sequence (Part I and II of same subject).	
<b>AREA III. Natural Sciences &amp; Math</b>	11
College level Pre Calculus Algebra - Choose MA 112	3 hrs
Life Science or Biology for science majors - BLY 101/BLY 101L or BLY 121/BLY 121L (4) and BLY 102/BLY12L or BLY 122/BLY122L (4)	8 hrs
<b>AREA IV. History, Social and Behavioral Sciences</b>	12
General psychology course - Choose PSY 120	3 hrs
History elective* - Choose from HY 101, 102, 135, or 136	3 hrs
History sequence* or Social Science Elective - Choose from HY 101, 102, HY 135, HY 136, or AN 100, AN 101, ECO 215, 216, GEO 114, GEO 115, PSC 130, PSY 250, SY 109, SY 112, AIS 115, AIS 201, CA 211, CA 275, GA 101	3 hrs
Social Science Elective - Choose AN 100, AN 101, ECO 215, 216, GEO 114, GEO 115, PSC 130, PSY 250, SY 109, SY 112, AIS 115, or AIS 201	3 hrs

\*Student must have one history elective and one literature elective to graduate. In addition, student must choose a second history or literature to complete a two-part sequence (Part I and II of same subject).

<b>AREA V. Pre-Professional Required Courses</b>	<b>18-22</b>
Human Anatomy and Physiology - BMD 114, BMD 115	8 hrs
Intro to Computer App - CIS 010 or CIS 150	0-3 hrs
Physics - PH 104 or PH 114	4-5 hrs
Statistics - ST 210	3 hrs
Optional General Elective	3 hrs
Professional Component All students admitted to the professional component are required to complete the following courses during their first year in the B.S. program:	
Junior year professional component	<b>38</b>
Fall: RAD 300, RAD 304, RAD 307, RAD 310, RAD 312	15 hrs
Spring: RAD 301, RAD 308, RAD 315, RAD 318, RAD 335	15 hrs
Summer: RAD 302, RAD 309, RAD 320	8 hrs
Senior year professional component	<b>30-44</b>
Note: Course requirements and semester hours vary based on the educational track followed.	
<b>Track 1: General Radiography to include one advanced modality<sup>A</sup>. (Study of ultrasound or radiation therapy is not an option in the General Radiography Track)</b>	
Fall: RAD 403, RAD 411, RAD 415 AND Mammography: RAD 472 (total 16 semester hrs) or Computed tomography: RAD 464 (total 16 semester hours) or Magnetic resonance imaging: RAD 468 (total 16 semester hours) or Vascular radiography: RAD 460 (total 16 semester hours) and/or Radiology administration: RAD 430 & RAD 432 (total 18 semester hours)	
Spring: RAD 404, RAD 437, RAD 496 AND Mammography: RAD 473 (total 12 semester hours) or Computed tomography: RAD 465 (total 12 semester hours) or Magnetic resonance imaging: RAD 469 (total 12 semester hours) or Vascular radiography: RAD 461 (total 12 semester hours) and/or Radiology administration: RAD 433 & RAD 435 (total 14 semester hours)	
Summer: RAD 405, RAD 494, RAD 497 AND Mammography: RAD 474 (total 11 semester hours) or Computed tomography: RAD 466 (total 11 semester hours) or Magnetic resonance imaging: RAD 470 (total 11 semester hours) or	

Vascular radiography: RAD 462 (total 11 semester hours) or  
Radiology administration: RAD 440 (total 8 semester hours)

<b>Track 2: Ultrasound Only</b>	30/36
Fall: RAD 417, RAD 423, RAD 411** (9-13 hrs)	
Spring: RAD 418, RAD 421, RAD 424, AND RAD 496 (12 hrs)	
Summer: RAD 320**, RAD 425, RAD 427, RAD 497 (9/11 hrs)	
<b>Track 3: Radiation Therapy Only</b>	42/44
Fall: RAD 320**, RAD 441, RAD 448, RAD 446, RAD 450, RAD 452 (15/17 hrs)	
Spring: RAD 442, RAD 455, RAD 453, RAD 458, RAD 496 (16 hrs)	
Summer: RAD 443, RAD 456, RAD 454, RAD 497 (11 hrs)	
**RAD 320 and 411 required if not previously completed	
*Students who choose to complete Track 1 (Radiography to include one advanced modality) will be eligible to apply for continuation in the program to study any additional modality to include ultrasound and radiation therapy.	

### Post-ARRT Continuing Education Program (Non-Degree)

The department offers a three semester post-ARRT certification option to former USA certificate graduates and graduates of other radiography programs who want to complete an advanced imaging modality without pursuing the bachelor's degree. The three-semester non-degree option is available only to ARRT-registered radiographers who completed the USA Certificate or B.S. program or completed an associate degree radiography program.

There are six advanced imaging modalities available, and include mammography, magnetic resonance imaging, vascular-interventional radiography, computed tomography, radiology administration, or ultrasound. A non-degree option for radiation therapy is not offered. Upon completion of the didactic and clinical education requirements, students are eligible to seek ARRT certification in five of the six advanced imaging modalities offered. At the present time, the ARRT does not offer certification in radiology administration.

Students in the non-degree track are required to complete only the advanced imaging modality courses for the modality in which they are admitted. Admission of students to the non-degree option will be limited based on the number of clinical positions available after degree-seeking students have been admitted. Students who complete the non-degree option may later choose to complete requirements to earn the bachelor's degree, which would include completion of all general education courses listed in the pre-professional component and the bridge course.

### Transfer Student's Transition To B.S. In Radiologic Sciences

Students may transfer no more than 60 semester hours from a community college. To earn a B.S. degree, students must complete a minimum of 25 percent of the credit hours required for the degree through instruction in upper level courses (300, 400) at USA, and must complete 15 semester hours in the major. Two "W" (writing component) courses must also be taken at USA. In addition to meeting all other admissions requirements, associate degree transfer radiography students are required to take a 6 hour bridge course (RAD 491-*Concepts of Professional Radiologic Practice*). Upon completion of the bridge course, 41 semester hours of upper level credit will be awarded for the student's previous radiography training during the final semester before graduation.

### Total Hours Required By Program/Track

**Track 1:** Bachelor degree, General Radiography to include either mammography, computerized tomography, magnetic resonance imaging, vascular radiography: 130-140 semester hrs

**Track 2:** Bachelor degree, Ultrasound modality only: 121-137 semester hours

**Track 3:** Bachelor degree, Radiation therapy only: 133-145 semester hours  
 For more information regarding requirements, admissions, and FAQs, go to  
<http://southalabama.edu/colleges/alliedhealth/radiologicsciences>

## Graduation Plan

Department Of Radiologic Sciences B.S. Degree Program Professional Component Model Curriculum			Course Title	Credit Hours
Junior Year				41
Fall				15
RAD 300	2 hrs		Clin. Ed. I	
RAD 304	3 hrs		Patient Care	
RAD 307	4 hrs		Osseous I	
RAD 310	2 hrs		Rad. Biology	
RAD 312	4 hrs		Exposure Factors	
Spring				15
RAD 301	4 hrs		Clin. Ed. II	
RAD 308	4 hrs		Osseous II	
RAD 315	2 hrs		Contrast Media	
RAD 318	4 hrs		X-ray Physics	
RAD 335	1 hr		Peds & Geriatrics	
Summer				11
RAD 302	3 hrs		Clin. Ed. III	
RAD 309	3 hrs		Osseous III	
RAD 324	3 hrs		Diag. Imaging I	
RAD 320	2 hrs		Cross-Sec. Anatomy	

At the end of the junior year, students will be asked to make a choice on how they wish to complete the degree.

There are three tracks from which to choose to complete the senior year:

Track 1 General Radiography plus one advanced imaging modality (Vascular Imaging, CT, MRI, Mammography)

Track 2 Ultrasound only

Track 3 Radiation Therapy only

In addition to one of the modalities in Track 1, students may choose to add studies in Radiology Administration.

Students may also choose to complete the senior year as described for Track 1, and then later proceed with Radiology Administration, Radiation Therapy or Ultrasound.

<b>Senior Year Track 1: General Radiography plus one advanced imaging modality</b>			<b>Course Title</b>	<b>Credit Hours</b>
Fall				15
RAD 403	4 hrs		Clin. Ed. IV	
RAD 411	4 hrs		Rad. Pathology	
RAD 415	3 hrs		Diag. Imaging II	
RAD 460 <b>OR</b>	4 hrs		Vascular Img. I	
RAD 464 <b>OR</b>	4 hrs		CT Imag. I	
RAD 468 <b>OR</b>	4 hrs		MRI I	
RAD 472	4 hrs		Mammo I	
*In addition to the above, students choosing Radiology Administration will add:				
RAD 430 <b>AND</b>	3 hrs		Health Care Comm. & RAD 430 Information MGT	
RAD 432	3 hrs		Health Care Resource MGT	
Spring				12
RAD 404	4 hrs		Clin. Ed. V	
RAD 437	3 hrs		Image Analysis	
RAD 496	1 hr		Rad. Sci. Research I	
RAD 461 <b>OR</b>	4 hrs		Vascular Img. II	
RAD 465 <b>OR</b>	4 hrs		CT Imag. II	
RAD 469 <b>OR</b>	4 hrs		MRI II	
RAD 473	4 hrs		Mammo II	
*In addition to the above, students choosing Radiology Administration will add:				
RAD 433 <b>AND</b>	3 hrs		Health Care Financial MGT	
RAD 435	3 hrs		Health Care Operations MGT	
Summer				11
RAD 405	4 hrs		Clin. Ed. VI	
RAD 497	1 hr		Rad. Sci. Research II	

RAD 494	2 hrs	Directed Independent Study
RAD 462 <b>OR</b>	4 hrs	Vascular Img III
RAD 466 <b>OR</b>	4 hrs	CT Img III
RAD 470 <b>OR</b>	4 hrs	MRI III
RAD 474	4 hrs	Mammo III
*In addition to the above, students choosing Radiology Administration will add:		
RAD 440	1 hr	Management Preceptorship
Track 1 Senior Year Radiography plus one imaging modality Total Hours		38
*The addition of the Radiology Administration option will add 13 hours		

<b>Senior Year Track 2: Ultrasound</b>		<b>Course Title</b>	<b>Credit Hours</b>
Fall			9-13
RAD 417	4 hrs	Abd & Superficial Structures US	
RAD 411*	4 hrs	Rad. Pathology	
RAD 423	5 hrs	US Clinical Education I	
Spring			12
RAD 418	3 hrs	OB/GYN Ultrasound	
RAD 424	5 hrs	US Clinical Education II	
RAD 421	3 hrs	US Physics	
RAD 496	1 hr	Rad. Sci. Research I	
Summer			9-11
RAD 425	5 hrs	US Clinical Education III	
RAD 427	3 hrs	Procedural Guidelines in US	
RAD 497	1 hr	Rad. Sci. Research II	
RAD 320*	2 hr	Cross Sectional Anatomy	
*RAD 320 and 411 required if not previously completed			
Track 2 Senior Year Total Hours			30-36

Senior Year Track 3: Radiation Therapy		Course Title	Credit Hours
Fall			15-17
RAD 441	5 hrs	Clinical Education I	
RAD 448	3 hrs	Radiation Therapy Physics	
RAD 320*	2 hrs	Cross Sectional Anatomy	
RAD 446	3 hrs	Orientation to Radiation Oncology	
RAD 450	1 hr	Patient Care in Radiation Oncology	
RAD 452	3 hrs	Principles & Practice of Radiation Oncology I	
Spring			16
RAD 442	6 hrs	Clinical Education II	
RAD 455	3 hrs	Dosimetry and Treatment Planning I	
RAD 453	3 hrs	Principles & Practice of Radiation Oncology II RAD 453	
RAD 458	3 hrs	Cancer Management in Radiation	
RAD 496	1 hr	Rad. Sci. Research I	
Summer			11
RAD 443	7 hrs	Clinical Education III	
RAD 456	2 hrs	Dosimetry and Treatment Planning II	
RAD 454	1 hr	Quality Mgmt in Radiation Oncology	
RAD 497	1 hr	Rad. Sci. Research II	
*RAD 320 required if not previously completed			

Track 3 Senior Year Total Hours		42-44		
Summary of Hours by Track	Freshman & Sophomore Pre-Professional Component	Junior Year Professional Component	Senior Year Professional Component	Total
Track 1	53-63*	41	General Radiography and one modality	
	Radiography plus Vascular	38	132-142	
Radiography plus CT	38	132-142		
Radiography plus MRI	38	132-142		
Radiography plus Mammography	38	132-142		
Track 1 Plus	General Radiography and one modality (above) plus Radiology Administration			
Radiography, one modality plus Radiology Administration	51	145-155		
Track 2	Ultrasound	30-36	124-140	
Track 3	Radiation Therapy	42-44	136-148	

\*The number of required hours will be influenced by various factors.

Example A: 53 hours required if student is exempt from EH 101 based on ACT score, passes the CIS 010 Proficiency Exam, and does not need general elective.

Example B: 63 hours required if student must take EH 101, fails CIS 010 Proficiency Exam twice and therefore has to take CIS 150, takes PH 114 rather than PH 104, and needs general elective.

# Sociology, Anthropology, And Social Work

## Department Information

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Department of Sociology, Anthropology and Social Work web site  
<http://www.southalabama.edu/colleges/artsandsci/syansw/>

### Departmental Mission Statement

The Department of Sociology, Anthropology and Social Work seeks to equip students with conceptual tools to enhance their social and cultural awareness and with methodological tools to obtain empirical knowledge to empower them to engage in improvement of social conditions. Acknowledging the inextricable link between teaching and scholarly research, we strive for excellence in both areas to unite students and faculty in a common experience of learning and discovery through pure and applied research to prepare students for service through careers and civic engagement.

### Undergraduate Programs

Sociology is the scientific study of social behavior and social phenomena. Our program seeks to provide students with knowledge and insight about why groups, institutions, organizations, and societies (and the people in them) behave in the ways they do. Popular courses within the program address such diverse social phenomena as Drug Use, Marriage and Family, Culture, Religion, Crime and Deviance, Medicine, Disasters, Race, Gender, and Aging. We also focus on equipping students with the tools of social research methods and statistics - two very highly-sought-after skills in today's labor market.

Anthropology is the study of humans, past and present. To understand the full sweep and complexity of cultures across all of human history, anthropology draws and builds upon knowledge from the social and biological sciences as well as the humanities and physical sciences. A central concern of anthropologists is the application of knowledge to the solution of human problems. Historically, anthropologists in the United States have been trained in one of four areas: archaeology, biological/physical anthropology, sociocultural anthropology, and linguistic anthropology. Anthropologists often integrate the perspectives of several of these areas into their professional lives.

Social work is a social science and a profession devoted to helping people solve problems and issues in their lives. Social workers, help individuals, families, groups, organizations, and communities to achieve an effective level of psychosocial functioning and seek social reform to improve societal well being, with an emphasis upon marginalized and oppressed communities. Social work is founded upon the ethical principles of service; social and economic justice; personal dignity and worth; the importance of human relationships; integrity; and competence.

All first-time freshmen must successfully complete CAS 100: First Year Experience as a degree requirement. Students must enroll during their first term at USA, except for summer-entry students who must enroll in the fall semester following entry.

SY 382 will fulfill the technology proficiency requirement for Sociology and Social Work majors.

AN 454 will fulfill the technology proficiency requirement for Anthropology majors.

## Areas Of Study

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### Degrees, Programs, Or Concentrations

Anthropology (BA).....	778
Minor in Anthropology.....	779
Minor in Sociology.....	780
Social Work (BSW).....	781
Sociology (BA).....	783
Sociology (MA).....	784

## Courses

### Course Listing

Anthropology.....	856
Gerontology.....	998
Museum Studies.....	1070
Social Work.....	1135
Sociology.....	1136

## Faculty

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PHD, University of Kentucky

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PHD, Louisiana State University

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MA, University of Tennessee-Knox  
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BSW, Indiana University-Bloomington  
MSW, Indiana University-Bloomington  
PHD, University of Georgia

# Anthropology (BA)

## Degree Requirements

Majors in Arts and Sciences may be completed with a minimum of 120 semester hours unless designated otherwise. At least 30 hours of course work, which represents 25% of the required 120 hours, must be at the upper division level in order to fulfill the University's residency requirement. At least 15 of the 30 upper-division hours must be in the major or concentration area. An overall grade-point-average (GPA) of 2.0 is required for graduation. In addition, a minimum GPA of 2.0 is required in the student's major or concentration area.

Requirements For A Major In Anthropology	Credit Hours
A minimum of 37 semester hours is required for the Anthropology major, including	37
AN 100	
AN 101	
AN 121 and AN 121L	
AN 300	
AN 454	
300 or 400 level Archaeology course	
300 or 400 level Biological Anthropology course	
300 or 400 level Cultural Anthropology course	
SY 109	
Majors must complete the remaining hours required in Anthropology at the 200 level or above. Upon departmental approval, up to 6 hours of AN 190, Special Topics, may be used to satisfy a portion of the required hours.	
Students pursuing a degree in Anthropology also must have a minor in another discipline.	

### Requirements For The Anthropology Departmental Honors Program

Students will work with a faculty mentor from the Anthropology Program and two other faculty members while pursuing an Honors Senior Thesis. See your advisor for more information.

### General Education Requirements For Anthropology Majors

General Education Requirements for Anthropology majors are specified in the College of Arts and Sciences section. Note that Area IV is partially satisfied by the major requirements specified above, and that Area III is partially satisfied by AN 121/L.

# Minor In Anthropology

## Degree Requirements

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If a minor is required in your degree program, at least 9 (lower and/or upper-division) hours of courses in the minor must be completed at the University.

### Requirements For A Minor In Anthropology

A minimum of 18 semester hours in Anthropology, including AN 100 and AN 101. At least 9 (lower and/or upper-division) hours of courses in the minor must be completed at the University. At least 9 hours of courses in the minor must be upper-division.

# Minor In Sociology

## Degree Requirements

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If a minor is required in your degree program, at least 9 (lower and/or upper-division) hours of courses in the minor must be completed at the University.

### Requirements For A Minor In Sociology

A minimum of 18 semester hours in Sociology, including SY 109. No more than six semester hours of Directed Studies may be used in meeting the minor requirements. At least 9 (lower and/or upper-division) hours of courses in the minor must be completed at the University. At least 9 hours of courses in the minor must be upper-division.

# Social Work (BSW)

## Degree Requirements

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Majors in Arts and Sciences may be completed with a minimum of 120 semester hours unless designated otherwise. At least 30 hours of course work, which represents 25% of the required 120 hours, must be at the upper division level in order to fulfill the University's residency requirement. At least 15 of the 30 upper-division hours must be in the major or concentration area. An overall grade-point-average (GPA) of 2.0 is required for graduation. In addition, a minimum GPA of 2.0 is required in the student's major or concentration area.

### Social Work Admission Policy And Procedures

The social work program has a policy and procedures for admission to the major that are consistent with the goals of the BSW program. The policies and procedures insure that students have a liberal arts base, demonstrate a beginning knowledge of social work and identification with the profession, have content in diversity, populations-at-risk, and social and economic justice, and can demonstrate effective communication skills prior to entry into the professional foundation.

### Admission Policy

Students who want to major in social work are admitted to the pre-professional social work major and remain in the pre-professional major until they meet requirements to be admitted into the social work major. The policy is applicable to all students: new freshmen, transfer students, and students changing their major. In order to be admitted into the social work major, students must meet the following criteria:

- Have a 2.60 overall GPA in courses taken at USA.
- Have completed SW 200, SW 214, and SW 220 with a grade of "C" or better.
- Have completed the BLY 101/102 or BLY 121/122 sequences with labs or BLY 101 or 121 and a second lab science with a grade of "C" or better in both courses and labs.
- Have completed EH 101 and EH 102 with a grade of "C" or better.
- Have completed the Math requirement.
- Have completed a minimum of 56 credit hours.
- Have completed the Statistics requirement (ST 210).
- Meet all requirements specified by the program for demonstrating behavior consistent with the NASW Code of Ethics.

Students who are considering pursuing a major in social work should consult with a social work advisor at the earliest opportunity. Students entering the pre-professional social work major who have 50 or more credit hours are strongly encouraged to take SW 200, SW 214, and SW 220 in their first semester. Students are also encouraged to consider the Spanish sequence to complete their foreign language requirement. There may be factors in a student's past that could affect the ability to obtain a professional social work license. Examples of factors that may need to be discussed with the advisor might include conviction of a felony or misdemeanor, or the revocation or surrender of another professional license.

### Admission Procedures

Once the student has completed the specified requirements, the student must submit the application for admission to the social work major. Students are encouraged to consult with their social work advisor prior to submitting this application.

The student's application for admission to the major will be reviewed by the BSW program faculty and a determination will be made on whether or not the student will be admitted to the major. Following this determination the student will be notified in writing concerning the faculty decision.

Once the student is admitted to the major, the program will initiate a change of major to the university. The criteria for continuation as a major include:

- Maintain a 2.50 grade point average in social work courses.
- Maintain an overall 2.60 grade point average at USA.
- Demonstrate acceptable professional conduct, personal integrity and emotional stability requisite for effective social work practice.
- Demonstrate identification with the profession of social work.
- Demonstrate behavior consistent with Code of Ethics for the National Association of Social Workers.

Students who have not been admitted to the major may not enroll for SW 201, SW 301, SW 302, SW 401, SW 402, SW 412, or SW 414.

### **Social Work As A Second Bachelor's Degree**

Students who already have an undergraduate degree and wish to pursue the Bachelor of Social Work as a second degree must meet the following requirements.

- Meet the general education requirements for the College of Arts and Sciences
- Meet the general education requirements specific to Social Work including:
  - Biology
  - Statistics
  - Diversity
- Complete the following courses in the major:
  - SW 200
  - SW 214
  - SW 220
  - SW 201
  - SW 301
  - SW 302
  - SW 401
  - SW 402
  - SW 412
  - SW 414
  - SW Elective
  - SY 220
  - SY 381 & SY 382

Total: 55 Semester Credit Hours

### **Transfer Students**

In order to receive a degree in social work from the University of South Alabama, the student must complete SW 401, SW 402, SW 412, and SW 414 and meet the university residency requirements.

Social work course credit will only be granted for courses transferred from programs accredited by the Council on Social Work Education or in CSWE Candidacy. The program director will evaluate social work transfer credits to determine equivalency. No credit will be given for life or prior work experience.

# Sociology (BA)

## Degree Requirements

Majors in Arts and Sciences may be completed with a minimum of 120 semester hours unless designated otherwise. At least 30 hours of course work, which represents 25% of the required 120 hours, must be at the upper division level in order to fulfill the University's residency requirement. At least 15 of the 30 upper-division hours must be in the major or concentration area. An overall grade-point-average (GPA) of 2.0 is required for graduation. In addition, a minimum GPA of 2.0 is required in the student's major or concentration area.

Requirements For A Major In Sociology	Credit Hours
A minimum of 33 semester hours in Sociology, including:	33
SY 109	
SY 112	
SY 376	
SY 381	
SY 382	
AN 100 or 101	
At least 15 of the 33 semester hours required for a major must be taken in upper division courses (300-400 level).	
SY 475 is recommended for students contemplating graduate work.	
No more than six semester hours of Directed Studies may be used in meeting the major requirements. Students pursuing a degree in Sociology also must have a minor in another discipline.	

### General Education Requirements For Sociology Majors

General Education Requirements for Sociology majors are specified in the College of Arts and Sciences section. Note that Area IV is partially satisfied by the major requirements specified above.

# Sociology (MA)

## Degree Requirements

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### Master Of Arts Program In Sociology

The Master of Arts Program in Sociology provides students with advanced training in sociological theory and social science research methods for enhanced understanding of several specialized subject areas of sociology: crime and deviance, environmental sociology, family, gender, medical sociology, social psychology, social stratification and labor markets, and the sociology of religion. In addition to working closely with sociology graduate faculty, students can collaborate with graduate faculty in anthropology and social work and can simultaneously pursue a graduate certificate in gerontology. The Master of Arts Program in Sociology can prepare students for doctoral-level study or for careers in teaching, private industry, government, or community and social service.

Students can apply for admission to the Master of Arts Program in Sociology to begin study in the Fall, Spring, or Summer semester. However, it is highly recommended that students apply for admission to begin study in the Fall semester as per the academic structure of the Master of Arts Program in Sociology. See below, and The Graduate School, for important application deadlines.

The following Requirements for Admission to the Master of Arts Program in Sociology supplement the categories of admission as stipulated by The Graduate School.

### Requirements For Admission

#### Regular Admission

1. Baccalaureate degree or coursework in a social science discipline from an accredited institution of higher education.
2. 3.0 or higher cumulative grade point average across all completed undergraduate courses.
3. Completion of the University of South Alabama Graduate Application for Admission.
4. Official academic transcripts from each college or university attended, even if the applicant did not earn credit at the institution.
5. Combined score of 300 or better on the Verbal Reasoning and Quantitative Reasoning sections of the Graduate Record Examination (GRE) General Test. GRE scores older than five (5) years from the date of application for admission to the Master of Arts Program in Sociology will not be accepted.
6. Submission of a statement of purpose—approximately two (2), single-spaced pages in length—that provides an intellectual autobiography of the applicant, an indication of the applicant's areas of specialized interest within sociology, and a description of the applicant's academic and career goals.
7. One (1) writing sample, preferably generated for evaluation in completed coursework toward the baccalaureate degree.
8. Three (3) letters of recommendation that detail the applicant's capacity for success in, and for timely completion of, a master's program of study. Letters of recommendation should also address the applicant's ability and willingness to work cooperatively within the Department of Sociology, Anthropology, and Social Work and cooperatively among the University of South Alabama's broader academic community. A minimum of two (2) letters of recommendation must be written by college or university faculty members who are familiar with the applicant's academic work.

Applicants who wish to be considered for financial assistance through a Graduate Assistantship must submit a University of South Alabama Application for Graduate Assistantship directly to the Master of Arts Program in Sociology, care of the Graduate Coordinator. Letters of recommendation for Graduate Assistantships should additionally consider merit for paid financial assistance through a Graduate Assistantship. Applicants who wish to be considered for Fall admission to the Master of Arts Program in Sociology, and for a Graduate Assistantship, should submit all pertinent application materials to the appropriate recipient by March 1. Review of admission and Graduate Assistantship applications will begin immediately thereafter and continue until all available Graduate Assistantships are awarded.

#### Provisional Admission

Applicants who do not meet all of the requirements for Regular Admission (e.g., combined score of less than 300 on the Verbal Reasoning and Quantitative Reasoning sections of the GRE General Test) can still qualify for acceptance to the Master of Arts Program in Sociology under Provisional Admission. A minimum cumulative grade point average of 2.5 across all completed undergraduate courses is required to be considered for Provisional Admission. To advance to Regular status, students accepted

to the Master of Arts Program in Sociology under Provisional Admission must meet two requirements: 1) satisfy all conditions of admission as stipulated in the letter of acceptance and 2) accumulate a minimum of nine (9) credit hours of graduate-level coursework in sociology, within the Department of Sociology, Anthropology, and Social Work, with a minimum grade point average of 3.0. No more than fifteen (15) credit hours of graduate-level coursework earned under Provisional Admission can be approved for change to Regular status. Students accepted under Provisional Admission with a grade point average of below 3.0 after completing fifteen (15) credit hours of graduate-level coursework will be subject to dismissal both from the Master of Arts Program in Sociology and from The Graduate School.

### **Non-Degree Admission**

Applicants with a baccalaureate degree from an accredited institution of higher education who prefer not to earn the terminal master's degree in sociology can apply for admission to the Master of Arts Program in Sociology as a Non-Degree student. A suitable academic background for coursework in sociology is expected. After completing the University of South Alabama Graduate Application for Admission, permission to enter graduate-level courses in sociology in the Department of Sociology, Anthropology and Social Work should be obtained from the Department's Graduate Coordinator. Non-Degree students subsequently seeking admission to the Master of Arts Program in Sociology must follow and meet the requirements for admission as above outlined. No more than twelve (12) credit hours of graduate-level coursework completed as a Non-Degree student can be applied toward coursework requirements for the Master of Arts degree in sociology.

### **Program Requirements**

To earn the Master of Arts degree in sociology, students must complete thirty-five (35) credit hours of graduate-level work with a minimum cumulative grade point average of 3.0. At least twenty-five (25) credit hours of graduate-level work must be in sociology. A student who receives two (2) grades of "C" or lower in any graduate-level course while enrolled in the Master of Arts Program in Sociology will be recommended to the Dean of The Graduate School for academic dismissal.

Program requirements, both for master's students planning to ultimately pursue doctoral-level study and for master's students planning to ultimately pursue a career in teaching, private industry, government, or community and social service, are as follows:

#### 1. Core Coursework

Contemporary Sociological Theory (SY 506), Research Design (SY 508), Research Analysis (SY 509), and Papers and Presentations Seminar (SY 591).

#### 2. Comprehensive Examination

Students will sit for a comprehensive examination that evaluates their knowledge and skills with respect to Year 1 coursework in contemporary sociological theory, research methods, and other relevant, specialized subject areas of sociology. The comprehensive examination will be administered between the Spring and first Summer semesters. The sociology graduate faculty, comprised of at least a quorum of sociology graduate faculty members, will evaluate the comprehensive examination as Pass or Fail, the latter score initiating a reexamination evaluated by at least a quorum of sociology graduate faculty members within three (3) calendar weeks from the original score notification. Two consecutive comprehensive examinations evaluated by the sociology graduate faculty as Fail will result in dismissal from the Master of Arts Program in Sociology.

#### 3a. Master's Practicum Report Proposal, SY 592

For master's students planning to ultimately pursue a career in teaching, private industry, government, or community and social service, completion of Master's Practicum Report Proposal (in conjunction with course co-requisite SY 596, Sociology Internship) to generate a practicum report proposal, directed by a member of the sociology graduate faculty, that the student must formally defend. The practicum report proposal and practicum report proposal defense must be approved by a faculty committee, the Chair of which must be a member of the sociology graduate faculty. The faculty committee must also include one member of the graduate faculty from within the Department of Sociology, Anthropology and Social Work and one member of the University's graduate faculty from outside of the Department of Sociology, Anthropology and Social Work. The faculty committee will evaluate the practicum report proposal defense as Pass or Fail, the latter score initiating one (1) opportunity to re-defend the practicum report proposal within three (3) calendar weeks from the original score notification. Two consecutive practicum report proposal defenses evaluated by the faculty committee as Fail will result in dismissal from the Master of Arts Program in Sociology.

#### 3b. Master's Thesis Proposal, SY 598

For master's students planning to ultimately pursue doctoral-level study, completion of Master's Thesis Proposal focused on the specialized subject area of research interest in sociology to generate a thesis proposal, directed by a member of the sociology graduate faculty, that the student must formally defend. The thesis proposal and thesis proposal defense must be approved by a faculty committee, the Chair of which must be a member of the sociology graduate faculty.

The faculty committee must also include one member of the graduate faculty from within the Department of Sociology, Anthropology and Social Work and one member of the University's graduate faculty from outside of the Department of Sociology, Anthropology and Social Work. The faculty committee will evaluate the thesis proposal defense as Pass or Fail, the latter score initiating one (1) opportunity to re-defend the thesis proposal within three (3) calendar weeks from the original score notification. Two consecutive thesis proposal defenses evaluated by the faculty committee as Fail will result in dismissal from the Master of Arts Program in Sociology.

4a. Master's Practicum Report, SY 593

For master's students planning to ultimately pursue a career in teaching, private industry, government, or community and social service, completion of Master's Practicum Report based on work in SY 596, Sociology Internship, that satisfied the practicum report proposal. The practicum report must be defended and approved by a faculty committee, the Chair of which must be a member of the sociology graduate faculty. The faculty committee must also include one member of the graduate faculty from within the Department of Sociology, Anthropology and Social Work and one member of the University's graduate faculty from outside of the Department of Sociology, Anthropology and Social Work. The faculty committee will evaluate the practicum report defense as Pass or Fail, the latter score initiating one (1) opportunity to re-defend the practicum report within three (3) calendar weeks from the original score notification. Two consecutive practicum report defenses evaluated by the faculty committee as Fail will result in dismissal from the Master of Arts Program in Sociology. Upon passing the practicum report defense, students must provide the Chair of the Department of Sociology, Anthropology and Social Work with a PDF copy of the practicum report for approval. Students must follow all thesis preparation deadlines and approval guidelines as outlined by The Graduate School.

4b. Master's Thesis, SY 599

For master's students planning to ultimately pursue doctoral-level study, completion of Master's Thesis focused on the specialized subject area of research interest in sociology that satisfies the Master's thesis proposal. The thesis must be defended and approved by a faculty committee, the Chair of which must be a member of the sociology graduate faculty. The faculty committee must also include one member of the graduate faculty from within the Department of Sociology, Anthropology and Social Work and one member of the University's graduate faculty from outside of the Department of Sociology, Anthropology and Social Work. The faculty committee will evaluate the thesis defense as Pass or Fail, the latter score initiating one (1) opportunity to re-defend the thesis within three (3) calendar weeks from the original score notification. Two consecutive thesis defenses evaluated by the faculty committee as Fail will result in dismissal from the Master of Arts Program in Sociology. Upon passing the thesis defense, students must provide the Chair of the Department of Sociology, Anthropology and Social Work with a PDF copy of the thesis for approval. Students must follow all thesis preparation deadlines and approval guidelines as outlined by The Graduate School.

## Program Summary

### Year 1 of Study

Core Coursework

SY 506, SY 508, SY 509                      10 credit hours

Elective Coursework                      9 credit hours

Comprehensive Examination              Pass to advance to Year 2 of study

### Year 2 of Study

Core Coursework

SY 591    1 credit hour

Elective Coursework                      6 credit hours

Master's Practicum Report Proposal or Master's Thesis Proposal

SY 592 and SY 596 or SY 598              6 or 3 credit hours

Master's Practicum Report or Master's Thesis

SY 593 or SY 599

3 or 6 credit hours

**Total Credit Hours: 35**

# Speech Pathology And Audiology

## Department Information

Speech Pathology and Audiology Administrative Staff	(251) 445-9378
Chair	Elizabeth E. Adams
Professor Emeritus	Evans, Holston, Sellers, Talbott
Associate Professors	Adams, B. Beverly, Davis, Gordon-Hickey, Ramkissoon
Assistant Professors	T. Beverly, Choi, Garand, Nichols, Rishiq, Roberts, Smith
Instructors	Brown, Hill, Hudson, McVay

Department of Speech Pathology and Audiology web site  
<http://www.southalabama.edu/colleges/alliedhealth/speechandhearing>

The mission of the Department of Speech Pathology and Audiology is to provide undergraduate, masters and doctoral programs that challenge the students to achieve the highest standards of academic learning, scientific inquiry and clinical excellence. The Department of Speech Pathology and Audiology seeks to deliver a comprehensive program of academic, research and clinical training in the areas of speech, language and hearing development and disorders. The Department offers the Bachelor of Science in Speech and Hearing Sciences, the Master of Science in Speech-Language Pathology, the Doctor of Audiology, and the Doctor of Philosophy in Communication Sciences and Disorders, degree programs.

The undergraduate program readies the graduate to undertake professional study on the graduate level. Students in Speech-Language Pathology who complete the master's program will meet all the academic and practicum requirements to be eligible for the Clinical Fellowship (CF) that leads to national certification (CCC/SLP) by the American Speech-Language-Hearing Association (ASHA) and eligibility for the Alabama State License. Students in Audiology who complete the Doctor of Audiology program will meet all the academic and practicum requirements for national certification (CCC/A) and also be eligible for the Alabama State License. The Graduate programs in both Speech-Language Pathology and Audiology are accredited by the Council on Academic Accreditation (CAA) of ASHA.

## Areas Of Study

### Degrees, Programs, Or Concentrations

Audiology (AUD).....	793
Bachelor of Science in Speech and Hearing Sciences (SHS).....	797
Communication Sciences and Disorders (Ph.D.).....	790
Speech-Language Pathology (MSSLP).....	799

## Courses

### Course Listing

Allied Health Professions.....	855
Audiology.....	873

Communication Sciences-Disordr.....	920
Speech Language Pathology.....	1145
Speech and Hearing Sci.....	1146

## Faculty

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ADAMS, ELIZABETH M.  
Associate Professor  
BS, Spring Hill College  
PHD, University of South Alabama

BEVERLY, BRENDA L.  
Associate Professor  
BSED, Bloomsburg U of Pennsylvania  
MS, Bloomsburg U of Pennsylvania  
PHD, University of Tennessee-Knox

BEVERLY, TONIA M.  
Assistant Professor  
BS, University of South Alabama  
MS, University of South Alabama  
AUD, University of Florida

BROWN, GIDGET R.  
Instructor  
BSSH, University of South Alabama  
MS, University of South Alabama

CHOI, DAHYE  
Assistant Professor  
BA, Ewha Womans University  
MA, Ewha Womans University  
PHD, Vanderbilt University

DAVIS, TARA M.  
Associate Professor  
BA, Louisiana State University  
MCD, Louisiana State U - Hlth Sci  
PHD, University of Texas-Dallas

GARAND, KENDREA L.  
Assistant Professor  
BA, North Carolina State U-Raleigh  
MS, Purdue University-Main Campus  
CSCD, University of Pittsburgh  
PHD, Medical U of South Carolina

GORDON-HICKEY, SUSAN  
Associate Professor  
BA, University of Florida  
AUD, University of South Alabama  
PHD, University of South Alabama

HILL, GRAYSON B.  
Instructor  
BS, University of Montevallo  
MS, University of Montevallo

HUDSON, KENDRA D.  
Instructor  
BS, University of Montevallo  
MS, University of Montevallo

MCVAY, KAREN A.  
Instructor  
BS, University of Washington  
MS, University of Alabama

NICHOLS, AMY C.  
Assistant Professor  
BA, University of Central Florida  
AUD, University of South Alabama  
PHD, University of South Alabama

PELEKANOS, SHARON F.  
BS, Louisiana State University  
MHS, University of South Alabama

RAMKISSOON, ISHARA  
Associate Professor  
BSSH, University of Durban  
MA, University of Illinois-Urbana  
PHD, University of Illinois-Urbana

RISHIQ, DANIA  
Assistant Professor  
BS, Applied Science University  
MA, University of Tennessee-Knox  
PHD, Univ of Tenn Hlth Sci Center

ROBERTS, WILDER M.  
Assistant Professor  
BS, University of Montevallo  
MS, University of Montevallo  
AUD, University of Florida

SMITH, KIMBERLY A.  
Assistant Professor  
BS, Old Dominion University  
MS, Old Dominion University  
PHD, University of SC-Columbia

TALBOTT, RICHARD E.  
Professor  
BS, West Virginia University  
MS, West Virginia University  
PHD, University of Oklahoma-Norman

# Communication Sciences And Disorders (Ph.D.)

## Degree Requirements

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The Doctor of Philosophy (Ph.D.) Program in Communication Sciences and Disorders offers students specialization in speech and language pathology, communication science, or audiology. The doctoral program is designed to provide a formal course of training and advanced research in communication sciences and disorders that produces significant, original contributions to the professional discipline. Course work in experimental research design, statistics and various out-of-department opportunities maximize the student's ability to engage in original research and scholarship. A doctoral student is admitted to candidacy upon passing a written and oral comprehensive examination.

Applicants wishing to pursue the Ph.D. degree design a program suited to meet their future teaching and research goals in speech-language pathology, audiology, and/or applied speech/hearing sciences within the framework of the core requirements described below. For full-time students, it is anticipated that they can complete the Ph.D. in three years.

Students must complete the Ph.D. in seven years from the start of the program. The student may apply for an extension if unable to complete the degree in seven years. All extensions must be approved by the student's committee and the department chair. There are two tracks that students can choose in pursuit of the Ph.D. degree:

- **Track One** is for applicants who have completed both undergraduate and graduate level training in the profession or a related field. For these students, it is assumed that they have either already met course work requirements toward certification by the American Speech-Language-Hearing Association (ASHA), or they are not pursuing certification.
- **Track Two** is designed for students who wish to obtain clinical certification in either discipline as part of their training. This track is available as a fast-track option to the Ph.D. program and is available to Au.D. and SLP Master's degree students after they have completed one half of their degree programs. That is, Au.D. students can apply to the Ph.D. program after the first two years of their Au.D. training. If accepted, they proceed to complete the requirements for the Au.D. and the Ph.D. programs simultaneously. They are awarded both degrees at the completion of all program requirements, and they are eligible for ASHA CCC-A. Students in the MSSLP program can convert to the Ph.D. program after one year of the master's degree and complete the Ph.D. in three years. They are awarded the Ph.D. only. They will have, however, demonstrated the core knowledge and skills necessary to be eligible for the ASHA CCC-SLP. They will still need to complete the Clinical Fellowship (CF).

### Requirements For Admission

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Minimum admission consideration requirements are as follows:

#### Track One:

1. If the applicant wants to earn ASHA certification then a graduate degree in speech-language pathology or audiology is needed.
2. A minimum overall graduate GPA of 3.5 is required.
3. For Graduate Record Exam (GRE), a combined score of at least 290 on the Verbal and Quantitative portions of the GRE, however, to be competitive a GRE score of 300 or higher is recommended. The writing portion of the GRE must be taken but there is no minimum score requirement.
4. Three letters of reference from faculty at the undergraduate institution are required. At least two references must be provided by the Ph.D. faculty.
5. A Letter of Intent stating the applicant's reasons for pursuing the degree.

#### Track Two:

1. Current status within the Au.D. or M.S. Speech-Language Pathology program at USA with a minimum graduate GPA of 3.5 (based on 4.0).
2. A combined score of at least 290 on the Verbal and Quantitative portions of the GRE is required. However, to be competitive a GRE score of 300 or higher is recommended. The writing portion of the GRE must be taken but there is no minimum score requirement.
3. Three letters of reference from current faculty. All three references must be provided by the Ph.D. faculty.
4. A Letter of Intent stating the applicant's reasons for pursuing the degree.

## Program Requirements

Curriculum (Total 66 Hours)	Course Title	Credit Hours
Core Courses		12
Pre-dissertation course work in experimental design, statistical procedures, and research instrumentation. Includes doctoral colloquia.		
CSD 650	Research Methods in Communication Science and Disorders	3 hrs
CSD 651	Advanced Speech and Hearing Science and Instrumentation	3 hrs
IDE 620	Quantitative Methods I	3 hrs
IDE 621	Quantitative Methods II	3 hrs
Electives		29
Electives include directed studies and directed research. Research projects are designed to give the student direct experience in the design, analysis and interpretation of experimental questions. This directed research is intended, in part, to provide the student with a project for their precomprehensive examination manuscript and oral presentation. These experiences are also designed as prerequisites to the preparation of the prospectus of the doctoral dissertation. Additionally, students may take course work within and outside the Department of Speech Pathology and Audiology.		
Professional Practicum		4
Professional practicum experiences are designed to give direct experience with, at least, two of the following professional areas: teaching, clinical supervision and administration. These may be repeated but only 4 hours count toward degree requirements.		
Dissertation		21

**Note:** The above represent minimum requirements. A student, with approval or recommendation of the graduate faculty, may take additional course work in a specific area if it is needed to support the student's specialization area or to obtain knowledge in an ancillary area.

The Doctor of Philosophy degree program in Communication Sciences and Disorders requires a minimum of 66 semester hours of approved graduate course work beyond the Master's Speech-Language Pathology degree and a minimum of 50 hours beyond the Doctor of Audiology degree. Refer to the doctoral handbook for specific requirements.

## Application

Applications for Track One of the Ph.D. program are accepted at any time and enrollment can begin any semester. Applications for the Track Two program are accepted after November 1 during the student's first year of the MSSLP program or second year of the Au.D. program.

## Graduate Assistantships/Tuition Fellowships

Graduate assistantships and tuition fellowships are available annually on a competitive basis.

## Transfer Credit

Normally, students are not permitted to transfer doctoral level credits. Exceptions to this policy would require approval of the Admissions Committee, Director of Graduate Studies for the Pat Capps Covey College of Allied Health Professions, and the Dean of the Graduate School.

## Comprehensive Examination

Ph.D. students must pass a comprehensive examination following successful completion of academic work. Subsequent to passing the comprehensive examination and successful presentation of an original research project the student is admitted to

candidacy. The content of the student's comprehensive examination is determined by the student's comprehensive examination committee. The comprehensive examination consists of 18 hours of written examination followed by a 2 hour oral examination.

## **Candidacy**

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Admission to candidacy will be achieved upon successful completion of the comprehensive examination and professional presentation of a completed research project. The research project is undertaken with the guidance and approval of a pre-dissertation project committee. The doctoral candidate is, therefore, a student who has fulfilled all preliminary requirements for the Ph.D. and has only the dissertation research project as the remaining program requirement.

## **Dissertation/Dissertation Defense**

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While only 21 semester hours of dissertation research may count towards the degree, a student must continually enroll in CSD 799 (Dissertation Research) until the final dissertation document has been approved by the Dean of the Graduate School. The final oral defense of the dissertation is scheduled after the dissertation study is completed and prepared in written form. Additional revisions of the dissertation may be required as a result of the defense or Graduate School evaluation.

## **Time Limit**

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After reaching candidacy, students have a maximum of two years to complete the dissertation.

# Audiology (AUD)

## Degree Requirements

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The Doctor of Audiology (Au.D.) is a professional doctoral degree and is administered through the Pat Capps Covey College of Allied Health Professions. The Au.D. serves either as preparation for professional clinical audiologists or as preparation for graduate study leading to the Ph.D. degree. The Au.D. program provides a broad range of basic science courses and specialized offerings emphasizing assessment, intervention, and prevention techniques used with patients of all ages who have hearing or balance related disorders. Students are prepared for careers as clinicians in schools, hospitals, rehabilitation centers, private practice and community clinics.

Clinical practicum opportunities occur at the on-campus Speech and Hearing Center and many affiliated ENT clinics, rehabilitation centers, schools, and hospitals. Within this framework, students are prepared to meet the academic and practicum requirements for national certification (the Certificate of Clinical Competence, CCC, in Audiology awarded by the American Speech-Language-Hearing Association) and State of Alabama Licensure. The Au.D. Program typically extends for 11 academic semesters including three semesters of clinical externship. Assistantships are available annually on a competitive basis. Applications for admission and assistantships are available after November 1 with enrollment beginning in the Fall Semester only. Specific information about the Au.D. Program is available from the department.

Details regarding the Admissions process and deadline are available on the Department of Speech-Language Pathology and Audiology website.

### Requirements For Admission

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Students are admitted in the Fall Semester only.

The following describes admission criteria:

#### Regular Admission

1. A baccalaureate degree (or equivalent) from an accredited college or university is required for admission. Students who hold a baccalaureate degree in another field will be considered for admission on an individual basis.
2. A minimum 3.0 (A=4.0) overall undergraduate GPA is required to be considered for regular admission, a minimum of 2.5 overall undergraduate GPA for provisional admission.
3. Completion of the Graduate Record Examination (GRE) within the last five years. In order to be considered for regular admission, a minimum combined score of 290 for the Verbal and Quantitative portion of the GRE is required. In rare instances applicants with a GRE score of less than 290 may be considered for provisional admission. The GRE analytical writing score is required.
4. Three references from faculty at the undergraduate institution are required. It is recommended that two of these references be provided by Ph.D. faculty within the applicant's undergraduate department.
5. A Letter of Intent stating the applicant's reasons for pursuing the degree.

Because the number of applicants is greater than the number of vacancies in the program, students are admitted on a competitive basis, based on the criteria stated above. Because of limited course sequencing, students are admitted in fall semester only.

Details regarding the Admissions process and deadline are available on the Department of Speech-Language Pathology and Audiology website. In addition, students should have one course each in biological sciences, physical sciences, behavioral sciences, and statistics.

In addition, students should have a course sequence in human anatomy and physiology, an adequate background in psychology, and a course in basic mathematics. Students are strongly encouraged to complete course work in areas dealing with multicultural issues, aging/gerontology, and human development.

### Retention Policies

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1. Any term in which a graduate student enrolled in the Au.D. program drops below a 3.0 GPA, the student will be placed on probationary status and has a period of one semester to attain a 3.0 GPA or be dismissed from the program.

2. A student in the status of Provisional Admission who does not earn all A and B grades in their 1st year of coursework (Fall, Spring, and Summer) and/or does not successfully pass 1st year Summative Assessments will be dismissed from the Au.D. program
3. Any student who receives a grade lower than a "C" in a graduate level course will be dismissed from the program.
4. A "C" in any combination of two or more AUD courses will result in academic dismissal.
5. Dismissal due to poor performance can occur at anytime during the course of study. Students should understand and agree that they may be required to complete additional and/or augmentative work or clinical experience as determined by the faculty. As such, graduation may be delayed.
6. If for any reason a student must withdraw from the Au.D. program, re-admission will require approval of the department chairperson and the Dean of the Pat Capps Covey College of Allied Health Professions.
7. If a student is dismissed from a program prior to the end of the regular semester and that dismissal occurs after the University's refund deadline, the student will not receive any type of refund even if the next series of classes have not begun.

## Requirements For A Degree

The Doctor of Audiology (Au.D.) requires:

- A minimum of eleven full time semesters of academic study. The final three semesters are spent off campus completing externships.
- A minimum GPA of 3.0.
- A passing grade on summative assessments administered during the third semester of years 1, 2, and 3 of the program. Students must also complete formative assessments throughout the program.
- Demonstration of academic and clinical competencies as reflected in the student's Knowledge and Skills Assessment document.
- 1820 clinical clock hours (52 weeks X 35 hours per week) in the required areas as stipulated by ASHA.
- All students must take the Praxis Exam prior to graduation.

## Graduation Plan

### Typical Course Sequence

Doctor of Audiology (Au.D.)		Credit Hours
<b>Year 1</b>		
Fall Semester		14
AUD 612	4 hrs	
AUD 614	3 hrs	
AUD 640	3 hrs	
AUD 641	3 hrs	
AUD 670	1 hr	
Spring Semester		12
AUD 613	3 hrs	
AUD 622	3 hrs	
AUD 630	3 hrs	
AUD 670*	3 hrs	
Summer Semester		12
AUD 631	3 hrs	

AUD 642	3 hrs	
AUD 643	3 hrs	
AUD 670*	3 hrs	
<b>Year 2</b>		
Fall Semester		13
AUD 616	3 hrs	
AUD 645	3 hrs	
AUD 656	4 hrs	
AUD 671*	3 hrs	
Spring Semester		11
AUD 647	3 hrs	
AUD 649	3 hrs	
AUD 657	2 hrs	
AUD 671*	3 hrs	
Summer Semester		12
AUD 648	3 hrs	
AUD 651	3 hrs	
AUD 658	3 hrs	
AUD 671*	3 hrs	
<b>Year 3</b>		
Fall Semester		14
AUD 621	2 hrs	
AUD 623	3 hrs	
AUD 633	3 hrs	
AUD 653	3 hrs	
AUD 672*	3 hrs	
Spring Semester		11
AUD 654	3 hrs	
AUD 655	2 hrs	
AUD 661	3 hrs	
AUD 672	3 hrs	
Summer Semester		6
AUD 676	6 hrs	
<b>Year 4</b>		
Fall Semester		6
AUD 676	6 hrs	
Spring Semester		6

AUD 676

6 hrs

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\*A special course fee is assessed for the following courses:

Course Number	Fee	Course Number	Fee
AUD 670	\$183.00		
AUD 671	\$183.00		
AUD 672	\$183.00		

# Bachelor Of Science In Speech And Hearing Sciences (SHS)

## Degree Requirements

Undergraduate students majoring in Speech and Hearing Sciences must complete each SHS course with a grade of "C" or better. Prior to enrolling in SHS courses at the 300 level, students must have achieved an overall GPA of 3.0. Undergraduate speech and hearing majors are expected to maintain an overall grade-point average acceptable for admission to a graduate program.

Course requirements for the baccalaureate degree are outlined below.

Requirements for a Major in Speech and Hearing Sciences		Credit Hours
Area I - Written Composition		6
EH 101	3 hrs	
EH 102	3 hrs	
Area II - Humanities & Fine Arts		12
CA 110	3 hrs	
ARH 100, ARH 103, ARH 123, ARH 240, ARH 242; ARS 101; MUL 101; DRA 110	3 hrs	
EH 215 or EH 216 or EH 225 or EH 226 or EH 235 or EH 236	3 hrs	
*Humanities Elective (suggest LG if HY sequence chosen)	3 hrs	
Area III - Natural Sciences & Math		7
MA 112	3 hrs	
BLY 121 & BLY 121L	4 hrs	
Area IV - History, Social & Behavioral Sciences		12
History Elective (HY 101, HY 102, HY 135, or HY 136)	3 hrs	
*Social Sciences Electives (3 courses) (recommend AN 100 & SY 109)	9 hrs	
Area V - Preprofessional, Major & Electives		30
CIS 150 or CIS 110 or CIS 250	3 hrs	
PSY 120	3 hrs	
BMD 114	4 hrs	
BMD 115	4 hrs	
ST 210 or BUS 245 or ST 305	3 hrs	
PH 104	4 hrs	
General Electives (3 courses)	9 hrs	

\*Must complete a two course sequence in Literature or History

Major Requirements		18
Human Development (PSY 250, PSY 340, PSY 350; EPY 251, EPY 315) AIS 301	3 hrs	
Aging (PSY 250, PSY 436; BLY 207; HSC 450, HSC 457; SY 372, SY 472; LS479, GRN 290; AIS 201, AIS 401), SY435	3 hrs	
Multicultural (EDF 315; EPY 315; AN 200, AN 458; SY 315, SY 420, SY 428, SY 445, SY 455; PSY 270, PSY 485; AIS 320; IS 100, IS 200), AN 100, AN 101, AN 210, AN 340, AN 344, AN 397, AN 354, AN 355, AN 356, AN 357, HY 279, AFR 101, LG 110, LG 305, GS 101, PSC 452, REL 352, REL 354, REL 355	3 hrs	
Psychology (PSY of your choice) (2 courses)	6 hrs	
SHS 290 or approved elective	3 hrs	
Students complete BMD 114, BMD 115, CIS 150 or CIS 110 or CIS 250, PH 104 during the first two years. Students must have achieved an overall GPA of 3.0 prior to enrolling in SHS 315 and SHS 341.		
Required Speech And Hearing Sciences Courses		36
SHS 301	3 hrs	
SHS 315	3 hrs	
SHS 341	4 hrs	
SHS 453	3 hrs	
SHS 473	3 hrs	
SHS 480*	4 hrs	
SHS 302	3 hrs	
SHS 331	4 hrs	
SHS 414	3 hrs	
SHS 431	3 hrs	
SHS 474	3 hrs	
*A special course fee is assessed for the following course: SHS 480 \$37.00		

\*Must complete a two course sequence in Literature or History

## Graduation Plan

# Speech-Language Pathology (MSSLP)

## Degree Requirements

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The Master of Science (MSSLP) in Speech-Language Pathology serves either as a professional preparation for clinical certification by the American Speech-Language-Hearing Association (ASHA) or as preparation for graduate study leading to the Ph.D. degree. The MSSLP program provides a broad range of basic science courses and specialized offerings emphasizing evaluation and treatment of language, articulation, fluency, voice, swallowing, and neurologically-based communication disorders. Students are prepared for careers as clinicians in schools, hospitals, rehabilitation centers, and community clinics.

Clinical practicum experiences occur at the on-campus Speech and Hearing Center and many affiliated clinics, rehabilitation centers, schools, and hospitals. Within this framework, students must meet the academic and practicum requirements leading to the Clinical Fellowship (CF) that occurs post graduation. Completion of the CF results in national certification (the Certificate of Clinical Competence (CCC) in Speech-Language Pathology awarded by ASHA) and eligibility for State of Alabama Licensure.

For the students with backgrounds in communication sciences and disorders, the MSSLP program typically extends for five academic semesters, including one partial semester of clinical externship. For those students who do not have a background in communication sciences and disorders, the program of study can be expected to last six academic semesters or longer.

Graduate assistantships are available annually on a competitive basis.

Applications for admission and assistantships are accepted after November 1 with enrollment beginning in the Fall Semester only. Details regarding the Admissions process and deadline can be found on the Department of Speech-Language Pathology and Audiology website. Specific information about the Master's program is available from the department.

## Requirements For Admission

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Students are admitted in the Fall Semester only.

The following criteria supplement the Graduate School criteria:

### Regular Admission

1. A baccalaureate degree (or equivalent). Students with an undergraduate degree in communication sciences and disorders can expect to track through a five semester program. Students without an undergraduate degree in communication sciences and disorders apply directly to the MSSLP Program. These students can anticipate taking additional course work and track through a six semester program or longer.
2. A minimum 3.0 ("A"-4.0) overall undergraduate GPA is required to be considered for regular admission, a minimum of 2.5 overall undergraduate GPA for provisional admission.
3. Completion of the Graduate Record Examination (GRE) within the last five years. In order to be considered for regular admission, a minimum combined score of 290 for the Verbal and Quantitative portions of the GRE is required. In rare instances applicants with a GRE score of less than 290 may be considered for provisional admission. The score for the writing portion will be evaluated.
4. Three references from faculty at the undergraduate institution are required. It is recommended that two of these references be provided by Ph.D. faculty within the applicant's undergraduate department.
5. A Letter of Intent stating the applicant's reasons for pursuing the degree.

Because the number of applicants is greater than the number of vacancies in the program, students are admitted on a competitive basis, based on the criteria stated above. Because of limited course sequencing, students are admitted in Fall Semester only.

Details regarding the Admissions process and deadline can be found on the Department of Speech-Language Pathology and Audiology website.

In addition, students should have one course each in biological sciences, physical sciences, behavioral sciences, and statistics. In addition, students should have coursework in human anatomy and physiology and, an adequate background in psychology. Students are strongly encouraged to complete course work in areas dealing with multicultural issues, aging/gerontology, and human development.

## Typical Requirements For Degree

The Master of Science in Speech-Language Pathology degree requires:

1. A minimum of five semesters of full-time academic study. A portion of the final semester is spent off campus completing the externship.
2. A minimum GPA of 3.0.
3. A passing grade on a comprehensive examination administered during the final semester before leaving for the externship, or satisfactory completion of a thesis.
4. Demonstration of academic and clinical competencies as reflected in the 2014 Standards for Clinical Certification in Speech-Language Pathology Verification by Program Director document.
5. 375 clinical clock hours in the required areas as stipulated by ASHA. Note: Students without an undergraduate degree in communication sciences and disorders will have to complete 25 hours of clinical observation before starting their 375 clinical clock hour requirement.

Typical Course Sequence	Credit Hours
Master of Science in Speech-Language Pathology *Note: Students without undergraduate degrees in communication sciences and disorders will be required to complete a course in clinical phonetics and a course in clinical observations during the Fall Semester of Year 1. Clinical Training will start Spring Semester of Year One This will offset completing the SLP 598 externship until Summer Semester of Year 2.	
<b>Year 1</b>	
Fall Semester	12
SLP 541	3 hrs
SLP 533	3 hrs
SLP 565	3 hrs
SLP 596*	3 hrs
Spring Semester	12
SLP 568	3 hrs
SLP 561	3 hrs
SLP 566	3 hrs
SLP 596	3 hrs
Maymester	7
SLP 567 *will be taught during the Maymester	2 hrs
Summer Semester	
SLP 521	2 hrs
SLP 596	3 hrs
<b>Year 2</b>	
Fall Semester	12
SLP 510	3 hrs
SLP 551	3 hrs
SLP 532	3 hrs
SLP 596	3 hrs

Spring Semester		12
SLP 534	2 hrs	
SLP 588	2 hrs	
SLP 598	8 hrs	
*A special course fee is assessed for the following course: SLP 596 \$183.00		

## Retention Policies

1. Any term in which a graduate student enrolled in the MSSLP program drops below a 3.0 GPA, the student will be placed on probationary status and has a period of one semester to attain a 3.0 GPA or be dismissed from the program.
2. A student in the status of Provisional Admission who has not earned a minimum of a B Grade in all courses completed in their first semester in the program and does not have a 3.0 GPA upon completing 15 semester hours of graduate credit toward degree requirements will be academically dismissed from the MSSLP program.
3. Any student who receives a grade lower than a "C" in a graduate level course will be dismissed from the program.
4. A "C" in any combination of two or more MSSLP courses will result in academic dismissal.
5. Dismissal due to poor performance can occur at any time during the course of study. Students should understand and agree that they may be required to complete additional and/or augmentative work or clinical experience as determined by the faculty. As such, graduation may be delayed.
6. If for any reason a student must withdraw from the MSSLP program, re-admission will require approval of the department chairperson and the Dean of the Pat Capps Covey College of Allied Health Professions.
7. If a student is dismissed from a program prior to the end of the regular semester and that dismissal occurs after the University's refund deadline, the student will not receive any type of refund even if the next series of classes have not begun.

## Graduation Plan

### Typical Course Sequence

Master of Science in Speech-Language Pathology		Credit Hours
<b>Year 1</b>		
Fall Semester		12
SLP 541	3 hrs	
SLP 533	3 hrs	
SLP 565	3 hrs	
SLP 596*	3 hrs	
Spring Semester		12
SLP 568	3 hrs	
SLP 561	3 hrs	
SLP 566	3 hrs	
SLP 596	3 hrs	
Maymester		2
SLP 567* will be taught during the Maymester	2 hrs	
Summer Semester		5

SLP 521	2 hrs	
SLP 596	3 hrs	
<b>Year 2</b>		
Fall Semester		12
SLP 510	3 hrs	
SLP 551	3 hrs	
SLP 532	3 hrs	
SLP 596	3 hrs	
Spring Semester		12
SLP 534	2 hrs	
SLP 588	2 hrs	
SLP 598	8 hrs	

\*A special course fee is assessed for the following course:  
SLP 596 \$183.00

# Systems Engineering

## Department Information

Department of Systems Engineering Staff	
	(251) 460-7993
Chair	Dr. Robert Cloutier
Associate Professor	Dr. Henry D. Lester
Instructor	Dr. Richard Kramer

Department of Systems Engineering web site  
<http://www.southalabama.edu/colleges/engineering/dsc-se>

The Doctor of Science (D.Sc.) in systems engineering offers the students a holistic approach to the design and understanding complex systems. NASA defines systems engineering as “a holistic, integrative discipline, wherein the contributions of structural engineers, electrical engineers, mechanism designers, power engineers, human factors engineers, and many more disciplines are evaluated and balanced, one against another, to produce a coherent whole that is not dominated by the perspective of a single discipline.” The main objectives of the D.Sc. program are to 1) provide our graduates with the ability to approach all systems (engineered, environmental, coastal, etc.) with the ability to understand the entire system lifecycle in a manner that meets the needs of industry, and 2) prepare our graduates for leadership positions requiring applied research and critical thinking. This program is appropriate for students who want to pursue research-based careers in industry, government, or academia. The program requires coursework across multiple engineering disciplines, and specific, validated systems research resulting in a publicly defended doctoral thesis.

### Requirements For Admission (With Master's Degree):

In addition to meeting Graduate School requirements, the requirements for admission with a Master's degree to the D.Sc. Program are as follows:

1. A written statement of the applicant's professional goals and commitment to completing the degree requirements. (Statement of Purpose)
2. Three letters of recommendation from individuals familiar with the student's academic and technical abilities.
3. An M.S. degree in a discipline related to engineering (e.g. civil, computer, chemical, electrical, industrial, mechanical).
4. A grade point average of 3.0 or greater (on a scale of 4.0) on all graduate coursework.
5. A minimum score of 151 in the Verbal portion and a minimum score of 151 in the Quantitative portion of the Graduate Record Examination (GRE). If the applicant has a current P.E. license, or has an M.S. degree in a discipline related to engineering (e.g. civil, computer, chemical, electrical, industrial, mechanical), they may petition the D.Sc. acceptance committee to waive the GRE requirement.
6. For international students whose native language is not English, a minimum score of 79 on the Internet-based TOEFL, 213 on the computer-based TOEFL, or a minimum score of band 6.5 on the IELTS is required.
7. Transcripts from all colleges and universities attended.

### Requirements For Admission (With Bachelor's Degree)

Those students who have not obtained a Master's degree yet may also apply to the D.Sc. program. The admission requirements are as follows:

In addition to meeting Graduate School requirements, the requirements for acceptance without a Master's degree are as follows:

1. A B.S. degree in a discipline related to engineering (e.g. civil, computer, chemical, electrical, industrial, mechanical, etc.). [The D.Sc. admission committee reserves the right to review the coursework at the B.S. level before making an admission decision, particularly if the degree is from a non-US university or a university with non-accredited programs]
2. A grade point average of 3.5 or greater ( on a scale of 4.0) on all undergraduate coursework. If the student has performed graduate level work, this will be considered separately, and will not be used to recalculate the required 3.5 undergraduate GPA.

3. A grade of B or higher for all graduate courses to be considered as transfer credits from previous institutions attended. Only graduate credits that have not been applied to another degree can be considered for transfer.
4. Transcripts from all colleges and universities attended.
5. A minimum score of 151 in the Verbal portion and a minimum score of 151 in the Quantitative portion of the Graduate Record Examination (GRE). If the applicant has a current P.E. license, they may petition the D.Sc. acceptance committee to waive the GRE requirement.
6. For international students whose native language is not English, a minimum score of 79 on the Internet-based TOEFL, 213 on the computer-based TOEFL, or a minimum score of band 6.5 on the IELTS is required.

## Areas Of Study

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### Degrees, Programs, Or Concentrations

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Systems Engineering (DSc)..... 805

## Courses

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### Course Listing

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Engineering..... 969  
 Systems Engineering..... 1151

## Faculty

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CLOUTIER, ROBERT J.

Professor

BS, United States Naval Academy

MBA, Eastern University

PHD, Stevens Inst of Technology

LESTER, HENRY D.

Assistant Professor

BS, Embry-Riddle Aeronautical U

MS, University of Arkansas- Fayette

MSCE, University of Alabama

MS, University of Alabama

PHD, University of Alabama

# Systems Engineering (DSc)

## Degree Requirements

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Degree requirements for the D.Sc. Program in Systems Engineering include a minimum of 67 graduate credit hours, up to 30 credit hours of which may come from an M.S. degree with the approval of the student's committee. Only courses with a grade of A or Bare eligible for transfer. A minimum of 36 graduate credit hours must be taken at the University of South Alabama. In addition to meeting graduate school requirements, the following requirements must be met:

1. Completion of four core courses for twelve (12) credit hours of core systems engineering courses. These include three required courses - SE 601 - Systems Engineering Fundamentals, SE606 – Architecture and Modeling, SE 602 - Risk and Failure Analysis, SE 603 - Integration, Test and Evaluation.
2. Completion of two electives for six (6) credit hours in a Systems Engineering subject area approved by the student's committee will be required.
3. Completion of EG 501 Research Integrity and Ethics for one (1) credit hour, or SE609 Engineering Research Methods for three (3) credits.
4. Successful completion of doctoral qualifying examination.

# Theatre And Dance

## Department Information

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Department of Theatre & Dance web site

<http://www.southalabama.edu/colleges/artsandsci/theatre/>

The programs are designed to provide students with a theoretical foundation and a practical proficiency in the arts of theatre.

The Bachelor of Arts (B.A.) allows the student to gain a better understanding of the theatre, while the Bachelor of Fine Arts (B.F.A.) provides pre-professional training in the same field. Both include lectures, workshops, and practical experience in all phases of the theatre.

All first-time freshmen must successfully complete CAS 100: First Year Experience as a degree requirement. Students must enroll during their first term at USA, except for summer-entry students who must enroll in the fall semester following entry. DRA 150 will fulfill the technology proficiency requirement for Theatre & Dance majors.

## Areas Of Study

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### Degrees, Programs, Or Concentrations

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Drama (BA).....	807
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## Courses

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### Course Listing

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Drama.....	934
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## Faculty

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BRITTON, REBECCA F.

Associate Professor

BA, Samford University

MFA, University of Tennessee-Knox

HURLEY, PAUL M.

Assistant Professor

BA, Lawrence University

MFA, University of Delaware

MILLER, LYLE B.

Professor

BFA, University of Oklahoma-Norman

MFA, University of Oklahoma-Norman

NARA, JOHN A.

Part-Time Instructor

BA, Le Moyne College

MFA, University of Alabama

TATOM, LAWRENCE R.

Associate Professor

AA, Sacramento City College

BA, California State U-Sacramento

MFA, University of NC- Greensboro

PHD, University of Colorado-Boulder

# Drama (BA)

## Degree Requirements

Majors in Arts and Sciences may be completed with a minimum of 120 semester hours unless designated otherwise. At least 30 hours of course work, which represents 25% of the required 120 hours, must be at the upper division level in order to fulfill the University's residency requirement. At least 15 of the 30 upper-division hours must be in the major or concentration area. An overall grade-point-average (GPA) of 2.0 is required for graduation. In addition, a minimum GPA of 2.0 is required in the student's major or concentration area.

Course Requirements	Course Title	Credit Hours
A minimum of 45 semester hours in Theatre & Dance, including		45
DRA 100	Theatre Workshop: Rehearsal and Performance	1 hr
DRA 101	Theatre Workshop: Technical Production	1 hr
DRA 100, 101, 102, 300, 301 or 302 Additional Workshop		1 hr
DRA 103*	Theatre Symposium	4 hrs
DRA 120	Acting I	3 hrs
DRA 130 and 131 and 132	Stagecraft, Fundamentals of Lighting, Costume Fundamentals	9 hrs
DRA 150	Text Analysis	3 hrs
DRA 210	Makeup	1 hr
DRA 220, 221, or 222	Additional Acting course from: Stage Movement, Voice for Actors, or Acting II in Acting Styles	3 hrs
DRA 330 <b>OR</b> DRA 331 <b>OR</b> DRA 432	Scene Design Lighting Design Costume Design	3 hrs
DRA 340	Directing I	3 hrs
DRA 350	Theatre History I (W)	3 hrs
DRA 351	Theatre History II (W)	3 hrs
Additional elective hours in DRA *		4 hrs
DRA 480	Senior Capstone	3 hrs
*Note: Elective hours in Drama except DRA 100, DRA 101, DRA 102, DRA 103, DRA 300, DRA 301 or DRA 302.		

# Minor In Drama

## Degree Requirements

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If a minor is required in your degree program, at least 9 (lower and/or upper-division) hours of courses in the minor must be completed at the University.

Course Requirements	Credit Hours
Requirements for Minor in Drama	min of 22
DRA 100 or 101 or 102	
DRA 110	
DRA 115 or 120	
DRA 150	
DRA 130 or 131 or 132	
DRA 350 or DRA 351	
6 elective upper division hours in Drama	

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# Minor In Drama With Concentration In Dance

## Degree Requirements

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If a minor is required in your degree program, at least 9 (lower and/or upper-division) hours of courses in the minor must be completed at the University.

DRA 100 or 101 or 102	1 hr.
DRA 110 or 111	3 hrs.
DRA 104 and 105	6 hrs.
DRA 130 or 131 or 132	3 hrs.
DRA 350 or 351 or 315	3 hrs.
6 elective upper division hours in Drama	

# Theatre Arts (BFA) - Musical Theatre Concentration

## Degree Requirements

Majors in Arts and Sciences may be completed with a minimum of 120 semester hours unless designated otherwise. At least 30 hours of course work, which represents 25% of the required 120 hours, must be at the upper division level in order to fulfill the University's residency requirement. At least 15 of the 30 upper-division hours must be in the major or concentration area. An overall grade-point-average (GPA) of 2.0 is required for graduation. In addition, a minimum GPA of 2.0 is required in the student's major or concentration area.

General Education and Core requirements as listed here and other theatre courses as approved. In addition to the Theatre & Dance core requirements, an emphasis must be selected in either Acting, Tech/Design or Music Theatre. An additional six hours are required and may be selected from any remaining courses in Theatre & Dance. A minor may not be added to the BFA. Students wishing to complete a minor must pursue the B.A. option.

Course Requirements	Credit Hours
General education requirements for BFA	
Communication	6
EH 101	
EH 102	
Humanities	6
Dramatic Literature: EH 302, EH 322, EH 323, EH 460, EH 461, EH 462, EH 463, EH 472 or 390 w/ Drama Topic	
Natural Sciences and Mathematics	11
Select 3 hours: MA 110, or higher	
2 Lab Sciences- Lecture and Lab required (8 hrs.): AN 210, BLY 101, BLY 102; CH 101, CH 103, CH 131 or CH 141, CH 132 or CH 141, GEO 101, GEO 102, GY 111, GY 112, PH 101, PH 104, PH 114 or PH 201, PH 115 or PH 202	
History, Social & Behavioral Sciences	12
HY 101 and 102 or HY 135 and 136	6 hrs
Two approved courses in Anthropology, Geography, History, International Studies, Political Science, Psychology, Sociology (AN 100, AN 101, ECO 215, ECO 216, GEO114, GEO 115, IS 100, PSC 130, PSY 120, PSY 250, SY 109, SY 112)	6 hrs

## BFA in Theatre Arts

Dramatic Arts Core Requirements	34
DRA 100 Theatre Workshop: Rehearsal and Performance	1 hr
DRA 101 Theatre Workshop: Technical Production	1 hr
DRA 103 * Theatre Symposium	4 hrs
DRA 104 Fundamentals of Dance I	3 hrs
DRA 120 Acting I	3 hrs
DRA 130 Stagecraft	3 hrs
DRA 131 Fundamentals of Lighting	3 hrs
DRA 132 Costume Fundamentals	3 hrs
DRA 150 Text Analysis	3 hrs
DRA 210 Makeup	1 hr
DRA 340 Directing I	3 hrs
DRA 350 Theatre History I (W)	3 hrs
DRA 352 Period Styles	3 hrs
*DRA 103 is required every semester.	
Musical Theatre	51
DRA/MUO 116/416 Music Theatre Workshop	1 hr
DRA 220 *Stage Movement	3 hrs
DRA 221 Voice for the Actor	3 hrs
DRA 222 Acting II: Scene Study in Realism	3 hrs
DRA/MUL 315 History of the Broadway Musical (W)	3 hrs
DRA 320 Studies in Acting Styles (Variable-content) (must include "Acting for the Musical Theatre Stage")	6 hrs
DRA 330 or 331 or 334 Scene Design or Lighting Design or Costume Design	3 hrs
DRA 480 Theatre Capstone	3 hrs
DRA 496 Theatre Internship	6 hrs
Music Courses	
DRA 100 or 300 Theatre Workshop	1 hr

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DRA 105 Fundamentals of Dance II	3 hrs
MUE 102 Elementary Class Piano	1 hr
MUE 103 Elementary Class Piano	1 hr
MUO 111/411 or 115 Concert Choir or Chorale	1 hr
MUT 112 Music Theory I	3 hrs
MUA 222 Applied Voice	8 hrs

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# Theatre Arts (BFA) - Performance Concentration

## Degree Requirements

Majors in Arts and Sciences may be completed with a minimum of 120 semester hours unless designated otherwise. At least 30 hours of course work, which represents 25% of the required 120 hours, must be at the upper division level in order to fulfill the University's residency requirement. At least 15 of the 30 upper-division hours must be in the major or concentration area. An overall grade-point-average (GPA) of 2.0 is required for graduation. In addition, a minimum GPA of 2.0 is required in the student's major or concentration area.

General Education and Core requirements as listed here and other theatre courses as approved. In addition to the Theatre & Dance core requirements, an emphasis must be selected in either Acting, Tech/Design or Music Theatre. An additional six hours are required and may be selected from any remaining courses in Theatre & Dance. A minor may not be added to the BFA. Students wishing to complete a minor must pursue the B.A. option.

Course Requirements	Credit Hours
General education requirements for BFA	
Composition	6
EH 101	
EH 102	
Humanities	6
Dramatic Literature: EH 302, EH 322, EH 323, EH 460, EH 461, EH 462, EH 463, EH 472 or 390 w/ Drama Topic	
Natural Sciences and Mathematics	11
Select 3 hours: MA 110, or higher	
2 Lab Sciences- Lecture and Lab required (8 hrs.): AN 210, BLY 101, BLY 102; CH 101, CH 103, CH 131 or CH 141, CH 132 or CH 141, GEO 101, GEO 102, GY 111, GY 112, PH 101, PH 104, PH 114 or PH 201, PH 115 or PH 202	
History, Social & Behavioral Sciences	12
HY 101 and 102 or HY 135 and 136	6 hrs
Two approved courses in Anthropology, Geography, History, International Studies, Political Science, Psychology, Sociology (AN 100, AN 101, ECO 215, ECO 216, GEO114, GEO 115, IS 100, PSC 130, PSY 120, PSY 250, SY 109, SY 112)	6 hrs

Freshmen Seminar		2
CAS 100	2 hrs	
BFA in Theatre Arts		
Dramatic Arts Core Requirements		34
DRA 100 Theatre Workshop: Rehearsal and Performance	1 hr	
DRA 101 Theatre Workshop: Technical Production	1 hr	
DRA 103 * Theatre Symposium	4 hrs	
DRA 104 Fundamentals to Dance I	3 hrs	
DRA 120 Acting I	3 hrs	
DRA 130 Stagecraft	3 hrs	
DRA 131 Fundamentals of Lighting	3 hrs	
DRA 132 Costume Fundamentals	3 hrs	
DRA 150 Text Analysis	3 hrs	
DRA 210 Makeup	1 hr	
DRA 340 Directing I	3 hrs	
DRA 350 Theatre History I (W)	3 hrs	
DRA 352 Period Styles	3 hrs	
*DRA 103 is required every semester.		
Performance Concentration		51
DRA 100 Theatre Workshop: Rehearsal and Performance	1 hr	
DRA 101/301 or DRA 102/302 Theatre Workshop: Technical Production and Advanced Workshop: Technical Production OR 2 hrs DRA 102/302 Theatre Workshop: Special Activities and Advanced Workshop: Special Activities	1 hr	
DRA 220 *Stage Movement	3 hrs	
DRA 221 Voice for Actors	3 hrs	
DRA 222 Acting II: Scene Study in Realism	3 hrs	
DRA 300 Advanced Workshop: Rehearsal and Performance	2 hrs	

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DRA 320 Studies in Acting Styles (Variable-content) (must include one semester of "Acting Shakespeare")	6 hrs
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DRA 321 Advanced Voice and Movement	3 hrs
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DRA 330 or 331 or 334 Scene Design or Lighting Design or Costume Design	3 hrs
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DRA 351 Theatre History II (W)	3 hrs
<hr/>	
DR 480 Senior Capstone	3 hrs
<hr/>	
DRA 496 Theatre Internship	6 hrs
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Art and/or Music electives	3 hrs
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Additional elective hours in DRA	9 hrs
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# Visual Arts

## Department Information

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Department of Visual Arts web site  
<http://www.southalabama.edu/art>

The goals of the Department of Visual Arts include preparing students for graduate work or careers in the visual arts; providing suitable programs and courses for persons who want to study or practice the arts for their own personal development and cultural enrichment; and introducing students to their cultural tradition.

The Department of Visual Arts offers Bachelor of Arts and the Bachelor of Fine Arts degree with concentrations in Animation, Art History, Ceramics, Graphic Design, Painting, Photography, Sculpture, Glass, and Printmaking. These degree programs are intended for students who plan to pursue careers in Art or Art History, which will typically require their having continued their studies at the graduate level. The Department offers minors in Studio Art and in Art History.

All first-time freshmen must successfully complete CAS 100: First Year Experience as a degree requirement. Students must enroll during their first term at USA, except for summer-entry students who must enroll in the fall semester following entry. Students receiving a B.A. in Visual Arts must take ARS 396 (Studio Art students) or ARH 493 (Art History students) to fulfill the technology requirement. Students receiving a B.F.A. in Studio Art must take ARS 396 (Studio students), or ARS 479 (Graphic Design students), or ARH 493 (Art History students) to fulfill the technology requirement.

### Graduate Studies

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The University of South Alabama offers a Masters of Fine Arts degree (MFA) in Creative Technologies and Practice, which is the terminal, or highest, degree available in the field. It is a cross-disciplinary degree program appealing to creatives who are interested in a variety of media technologies. The program emphasizes interdisciplinary practice that spans multiple concentrations within the visual arts with technology serving to inform or facilitate the creative process.

The MFA in Creative Technologies and Practice will equip individuals to enter the workforce in a variety of creative technology areas, particularly to manage creative teams, to pursue careers as visual artists, to advance knowledge in the field through research or creative input, and to teach at the university level.

The University of South Alabama offers a Masters in Art Education and an Alternative Masters in Art Education which are housed in the College of Education and Professional Studies. Course work in the visual arts is within the Department of Visual Arts. Further information regarding these degree programs is listed in the Bulletin under graduate programs in the College of Education and Professional Studies.

## Areas Of Study

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### Degrees, Programs, Or Concentrations

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Studio Art (BFA) - Art History Concentration.....	822
Studio Art (BFA) - Ceramics Concentration.....	824
Studio Art (BFA) - Glass Concentration.....	826
Studio Art (BFA) - Graphic Design Concentration.....	828
Studio Art (BFA) - Painting Concentration.....	831
Studio Art (BFA) - Photography Concentration.....	833
Studio Art (BFA) - Printmaking Concentration.....	835
Studio Art (BFA) - Sculpture Concentration.....	837
Visual Art (BA) - Art History Concentration.....	839

Visual Art (BA) - Studio Art Concentration.....	840
Visual Art (MFA) - Creative Technologies and Practice.....	841

## Courses

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### Course Listing

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Art History.....	866
Art Studio.....	868

## Faculty

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BURNS, KARA K.  
Assistant Professor  
BA, University of Arizona  
MA, University of Oregon  
PHD, University of Arizona

RIVENBARK, ELIZABETH A.  
Associate Professor  
BA, Colby College  
MA, Cornell U-Ny St Statutory Cols  
PHD, Cornell U-Ny St Statutory Cols

GIBBS, CONSTANCE D.  
Associate Professor  
BFA, Auburn University  
MFA, Virginia Commonwealth U

SHAMBACK, BENJAMIN J.  
Professor  
BA, Central Connecticut State U  
MA, Fontbonne College  
MFA, Fontbonne College

HOFFMANN, ALMA R.  
Assistant Professor  
BA, Univ of Puerto Rico-Central Ad  
MFA, Iowa State University

SKIADAS, MARGARITA  
Senior Instructor  
BFA, College of Santa Fe  
MFA, University of Colorado-Boulder

HOPSON-WALKER, MATTHEW S.  
Assistant Professor  
BFA, Kansas City Art Institute  
MA, University of Iowa  
MFA, University of Iowa

WRIGHT, ROGER A.  
Professor  
BFA, Moorhead State University  
MFA, Southern Illinois U-Carbondale

JAHNKE, KARL R.  
Assistant Professor  
BFA, Academy of Art College  
MFA, Clemson University

JOHNSON, MATTHEW A.  
Associate Professor  
BFA, University of South Alabama  
MFA, Louisiana Tech University

LINDEMAN, CHRISTINA K.  
Assistant Professor  
BA, Arizona State University-Main  
MA, Arizona State University-Main  
PHD, University of Arizona

PATTERSON, MATTHEW W.  
Assistant Professor  
BFA, University of Texas- Arlington  
MFA, University of Texas- Arlington

# Minor In Art History

## Degree Requirements

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**If a minor is required in your degree program, at least 9 (lower and/or upper-division) hours of courses in the minor must be completed at the University.**

A minimum of 21 hours in Art History of which nine hours must be taken at this university. At least six hours must be in courses numbered 300 or higher taken at this university. ARH 100 will not count toward the minor in Art History.

# Minor In Studio Art

## Degree Requirements

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**If a minor is required in your degree program, at least 9 (lower and/or upper-division) hours of courses in the minor must be completed at the University.**

A minimum of 21 hours in Studio Art of which nine hours must be taken at this university. At least three hours must be in courses numbered 300 or higher taken at this university.

# Studio Art (BFA) - Animation Concentration

## Degree Requirements

Majors in Arts and Sciences may be completed with a minimum of 120 semester hours unless designated otherwise. At least 30 hours of course work, which represents 25% of the required 120 hours, must be at the upper division level in order to fulfill the University's residency requirement. At least 15 of the 30 upper-division hours must be in the major or concentration area. An overall grade-point-average (GPA) of 2.0 is required for graduation. In addition, a minimum GPA of 2.0 is required in the student's major or concentration area.

A minimum of 120 hours of required and elective courses. At least 30 hours in courses numbered 300 or higher must be taken at this University, including a minimum of 12 hours in the primary concentration, and 6 hours in a secondary concentration. Two courses, including one in Studio Art, must be designated "Writing Across the Curriculum" (W) courses.

Requirements	Credit Hours
General Education Requirements	
Written composition: EH 101, EH 102	6
Oral communication: CA 110	3
Fine Arts - Art History: ARH 103, ARH 123, ARH 344, 6 hours in elective Art History courses	15
Humanities: One approved course in literature (EH 215, EH 216, EH 225, EH 226, EH 235, EH 236)	3
History, Social and Behavioral Sciences:	
HY 101-102 or HY 135-136	6
Two approved 100/200 level courses in Anthropology, Economics, Geography, International Studies, Political Science, Psychology or Sociology (AN 100, AN 101, ECO 215, ECO 216, GEO114, GEO 115, IS 100, PSC 130, PSY 120, PSY 250, SY 109, SY 112)	6
Natural Sciences and Mathematics:	
MA 110, 112, or higher level course	3
Two courses in laboratory sciences (AN 210, BLY 101, BLY 102, CH 101, CH 103, CH 131 or CH 141, CH 132 or CH 141, GEO 101, GEO 102, GY 111, GY 112, PH 101, PH 104, PH 114 or PH 201, PH 115 or PH 202)	8
Art Core Requirement	
Drawing: five course including ARS 121, ARS 122, one or two 200 level courses, and at least one 300 or higher level drawing course, or ARS 326	15
Design: ARS 123, ARS 124	6
One of the following:	
Professional Practices (studio students): ARS 396	3
Business Practices for Graphic Design (graphic design students): ARS 479	3
Methodology of Art History (art history students): ARH 493	3
Courses in section "c" satisfy technology requirements.	
Senior Thesis in Animation	6
Animation	24
ARS 200	

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ARS 201

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ARS 202

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ARS 204

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ARS 301

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ARS 302

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ARS 304

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ARS 404

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### **Secondary Studio Concentrations**

Fifteen hours in studio areas. Secondary concentrations are available in Ceramics, Glass, Painting, Photography, Printmaking, Sculpture and Interdisciplinary. Interdisciplinary Secondary consists of 9 credits in one area and 6 credits in any combination of the other areas.

### **Requirements For A Double Primary Concentration**

In lieu of a secondary concentration, students may complete a second primary concentration. This will require course work in excess of the 120 hours minimum required for the B.F.A. and may delay time to graduation. To complete a Double Primary Concentration, students must complete Primary Concentration requirements in two separate areas including Senior Thesis or Senior Portfolio where applicable.

### **Requirements For An Optional Minor**

In addition to the completion of the Studio Art B.F.A. primary and secondary concentration requirements, students have the option to complete a minor in a discipline outside the department. The addition of a minor will require course work in excess of the 120 hours minimum required for the B.F.A. and may delay time to graduation.

### **BFA Program In Animation Admissions Process**

Students who wish to pursue a degree in animation at the University of South Alabama may apply for admission to the BFA program in animation after completing ARS 200 Introduction to Animation and ARS 201 2D Animation I or ARS 202 3D Animation I. Acceptance into the program is determined by a review process coordinated each fall semester. Only those admitted to the program are allowed to enroll in upper-level animation courses.

### **Review Process**

Upon completion of the aforementioned courses, each student who wishes to be considered for admission to the BFA program in animation will assemble a portfolio of his/her work to be presented for evaluation by the Animation Review Board. A list of the required portfolio pieces is available on the Department of Visual Arts website. One or two of these pieces may come from other studio art areas. Portfolio pieces should reflect the student's creative and conceptual abilities, show a strong working knowledge of animation software, and display the student's understanding of the basic principles of animation. The student's portfolio will also be evaluated in terms of presentation and craftsmanship. Students accepted into the program will be those who exhibit strong animation sensibilities and have potential to excel in the upper level courses.

### **Written Statement Of Intent**

In conjunction with the portfolio of work, each student must submit a minimum 250 word essay outlining why they feel they should be accepted into the program and what they intend to accomplish with an animation degree. This essay will be submitted along with the portfolio. Attention should be given to presentation and writing quality.

### **Acceptance Into The Animation Program**

Students are permitted to apply for the animation program only twice. Students will receive written notification of acceptance or non-acceptance. Upon acceptance, students will be allowed to register for further animation classes and continue their studies toward the BFA in animation as outlined by the University of South Alabama Bulletin. Students must register for the designated animation class for the semester following acceptance to the program. Failure to register for class or failure to progress through the animation curriculum in a timely manner will result in revocation of admission status.

# Studio Art (BFA) - Art History Concentration

## Degree Requirements

Majors in Arts and Sciences may be completed with a minimum of 120 semester hours unless designated otherwise. At least 30 hours of course work, which represents 25% of the required 120 hours, must be at the upper division level in order to fulfill the University's residency requirement. At least 15 of the 30 upper-division hours must be in the major or concentration area. An overall grade-point-average (GPA) of 2.0 is required for graduation. In addition, a minimum GPA of 2.0 is required in the student's major or concentration area.

A minimum of 120 hours of required and elective courses. At least 30 hours in courses numbered 300 or higher must be taken at this University, including a minimum of 12 hours in the primary concentration, and 6 hours in a secondary concentration. Two courses, including one in Studio Art, must be designated "Writing Across the Curriculum" (W) courses.

Requirements	Credit Hours
General Education Requirements	
Written composition: EH 101, EH 102	6
Oral communication: CA 110	3
Fine Arts - Art History: ARH 103, ARH 123, ARH 344, 6 hours in elective Art History courses	15
Humanities: One approved course in literature (EH 215, EH 216, EH 225, EH 226, EH 235, EH 236)	3
History, Social and Behavioral Sciences:	
HY 101-102 or HY 135-136	6
Two approved 100/200 level courses in Anthropology, Economics, Geography, International Studies, Political Science, Psychology or Sociology (AN 100, AN 101, ECO 215, ECO 216, GEO114, GEO 115, IS 100, PSC 130, PSY 120, PSY 250, SY 109, SY 112)	6
Natural Sciences and Mathematics:	
MA 110, 112, or higher level course	3
Two courses in laboratory sciences (AN 210, BLY 101, BLY 102, CH 101, CH 103, CH 131 or CH 141, CH 132 or CH 141, GEO 101, GEO 102, GY 111, GY 112, PH 101, PH 104, PH 114 or PH 201, PH 115 or PH 202)	8
Art Core Requirement	
Drawing: five course including ARS 121, ARS 122, one or two 200 level courses, and at least one 300 or higher level drawing course, or ARS 326	15
Design: ARS 123, ARS 124	6
One of the following:	
Professional Practices (studio students): ARS 396	3
Business Practices for Graphic Design (graphic design students): ARS 479	3
Methodology of Art History (art history students): ARH 493	3
Courses in section "c" satisfy technology requirements.	

**Senior Thesis:** Students with a primary concentration in Art History must complete six hours of ARH 498: Senior Thesis. The thesis is to be taken over a two semester period during the student's senior year.

Individuals pursuing BFA in Art History must take ARH 493 Methodology of Art History in the Art Core section C. In addition to the General Education and Art Core requirements, a primary concentration in Art History requires 30 hours in Art History to include ARH 492 or ARH 480, ARH 498 (6 hours), and at least one course in each of the following areas:

1. Ancient Art - ARH 304, ARH 306.
2. Medieval Art - ARH 312, ARH 415
3. Renaissance Art and Baroque Art - ARH 322, ARH 324, ARH 326, ARH 330, ARH 332, ARH 335, ARH 434.
4. Modern Art - ARH 340, ARH 345, ARH 346.  
ARH 290 Special Topics, ARH 390, Special Topics, and ARH 492 Seminar, may be used to satisfy area requirements.

### **Secondary Studio Concentrations**

Fifteen hours in studio areas. Secondary concentrations are available in Ceramics, Glass, Painting, Photography, Printmaking, Sculpture and Interdisciplinary. Interdisciplinary Secondary consists of 9 credits in one area and 6 credits in any combination of the other areas.

### **Requirements For A Double Primary Concentration**

In lieu of a secondary concentration, students may complete a second primary concentration. This will require course work in excess of the 120 hours minimum required for the B.F.A. and may delay time to graduation. To complete a Double Primary Concentration, students must complete Primary Concentration requirements in two separate areas including Senior Thesis or Senior Portfolio where applicable.

### **Requirements For An Optional Minor**

In addition to the completion of the Studio Art B.F.A. primary and secondary concentration requirements, students have the option to complete a minor in a discipline outside the department. The addition of a minor will require course work in excess of the 120 hours minimum required for the B.F.A. and may delay time to graduation.

# Studio Art (BFA) - Ceramics Concentration

## Degree Requirements

Majors in Arts and Sciences may be completed with a minimum of 120 semester hours unless designated otherwise. At least 30 hours of course work, which represents 25% of the required 120 hours, must be at the upper division level in order to fulfill the University's residency requirement. At least 15 of the 30 upper-division hours must be in the major or concentration area. An overall grade-point-average (GPA) of 2.0 is required for graduation. In addition, a minimum GPA of 2.0 is required in the student's major or concentration area.

A minimum of 120 hours of required and elective courses. At least 30 hours in courses numbered 300 or higher must be taken at this University, including a minimum of 12 hours in the primary concentration, and 6 hours in a secondary concentration. Two courses, including one in Studio Art, must be designated "Writing Across the Curriculum" (W) courses.

Requirements	Credit Hours
General Education Requirements	
Written composition: EH 101, EH 102	6
Oral communication: CA 110	3
Fine Arts - Art History: ARH 103, ARH 123, ARH 344, 6 hours in elective Art History courses	15
Humanities: One approved course in literature (EH 215, EH 216, EH 225, EH 226, EH 235, EH 236)	3
History, Social and Behavioral Sciences:	
HY 101-102 or HY 135-136	6
Two approved 100/200 level courses in Anthropology, Economics, Geography, International Studies, Political Science, Psychology or Sociology (AN 100, AN 101, ECO 215, ECO 216, GEO114, GEO 115, IS 100, PSC 130, PSY 120, PSY 250, SY 109, SY 112)	6
Natural Sciences and Mathematics:	
MA 110, 112, or higher level course	3
Two courses in laboratory sciences (AN 210, BLY 101, BLY 102, CH 101, CH 103, CH 131 or CH 141, CH 132 or CH 141, GEO 101, GEO 102, GY 111, GY 112, PH 101, PH 104, PH 114 or PH 201, PH 115 or PH 202)	8
Art Core Requirement	
Drawing: five course including ARS 121, ARS 122, one or two 200 level courses, and at least one 300 or higher level drawing course, or ARS 326	15
Design: ARS 123, ARS 124	6
One of the following:	
Professional Practices (studio students): ARS 396	3
Business Practices for Graphic Design (graphic design students): ARS 479	3
Methodology of Art History (art history students): ARH 493	3
Courses in section "c" satisfy technology requirements.	
Senior Thesis or Senior Portfolio Requirements ARS 498	6
Ceramics: 24 hours in Ceramics courses.	24

**Secondary Studio Concentrations**

Fifteen hours in studio areas. Secondary concentrations are available in Ceramics, Glass, Painting, Photography, Printmaking, Sculpture and Interdisciplinary. Interdisciplinary Secondary consists of 9 credits in one area and 6 credits in any combination of the other areas.

**Requirements For A Double Primary Concentration**

In lieu of a secondary concentration, students may complete a second primary concentration. This will require course work in excess of the 120 hours minimum required for the B.F.A. and may delay time to graduation. To complete a Double Primary Concentration, students must complete Primary Concentration requirements in two separate areas including Senior Thesis or Senior Portfolio where applicable.

**Requirements For An Optional Minor**

In addition to the completion of the Studio Art B.F.A. primary and secondary concentration requirements, students have the option to complete a minor in a discipline outside the department. The addition of a minor will require course work in excess of the 120 hours minimum required for the B.F.A. and may delay time to graduation.

# Studio Art (BFA) - Glass Concentration

## Degree Requirements

Majors in Arts and Sciences may be completed with a minimum of 120 semester hours unless designated otherwise. At least 30 hours of course work, which represents 25% of the required 120 hours, must be at the upper division level in order to fulfill the University's residency requirement. At least 15 of the 30 upper-division hours must be in the major or concentration area. An overall grade-point-average (GPA) of 2.0 is required for graduation. In addition, a minimum GPA of 2.0 is required in the student's major or concentration area.

A minimum of 120 hours of required and elective courses. At least 30 hours in courses numbered 300 or higher must be taken at this University, including a minimum of 12 hours in the primary concentration, and 6 hours in a secondary concentration. Two courses, including one in Studio Art, must be designated "Writing Across the Curriculum" (W) courses.

Requirements	Credit Hours
General Education Requirements	
Written composition: EH 101, EH 102	6
Oral communication: CA 110	3
Fine Arts - Art History: ARH 103, ARH 123, ARH 344, 6 hours in elective Art History courses	15
Humanities: One approved course in literature (EH 215, EH 216, EH 225, EH 226, EH 235, EH 236)	3
History, Social and Behavioral Sciences:	
HY 101-102 or HY 135-136	6
Two approved 100/200 level courses in Anthropology, Economics, Geography, International Studies, Political Science, Psychology or Sociology (AN 100, AN 101, ECO 215, ECO 216, GEO114, GEO 115, IS 100, PSC 130, PSY 120, PSY 250, SY 109, SY 112)	6
Natural Sciences and Mathematics:	
MA 110, 112, or higher level course	3
Two courses in laboratory sciences (AN 210, BLY 101, BLY 102, CH 101, CH 103, CH 131 or CH 141, CH 132 or CH 141, GEO 101, GEO 102, GY 111, GY 112, PH 101, PH 104, PH 114 or PH 201, PH 115 or PH 202)	8
Art Core Requirement	
Drawing: five course including ARS 121, ARS 122, one or two 200 level courses, and at least one 300 or higher level drawing course, or ARS 326	15
Design: ARS 123, ARS 124	6
One of the following:	
Professional Practices (studio students): ARS 396	3
Business Practices for Graphic Design (graphic design students): ARS 479	3
Methodology of Art History (art history students): ARH 493	3
Courses in section "c" satisfy technology requirements ARS 396.	3
Senior Thesis or Senior Portfolio Requirements ARS 498	6
Glass: 24 hours in Glass courses.	24

**Secondary Studio Concentrations**

Fifteen hours in studio areas. Secondary concentrations are available in Ceramics, Glass, Painting, Photography, Printmaking, Sculpture and Interdisciplinary. Interdisciplinary Secondary consists of 9 credits in one area and 6 credits in any combination of the other areas.

**Requirements For A Double Primary Concentration**

In lieu of a secondary concentration, students may complete a second primary concentration. This will require course work in excess of the 120 hours minimum required for the B.F.A. and may delay time to graduation. To complete a Double Primary Concentration, students must complete Primary Concentration requirements in two separate areas including Senior Thesis or Senior Portfolio where applicable.

**Requirements For An Optional Minor**

In addition to the completion of the Studio Art B.F.A. primary and secondary concentration requirements, students have the option to complete a minor in a discipline outside the department. The addition of a minor will require course work in excess of the 120 hours minimum required for the B.F.A. and may delay time to graduation.

# Studio Art (BFA) - Graphic Design Concentration

## Degree Requirements

Majors in Arts and Sciences may be completed with a minimum of 120 semester hours unless designated otherwise. At least 30 hours of course work, which represents 25% of the required 120 hours, must be at the upper division level in order to fulfill the University's residency requirement. At least 15 of the 30 upper-division hours must be in the major or concentration area. An overall grade-point-average (GPA) of 2.0 is required for graduation. In addition, a minimum GPA of 2.0 is required in the student's major or concentration area.

A minimum of 120 hours of required and elective courses. At least 30 hours in courses numbered 300 or higher must be taken at this University, including a minimum of 12 hours in the primary concentration, and 6 hours in a secondary concentration. Two courses, including one in Studio Art, must be designated "Writing Across the Curriculum" (W) courses.

Requirements	Credit Hours
General Education Requirements	
Written composition: EH 101, EH 102	6
Oral communication: CA 110	3
Fine Arts - Art History: ARH 103, ARH 123, ARH 344, 6 hours in elective Art History courses	15
Humanities: One approved course in literature (EH 215, EH 216, EH 225, EH 226, EH 235, EH 236)	3
History, Social and Behavioral Sciences:	
HY 101-102 or HY 135-136	6
Two approved 100/200 level courses in Anthropology, Economics, Geography, International Studies, Political Science, Psychology or Sociology (AN 100, AN 101, ECO 215, ECO 216, GEO114, GEO 115, IS 100, PSC 130, PSY 120, PSY 250, SY 109, SY 112)	6
Natural Sciences and Mathematics:	
MA 110, 112, or higher level course	3
Two courses in laboratory sciences (AN 210, BLY 101, BLY 102, CH 101, CH 103, CH 131 or CH 141, CH 132 or CH 141, GEO 101, GEO 102, GY 111, GY 112, PH 101, PH 104, PH 114 or PH 201, PH 115 or PH 202)	8
Art Core Requirement	
Drawing: five course including ARS 121, ARS 122, one or two 200 level courses, and at least one 300 or higher level drawing course, or ARS 326	15
Design: ARS 123, ARS 124	6
One of the following:	
Professional Practices (studio students): ARS 396	3
Business Practices for Graphic Design (graphic design students): ARS 479	3
Methodology of Art History (art history students): ARH 493	3
Courses in section "c" satisfy technology requirements.	
Senior Thesis or Senior Portfolio Requirements Students with the primary concentration in Graphic Design take ARS 488 (three hours).	3
Graphic Design	27

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ARS 271

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ARS 272

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ARS 273

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ARS 373

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ARS 374

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ARS 472

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ARS 473

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Two of the following: ARS 375, ARS 376, ARS 490, ARS 496. (see admissions process below).

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### **Secondary Studio Concentrations**

Fifteen hours in studio areas. Secondary concentrations are available in Ceramics, Glass, Painting, Photography, Printmaking, Sculpture and Interdisciplinary. Interdisciplinary Secondary consists of 9 credits in one area and 6 credits in any combination of the other areas.

### **Requirements For An Optional Minor**

In addition to the completion of the Studio Art B.F.A. primary and secondary concentration requirements, students have the option to complete a minor in a discipline outside the department. The addition of a minor will require course work in excess of the 120 hours minimum required for the B.F.A. and may delay time to graduation.

### **BFA Program In Graphic Design Admissions Process**

Students who wish to pursue a degree in graphic design at the University of South Alabama may apply for admission to the BFA program in graphic design after completion of or current enrollment in ARS 271 Introduction to Graphic Design, and ARS 273 Graphic Design Applications. Acceptance into the program is determined by a review process which is coordinated each fall semester. Only those admitted to the program are allowed to enroll in upper-level graphic design courses.

### **Review Process**

Upon completion of the aforementioned courses, each student who wishes to be considered for admission to the BFA program in graphic design will assemble a portfolio of his/her work to be presented for evaluation by the Graphic Design Review Board. The portfolio should consist of ten to fifteen pieces that best display the student's abilities in the area of graphic design. A limited number of these portfolio pieces may come from other studio art areas but the emphasis should be on works that are relevant to graphic design. Portfolio pieces should reflect the student's creative and conceptual abilities, demonstrate an ability to successfully work with typography, show a strong working knowledge of graphic design software, and display the student's understanding of the basic principles of design and how best to incorporate these principles compositionally. The student's portfolio will also be evaluated in terms of presentation and craftsmanship. Students accepted into the program will be those who exhibit strong design sensibilities and have potential to excel in the upper level courses.

### **Written Statement Of Intent**

In conjunction with the portfolio of work, each student must submit a minimum 250 word essay outlining why they feel they should be accepted into the program and what they intend to accomplish with a graphic design degree. This essay will be submitted along with the portfolio. Attention should be given to presentation and writing quality.

### **Acceptance Into The Graphic Design Program**

Students are permitted to apply for the graphic design program only twice. Upon acceptance, the chosen students will be allowed to register for upper level graphic design classes and continue their studies toward the BFA in graphic design as outlined by the University of South Alabama Bulletin. Students must register for designated graphic design classes for the fall semester following acceptance to the program. Failure to register for classes or failure to progress through the graphic design curriculum in a timely manner will result in revocation of admission status.

### **Requirements For A Double Primary Concentration**

In lieu of a secondary concentration, students may complete a second primary concentration. This will require course work in excess of the 120 hours minimum required for the B.F.A. and may delay time to graduation. To complete a Double Primary Concentration, students must complete Primary Concentration requirements in two separate areas including Senior Thesis or Senior Portfolio where applicable.

### **Graphic Design Laptop Policy And Computer Requirements**

All students enrolling in ARS 271, Introduction to Graphic Design, or ARS Graphic Design Applications, and all subsequent graphic design courses are required to own a personal laptop computer that conforms to the graphic design computer requirements. Students are expected to have a computer on the first day of classes. This is a one-student, one-machine requirement. Any student who does not have a laptop by the end of the first week of the semester will be administratively withdrawn from any course requiring the laptop. There are no exceptions to the policy.

This purpose of this policy is to ensure that students have adequate access to computing resources and obtain an extensive working knowledge of the Macintosh system. Possession of a laptop allows students access to printers and other available resources on campus and elsewhere. In addition, owning a laptop aids students with job searches and job preparation as well as provides necessary resources for freelance opportunities that otherwise would not be available. Computer requirements are available in the Department of Visual Arts office, in the graphic design program and online at <http://www.southalabama.edu/art> .

# Studio Art (BFA) - Painting Concentration

## Degree Requirements

Majors in Arts and Sciences may be completed with a minimum of 120 semester hours unless designated otherwise. At least 30 hours of course work, which represents 25% of the required 120 hours, must be at the upper division level in order to fulfill the University's residency requirement. At least 15 of the 30 upper-division hours must be in the major or concentration area. An overall grade-point-average (GPA) of 2.0 is required for graduation. In addition, a minimum GPA of 2.0 is required in the student's major or concentration area.

A minimum of 120 hours of required and elective courses. At least 30 hours in courses numbered 300 or higher must be taken at this University, including a minimum of 12 hours in the primary concentration, and 6 hours in a secondary concentration. Two courses, including one in Studio Art, must be designated "Writing Across the Curriculum" (W) courses.

Requirements	Credit Hours
General Education Requirements	
Written composition: EH 101, EH 102	6
Oral communication: CA 110	3
Fine Arts - Art History: ARH 103, ARH 123, ARH 344, 6 hours in elective Art History courses	15
Humanities: One approved course in literature (EH 215, EH 216, EH 225, EH 226, EH 235, EH 236)	3
History, Social and Behavioral Sciences:	
HY 101-102 or HY 135-136	6
Two approved 100/200 level courses in Anthropology, Economics, Geography, International Studies, Political Science, Psychology or Sociology (AN 100, AN 101, ECO 215, ECO 216, GEO114, GEO 115, IS 100, PSC 130, PSY 120, PSY 250, SY 109, SY 112)	6
Natural Sciences and Mathematics:	
MA 110, 112, or higher level course	3
Two courses in laboratory sciences (AN 210, BLY 101, BLY 102, CH 101, CH 103, CH 131 or CH 141, CH 132 or CH 141, GEO 101, GEO 102, GY 111, GY 112, PH 101, PH 104, PH 114 or PH 201, PH 115 or PH 202)	8
Art Core Requirement	
Drawing: five course including ARS 121, ARS 122, one or two 200 level courses, and at least one 300 or higher level drawing course, or ARS 326	3
Design: ARS 123, ARS 124	6
One of the following:	
Professional Practices (studio students): ARS 396	15
Business Practices for Graphic Design (graphic design students): ARS 479	3
Methodology of Art History (art history students): ARH 493	3
Courses in section "c" satisfy technology requirements.	
Senior Thesis or Senior Portfolio Requirements ARS 498	6
Painting: 24 hours in Painting courses, including ARS 231 and ARS 232.	24

**Secondary Studio Concentrations**

Fifteen hours in studio areas. Secondary concentrations are available in Ceramics, Glass, Painting, Photography, Printmaking, Sculpture and Interdisciplinary. Interdisciplinary Secondary consists of 9 credits in one area and 6 credits in any combination of the other areas.

**Requirements For A Double Primary Concentration**

In lieu of a secondary concentration, students may complete a second primary concentration. This will require course work in excess of the 120 hours minimum required for the B.F.A. and may delay time to graduation. To complete a Double Primary Concentration, students must complete Primary Concentration requirements in two separate areas including Senior Thesis or Senior Portfolio where applicable.

**Requirements For An Optional Minor**

In addition to the completion of the Studio Art B.F.A. primary and secondary concentration requirements, students have the option to complete a minor in a discipline outside the department. The addition of a minor will require course work in excess of the 120 hours minimum required for the B.F.A. and may delay time to graduation.

# Studio Art (BFA) - Photography Concentration

## Degree Requirements

Majors in Arts and Sciences may be completed with a minimum of 120 semester hours unless designated otherwise. At least 30 hours of course work, which represents 25% of the required 120 hours, must be at the upper division level in order to fulfill the University's residency requirement. At least 15 of the 30 upper-division hours must be in the major or concentration area. An overall grade-point-average (GPA) of 2.0 is required for graduation. In addition, a minimum GPA of 2.0 is required in the student's major or concentration area.

A minimum of 120 hours of required and elective courses. At least 30 hours in courses numbered 300 or higher must be taken at this University, including a minimum of 12 hours in the primary concentration, and 6 hours in a secondary concentration. Two courses, including one in Studio Art, must be designated "Writing Across the Curriculum" (W) courses.

Requirements	Credit Hours
General Education Requirements	
Written composition: EH 101, EH 102	6
Oral communication: CA 110	3
Fine Arts - Art History: ARH 103, ARH 123, ARH 344, 6 hours in elective Art History courses	15
Humanities: One approved course in literature (EH 215, EH 216, EH 225, EH 226, EH 235, EH 236)	3
History, Social and Behavioral Sciences:	
HY 101-102 or HY 135-136	6
Two approved 100/200 level courses in Anthropology, Economics, Geography, International Studies, Political Science, Psychology or Sociology (AN 100, AN 101, ECO 215, ECO 216, GEO114, GEO 115, IS 100, PSC 130, PSY 120, PSY 250, SY 109, SY 112)	6
Natural Sciences and Mathematics:	
MA 110, 112, or higher level course	3
Two courses in laboratory sciences (AN 210, BLY 101, BLY 102, CH 101, CH 103, CH 131 or CH 141, CH 132 or CH 141, GEO 101, GEO 102, GY 111, GY 112, PH 101, PH 104, PH 114 or PH 201, PH 115 or PH 202)	8
Art Core Requirement	
Drawing: five course including ARS 121, ARS 122, one or two 200 level courses, and at least one 300 or higher level drawing course, or ARS 326	15
Design: ARS 123, ARS 124	6
One of the following:	
Professional Practices (studio students): ARS 396	3
Business Practices for Graphic Design (graphic design students): ARS 479	3
Methodology of Art History (art history students): ARH 493	3
Courses in section "c" satisfy technology requirements.	
Senior Thesis or Senior Portfolio Requirements ARS 498	6
Photography: 24 hours in Photography courses, including ARS 281.	24

**Secondary Studio Concentrations**

Fifteen hours in studio areas. Secondary concentrations are available in Ceramics, Glass, Painting, Photography, Printmaking, Sculpture and Interdisciplinary. Interdisciplinary Secondary consists of 9 credits in one area and 6 credits in any combination of the other areas.

**Requirements For A Double Primary Concentration**

In lieu of a secondary concentration, students may complete a second primary concentration. This will require course work in excess of the 120 hours minimum required for the B.F.A. and may delay time to graduation. To complete a Double Primary Concentration, students must complete Primary Concentration requirements in two separate areas including Senior Thesis or Senior Portfolio where applicable.

**Requirements For An Optional Minor**

In addition to the completion of the Studio Art B.F.A. primary and secondary concentration requirements, students have the option to complete a minor in a discipline outside the department. The addition of a minor will require course work in excess of the 120 hours minimum required for the B.F.A. and may delay time to graduation.

# Studio Art (BFA) - Printmaking Concentration

## Degree Requirements

Majors in Arts and Sciences may be completed with a minimum of 120 semester hours unless designated otherwise. At least 30 hours of course work, which represents 25% of the required 120 hours, must be at the upper division level in order to fulfill the University's residency requirement. At least 15 of the 30 upper-division hours must be in the major or concentration area. An overall grade-point-average (GPA) of 2.0 is required for graduation. In addition, a minimum GPA of 2.0 is required in the student's major or concentration area.

A minimum of 120 hours of required and elective courses. At least 30 hours in courses numbered 300 or higher must be taken at this University, including a minimum of 12 hours in the primary concentration, and 6 hours in a secondary concentration. Two courses, including one in Studio Art, must be designated "Writing Across the Curriculum" (W) courses.

Requirements	Credit Hours
General Education Requirements	
Written composition: EH 101, EH 102	6
Oral communication: CA 110	3
Fine Arts - Art History: ARH 103, ARH 123, ARH 344, 6 hours in elective Art History courses	15
Humanities: One approved course in literature (EH 215, EH 216, EH 225, EH 226, EH 235, EH 236)	3
History, Social and Behavioral Sciences:	
HY 101-102 or HY 135-136	6
Two approved 100/200 level courses in Anthropology, Economics, Geography, International Studies, Political Science, Psychology or Sociology (AN 100, AN 101, ECO 215, ECO 216, GEO114, GEO 115, IS 100, PSC 130, PSY 120, PSY 250, SY 109, SY 112)	6
Natural Sciences and Mathematics:	
MA 110, 112, or higher level course	3
Two courses in laboratory sciences (AN 210, BLY 101, BLY 102, CH 101, CH 103, CH 131 or CH 141, CH 132 or CH 141, GEO 101, GEO 102, GY 111, GY 112, PH 101, PH 104, PH 114 or PH 201, PH 115 or PH 202)	8
Art Core Requirement	
Drawing: five course including ARS 121, ARS 122, one or two 200 level courses, and at least one 300 or higher level drawing course, or ARS 326	15
Design: ARS 123, ARS 124	6
One of the following:	
Professional Practices (studio students): ARS 396	3
Business Practices for Graphic Design (graphic design students): ARS 479	3
Methodology of Art History (art history students): ARH 493	3
Courses in section "c" satisfy technology requirements.	
Senior Thesis or Senior Portfolio Requirements ARS 498	6
Printmaking: 24 hours in Printmaking courses.	24

**Secondary Studio Concentrations**

Fifteen hours in studio areas. Secondary concentrations are available in Ceramics, Glass, Painting, Photography, Printmaking, Sculpture and Interdisciplinary. Interdisciplinary Secondary consists of 9 credits in one area and 6 credits in any combination of the other areas.

**Requirements For A Double Primary Concentration**

In lieu of a secondary concentration, students may complete a second primary concentration. This will require course work in excess of the 120 hours minimum required for the B.F.A. and may delay time to graduation. To complete a Double Primary Concentration, students must complete Primary Concentration requirements in two separate areas including Senior Thesis or Senior Portfolio where applicable.

**Requirements For An Optional Minor**

In addition to the completion of the Studio Art B.F.A. primary and secondary concentration requirements, students have the option to complete a minor in a discipline outside the department. The addition of a minor will require course work in excess of the 120 hours minimum required for the B.F.A. and may delay time to graduation.

# Studio Art (BFA) - Sculpture Concentration

## Degree Requirements

Majors in Arts and Sciences may be completed with a minimum of 120 semester hours unless designated otherwise. At least 30 hours of course work, which represents 25% of the required 120 hours, must be at the upper division level in order to fulfill the University's residency requirement. At least 15 of the 30 upper-division hours must be in the major or concentration area. An overall grade-point-average (GPA) of 2.0 is required for graduation. In addition, a minimum GPA of 2.0 is required in the student's major or concentration area.

A minimum of 120 hours of required and elective courses. At least 30 hours in courses numbered 300 or higher must be taken at this University, including a minimum of 12 hours in the primary concentration, and 6 hours in a secondary concentration. Two courses, including one in Studio Art, must be designated "Writing Across the Curriculum" (W) courses.

Course Requirements	Credit Hours
General Education Requirements	
Written composition: EH 101, EH 102	6
Oral communication: CA 110	3
Fine Arts - Art History: ARH 103, ARH 123, ARH 344, 6 hours in elective Art History courses	15
Humanities: One approved course in literature (EH 215, EH 216, EH 225, EH 226, EH 235, EH 236)	3
History, Social and Behavioral Sciences:	
HY 101-102 or HY 135-136	6
Two approved 100/200 level courses in Anthropology, Economics, Geography, International Studies, Political Science, Psychology or Sociology (AN 100, AN 101, ECO 215, ECO 216, GEO114, GEO 115, IS 100, PSC 130, PSY 120, PSY 250, SY 109, SY 112)	6
Natural Sciences and Mathematics:	
MA 110, 112, or higher level course	3
Two courses in laboratory sciences (AN 210, BLY 101, BLY 102, CH 101, CH 103, CH 131 or CH 141, CH 132 or CH 141, GEO 101, GEO 102, GY 111, GY 112, PH 101, PH 104, PH 114 or PH 201, PH 115 or PH 202)	8
Art Core Requirement	
Drawing: five course including ARS 121, ARS 122, one or two 200 level courses, and at least one 300 or higher level drawing course, or ARS 326	15
Design: ARS 123, ARS 124	6
One of the following:	
Professional Practices (studio students): ARS 396	3
Business Practices for Graphic Design (graphic design students): ARS 479	3
Methodology of Art History (art history students): ARH 493	3
Courses in section "c" satisfy technology requirements.	
Senior Thesis or Senior Portfolio Requirements ARS 498	6
Sculpture: 24 hours in Sculpture courses.	24

**Secondary Studio Concentrations**

Fifteen hours in studio areas. Secondary concentrations are available in Ceramics, Glass, Painting, Photography, Printmaking, Sculpture and Interdisciplinary. Interdisciplinary Secondary consists of 9 credits in one area and 6 credits in any combination of the other areas.

**Requirements For A Double Primary Concentration**

In lieu of a secondary concentration, students may complete a second primary concentration. This will require course work in excess of the 120 hours minimum required for the B.F.A. and may delay time to graduation. To complete a Double Primary Concentration, students must complete Primary Concentration requirements in two separate areas including Senior Thesis or Senior Portfolio where applicable.

# Visual Art (BA) - Art History Concentration

## Degree Requirements

Majors in Arts and Sciences may be completed with a minimum of 120 semester hours unless designated otherwise. At least 30 hours of course work, which represents 25% of the required 120 hours, must be at the upper division level in order to fulfill the University's residency requirement. At least 15 of the 30 upper-division hours must be in the major or concentration area. An overall grade-point-average (GPA) of 2.0 is required for graduation. In addition, a minimum GPA of 2.0 is required in the student's major or concentration area.

The B.A. program requires completion of the general education requirements in the College of Arts and Sciences, requirements for a minor, and enough elective courses for credit hours to total 120. At least 30 hours of courses numbered 300 or higher must be taken at this University, including a minimum of 15 hours of upper-division art courses. Two courses must be designated writing credit (W) courses, at least one of which is in the art program. A minimum of 39 hours in art history and studio courses is required. All students must complete the core requirements and those listed under one of two concentrations, art history or art studio, as follows:

BA Concentration in Art	Course Title	Credit Hours
Core Courses:		15
ARH 103	Art History I	3 hrs
ARH 123	Art History II	3 hrs
ARH 344	Contemporary Art	3 hrs
ARS 123	Two-Dimensional Design	3 hrs
ARS 124	Three-Dimensional Design	3 hrs

### Art History: 24 Hours

In addition to the core requirements, 24 hours in art history courses including ARH 492 Seminar or ARH 480, ARH 493 Methodology of Art History, and at least one 300 or 400 level course in each of the following areas:

1. Ancient Art - ARH 304, ARH 306
2. Medieval Art - ARH 312, ARH 415
3. Renaissance Art and Baroque Art - ARH 322, ARH 324, ARH 326, ARH 330, ARH 332, ARH 335, ARH 434
4. Modern Art - ARH 340, ARH 345, ARH 346  
Seminar and Special Topics courses may be used to satisfy area requirements.

### Language Requirements In Art History:

While the department does not require language training beyond the General Education requirement (6 hours), we strongly encourage art history majors, particularly those planning graduate study, to pursue foreign languages beyond what is required by the College. French and German are the preferred languages because they are required by most M.A. and Ph.D. programs in art history.

# Visual Art (BA) - Studio Art Concentration

## Degree Requirements

Majors in Arts and Sciences may be completed with a minimum of 120 semester hours unless designated otherwise. At least 30 hours of course work, which represents 25% of the required 120 hours, must be at the upper division level in order to fulfill the University's residency requirement. At least 15 of the 30 upper-division hours must be in the major or concentration area. An overall grade-point-average (GPA) of 2.0 is required for graduation. In addition, a minimum GPA of 2.0 is required in the student's major or concentration area.

The B.A. program requires completion of the general education requirements in the College of Arts and Sciences, requirements for a minor, and enough elective courses for credit hours to total 120. At least 30 hours of courses numbered 300 or higher must be taken at this University, including a minimum of 15 hours of upper-division art courses. Two courses must be designated writing credit (W) courses, at least one of which is in the art program. A minimum of 39 hours in art history and studio courses is required. All students must complete the core requirements and those listed under one of two concentrations, art history or art studio, as follows:

BA Concentration in Art	Course Title	Credit Hours
Core Courses:		15
ARH 103	Art History I	3 hrs
ARH 123	Art History II	3 hrs
ARH 344	Contemporary Art	3 hrs
ARS 123	Two-Dimensional Design	3 hrs
ARS 124	Three-Dimensional Design	3 hrs

### Studio Art: 24 Hours

In addition to the core requirements, 24 hours in studio art courses of which at least 12 hours are at the 300 or 400 levels. Studio students must take ARS 396 Professional Practices.

# Visual Art (MFA) - Creative Technologies And Practice

## Degree Requirements

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### Master Of Fine Arts In Creative Technologies And Practice (M.F.A.) Program

The Master of Fine Arts program in Creative Technologies and Practice at the University of South Alabama is a cross-disciplinary program appealing to creatives who are interested in a variety of media technologies. The program emphasizes interdisciplinary practice that spans multiple concentrations within the visual arts with technology serving to inform or facilitate the creative process.

The MFA in Creative Technologies and Practice will equip individuals to enter the workforce in a variety of creative technology areas, particularly to manage creative teams, to pursue careers as visual artists, to advance knowledge in the field through research or creative output, and to teach at the university level.

The requirements and procedures that follow are specifically for the Department of Visual Arts. However, the general rules and policies of the Graduate School also apply.

### Minimum Requirements For Regular Admission

Students are normally admitted in the Fall Semester. Although applications for admission and assistantships are accepted throughout the year, application by February 15 is encouraged; beginning February 15 the admissions committee will make initial recommendations about applicants for the following Fall class. Depending on availability of space and funding, applications may be approved and students admitted throughout the year. The following criteria supplement the Graduate School criteria (see Categories of Admission):

1. GPA of 3.0 in undergraduate degree.
2. Official Transcript(s) from other institutions and sessions/programs/workshops the student has attended.
3. Artist's statement of no more than 500 words.
4. Letter of intent of no more than 500 words.
5. Resumé or Curriculum Vitae
6. Three letters of recommendation.
7. For applicants for whom English is a second language, the students must have a working proficiency of the English language and submit a TOEFL IBT score of at least 71 or IELTS score of at least 6 (Paper-based score of 525, computer-based score of 197) or equivalent score on computer administered tests. Note that ESL applicants must apply through the International Admissions Office at USA.
8. A portfolio of up to 20 pieces that shows proficiency of media in which the student wishes to dedicate further study. If the student is focusing on video, film, or animation we require portfolio equivalents of at least five works. (Submit an electronic portfolio of your work on DVD, CD, USB [mac formatted] thumb drive or as a website link.) To submit a website or to use a file hosting service for a digital portfolio, please email the information to the graduate coordinator. Email found on the departmental website. To submit a thumb drive or disk, see below for address.

Requirements 1–7 should be sent to the Office of Admission.

Requirement 8 (Portfolio Materials) should be emailed to the graduate coordinator (email found on the departmental website) or mailed to the address below:

ATTN: Graduate Program Coordinator  
Department of Visual Arts

The University of South Alabama  
501 North University Blvd.  
172 VAB  
Mobile, AL 36688

### **Provisional Admission**

1. A minimum GPA of 2.50.
2. Same as requirements 2 through 8 for Regular Admission.

### **Graduate Assistantships**

The Department of Visual Arts offers assistantships to M.F.A. students annually on a competitive basis. Assistantships include a stipend, a tuition fellowship, and waiver of out-of-state fees. Applications are taken continuously. See Graduate Coordinator for information and application. (See also Bulletin section on Graduate School, "Assistantships and Fellowships.") Students awarded assistantships must complete all semesters of study in residence at the University of South Alabama. More information about assistantships is available from the Office of the Dean of the Graduate School, Mobile Townhouse 222, University of South Alabama, Mobile, AL 36688-0002.

### **Degree Requirements**

The Master of Fine Arts in Creative Technologies and Practice degree is awarded in recognition of the student's demonstrated ability to create original, creative research at the highest levels without extensive supervision. The degree is not granted solely upon completion of a stated amount of course work, but rather after the student demonstrates and defends a body of work or presentation of a major project in a public exhibition.

### **General Required Credit**

A minimum of 60 semester hours of approved graduate credit is required. Details about the curriculum are given below.

### **Transfer Credit**

Graduate courses taken at another accredited university, such as for students with MA degrees in the same (or a closely related) subject as that of the M.F.A. program, may be considered in the M.F.A. plan of study up to a maximum of 12 semester hours. Only grades of "A" or "B" may be accepted as transfer credit. The graduate coordinator, in consultation with the Chair, and if necessary, the advisory committee, will evaluate transfer credit; the transfer credit is approved by the Dean of the Graduate School only after completion of a minimum of nine semester hours of graduate course work in the masters program at USA.

### **Residency Requirements**

A minimum of four semesters of study in residence is required. The residency requirement must be met at USA.

The final two semesters of study may be completed as low residency. The low residency requirement obligates each student to visit the USA main campus two to three times during each semester of low residency.

If a student plans on completing his/her final two semesters in residency elsewhere the student must meet the following by February 1 of his/her second year:

No one with an assistantship will be able to apply for the final year to be held in low residency.

1. The student must have internet access and a computer or phone on which to video chat weekly with primary thesis advisor, having virtual studio tours.
2. The student must provide proof of access to a facility where they can create and obtain suitable studio space in which to work.
3. The student must have the ability to transport the work to the University of South Alabama main campus.
4. The student's thesis show must be on the University of South Alabama main campus.
5. The student must have the ability to travel during the weeks specified for both semesters.
6. The student must be on campus for a thesis review during the first full week of classes during the Fall Semester and once again during the last week of October or the first full week of November. In the Spring Semester the student must be on campus three times: once during the first full week of class, the second time will be the week before spring break, and the third time will be at the end of the semester to hang and present his/her thesis show.
7. The student must be available per the faculty's schedule.



# Courses

ACC Accounting.....	845	GIT Geographic Info Technology.....	992
AHN Adult Health Nursing.....	847	GEO Geography.....	993
AFR African-American Studies.....	854	GY Geology.....	996
AS Air Force Studies.....	854	GRN Gerontology.....	998
AHP Allied Health Professions.....	855	GIS Grad Interdisciplinary Studies.....	999
AN Anthropology.....	856	HPE HPE Graduate.....	1000
MUA Applied Music A.....	858	HI Health Informatics.....	1001
MUB Applied Music B.....	862	HSC Health Sciences.....	1002
ARG Argument.....	865	HS Health and Safety.....	1003
AED Art Education.....	865	HED Higher Education.....	1005
ARH Art History.....	866	HY History.....	1005
ARS Art Studio.....	868	HON Honors Interdiscipln Studies.....	1011
AUD Audiology.....	873	HTM Hospitality/Tourism Management.....	1011
BCH Biochemistry - MD.....	875	ISC Information Systems.....	1014
BLY Biology.....	876	ITE Information Technology.....	1018
BMD Biomedical Sciences.....	885	ISD Instructional Systems Design.....	1020
BUS Business.....	888	IDE Interdepartmental Education.....	1023
CRC Cardiorespiratory Care.....	890	IDL Interdepartmental Studies.....	1025
CP Career Planning.....	891	IDS Interdisciplinary Programs.....	1026
CBN Cell Biology and Neuroscience.....	892	IST Interdisciplinary Studies.....	1027
CHE Chemical Engineering.....	892	IS International Studies.....	1029
CH Chemistry.....	895	LTE Leadership and Teacher Educ.....	1030
CE Civil Engineering.....	900	LS Leisure Studies.....	1030
CLA Classics.....	905	LNG Linguistics.....	1081
CCP Clinical/Counseling Psychology.....	906	MGT Management.....	1033
COE Co-op.....	907	MAS Marine Sciences.....	1037
CAS College of Arts and Sciences.....	908	MKT Marketing.....	1043
CMN Commun Mental Health Nursing.....	908	MBA Master of Bus Administration.....	1045
CA Communication.....	912	MCN Maternal Child Nursing.....	1045
CSD Communication Sciences-Disordr.....	920	MA Mathematics.....	1052
CSC Computer Science.....	921	MTH Mathematics for College.....	1059
CIS Computer and Inform Sciences.....	926	ME Mechanical Engineering.....	1059
CED Counselor Education.....	929	MET Meteorology.....	1065
CJ Criminal Justice.....	932	MIC Microbiology/Immunology -MD.....	1068
DS Developmental Studies.....	934	MS Military Science.....	1069
DRA Drama.....	934	MUM Museum Studies.....	1070
ES Earth Sciences.....	937	MUE Music Education.....	1070
ECO Economics.....	937	MUL Music Literature.....	1073
EDU Education-K-6 and 6-12 Teacher.....	939	MUO Music Organization.....	1074
EDF Educational Foundations.....	943	MUS Music Studio.....	1078
EDL Educational Leadership.....	945	MUT Music Theory.....	1080
EDM Educational Media.....	949	NSE Natural Science Education.....	1081
EPY Educational Psychology.....	950	NU Nursing.....	1082
EE Electrical Engineering.....	952	OT Occupational Therapy.....	1090
EEC Elementary-Early Childhood.....	961	PE PE-Activity Courses.....	1094
EMS Emergency Medical Services.....	964	PHA Pharmacology.....	1098
EMT Emergency Medical Training.....	969	PHL Philosophy.....	1099
EG Engineering.....	969	PT Physical Therapy.....	1102
EH English.....	970	PA Physician Assistant Studies.....	1106
ELT English Language Teaching.....	979	PH Physics.....	1111
ESL English as a Second Language.....	980	PHS Physiology.....	1114
EXT Environmental Toxicology.....	981	PSC Political Science.....	1115
FIN Finance.....	981	PSY Psychology.....	1119
LGS Foreign Language Lesser Taught.....	984	RAD Radiologic Sciences.....	1123
LG Foreign Languages and Lit.....	986	RED Reading Instruction.....	1128
GS Gender Studies.....	992	REL Religion.....	1130



- ACC 461 Acc for Gov and Not-For-Profit 3 cr**  
A study of the concepts and procedures underlying fund accounting, budgetary control, and financial reporting requirements for governmental and not-for-profit entities. Pre-requisite: ACC 314 Minimum Grade of C or ACC 372 Minimum Grade of C
- ACC 490 Sp Top- 3 cr**  
Designed to provide senior students an opportunity to study selected topics of particular interest. A student may count no more than six hours of Special Topics in the concentration. Prerequisite: Approval of Department Chair.
- ACC 494 Dir St in Accounting 3 cr**  
Primarily designed to give superior students an opportunity to study some phase of accounting of particular interest. Conferences, a bibliography, and a formal research report are required. Requires permission of Department Chair, 2.5 GPA or better and junior or senior standing.
- ACC 496 Accounting Internship 3 cr**  
The internship program is designed to give students practical experience in their field of study. Students complete directed projects under the supervision of Department Chair. No more than three hours of internship credit may be counted toward a degree in the Mitchell College of Business. Prerequisites: Junior or Senior standing, declared major in accounting, overall GPA of at least 2.5, and Internship Agreement signed by department Chair. Pre-requisite: ACC 314 Minimum Grade of C or ACC 372 Minimum Grade of C
- ACC 498 Accounting Internship II 3 cr**  
The Internship experience is designed to give students practical experience in their field of study. Students complete directed learning experiences under the supervision of the Department Chair. Prerequisites: Junior or Senior standing, declared major in accounting, overall GPA of at least 2.5 and internship agreement signed by the Department Chair. Pre-requisite: ACC 496 Minimum Grade of P
- ACC 511 Financial Accounting Theory 3 cr**  
The evolution of general accounting theory leading up to and including the Conceptual Framework will be discussed as well as the specific theory underlying certain accounting topics of current interest.
- ACC 521 Advanced Managerial Accounting 3 cr**  
Advanced managerial and cost accounting topics. Tools for planning and control, development of cost information for decision making, cost allocation, inventory management systems, capital budgeting, performance measurement, transfer pricing and multi-national considerations.
- ACC 531 Tax Planning and Research 3 cr**  
An examination of tax research tools, their utilization, and various tax planning considerations. Students are required to conduct research and tax planning upon assigned topics, and write a report on their findings.
- ACC 532 Tax Partnerships/Corporations 3 cr**  
An examination of the federal tax treatment of partnerships and corporations. Topics include: tax aspects of the formation of the entity, elements of gross income, treatment of property dispositions, allowable deductions and credits, determination of entity and investor basis, and liquidation of the entity.
- ACC 534 Tax of Gifts, Trusts & Estates 3 cr**  
An examination of the federal tax treatment of gratuitous transfers made during life and at death.
- ACC 535 Multi Tax 3 cr**  
This course addresses the increased importance of international and multi-jurisdictional taxation in today's global environment. It introduces students to the principles guiding nexus, geographic allocation of income and the avoidance of double taxation. The course helps students develop an understanding of the U.S. tax rules that may apply to income involving the U.S. and other countries. It also helps students understand multistate tax rules. Students will develop an understanding of the tax implications resulting from business that is conducting electronically. Students will apply multi-jurisdictional tax principles and rules to solve case studies.
- ACC 541 Advanced Accounting Systems 3 cr**  
Analysis of accounting information system case studies in order to expose students to real-world system problems and applications. Course work includes hands-on work with a variety of computer-based accounting application packages.
- ACC 552 Advanced Auditing 3 cr**  
Advanced study of the application of Auditing Standards; internal control evaluations; applications of statistics; audits of EDP systems; internal and operational auditing, ethical, legal and reporting obligations.
- ACC 561 Acc of Government and NFPE 3 cr**  
A study of the concepts and procedures underlying fund accounting, budgetary control, and financial reporting requirements for governmental and not-for-profit entities.
- ACC 571 Professional Accounting 3 cr**  
A capstone course study of contemporary issues and responsibilities relevant to the accounting profession, including ethical, legal and international considerations.
- ACC 572 Fraud Ex 3 cr**  
Overview of the nature of occupational fraud and how it is committed included an introduction to the actions that can be taken to determine the presence of occupational fraud and procedures that can be implemented to deter fraud. Students will also learn how financial statement fraud and reporting occur, including investigation and financial fraud prevention techniques.

**ACC 590 Special Topics 3 cr**

Designed to provide graduate students an opportunity to study selected topics. Prerequisites: Permission of Department Chair. A student may count no more than three hours of Special Topics in the MBA degree program.

**ACC 594 Independent Study in Account 3 cr**

Readings and research on selected topics. Conference and formal research report required. Permission of department chair.

**Adult Health Nursing (AHN)****AHN 347 Adult Health Nursing I 3 cr**

Provides the opportunity to analyze theories, concepts, research, issues and trends in caring for adults with basic and commonly occurring health care needs. Content includes internal and external environmental factors affecting the health of adults with basic and commonly occurring health care needs. Emphasis is on the role of the professional nurse in health promotion and maintenance, illness care, and rehabilitation of adults.

Co-requisite: AHN 348

Pre-requisite: NU 327 Minimum Grade of C and (NU 211 Minimum Grade of C or NU 300 Minimum Grade of C) and NU 325 Minimum Grade of C and (NU 221 Minimum Grade of C or NU 301 Minimum Grade of C) and HSC 342 Minimum Grade of C and (HSC 243 Minimum Grade of C or HSC 343 Minimum Grade of C)

**AHN 348 Adult Health Nsg Clinical I 3 cr**

Clinical practice course in adult health nursing. The focus is on application of theories, concepts, research, issues and trends in caring for adults with basic and commonly occurring health care needs. Emphasis is on the role of the professional nurse and on the use of the nursing process with adults experiencing basic and commonly occurring health care needs and their families.

Co-requisite: AHN 347

Pre-requisite: NU 327 Minimum Grade of C and NU 325 Minimum Grade of C and (NU 211 Minimum Grade of C or NU 300 Minimum Grade of C) and (NU 221 Minimum Grade of C or NU 301 Minimum Grade of C) and HSC 342 Minimum Grade of C and (HSC 243 Minimum Grade of C or HSC 343 Minimum Grade of C)

**AHN 447 Adult Gerontological Nursing 5 cr**

Synthesize theories, concepts, research, issues and trends in caring for adult gerontological population with complex multisystem health care needs. Emphasis is on the role of the professional nurse in health promotion and maintenance, illness care, and rehabilitation of adult gerontological population in a variety of acute and community settings.

Co-requisite: AHN 448

Pre-requisite: CMN 350 Minimum Grade of C and CMN 351 Minimum Grade of C and MCN 347 Minimum Grade of C and MCN 348 Minimum Grade of C

**AHN 448 Adult Gerontological Nsg Clin 4 cr**

The focus of this course is the application of theories, concepts, evidence, issues and trends in caring for adult gerontological population experiencing complex multisystem health care needs. Emphasis is on the role of the professional nurse and on the use of the nursing process with adult gerontological population experiencing complex multisystem health care needs and their families.

Co-requisite: AHN 447

Pre-requisite: CMN 350 Minimum Grade of C and CMN 351 Minimum Grade of C and MCN 347 Minimum Grade of C and MCN 348 Minimum Grade of C

**AHN 516 CNS Adult Geron Pract I 3 cr**

The purpose of this precepted practicum course is to provide students an immersion experience in the CNS role with adult and geriatric populations in the promotion of health and wellness across the lifespan from early adult to the frail elderly. The focus of the course is to develop the CNS's ability to assimilate and apply evidence based information in the design, implementation and evaluation of nursing care activities, nursing practice standards and norms, and influencing organizations to support the delivery of nursing care and achievement of optimal health outcomes for a specified population. The emphasis of course is on the patient and nurses and nursing practice spheres. The student should participate in activities that include direct interactions with patients and families to promote health and well-being, consultation and with disciplines, coaching of patient, families and nurses, development of evidenced based policies, guidelines, or protocols; guiding the education of other nursing personnel to improve patient outcomes; and implementing practices that improve quality and promote cost-effective outcomes.

Co-requisite: NU 515

**AHN 517 CNS Adult Geron Pract II 3 cr**

The purpose of this precepted practicum course is to provide students an immersion experience in the CNS role in early adult to the frail elderly populations with acute health problems in a selected area of nursing practice. The focus of the course is to develop the CNS's ability to assimilate and apply evidence based information in the design, implementation and evaluation of nursing care activities, nursing practice standards and norms, and influencing organizations to support the delivery of nursing care and achievement of optimal health outcomes for a specified population. The emphasis of the course is on the patient, nurses, and nursing practice spheres. The student should participate in activities that include direct interactions with patients and families to promote health and well-being, consultation and with disciplines, coaching of patient, families and nurses, development of evidenced based policies, guidelines, or protocols; guiding the education of other nursing personnel to improve patient outcomes; and implementing practices that improve quality and promote cost-effective outcomes.

Co-requisite: NU 516

**AHN 518 CNS Adult Geron Pract III 3 cr**

The purpose of this precepted capstone course is to provide students an immersion experience in the CNS role with adult and geriatric populations experiencing chronic health problems and exacerbations of chronic health problems in a selected area of nursing practice. The focus of the course is to develop the CNS' s ability to assimilate and apply evidence based information in the design, implementation and evaluation of nursing care activities, nursing practice standards and norms, and influencing organizations to support the delivery of nursing care and achievement of optimal health outcomes for a specified population. The emphasis of course is on patients, nurses and nursing practice, and the organization/system sphere. The student should participate in activities that include the direct care of patients, development of evidenced based policies, guidelines, or protocols; guiding the education of other nursing personnel to improve patient outcomes; and implementing practices that improve quality and promote cost-effective outcomes.

Co-requisite: NU 517

Pre-requisite: NU 516 Minimum Grade of C and AHN 517 Minimum Grade of C and NU 607 Minimum Grade of C and NU 613 Minimum Grade of C and NU 610 Minimum Grade of C

**AHN 530 Found Palliative Care/Adv Role 2 cr**

This didactic course prepares the Adult-Gerontological with Palliative Care Specialty student a forum for the evaluation of issues and trends encountered by the DNP in palliative care. Students learn to coordinate and develop primary and palliative health care programs for individuals and populations across the adult lifespan. Emphasis is on critical analysis and management of issues by the DNP in an interdisciplinary health care delivery system.

**AHN 531 Adv Palliative Cr/End of Life 2 cr**

This course provides students an in-depth study of the health care management for patients seeking palliative and end of life care. Emphasis is on the interaction among health care providers and psychological/spiritual care of the patient and family.

Pre-requisite: AHN 530 Minimum Grade of C

**AHN 532 Adv Chronic Illness Care 2 cr**

This course provides a study of the illness trajectories of chronic diseases that are among the leading causes of death in our society. Assessment and management of the illnesses as well as associated pain and symptoms will be examined. The focus is assisting patients, families, and other health professionals anticipate/prevent/reduce adverse symptoms from life threatening illnesses to maximize quality of life.

Pre-requisite: AHN 531 Minimum Grade of C

**AHN 533 Adv Palliative Care Practicum 1 TO 9 cr**

This course provides preceptor and faculty a facilitated experience in which students have the opportunity to become proficient at providing comprehensive care to patients with life threatening, progressive illness by engaging in holistic assessment of pain and quality of life in a variety of settings. Advanced knowledge of palliative/end of life care will be integrated into assessing and managing the complex psychological, ethical, social, spiritual issues, and grief reactions while working as a member of a palliative care team.

Pre-requisite: AHN 532 Minimum Grade of C

**AHN 538 HPDP Dual Role (FNP/AGACNP) 2 cr**

This didactic course prepares the Advanced Emergency Nursing (Family NP/Adult-Gerontological Acute Care Dual Role) student to identify and implement appropriate and culturally sensitive health promotion, health protection, and disease prevention strategies across the lifespan for clients in emergency, urgent, and ambulatory care settings. Emphasis is on health promotion, health protection, and disease prevention with strategic planning at the primary, secondary, and tertiary levels. Effective strategies for life-style behavioral changes will also be evaluated.

Pre-requisite: AHN 550 Minimum Grade of C

**AHN 548 Family Prim Care NP I 4 cr**

The purpose of this didactic course is to prepare Advanced Emergency Nursing (Family Nurse Practitioner/Adult-Gerontological Acute Care Nurse Practitioner Dual Role) students to assess, diagnose, and manage selected health care needs of women and childbirth, infants, children, and families in a caring, competent manner. Emphasis is placed on (1) synthesis and application of nursing and related theories and scientific knowledge to the development of differential/nursing diagnoses as a basis for health promotion and management; (2) wellness and the pathophysiology and epidemiology underlying acute and chronic health problems; and (3) collaboration and communication among health care providers in a culturally diverse environment. The focus is on the advanced practice nursing of individuals and families in primary healthcare settings.

Co-requisite: AHN 549

Pre-requisite: NU 518 Minimum Grade of C and NU 545 Minimum Grade of C

**AHN 549 Family Prim Care NP Prac I 4 cr**

The purpose of this practicum course is to provide opportunities for Advanced Emergency Nursing (Family Nurse Practitioner/Adult-Gerontological Acute Care Nurse Practitioner Dual Role) students to apply concepts from AHN 548 in selected clinical settings. The emphasis is on culturally competent delivery of health care, diagnostic reasoning, and decision making/critical thinking through communication and collaboration. The focus is continued refinement of cognitive and clinical skills needed to provide comprehensive health assessments, diagnoses, and management of selected health care needs of women and childbirth, infants, children, and families in primary healthcare settings.

Co-requisite: AHN 548

**AHN 550 Family Prim Care NP II 4 cr**

This didactic course prepares the Advanced Emergency Nursing (Family NP/Adult-Gerontological Dual Role) student to identify and implement appropriate and culturally sensitive health promotion and disease prevention strategies across the lifespan for clients in emergency, urgent, and ambulatory care settings. Emphasis is placed on health promotion and disease prevention with strategic planning at the primary, secondary, and tertiary levels. Prevention, early diagnosis, prompt treatment, and in-depth patient education will be emphasized. Effective strategies for life-style behavioral changes will also be evaluated.

Co-requisite: AHN 551

Pre-requisite: NU 578 Minimum Grade of C and AHN 548 Minimum Grade of C

**AHN 551 Family Prim Care NP Pract II 5 cr**

The purpose of this course is to provide a preceptor and faculty facilitated experience for Advanced Emergency Nursing (Family NP/Adult-Gerontological Acute Care Dual Role) students to practice within an advanced nursing framework. The focus is on the role of the Family Nurse Practitioner in the health care management of children, adults, and families in primary health care settings with the application and synthesis of knowledge and skills acquired from AHN 550 and previous courses. Emphasis is on leadership, professionalism, and collaboration with other health care providers in a culturally diverse environment.

Co-requisite: AHN 550

**AHN 552 Adult-Geron Acute Care NP I 4 cr**

The purpose of this course is to prepare Advanced Emergency Nursing (Family Nurse Practitioner/Adult-Gerontological Acute Care Nurse Practitioner Care Dual Role) students to assess, diagnose, and manage selected health care needs of young and older adults across the wellness-illness continuum in a caring, competent manner. Emphasis is placed on (1) synthesis of theoretical, scientific, and contemporary clinical knowledge used to develop differential diagnoses as a basis for health promotion, disease prevention, and management; (2) wellness and the pathophysiology and epidemiology underlying complex acute, critical, and chronic illness, disability, and/or injury; and (3) collaboration using appropriate processes for patient-centered, quality care in a culturally diverse system. The focus is on advanced practice nursing with the entire adult-older adult age spectrum and families in emergency, urgent, and ambulatory settings.

Co-requisite: AHN 553

Pre-requisite: AHN 538 Minimum Grade of C and AHN 549 Minimum Grade of C and AHN 551 Minimum Grade of C and NU 607 Minimum Grade of C and NU 608 Minimum Grade of C

**AHN 553 Adult-Ger Acute Care NP Prac I 4 cr**

The purpose of this practicum course is to provide opportunities for Advanced Emergency Nursing (Family NP/Adult-Gerontological Acute Care Dual Role) students to apply concepts from AHN 552 in selected clinical settings. Emphasis is on critical thinking, diagnostic reasoning, differential diagnosis, communication, and collaboration in a culturally diverse system. The focus is refinement of cognitive and clinical skills needed to provide competent patient-centered care to young adults, adults, and older adults across the wellness-illness continuum with acute, critical and chronic illness, disability, and/or injury in emergency, urgent, and ambulatory care settings.

Co-requisite: AHN 552

**AHN 554 Adult-Geron Acute Care NP II 4 cr**

The purpose of this didactic course is to (1) provide the Advanced Emergency Nursing (Family NP/Adult-Gerontological Acute Care Dual Role) student with an in-depth study of the health care management of young adults, adults, and older adults across the wellness-illness continuum and to (2) provide a forum for the critical analysis and evaluation of issues and trends encountered by the Adult-Gerontology Acute Care Nurse Practitioner in an interdisciplinary health care delivery system. Emphasis is on leadership and professionalism in a culturally diverse system. The focus is on ensuring quality, patient-centered care of the adult-older adult population with selected complex acute, critical and chronic illness, disability, and/or injury to improve health outcomes in emergency, urgent, and ambulatory settings.

Co-requisite: AHN 555

Pre-requisite: AHN 552 Minimum Grade of C and NU 610 Minimum Grade of C and NU 613 Minimum Grade of C

**AHN 555 Adlt-Ger Acute Care NP Prac II 5 cr**

The purpose of this practicum course is to provide a preceptor and faculty facilitated experience for Advanced Emergency Nursing (Family NP/Adult-Gerontological Acute Care Dual Role) students to practice within an advanced nursing framework by synthesizing and applying the knowledge and skills required in AHN 554 and previous courses. Emphasis is on leadership, professionalism, and collaboration in a culturally diverse system. The focus is on implementing the role of the Adult-Gerontology Acute Care Nurse Practitioner in the health care management of young adults, adults, and older adults across the wellness-illness continuum with acute, critical and chronic illness, disability, and/or injury in emergency, urgent, and ambulatory health care settings.

Co-requisite: AHN 554

**AHN 568 Intro to Adult-Geron Acute NP 3 cr**

The purpose of this first didactic course is to prepare the Adult Geron Acute Care Nurse Practitioner students to assess, diagnose, and manage selected health care needs of adults and children. Emphasis is placed on synthesis and application of nursing and related theories and scientific knowledge to the development of differential/ nursing diagnoses as a basis for health promotion and management.

Co-requisite: AHN 571

Pre-requisite: NU 545 Minimum Grade of C and NU 518 Minimum Grade of C

**AHN 571 HPDP Adult-Geron Acute Care NP 2 cr**

The purpose of this didactic course is to prepare the Adult Geron Acute Care Nurse Practitioner student to identify and implement appropriate health promotion and disease prevention strategies across the lifespan. The focus is on the advanced practice nursing of individuals and families in primary care settings. Emphasis is placed on health promotion/disease prevention with strategic planning at the primary, secondary and tertiary levels of prevention. Various issues are explored pertinent to the advanced practice role.

Co-requisite: AHN 568

**AHN 572 Adult-Geron Acute NP I 3 cr**

The purpose of this didactic course is to prepare Adult Geron Acute Care Nurse Practitioner students to assess, diagnose, and manage selected health care needs of adults. The focus is on advanced practice nursing with adults and families in primary and acute care settings. Emphasis is placed on the wellness and the pathophysiology and epidemiology underlying acute and chronic health problems.

Co-requisite: AHN 573

Pre-requisite: AHN 568 Minimum Grade of C and NU 578 Minimum Grade of C

**AHN 573 Adult-Gerone Acute NP Prac I 4 cr**

The purpose of this practicum course is to provide opportunities for students to apply concepts in select clinical settings. Focus is on adults and families in primary and acute care settings. The emphasis is on diagnostic reasoning and decision making/critical thinking.

Co-requisite: AHN 572

**AHN 574 Adult-Geron Acute NP II 3 cr**

The purpose of this course is provide an in-depth study of the health care management of the Adult Geron Acute Care patient. Emphasis is on the interaction among health care providers in a culturally diverse environment.

Co-requisite: AHN 575

Pre-requisite: AHN 572 Minimum Grade of C

**AHN 575 Adult-Geron Acute NP Prac II 2 cr**

The purpose of this course is to provide an opportunity for the Adult Acute Care Nurse Practitioner student to practice within an advanced nursing framework. The focus is on the role of the advanced practice nurse in the health care management of adults. Emphasis is on collaboration with other health care providers in a culturally diverse environment.

Co-requisite: AHN 574

**AHN 576 Adv Adlt-Ger Act Cr NP Prac IV 3 cr**

The purpose of this culminating course is to provide a preceptor and faculty facilitated experience in the Adult Geron Acute Care Nurse Practitioner role. The focus is on the application and synthesis of knowledge and skills acquired in all previous courses.

Co-requisite: AHN 577

Pre-requisite: NU 607 Minimum Grade of C

**AHN 577 Adv Adlt/Geron Act Cr Nsg IV 3 cr**

The purpose of this course is to provide a forum for the evaluation of issues and trends encountered in advanced adult gerontological acute care nursing. Emphasis is on a critical analysis and management of issues by the Adult Geron Acute Care Nurse Practitioner in an interdisciplinary health care delivery system.

Co-requisite: AHN 576

Pre-requisite: NU 607 Minimum Grade of C and NU 608 Minimum Grade of C and NU 610 Minimum Grade of C and NU 613 Minimum Grade of C

**AHN 581 HP/DP Adlt-Geron Prim Care NP 2 cr**

The purpose of this didactic course is to prepare the Adult-Gerontological Primary Care Nurse Practitioner nursing student with a knowledge base for identifying and implementing appropriate health promotion and disease prevention strategies with older adults. The focus is on advanced practice nursing of adults and older adults in multiple health care settings. Emphasis is placed on health promotion/disease prevention and related health issues with strategic planning at the primary, secondary, and tertiary levels of prevention. Various issues are explored which are pertinent to the advanced practice role.

Co-requisite: AHN 588

**AHN 588 Intro to Adult-Geron Prim NP 2 cr**

The purpose of this course is to expand the Adult-Geron Primary Care Nurse Practitioner student's knowledge and skills for obtaining, recording, and analyzing a systemic health assessment of the adult and older adult. Emphasis is placed on synthesis and application of nursing and related theories and scientific knowledge to the development of differential/nursing diagnoses as a basis for health promotion and management.

Co-requisite: AHN 581

Pre-requisite: NU 545 Minimum Grade of C and NU 518 Minimum Grade of C

**AHN 591 Adult-Geron Prim NP I 2 cr**

This didactic course prepares the Adult-Geron Primary Care Nurse Practitioner student to assess, diagnose, and manage selected health care needs of culturally diverse adult and well and frail geriatric populations. The focus is on the advanced practice nursing of adults and their families in a variety of health care settings. Emphasis is placed on wellness, the pathophysiology and epidemiology underlying acute and chronic health problems with a focus on the unique health care needs of elders.

Co-requisite: AHN 592

Pre-requisite: AHN 588 Minimum Grade of C and NU 578 Minimum Grade of C

**AHN 592 Adlt-Geron Primary NP Pract I 4 cr**

The purpose of this practicum course is to provide opportunities for Adult-Geron Primary Care Nurse Practitioner students to apply concepts from AHN 591 in primary and acute care settings with adults and families experiencing health concerns. This clinical course will offer clinical hours for targeting adult health and gerontological health issues. Students will divide clinical hours between young adults, middle aged adults, and elders.

Co-requisite: AHN 591

**AHN 593 Adult-Gero Prim NP II 3 cr**

The purpose of this course is to provide the Advanced Adult-Geron Primary Care Nurse Practitioner student an in-depth study of health care management of adults, well and frail elders, and their families within the framework of advanced nursing. The focus is on selected acute and chronic complex health care problems. Emphasis is on the interaction among health care providers in a culturally diverse environment.

Co-requisite: AHN 594

Pre-requisite: AHN 591 Minimum Grade of C

**AHN 594 Adult-Geron Prim NP Prac II 2 cr**

The purpose of this course is to provide opportunity for the Adv Adult-Geron Primary Care Nurse Practitioner student to practice within an advanced nursing framework. The focus is on the role of the advanced practice nurse in the health care management of adult and geriatric patients with physical and psychiatric-mental health concerns. Emphasis is on collaboration with other health care providers in a culturally diverse environment. This clinical course will offer experience with diverse populations including young and middle aged adults and elders in a variety of settings.

Co-requisite: AHN 593

**AHN 595 Adv Adult-Gero Prim Care NP IV 2 cr**

The purpose of this course is to provide a forum for the evaluation of issues and trends encountered in adult and gerontological nursing care. Emphasis is on critical analysis and management of issues by the Advanced Adult-Geron Primary Care Nurse Practitioner in an interdisciplinary health care delivery system.

Co-requisite: AHN 596

Pre-requisite: AHN 593 Minimum Grade of C and NU 607 Minimum Grade of C and NU 608 Minimum Grade of C and NU 610 Minimum Grade of C and NU 613 Minimum Grade of C

**AHN 596 Adv Adl-Ger Prim Cr NP Prac IV 3 cr**

The purpose of this culminating course is to provide a preceptor- and faculty facilitated experience in the Advanced Adult-Geron Primary Care Nurse Practitioner role. The focus is the application and synthesis of knowledge and skills acquired in all previous courses. Students will have clinical experiences with all ages of adults and elders in a variety of settings.

Co-requisite: AHN 595

Pre-requisite: NU 607 Minimum Grade of C

**AHN 604 Adult-Geron Acute Care NP PP&D 3 cr**

This course assists the Adult-Gerontological Acute Care Nurse Practitioner DNP student to learn the processes embedded in developing a doctoral synthesis project. The course will address all aspects of project planning and development as a preliminary step to the Adult-Gerontological Acute Care Nurse Practitioner students' selection of a topic or phenomenon of interest for the project and will incorporate well-built questions, search strategies and outcomes, identification of resources needed, plan for evaluation and dissemination.



**AHN 632 Diag & Mgmt of Acute CVD 2 cr**

The third of four cardiovascular specialization courses provides an in-depth study of the health care management of the acute cardiac patient. Emphasis is on patient diagnosis and management to include assessment, diagnostic procedures, treatment and pharmacological management to individuals with acute cardiovascular disorders. Particular attention will be given to the impact of cultural diversity and population based healthcare on cardiovascular health disparities in a culturally diverse environment.

Pre-requisite: AHN 631 Minimum Grade of C

**AHN 633 Dig/Mgmt Complex CV Disorders 2 cr**

The fourth cardiovascular specialization course provides an in-depth study of the health care management of the patient with complex cardiovascular disorders. Emphasis is patient diagnosis and management to include assessment, diagnostic procedures, treatment and pharmacological management to individuals with complex cardiovascular disorders. Particular attention will be given to the impact of cultural diversity and population based healthcare on cardiovascular health disparities in a culturally diverse environment.

Pre-requisite: AHN 632 Minimum Grade of C

**AHN 634 Adult-Geron CNS Proj Plan/Dev 3 cr**

This course assists the Adult-Gerontological Clinical Nurse Specialist DNP student to learn the processes embedded in developing a doctoral synthesis project. The course will address all aspects of project planning development as a preliminary step to the Adult-Gerontological Clinical Nurse Specialist students' selection of a topic or phenomenon of interest for the project and will incorporate well-built questions, search strategies and outcomes, identification of resources needed, plan for evaluation and dissemination.

**AHN 635 Adult-Geron CNS Residency I 3 cr**

Theories of leadership, motivation, power, and change are used to influence change in health care organizations. This course will implement evidence-based clinical models and evaluate their effectiveness in health outcomes. The Adult-Gerontological Clinical Nurse Specialist student will synthesize, critique, and apply evidence to support quality clinical or organizational practices. In this mentored and supervised experience, the Adult-Gerontological Clinical Nurse Specialist student will work with the primary faculty advisor to complete projects and advance their selected practice area. The Adult-Gerontological Clinical Nurse Specialist student will have access to and authority for expanded scope of practice to master the DNP competences. Residency sites will depend upon the Adult-Gerontological Clinical Nurse Specialist student's career trajectory and approval by collaborating faculty. During the residency semester, student must participate in scheduled scholarly seminars online. A total of 180 clinical hours of direct practice/management is required.

Pre-requisite: AHN 634 Minimum Grade of C

**AHN 636 Adult-Geron CNS Residency II 3 cr**

Provides Adult-Gerontological Clinical Nurse Specialist students the opportunity to fully express all DNP competencies. The Adult-Gerontological Clinical Nurse Specialist student, guided by the faculty facilitator, will implement the scholarly doctoral system's change project. Pre-requisite: AHN 635 Minimum Grade of C

**AHN 637 Adult-Geron CNS Residency III 3 cr**

Final course in residency series as Adult-Gerontological Clinical Nurse Specialist student continues to implement and evaluate project plan. Provides Adult-Gerontological Clinical Nurse Specialist student the opportunity to fully express all DNP competencies. The Adult-Gerontological Clinical Nurse Specialist student, guided by the core faculty and advisor completes quality improvement evidence-based system's change project.

Pre-requisite: AHN 636 Minimum Grade of C

**AHN 692 AHN DNP Project Progression 3 cr**

Students will register for this course to complete residency course work under supervision of faculty. Students must remain continuously enrolled until all residency requirements are completed.

Pre-requisite: AHN 618 Minimum Grade of C or AHN 695 Minimum Grade of C or NU 618 Minimum Grade of C or AHN 636 Minimum Grade of C or AHN 663 Minimum Grade of C or AHN 658 Minimum Grade of C

**AHN 693 Adult-Geron Primary Cr NP PP&D 3 cr**

This course assists the Adult-Geron Primary Care Nurse Practitioner student to learn the processes embedded in developing a doctoral synthesis project. The course will address all aspects of project planning and development as a preliminary step to the Adult-Geron Primary Care Nurse Practitioner students' selection of a topic or phenomenon of interest for the project and will incorporate well-built questions, search strategies and outcomes, identification of resources needed, plan for evaluation and dissemination.

**AHN 694 Adult-Gero Primary Cr NP Res I 3 cr**

Theories of leadership, motivation, power, and change are used to influence change in health care organizations. This course will implement evidence-based clinical models and evaluate their effectiveness in health outcomes. The Adult-Geron Primary Care Nurse Practitioner student will synthesize, critique, and apply evidence to support quality clinical or organizational practices. In this mentored and supervised experience, the Adult-Geron Primary Care Nurse Practitioner student will work with the primary faculty advisor to complete projects and advance their selected practice area. The Adult-Geron Primary Care Nurse Practitioner student will have access to and authority for expanded scope of practice to master the DNP competencies. Residency sites will depend upon the Adult-Geron Primary Care Nurse Practitioner student's career trajectory and approval by collaborating faculty. During the residency semester, student must participate in scheduled scholarly seminars online. Clinical hours of direct practice/management is required.

Pre-requisite: AHN 693 Minimum Grade of C

**AHN 695 Adlt-Gero Primary Cr NP Res II 3 cr**

Provides Adult-Geron Primary Care Nurse Practitioner students the opportunity to fully express all DNP competencies. The Adult-Geron Primary Care Nurse Practitioner student, guided by the faculty facilitator, will implement the scholarly doctoral system's change project.

Pre-requisite: AHN 694 Minimum Grade of C

**AHN 696 Adlt-Gero Prim Care NP Res III 3 cr**

Final course in residency series as Adult-Geron Primary Care Nurse Practitioner student continues to implement and evaluate project plan. Provides Adult-Geron Primary Care Nurse Practitioner student the opportunity to fully express all DNP competencies. The Adult-Geron Primary Care Nurse Practitioner student, guided by the core faculty and advisor completes quality improvement evidence-based system's change project.

Pre-requisite: AHN 695 Minimum Grade of C

## African-American Studies (AFR)

**AFR 101 Intro to African Amer Studies 3 cr**

An interdisciplinary investigation of the origins, experiences, conditions, accomplishments and contributions of people of African ancestry in the United States.

## Air Force Studies (AS)

**AS 101L Foundation of USAF I Lab 0 cr**

Provides an introduction to the military profession, including applications in leadership, drill and ceremony, customs and courtesies and community service.

Co-requisite: AS 101

**AS 102L Foundation of USAF II Lab 0 cr**

Provides an introduction to the military profession, including applications in leadership, drill and ceremony, customs and courtesies and community service.

Co-requisite: AS 102

**AS 201L Evolution of USAF I Lab 0 cr**

Provides an introduction to the military profession, including applications in leadership, drill and ceremony, customs and courtesies and community service.

Co-requisite: AS 201

**AS 202L Evolution of USAF II Lab 0 cr**

Provides an introduction to the military profession, including applications in leadership, drill and ceremony, customs and courtesies and community service.

Co-requisite: AS 202

**AS 301L AF Leadership Studies I Lab 0 cr**

Provides an introduction to the military profession, including applications in leadership, drill and ceremony, customs and courtesies and community service.

Co-requisite: AS 301

**AS 302L Air Force Ldrshp Studies I Lab 0 cr**

Provides an introduction to the military profession, including applications in leadership, drill and ceremony, customs and courtesies and community service.

Co-requisite: AS 302

**AS 401L Ntl Sec Affairs & Prep I Lab 0 cr**

Provides an introduction to the military profession, including applications in leadership, drill and ceremony, customs and courtesies and community service.

Co-requisite: AS 401

**AS 402L Natl Sec Affairs & Prep Lab 0 cr**

Provides an introduction to the military profession, including applications in leadership, drill and ceremony, customs and courtesies and community service.

Co-requisite: AS 402

**AS 101 Foundations of USAF I 1 cr**

AS 101 is a survey course designed to introduce students to the United States Air Force and encourage participation in Air Force Reserve Officer Training Corps. Featured topics include: overview of ROTC, special programs offered through ROTC, mission and organization of the Air Force, brief history of the Air Force, introduction to leadership and leadership related issues, Air Force Core Values, Air Force officer opportunities, and an introduction to communication studies. Leadership Laboratory is mandatory for AFROTC cadets and complements this course by providing cadets with followership experiences.

Co-requisite: AS 101L

**AS 102 Foundations of USAF II 1 cr**

AS 102 is a survey course designed to introduce students to the United States Air Force and encourage participation in Air Force Reserve Officer Training Corps. Featured topics include: overview of ROTC, special programs offered through ROTC, mission and organization of the Air Force, brief history of the Air Force, introduction to leadership and leadership related issues, Air Force Core Values, Air Force officer opportunities, and an introduction to communication studies. Leadership Laboratory is mandatory for AFROTC cadets and complements this course by providing cadets with followership experiences.  
Co-requisite: AS 102L

**AS 201 Evolution of USAF A&S Power I 1 cr**

AS 201 is designed to examine general aspects of air and space power through a historical perspective. Utilizing this perspective, the course covers a time period from the first balloons/dirigibles to the Korean Conflict. Historical examples are provided to extrapolate the development of Air Force distinctive capabilities (core competencies), and missions (functions) to demonstrate the evolution of what has become today's USAF air and space power. Furthermore, the course examines several fundamental truths associated with war in the third dimension: e.g., Principles of War and Tenets of Air and Space Power. The students will also complete several writing and briefing assignments to meet Air Force communication skills requirements.  
Co-requisite: AS 201L

**AS 202 Evolution of USAF A&S Power II 1 cr**

AS 202 is designed to examine general aspects of air and space power through a historical perspective, covering a period from the Korean Conflict to the space-age systems of the Global War on Terror. Historical examples are provided to extrapolate the development of Air Force distinctive capabilities (core competencies), and missions (functions) to demonstrate the evolution of what has become today's USAF air and space power. Furthermore, the course examines several fundamental truths associated with war in the third dimension e.g. Principles of War and Tenets of Air and Space Power. The students will also complete several writing and briefing assignments to meet Air Force communication skills requirement.  
Co-requisite: AS 202L

**AS 301 USAF Leadership Studies I-W 3 cr**

AS 301 is a study of leadership, management fundamentals, professional knowledge, Air Force personnel and evaluation systems, leadership ethics, and communication skills required of an Air Force junior officer. Case studies are used to examine Air Force leadership and management situations as a means of demonstrating and exercising practical application of the concepts being studied. A mandatory Leadership Laboratory complements this course by providing advanced leadership experiences in officer-type activities, giving students the opportunity to apply leadership and management principles of this course.  
Co-requisite: AS 301L

**AS 302 USAF Leadership Studies II 3 cr**

AS 302 is a study of leadership, management fundamentals, professional knowledge, Air Force personnel and evaluation systems, leadership ethics, and communication skills required of an Air Force junior officer. Case studies are used to examine Air Force leadership and management situations as a means of demonstrating and exercising practical application of the concepts being studied. A mandatory Leadership Laboratory complements this course by providing advanced leadership experiences in officer-type activities, giving students the opportunity to apply leadership and management principles of this course.  
Co-requisite: AS 302L

**AS 401 Ntl Security Affairs & Prep I 3 cr**

AS 401 examines the national security process, regional studies, advanced leadership ethics, and Air Force doctrine. Special topics of interest focus on the military as a profession, 'officership', military justice, civilian control of the military, preparation for active duty, and current issues affecting military professionalism. Within this structure, continued emphasis is given to refining communication skills.  
Co-requisite: AS 401L

**AS 402 Ntl Security Affairs & Prep II 3 cr**

Course examines the national security process, regional studies, advanced leadership ethics, and Air Force doctrine. Special topics of interest focus on the military as a profession, officership, military justice, civilian control of the military, preparation for active duty, and current issues affecting military professionalism. Within this structure, continued emphasis is given to refining communication skills.  
Co-requisite: AS 402L

**AS 494 Directed Study - 1 TO 3 cr**

Students will receive individual instructor guidance and may prepare a formal report/research paper on some aspect of Air Force Studies or other assignments as determined by instructor. Course may be repeated for a total of 3 credit hours.

## Allied Health Professions (AHP)

**AHP 101 Freshman Sem in Allied Health 2 cr**

A course for first-time students that assists with maximizing the student's potential to achieve academic success and to adjust responsibly to the individual and interpersonal challenges presented by college life. Taught in small groups, the course provides an introduction to the nature of higher education with special emphasis on health-related disciplines. Appropriate reading and writing assignments will be required.

**AHP 510 IPE Autism Spectrum Disorders 1 cr**

This foundational course is designed to prepare graduate students in OT, PT, SLP, MD and ED to provide high-quality services to individuals with autism spectrum disorder and other developmental disabilities. The emphasis will be on interprofessional education using team-based instruction to support effective interprofessional practice in both educational and health care settings. **ADDITIONAL RESTRICTION:** Students can only be enrolled following successful application and admission. Contact the course instructor for information on application.

**Anthropology (AN)****AN 121L Biological Anthropology Lab 1 cr**

The lab section of this course is designed to provide a more in-depth understanding of biological anthropology through a variety of exercises and hands-on learning opportunities. Topics covered parallel those in lecture (AN 121) and include evolutionary theory, living primates, primate origins, human evolution, and modern human variation. Co-requisite: AN 121

**AN 100 Intro to Cultural Anthropology 3 cr**

Introduces culture as a set of integrated behaviors and meanings learned in a social environment. Explores the diversity of human cultural practices in terms of kinship, gender, religion, subsistence, and politics. Language is emphasized as the means by which culture is transmitted from one generation to the next.

**AN 101 Intro Archaeology-Bio Anthro 3 cr**

The place of people in nature; the origin, development, and differentiation of people as biological organisms; archaeological evidence of early human cultures; basic concepts and principles for understanding human cultures. Introduces students to the topics of evolution, genetics, and primates and integrates cultural aspects associated with early human development. The fundamental orientation and methods of archaeology are introduced and an overview of world prehistory presented.

**AN 121 Biological Anthropology 3 cr**

This course covers the topics of human evolution and modern human variation, focusing on humanity's biological roots and modern appearance. To understand our present physical and social condition, we must understand our evolutionary past. This course discusses our place within the mammalian evolutionary lineage, evolutionary theory, population genetics, primate behavior, human evolution, and modern human variation. Co-requisite: AN 121L

**AN 190 Special Topics - 3 cr**

Different topics of anthropological importance will be studied as announced. This course may be taken twice for credit when content varies, but not for more than six credits.

**AN 200 Language and Culture 3 cr**

Brief introduction to descriptive and structural linguistics, language universals, classification and processes of change in language, language and thought, social cultural factors as expressed in language, origin of language, child language and non-verbal communication.

Pre-requisite: AN 100 Minimum Grade of D or AN 101 Minimum Grade of D

**AN 250 Forensic Anthropology 3 cr**

This course will introduce students to the field of forensic anthropology. Specifically, it will survey the basic methods employed by forensic anthropologists to recover and analyze human skeletal remains, including the construction of a biological profile and the analysis of skeletal trauma.

**AN 290 Special Topics - 1 TO 3 cr**

Different topics of anthropological importance will be studied as announced. This course may be taken twice for credit when content varies, but not for more than 6 credits. Prerequisites: AN 100 or AN 101 or permission of instructor. Pre-requisite: AN 100 Minimum Grade of D or AN 101 Minimum Grade of D

**AN 300 Thinking Anthropologically 1 cr**

This one-credit hour course is designed to expose anthropology majors to important applied concepts in our field, with a particular emphasis on scientific literacy and professional development. Through short lectures, guided activities, facilitated discussions, and student presentations, this course will help our majors identify and engage in practical skills to enhance their success as students as well as in their chosen post-graduation career paths. Pre-requisite: AN 100 Minimum Grade of C and AN 101 Minimum Grade of C and AN 121 Minimum Grade of C and AN 121L Minimum Grade of C

**AN 305 Arch Method and Theory 3 cr**

The theoretical basis of archaeology, and the various methods used to discover and interpret the human past from material evidence. Pre-requisite: AN 100 Minimum Grade of D or AN 101 Minimum Grade of D

**AN 313 New World Archaeology 3 cr**

The evolution of Native American cultures, from the first arrival of humans across the Bering Straits land bridge to the European settlement of the New World. Pre-requisite: AN 100 Minimum Grade of D or AN 101 Minimum Grade of D

**AN 335 Field Work in Archaeology 4 cr**

Archaeological field and laboratory techniques include excavation, site survey, artifact processing and analysis. Fee. Pre-requisite: AN 101 Minimum Grade of D

- AN 340 Native American Cultures-W** 3 cr  
An ethnographic and ethnohistorical survey of native cultures of North America, including historical and modern groups, with an emphasis on Indians of the Southeast. Pre-requisite: AN 100 Minimum Grade of D or AN 101 Minimum Grade of D
- AN 342 Applied Anthropology** 3 cr  
Issues surrounding theory and method of applied anthropology. Presentation and analysis of case studies concerning problems in areas such as development, both domestic and in foreign settings, community health, homelessness, drug and alcohol abuse, and others. Prerequisites: AN 100 or permission of instructor. Pre-requisite: AN 100 Minimum Grade of D
- AN 347 Latin Amer Cultures-Societies** 3 cr  
A survey of Latin American society and culture from the pre-contract period to the present. Pre-Columbian antecedents, colonial use of land and labor, patterns of race, class and ethnicity, and problems of development are examined. Prerequisite: AN 100 or permission of instructor. Pre-requisite: AN 100 Minimum Grade of D
- AN 355 Gender and Anthropology** 3 cr  
This course provides an introduction to anthropological themes and debates in gender theory, including an ethnographic survey of women and men in a variety of cultures. Prerequisites: AN 100 or permission of instructor. Pre-requisite: AN 100 Minimum Grade of D
- AN 357 Political Anthropology** 3 cr  
Authority, power, and conflict are examined cross-culturally and in evolutionary perspective. Particular emphasis is placed on the origins of stratification and the state. Pre-requisite: AN 100 Minimum Grade of D
- AN 358 Economic Anthropology** 3 cr  
An evolutionary survey of production and exchange in diverse societies. Considers the applicability of western economic theory to nonmarket economies, as well as their transformation by global capitalism. Pre-requisite: AN 100 Minimum Grade of D
- AN 365 Human Osteology** 3 cr  
This hands-on course focuses on the identification of the bones of the human skeleton and its application to specialties within biological anthropology, including bioarchaeology and forensic anthropology. Topics to be covered include human skeletal and dental anatomy, skeletal growth and development, skeletal pathology and anomalies, and the biological profile. Pre-requisite: AN 210 Minimum Grade of B or AN 250 Minimum Grade of B
- AN 370 Human Origins and Evolution** 3 cr  
This lecture, discussion, and lab-based seminar will examine the fossil, genetic, and archaeological evidence for human evolution - from the origins of primates to anatomically modern humans - with particular attention given to our hominid ancestors. Students will learn about the nature and timing of these developments, current theoretical models used to explain such changes, and the implications of these evolutionary trends for understanding modern human adaptations. Important fossil sites and associated material culture will also be used to provide insight into hominid biocultural behavior. Students must take AN 121/L (formerly AN 210/L) as a prerequisite for this course, or receive permission of the instructor. Pre-requisite: AN 210 Minimum Grade of C and AN 210L Minimum Grade of C or AN 121 Minimum Grade of C and AN 121L Minimum Grade of C
- AN 394 Directed Studies -** 1 TO 3 cr  
Supervised readings or projects. No more than a total of six hours may be taken for credit. Requires prior approval of instructor. Pre-requisite: AN 100 Minimum Grade of D or AN 101 Minimum Grade of D
- AN 435 Museum Methods in Archaeology** 3 cr  
Archaeology as practiced in museums, including the registration and curation of archaeological collections; artifact conservation; public interpretation of the past; and exhibit design, composition, construction, and evaluation. Pre-requisite: AN 100 Minimum Grade of D or AN 101 Minimum Grade of D
- AN 440 Adv Archaeological Field Meth** 4 cr  
This course involves participant instruction in archaeological field and laboratory techniques, including advanced excavation and survey methods, soils analysis, site mapping with electronic instruments, sampling strategy, and site interpretation. Requires permission of instructor.
- AN 442 Cultural Resource Management** 3 cr  
This course examines the interaction between archaeologists, architectural historians, historic preservationists, state and federal governments, and the public with regard to cultural resources. The focus of the course is identification, evaluation, and mitigation of cultural resources. Related topics discussed include public perceptions of the past, ethics, and being a professional in historical preservation.
- AN 454 Anthropological Theory - W** 3 cr  
An advanced historical survey of anthropological ideas, with primary emphasis on contemporary theoretical orientations and debates. Examines anthropology's often contested status as a science or humanity. Pre-requisite: AN 100 Minimum Grade of D

**AN 470 Bioarchaeology - W 3 cr**

This class introduces students to the field of bioarchaeology, the study of human remains in archaeological contexts. Through lectures, readings, activities, and discussions, students will examine how skeletal remains are used to reconstruct life in the past, including patterns of subsistence, diet, disease, demography, biological relatedness, and physical activity.

Pre-requisite: AN 250 Minimum Grade of B or AN 365 Minimum Grade of B

**AN 490 Special Topics - 3 cr**

Different topics of anthropological importance will be studied as announced. This 3 hour course may be repeated for credit as long as the content varies up to a maximum of 6 credit hours. Requires junior or senior standing; or permission of instructor.

Pre-requisite: (AN 100 Minimum Grade of D or AN 101 Minimum Grade of D)

**AN 492 Senior Seminar - 3 cr**

Course specifically designed for majors in their senior year. Some topical aspect of the discipline will be analyzed.

Pre-requisite: AN 100 Minimum Grade of D or AN 101 Minimum Grade of D

**AN 496 Anthropology Internship 3 TO 6 cr**

Provides an opportunity to combine academic principles with practical experiences in an agency dealing with human relationships, cultural resources, or primate research.

Specifics of the assignment result from mutual agreement among student, course director and agency. Course may be repeated for a maximum of six hours of credit. Requires advanced standing in Anthropology major and permission of course instructor. Fee.

**AN 498 Senior Thesis 3 cr**

With the guidance and advice of a faculty mentor, student will identify and carry out an in-depth, year-long, field research project in anthropology. The Senior Thesis will be judged and graded by a committee of three faculty, chaired by the faculty mentor. This course will be repeated to continue the thesis during a second semester. This is a 3 hour course that is expected to be repeated once for a total of six hours. Must be an Anthropology major; senior status; permission of a faculty mentor through an AN 394 Directed Studies course taken during the junior year.

Pre-requisite: AN 394 Minimum Grade of D

**AN 499 Honors Senior Thesis - H 3 cr**

With the guidance and advice of a faculty mentor, honors students will identify and carry out an in-depth, year-long field research project in anthropology. The Honors Senior Thesis will be judged and graded by a committee of three faculty, chaired by the faculty mentor. This is a 3 hour course that can be repeated once for a total of six hours. Must be an Anthropology major; senior status; permission of a faculty mentor; grade point average of 3.5; and completion of a thesis prospectus prepared in consultation with the faculty mentor through an AN 394 Directed Studies course taken during the junior year.

Pre-requisite: AN 394 Minimum Grade of D

**AN 535 Museum Methods in Archaeology 3 cr**

Archaeology as practiced in museums, including the registration and curation of archaeological collections; artifact conservation; public interpretation of the past; and exhibit design, composition, construction, and evaluation.

**AN 542 Adv. Cultural Resource Mgmt. 3 cr**

This course examines the interaction between archaeologists, architectural historians, historic preservationists, state and federal governments, and the public with regard to cultural resources. The focus of the course is identification, evaluation, and mitigation of cultural resources. Related topics discussed include public perceptions of the past, ethics, and being a professional in historical preservation.

**AN 594 Directed Studies - 1 TO 3 cr**

Field or library projects through which special interests of the student may be pursued on a tutorial basis with a graduate faculty member. Arrangements must be made prior to registration. Permission of the Department Chair is required.

## Applied Music A (MUA)

**MUA 100 Recital Class 0 cr**

A convocation required each term of all full-time music majors meeting each week in laboratory session to hear performances, perform, and discuss performing techniques, plus ten evening public programs. Six semesters of successful participation required for graduation with adjustments for transfer students.

**MUA 101 Piano - Elective 1 cr**

Private study at the elective level

**MUA 102 Piano - Elective 2 cr**

Private study at the elective level.

**MUA 111 Organ - Elective 1 cr**

Private study at the elective level.

**MUA 112 Organ - Elective 2 cr**

Private study at the elective level.

<b>MUA 124 Group Applied - Elective Voice</b> 1 cr Applied voice lessons taught in groups of 4, consisting of individual instruction in technique and performance. Two 1-hour sessions per week TBA (MW or TR). This course is for non-majors. Majors and minors in music should take other applied courses. Special fee applies. Prerequisite: Admission by audition. Registration through the Department of Music.		<b>MUA 221 Voice Major-Lower Division</b> 1 cr Private study at the secondary level.	
<b>MUA 131 Violin - Elective</b> 1 cr Private study at the elective level.		<b>MUA 222 Voice Major-Lower Division</b> 2 cr Private study at the secondary level.	
<b>MUA 132 Violin - Elective</b> 2 cr Private study at the elective level.		<b>MUA 231 Violin Major-Lower Division</b> 1 cr Private study at the secondary level.	
<b>MUA 141 Viola - Elective</b> 1 cr Private study at the elective level.		<b>MUA 232 Violin Major-Lower Division</b> 2 cr Private study at the secondary level.	
<b>MUA 142 Viola - Elective</b> 2 cr Private study at the elective level.		<b>MUA 241 Viola Major-Lower Division</b> 1 cr Private study at the secondary level.	
<b>MUA 151 Violoncello - Elective</b> 1 cr Private study at the elective level.		<b>MUA 242 Viola Major-Lower Division</b> 2 cr Private study at the secondary level.	
<b>MUA 152 Violoncello - Elective</b> 2 cr Private study at the elective level.		<b>MUA 251 Violoncello Major-Lower Div</b> 1 cr Private study at the secondary level.	
<b>MUA 161 String Bass - Elective</b> 1 cr Private study at the elective level.		<b>MUA 252 Violoncello Major-Lower Div</b> 2 cr Private study at the secondary level.	
<b>MUA 162 String Bass - Elective</b> 2 cr Private study at the elective level.		<b>MUA 261 String Bass Major-Lower Div</b> 1 cr Private study at the secondary level.	
<b>MUA 171 Harp - Elective</b> 1 cr Private study at the elective level.		<b>MUA 262 String Bass Major-Lower Div</b> 2 cr Private study at the secondary level.	
<b>MUA 172 Harp - Elective</b> 2 cr Private study at the elective level.		<b>MUA 271 Harp Major-Lower Division</b> 1 cr Private study at the secondary level.	
<b>MUA 181 Guitar - Elective</b> 1 cr Private study at the elective level.		<b>MUA 272 Harp Major-Lower Division</b> 2 cr Private study at the secondary level.	
<b>MUA 182 Guitar - Elective</b> 2 cr Private study at the elective level.		<b>MUA 281 Guitar Major-Lower Division</b> 1 cr Private study at the secondary level.	
<b>MUA 186 Percussion - Elective</b> 1 cr Private study at the elective level.		<b>MUA 282 Guitar Major-Lower Division</b> 2 cr Private study at the secondary level.	
<b>MUA 187 Percussion - Elective</b> 2 cr Private study at the elective level.		<b>MUA 286 Percussion Major-Lower Div</b> 1 cr Private study at the secondary level.	
<b>MUA 201 Piano Major-Lower Division</b> 1 cr Private study at the secondary level.		<b>MUA 287 Percussion Major-Lower Div</b> 2 cr Private study at the secondary level.	
<b>MUA 202 Piano Major-Lower Division</b> 2 cr Private study at the secondary level.		<b>MUA 300 Junior Recital</b> 0 cr Performance concentration junior recital. To be taken with a 400 level applied music course.	
<b>MUA 211 Organ Major-Lower Division</b> 1 cr Private study at the secondary level.		<b>MUA 301 Piano Major-Upper Division</b> 1 cr Private study at the concentration level.	
<b>MUA 212 Organ Major-Lower Division</b> 2 cr Private study at the secondary level.		<b>MUA 302 Piano Major-Upper Division</b> 2 cr Private study at the concentration level.	
		<b>MUA 311 Organ Major-Upper Division</b> 1 cr Private study at the concentration level.	
		<b>MUA 312 Organ Major-Upper Division</b> 2 cr Private study at the concentration level.	

<b>MUA 321 Voice Major-Upper Division</b> Private study at the concentration level.	<b>1 cr</b>	<b>MUA 411 Organ Major-Performance</b> Private study at the major level	<b>1 cr</b>
<b>MUA 322 Voice Major-Upper Division</b> Private study at the concentration level.	<b>2 cr</b>	<b>MUA 412 Organ Major-Performance</b> Private study at the major level	<b>2 cr</b>
<b>MUA 331 Violin Major-Upper Division</b> Private study at the concentration level.	<b>1 cr</b>	<b>MUA 413 Organ Major-Performance</b> Private study at the major level	<b>3 cr</b>
<b>MUA 332 Violin Major-Upper Division</b> Private study at the concentration level.	<b>2 cr</b>	<b>MUA 421 Voice Major-Performance</b> Private study at the major level	<b>1 cr</b>
<b>MUA 341 Viola Major-Upper Division</b> Private study at the concentration level.	<b>1 cr</b>	<b>MUA 422 Voice Major-Performance</b> Private study at the major level	<b>2 cr</b>
<b>MUA 342 Viola Major-Upper Division</b> Private study at the concentration level.	<b>2 cr</b>	<b>MUA 423 Voice Major-Performance</b> Private study at the major level	<b>3 cr</b>
<b>MUA 351 Violoncello Major-Upper Div</b> Private study at the concentration level.	<b>1 cr</b>	<b>MUA 431 Violin Major-Performance</b> Private study at the major level	<b>1 cr</b>
<b>MUA 352 Violoncello Major-Upper Div</b> Private study at the concentration level.	<b>2 cr</b>	<b>MUA 432 Violin Major-Performance</b> Private study at the major level	<b>2 cr</b>
<b>MUA 361 String Bass Major-Upper Div</b> Private study at the concentration level.	<b>1 cr</b>	<b>MUA 433 Violin Major-Performance</b> Private study at the major level	<b>3 cr</b>
<b>MUA 362 String Bass Major-Upper Div</b> Private study at the concentration level.	<b>2 cr</b>	<b>MUA 441 Viola Major-Performance</b> Private study at the major level	<b>1 cr</b>
<b>MUA 371 Harp Major-Upper Division</b> Private study at the concentration level.	<b>1 cr</b>	<b>MUA 442 Viola Major-Performance</b> Private study at the major level	<b>2 cr</b>
<b>MUA 372 Harp Major-Upper Division</b> Private study at the concentration level.	<b>2 cr</b>	<b>MUA 443 Viola Major-Performance</b> Private study at the major level	<b>3 cr</b>
<b>MUA 381 Guitar Major-Upper Division</b> Private study at the concentration level.	<b>1 cr</b>	<b>MUA 451 Violoncello Major-Performance</b> Private study at the major level	<b>1 cr</b>
<b>MUA 382 Guitar Major-Upper Division</b> Private study at the concentration level.	<b>2 cr</b>	<b>MUA 452 Violoncello Major-Performance</b> Private study at the major level	<b>2 cr</b>
<b>MUA 386 Percussion Major-Upper Div</b> Private study at the concentration level.	<b>1 cr</b>	<b>MUA 453 Violoncello Major-Performance</b> Private study at the major level	<b>3 cr</b>
<b>MUA 387 Percussion Major-Upper Div</b> Private study at the concentration level.	<b>2 cr</b>	<b>MUA 461 String Bass Major-Performance</b> Private study at the major level	<b>1 cr</b>
<b>MUA 400 Senior Recital</b> The Senior Recital provides a culminating performance experience of professional quality required of all concentrations of Bachelor of Music students. Committee approval needed to pass the course. To be taken in conjunction with the appropriate 300 or 400 level applied music course.	<b>0 cr</b>	<b>MUA 462 String Bass Major-Performance</b> Private study at the major level	<b>2 cr</b>
<b>MUA 401 Piano Major-Performance</b> Private study in Piano at the major level	<b>1 cr</b>	<b>MUA 463 String Bass Major-Performance</b> Private study at the major level	<b>3 cr</b>
<b>MUA 402 Piano Major-Performance</b> Private study at the major level	<b>2 cr</b>	<b>MUA 471 Harp Major-Performance</b> Private study at the major level	<b>1 cr</b>
<b>MUA 403 Piano Major-Performance</b> Private study at the major level	<b>3 cr</b>	<b>MUA 472 Harp Major-Performance</b> Private study at the major level	<b>2 cr</b>
		<b>MUA 473 Harp Major-Performance</b> Private study at the major level	<b>3 cr</b>

<b>MUA 481 Guitar Major-Performance</b>	<b>1 cr</b>	<b>MUA 511 Organ</b>	<b>1 cr</b>
Private study at the major level		Private study at the graduate level.	
<b>MUA 482 Guitar Major-Performance</b>	<b>2 cr</b>	<b>MUA 512 Organ</b>	<b>2 cr</b>
Private study at the major level		Private study at the graduate level.	
<b>MUA 483 Guitar Major-Performance</b>	<b>3 cr</b>	<b>MUA 513 Organ</b>	<b>3 cr</b>
Private study at the major level		Private study at the graduate level.	
<b>MUA 486 Percussion Major-Performance</b>	<b>1 cr</b>	<b>MUA 521 Voice</b>	<b>1 cr</b>
Private study at the major level		Private study at the graduate level.	
<b>MUA 487 Percussion Major-Performance</b>	<b>2 cr</b>	<b>MUA 522 Voice</b>	<b>2 cr</b>
Private study at the major level		Private study at the graduate level.	
<b>MUA 488 Percussion Major-Performance</b>	<b>3 cr</b>	<b>MUA 523 Voice</b>	<b>3 cr</b>
Private study at the major level		Private study at the graduate level.	
<b>MUA 500 Graduate Recital</b>	<b>1 cr</b>	<b>MUA 531 Violin</b>	<b>1 cr</b>
Graduate recital. To be taken in conjunction with a 500-level applied music course.		Private study at the graduate level.	
<b>MUA 501 Piano</b>	<b>1 cr</b>	<b>MUA 532 Violin</b>	<b>2 cr</b>
Private study at the graduate level.		Private study at the graduate level.	
<b>MUA 502 Piano</b>	<b>2 cr</b>	<b>MUA 533 Violin</b>	<b>3 cr</b>
Private study at the graduate level.		Private study at the graduate level.	
<b>MUA 503 Piano</b>	<b>3 cr</b>	<b>MUA 541 Viola</b>	<b>1 cr</b>
Private study at the graduate level.		Private study at the graduate level.	
<b>MUA 507 Applied Collaborative Piano</b>	<b>1 cr</b>	<b>MUA 542 Viola</b>	<b>2 cr</b>
The Director for Collaborative Keyboard studies will meet with the student enrolled in Applied Collaborative Piano to assign literature, which will be studied during the semester. For MUA 507, the student meets with the instructor 30 minutes each week to study vocal music and at least 1 collaborative assignment with strings, winds or brass. The goal of the course is to learn standard repertoire for piano with voice and various instruments.		Private study at the graduate level.	
<b>MUA 508 Applied Collaborative Piano</b>	<b>2 cr</b>	<b>MUA 543 Viola</b>	<b>3 cr</b>
The Director for Collaborative Keyboard studies will meet with the student enrolled in Applied Collaborative Piano to assign literature, which will be studied during the semester. For MUA 508, the student meets with the instructor 60 minutes each week to study vocal music and collaborates with at least 2 different instrument types (string, woodwinds, brass). The goal of the course is to learn standard repertoire for piano with voice and various instruments.		Private study at the graduate level.	
<b>MUA 509 Applied Collaborative Piano</b>	<b>3 cr</b>	<b>MUA 551 Violoncello</b>	<b>1 cr</b>
The Director for Collaborative Keyboard studies will meet with the student enrolled in Applied Collaborative Piano to assign literature, which will be studied during the semester. For MUA 509, the student meets with the instructor 60 minutes each week to study vocal music and collaborates with 3 different instrument types (string, woodwinds, brass). The goal of the course is to learn standard repertoire for piano with voice and various instruments.		Private study at the graduate level.	
		<b>MUA 552 Violoncello</b>	<b>2 cr</b>
		Private study at the graduate level.	
		<b>MUA 553 Violoncello</b>	<b>3 cr</b>
		Private study at the graduate level.	
		<b>MUA 561 String Bass</b>	<b>1 cr</b>
		Private study at the graduate level.	
		<b>MUA 562 String Bass</b>	<b>2 cr</b>
		Private study at the graduate level.	
		<b>MUA 563 String Bass</b>	<b>3 cr</b>
		Private study at the graduate level.	
		<b>MUA 581 Guitar</b>	<b>1 cr</b>
		Private study at the graduate level.	
		<b>MUA 582 Guitar</b>	<b>2 cr</b>
		Private study at the graduate level.	
		<b>MUA 583 Guitar</b>	<b>3 cr</b>
		Private study at the graduate level.	

<b>MUA 586 Percussion</b> Private study at the graduate level.	<b>1 cr</b>	<b>MUB 172 Trombone - Elective</b> Private study at the elective level.	<b>2 cr</b>
<b>MUA 587 Percussion</b> Private study at the graduate level.	<b>2 cr</b>	<b>MUB 181 Baritone-Euphonium - Elective</b> Private study at the elective level.	<b>1 cr</b>
<b>MUA 588 Percussion</b> Private study at the graduate level.	<b>3 cr</b>	<b>MUB 182 Baritone-Euphonium - Elective</b> Private study at the elective level.	<b>2 cr</b>
<b>MUA 599 Curr, Ped &amp; Instrct Techniques</b> This is an integrated study concentrating on the following subjects: literature, pedagogy, studio performance and master class. Studies focus on pedagogy, both private and group teaching methods, and instructional techniques grounded in research.	<b>2 cr</b>	<b>MUB 186 Tuba - Elective</b> Private study at the elective level.	<b>1 cr</b>
		<b>MUB 187 Tuba - Elective</b> Private study at the elective level.	<b>2 cr</b>
		<b>MUB 201 Flute Major-Lower Division</b> Private study at the secondary level.	<b>1 cr</b>
		<b>MUB 202 Flute Major-Lower Division</b> Private study at the secondary level.	<b>2 cr</b>
		<b>MUB 211 Oboe Major-Lower Division</b> Private study at the secondary level.	<b>1 cr</b>
		<b>MUB 212 Oboe Major-Lower Division</b> Private study at the secondary level.	<b>2 cr</b>
		<b>MUB 221 Clarinet Major-Lower Division</b> Private study at the secondary level.	<b>1 cr</b>
		<b>MUB 222 Clarinet Major-Lower Division</b> Private study at the secondary level.	<b>2 cr</b>
		<b>MUB 231 Bassoon Major-Lower Division</b> Private study at the secondary level.	<b>1 cr</b>
		<b>MUB 232 Bassoon Major-Lower Division</b> Private study at the secondary level.	<b>2 cr</b>
		<b>MUB 241 Saxophone Major-Lower Division</b> Private study at the secondary level.	<b>1 cr</b>
		<b>MUB 242 Saxophone Major-Lower Division</b> Private study at the secondary level.	<b>2 cr</b>
		<b>MUB 251 Trumpet-Cornet Major-Lower Div</b> Private study at the secondary level.	<b>1 cr</b>
		<b>MUB 252 Trumpet-Cornet Major-Lower Div</b> Private study at the secondary level.	<b>2 cr</b>
		<b>MUB 261 French Horn Major - Lower Div</b> Private study at the secondary level.	<b>1 cr</b>
		<b>MUB 262 French Horn Major - Lower Div</b> Private study at the secondary level.	<b>2 cr</b>
		<b>MUB 271 Trombone Major-Lower Division</b> Private study at the secondary level.	<b>1 cr</b>
		<b>MUB 272 Trombone Major-Lower Division</b> Private study at the secondary level.	<b>2 cr</b>

## Applied Music B (MUB)

<b>MUB 101 Flute Elective</b> Private study at the elective level.	<b>1 cr</b>
<b>MUB 102 Flute Elective</b> Private study at the elective level.	<b>2 cr</b>
<b>MUB 111 Oboe - Elective</b> Private study at the elective level.	<b>1 cr</b>
<b>MUB 112 Oboe - Elective</b> Private study at the elective level.	<b>2 cr</b>
<b>MUB 121 Clarinet - Elective</b> Private study at the elective level.	<b>1 cr</b>
<b>MUB 122 Clarinet - Elective</b> Private study at the elective level.	<b>2 cr</b>
<b>MUB 131 Bassoon - Elective</b> Private study at the elective level.	<b>1 cr</b>
<b>MUB 132 Bassoon - Elective</b> Private study at the elective level.	<b>2 cr</b>
<b>MUB 141 Saxophone-Elective</b> Private study at the elective level.	<b>1 cr</b>
<b>MUB 142 Saxophone-Elective</b> Private study at the elective level.	<b>2 cr</b>
<b>MUB 151 Trumpet-Cornet Elective</b> Private study at the elective level.	<b>1 cr</b>
<b>MUB 152 Trumpet-Cornet Elective</b> Private study at the elective level.	<b>2 cr</b>
<b>MUB 161 French Horn - Elective</b> Private study at the elective level.	<b>1 cr</b>
<b>MUB 162 French Horn - Elective</b> Private study at the elective level.	<b>2 cr</b>
<b>MUB 171 Trombone - Elective</b> Private study at the elective level.	<b>1 cr</b>

<b>MUB 281 Baritone-Euphonium Maj-Low Div</b> 1 cr Private study at the secondary level.	<b>MUB 382 Baritone-Euphonium Maj-Upp Div</b> 2 cr Private study at the concentration level.
<b>MUB 282 Baritone-Euphonium Maj-Low Div</b> 2 cr Private study at the secondary level.	<b>MUB 386 Tuba-Major Upper Division</b> 1 cr Private study at the concentration level.
<b>MUB 286 Tuba Major - Lower Division</b> 1 cr Private study at the secondary level.	<b>MUB 387 Tuba-Major Upper Division</b> 2 cr Private study at the concentration level.
<b>MUB 287 Tuba Major - Lower Division</b> 2 cr Private study at the secondary level.	<b>MUB 401 Flute Major-Performance</b> 1 cr Private study at the major level.
<b>MUB 301 Flute Major-Upper Division</b> 1 cr Private study at the concentration level.	<b>MUB 402 Flute Major-Performance</b> 2 cr Private study at the major level.
<b>MUB 302 Flute Major-Upper Division</b> 2 cr Private study at the concentration level.	<b>MUB 403 Flute Major-Performance</b> 3 cr Private study at the major level.
<b>MUB 311 Oboe Major-Upper Division</b> 1 cr Private study at the concentration level.	<b>MUB 411 Oboe Major-Performance</b> 1 cr Private study at the major level.
<b>MUB 312 Oboe Major-Upper Division</b> 2 cr Private study at the concentration level.	<b>MUB 412 Oboe Major-Performance</b> 2 cr Private study at the major level.
<b>MUB 321 Clarinet Major-Upper Division</b> 1 cr Private study at the concentration level.	<b>MUB 413 Oboe Major-Performance</b> 3 cr Private study at the major level.
<b>MUB 322 Clarinet Major-Upper Division</b> 2 cr Private study at the concentration level.	<b>MUB 421 Clarinet Major-Performance</b> 1 cr Private study at the major level.
<b>MUB 331 Bassoon Major-Upper Division</b> 1 cr Private study at the concentration level.	<b>MUB 422 Clarinet Major-Performance</b> 2 cr Private study at the major level.
<b>MUB 332 Bassoon Major-Upper Division</b> 2 cr Private study at the concentration level.	<b>MUB 423 Clarinet Major-Performance</b> 3 cr Private study at the major level.
<b>MUB 341 Saxophone-Major Upper Division</b> 1 cr Private study at the concentration level.	<b>MUB 431 Bassoon Major-Performance</b> 1 cr Private study at the major level.
<b>MUB 342 Saxophone-Major Upper Division</b> 2 cr Private study at the concentration level.	<b>MUB 432 Bassoon Major-Performance</b> 2 cr Private study at the major level.
<b>MUB 351 Trumpet-Cornet Major-Upper Div</b> 1 cr Private study at the concentration level.	<b>MUB 433 Bassoon Major-Performance</b> 3 cr Private study at the major level.
<b>MUB 352 Trumpet-Cornet Major-Upper Div</b> 2 cr Private study at the concentration level.	<b>MUB 441 Saxophone-Major Performance</b> 1 cr Private study at the major level.
<b>MUB 361 French Horn-Major Upper Div</b> 1 cr Private study at the concentration level.	<b>MUB 442 Saxophone-Major Performance</b> 2 cr Private study at the major level.
<b>MUB 362 French Horn-Major Upper Div</b> 2 cr Private study at the concentration level.	<b>MUB 443 Saxophone-Major Performance</b> 3 cr Private study at the major level.
<b>MUB 371 Trombone-Major Upper Division</b> 1 cr Private study at the concentration level.	<b>MUB 451 Trumpet-Cornet-Major Perform</b> 1 cr Private study at the major level.
<b>MUB 372 Trombone-Major Upper Division</b> 2 cr Private study at the concentration level.	<b>MUB 452 Trumpet-Cornet-Major Perform</b> 2 cr Private study at the major level.
<b>MUB 381 Baritone-Euphonium Maj-Upp Div</b> 1 cr Private study at the concentration level.	<b>MUB 453 Trumpet-Cornet-Major Perform</b> 3 cr Private study at the major level.

<b>MUB 461 French Horn-Major Performance</b>	<b>1 cr</b>	<b>MUB 531 Bassoon</b>	<b>1 cr</b>
Private study at the major level.		Private study at the graduate level.	
<b>MUB 462 French Horn-Major Performance</b>	<b>2 cr</b>	<b>MUB 532 Bassoon</b>	<b>2 cr</b>
Private study at the major level.		Private study at the graduate level.	
<b>MUB 463 French Horn-Major Performance</b>	<b>3 cr</b>	<b>MUB 533 Bassoon</b>	<b>3 cr</b>
Private study at the major level.		Private study at the graduate level.	
<b>MUB 471 Trombone-Major Performance</b>	<b>1 cr</b>	<b>MUB 541 Saxophone</b>	<b>1 cr</b>
Private study at the major level.		Private study at the graduate level.	
<b>MUB 472 Trombone-Major Performance</b>	<b>2 cr</b>	<b>MUB 542 Saxophone</b>	<b>2 cr</b>
Private study at the major level.		Private study at the graduate level.	
<b>MUB 473 Trombone-Major Performance</b>	<b>3 cr</b>	<b>MUB 543 Saxophone</b>	<b>3 cr</b>
Private study at the major level.		Private study at the graduate level.	
<b>MUB 481 Baritone-Euphonium-Maj Perform</b>	<b>1 cr</b>	<b>MUB 551 Trumpet-Cornet</b>	<b>1 cr</b>
Private study at the major level.		Private study at the graduate level.	
<b>MUB 482 Baritone-Euphonium Maj Perform</b>	<b>2 cr</b>	<b>MUB 552 Trumpet-Cornet</b>	<b>2 cr</b>
Private study at the major level.		Private study at the graduate level.	
<b>MUB 483 Baritone-Euphonium-Maj Perform</b>	<b>3 cr</b>	<b>MUB 553 Trumpet-Cornet</b>	<b>3 cr</b>
Private study at the major level.		Private study at the graduate level.	
<b>MUB 486 Tuba-Major Performance</b>	<b>1 cr</b>	<b>MUB 561 French Horn</b>	<b>1 cr</b>
Private study at the major level.		Private study at the graduate level.	
<b>MUB 487 Tuba-Major Performance</b>	<b>2 cr</b>	<b>MUB 562 French Horn</b>	<b>2 cr</b>
Private study at the major level.		Private study at the graduate level.	
<b>MUB 488 Tuba-Major Performance</b>	<b>3 cr</b>	<b>MUB 563 French Horn</b>	<b>3 cr</b>
Private study at the major level.		Private study at the graduate level.	
<b>MUB 501 Flute</b>	<b>1 cr</b>	<b>MUB 571 Trombone</b>	<b>1 cr</b>
Private study at the graduate level.		Private study at the graduate level.	
<b>MUB 502 Flute</b>	<b>2 cr</b>	<b>MUB 572 Trombone</b>	<b>2 cr</b>
Private study at the graduate level.		Private study at the graduate level.	
<b>MUB 503 Flute</b>	<b>3 cr</b>	<b>MUB 573 Trombone</b>	<b>3 cr</b>
Private study at the graduate level.		Private study at the graduate level.	
<b>MUB 511 Oboe</b>	<b>1 cr</b>	<b>MUB 581 Baritone Horn</b>	<b>1 cr</b>
Private study at the graduate level.		Private study at the graduate level.	
<b>MUB 512 Oboe</b>	<b>2 cr</b>	<b>MUB 582 Baritone Horn</b>	<b>2 cr</b>
Private study at the graduate level.		Private study at the graduate level.	
<b>MUB 513 Oboe</b>	<b>3 cr</b>	<b>MUB 583 Baritone Horn</b>	<b>3 cr</b>
Private study at the graduate level.		Private study at the graduate level.	
<b>MUB 521 Clarinet</b>	<b>1 cr</b>	<b>MUB 586 Tuba</b>	<b>1 cr</b>
Private study at the graduate level.		Private study at the graduate level.	
<b>MUB 522 Clarinet</b>	<b>2 cr</b>	<b>MUB 587 Tuba</b>	<b>2 cr</b>
Private study at the graduate level.		Private study at the graduate level.	
<b>MUB 523 Clarinet</b>	<b>3 cr</b>	<b>MUB 588 Tuba</b>	<b>3 cr</b>
Private study at the graduate level.		Private study at the graduate level.	

## Argument (ARG)

### ARG 120 Critical Thinking 3 cr

This course will examine complex types of reasoning, including statistical judgment, decision making, and causal and analogical thinking. Emphasis will be placed on the analysis of concrete examples of reasoning in various fields. Students will learn how to evaluate arguments, fallacies, common errors, and biases in reasoning and decision making. Identical with PHL 120. Credit cannot be received for both ARG 120 and PHL 120. Fulfills the General Education requirement.

### ARG 210 Argumentation 3 cr

Examines the role of argumentation in a democratic society and aims to develop critical thinking and reasoned advocacy. Course makes functional a knowledge of tests of evidence and the modes of logical reasoning. Students participate in various forms of argumentation and debating. Identical with ARG 210. Students cannot receive credit for both ARG 210 and CA 210. Fee.

### ARG 222 Rhetoric, Culture and Society 3 cr

### ARG 321 Symbolic Logic 3 cr

A study of sentential and predicate logics and related topics. Identical with 321. Credit cannot be received for both ARG 321 and PHL 321.

### ARG 371 Approaches to English Grammar 3 cr

A course designed primarily to help education majors translate between the languages of conventional grammar and the syntactical grammar relevant to the teaching of English at Precollege levels. Consideration will also be given to the rationales basic to the formation of different grammars and to methods of presenting grammatical material in a classroom situation. Non-education majors interested in a sophisticated approach to the study of grammar might also benefit from this course. Identical with EH 371. Credit cannot be received for both ARG 371 and EH 371. Pre-requisite: EH 101 Minimum Grade of C and EH 102 Minimum Grade of C

### ARG 390 Special Topics - 3 cr

Different figures, periods, or topics of significance in Argument will be studied as announced. May be repeated, when content varies, for a total of six hours. Requires Sophomore, Junior or Senior standing.

### ARG 402 Rhetoric: Ancient and Modern 3 cr

Readings in rhetorical theory, ancient and modern, are applied in specific writing assignments with encourage students to adopt a point of view and address a specific audience. Identical to EH 402. If credit for ARG 402 is received, then credit cannot be received for EH 402. Pre-requisite: EH 101 Minimum Grade of C and EH 102 Minimum Grade of C

### ARG 481 Studies in Rhetoric 3 cr

Seminar in specific topics dealing with writing, rhetoric, or language studies. May be repeated once for credit when course content varies. Identical with EH 481. Credit cannot be received for both ARG 481 and EH 481 when it is on the same specific topic. Junior standing required.

Pre-requisite: EH 101 Minimum Grade of C and EH 102 Minimum Grade of C

### ARG 490 Special Topics - 3 cr

An investigation of issues and concepts in Argument for advanced undergraduate students. May be repeated, when content varies, for a total of six hours. Prerequisites: Junior or Senior standing.

### ARG 492 Seminar 3 cr

### ARG 494 Directed Studies- 1 TO 3 cr

Directed research in Argument under the guidance of a member of the department. Credit according to the magnitude of the individual project. May be repeated, if content varies, for a total of six hours. Prerequisites: Junior or Senior standing and approval of directing professor and department chair.

## Art Education (AED)

### AED 301 Visual Arts for Young Children 3 cr

Exploration of knowledge and skills in the arts appropriate for young children. Art techniques and media are explored.

### AED 440 Arts for Learning 3 cr

Using the arts to promote physical, social, emotional, and cognitive development.

Co-requisite: AED 441

Pre-requisite: SED 340 Minimum Grade of C and SED 341 Minimum Grade of C

### AED 441 Art in the N-12 Program 3 cr

Art and the intellectual, creative, and emotional growth of adolescents and youth. The study of appropriate techniques and materials for teaching studio art and crafts, art history, appreciation and aesthetics, and participation in humanities programs at the secondary level. Laboratory practice in the secondary school. Restricted to N-12 art majors.

Prerequisites: Completion of two-thirds of teaching field.

Co-requisite: AED 440

Pre-requisite: SED 340 Minimum Grade of C and SED 341 Minimum Grade of C

### AED 494 Dir St - 1 TO 3 cr

No more than two directed study courses can be counted toward the Bachelor's degree and Class B Certificate.

Prerequisite: Permission of department chair.

**AED 501 Trn-Prac Tch Art Elem Sc 3 cr**

Orients the student toward the artistic interests and creative abilities of children in the elementary school, and developing attitudes of respect for individuality and creativity. Included are laboratory experiences with art materials and research into appropriate techniques of teaching art

**AED 502 Trn-Prac Tch Art Sec Sch 3 cr**

Current trends and practices in curriculum, instruction, selection of materials, and derivation of procedures for guiding learning in art in the secondary school.

**AED 540 Art in the N-12 Program 3 cr**

Art and the intellectual, creative, and emotional growth of children. The role of art in the instructional program, examination of objectives in an art program, and the study of appropriate techniques and materials for teaching art and crafts at the elementary level. Restricted to N-12 art majors. Pre-requisite: SED 555 Minimum Grade of B and SED 559 Minimum Grade of B and EPY 525 Minimum Grade of B

**AED 560 Grad Research Seminar 3 cr**

Research in problems confronting American education. Selected topics are explored by students which provide the basis for seminar discussions. A seminar paper is presented by each student. This course also includes a field-based practicum. Prerequisite: Permission of department chair.

**AED 590 Sp Top - 3 cr**

Current topics of special concern to secondary educators. A different topic will be used each time the course is offered. No more than 6 hours can be applied toward a graduate degree. Prerequisite: Permission of department chair.

**AED 594 Dir St - Research 1 TO 3 cr**

Students explore through directed study problems and issues of special interest or significance in Art Education. No more than 3 hours of any departmental 594 courses can be applied toward a degree program. Prerequisite: Permission of department chair.

**AED 595 Internship 1 TO 6 cr**

The internship is a supervised learning experience in a work setting similar to that in which the educator will eventually be employed. The internship provides the students with an opportunity to apply the theories and concepts learned during the graduate program of study. Pre-requisite: PRAXIS-Art Cont Knowledge 150 or PRAXIS-Art Cont Knowledge 154( or PRAXIS-Art Cont Knowledge 154 )

## Art History (ARH)

**ARH 100 Survey of Art 3 cr**

A survey of major periods of artistic development from prehistoric times to the present. Note: this course cannot be counted toward fulfilling degree requirements for majors in Studio Art, Art, or Art History. Fee. Core course

**ARH 103 Art History I 3 cr**

A survey of art and architecture from Prehistoric to Medieval times. Fee. Core Course.

**ARH 123 Art History II 3 cr**

Survey of art and architecture from the 15th Century through the middle of the 20th Century.

**ARH 203 Survey of Non-Western Art 3 cr**

Survey of the visual arts from five broad geographic areas of the world outside of Europe: Asia, Middle East, Africa, Oceania (the islands of the Pacific Ocean), and the Americas (North, Central, and South). Fee.

**ARH 245 History of Graphic Design 3 cr**

A survey of graphic design from the ancient Sumerians to the present day.

Pre-requisite: ARH 123 Minimum Grade of D

**ARH 248 History of Photography 3 cr**

A comprehensive study of the medium of photography. The course traces chronologically and thematically the evolution of an independent art form. The focus of the course is the growth of this contribution to the visual arts, through the inseparable aspects of science and art. Fee.

Pre-requisite: ARH 123 Minimum Grade of D

**ARH 250 African Art 3 cr**

This course is designed as a basic orientation to the arts of Africa and the interpretation of experience as witnessed in various African visual art forms. The course will focus on the major civilization and/or nations south of the Sahara Desert and their stylistic developments. Emphasis will be placed on the aesthetic approach of African artists and the influence of their art on western culture. Fee.

**ARH 290 Special Topics - 3 cr**

Different subjects or themes in art or architectural history as announced. This course may be repeated twice when content varies, for a maximum of nine credit hours. Fee.

**ARH 304 Ancient Grk Art and Architect 3 cr**

Architecture, sculpture, and painting in Ancient Greece and the expansion and influence of Greek culture in the Ancient World. Identical to CLA 304. Credit cannot be received for both ARH 304 and CLA 304. Fee.

Pre-requisite: (ARH 103 Minimum Grade of D or CLA 103 Minimum Grade of D) or CLA 110 Minimum Grade of D

**ARH 306 Roman Art 3 cr**

Architecture, sculpture, and painting in Ancient Rome and its empire. Identical to CLA 306. Credit cannot be received for both ARH 306 and CLA 306. Fee.

Pre-requisite: (ARH 103 Minimum Grade of D or CLA 103 Minimum Grade of D) or CLA 110 Minimum Grade of D

- ARH 312 Medieval Art and Architecture** 3 cr  
This course is a survey of the art and architecture of the Medieval world from the legalization of Christianity in AD 313 to the end of the Gothic Period. Fee.  
Pre-requisite: (ARH 103 Minimum Grade of D or CLA 103 Minimum Grade of D)
- ARH 322 Northern Renaissance Art** 3 cr  
Art of Flanders, Germany, and France in the 14th, 15th, and 16th centuries. Fee.  
Pre-requisite: ARH 123 Minimum Grade of D
- ARH 324 Italian Early Renaissance** 3 cr  
Art of 14th and 15th century Italy. Fee  
Pre-requisite: ARH 123 Minimum Grade of D
- ARH 326 16th Century Italian Art** 3 cr  
Art of the Italian High Renaissance and Mannerist Periods. Fee.  
Pre-requisite: ARH 123 Minimum Grade of D
- ARH 330 Baroque Art of Southern Europe** 3 cr  
A study of painting, sculpture, and architecture in Italy and Spain during the 17th and early 18th centuries. Fee.  
Pre-requisite: ARH 123 Minimum Grade of D
- ARH 332 Baroque Art and Architecture** 3 cr  
This course is a survey of the art and architecture of Seventeenth Century Europe. Fee.  
Pre-requisite: ARH 123 Minimum Grade of D
- ARH 335 18th Century Art and Arch** 3 cr  
Survey of the art and architecture of the Eighteenth Century. Fee.  
Pre-requisite: ARH 123 Minimum Grade of D
- ARH 340 Early Modern Art** 3 cr  
A study of art developments in the 19th and early 20th centuries. Fee.  
Pre-requisite: ARH 123 Minimum Grade of D
- ARH 343 African-American Art** 3 cr  
Investigation of the art of African-Americans and the historical and social contexts in which the works were produced. Major periods of concentration include slavery, post-slavery, and the 20th century. Fee.
- ARH 344 Contemporary Art** 3 cr  
A study of art developments since 1960. Fee.
- ARH 345 American Arts 1600 - 1940** 3 cr  
American painting, graphics and sculpture from the Colonial period to 1940. Fee.  
Pre-requisite: ARH 123 Minimum Grade of D
- ARH 346 Amer Architecture 1600-1940 -W** 3 cr  
American architecture from the colonial period to 1940. Fee.  
Pre-requisite: (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C) and ARH 123 Minimum Grade of D
- ARH 360 Traineeship in Museum Work** 3 cr  
This course is evaluated experience in museum work at an accredited institution of art. It may be repeated once if the experience differs. Prerequisites: Fifteen hours of Art History with a grade of C or above and permission of the course director.
- ARH 362 Internshp Architect Preservatn** 3 cr  
Evaluated experience in architectural preservation at the Mobile Historic Development Commission. Cannot be used to fulfill requirements for the Art History major or minor. The course may not be repeated.  
Pre-requisite: ARH 304 Minimum Grade of D or ARH 346 Minimum Grade of D or ARH 406 Minimum Grade of D or ARH 415 Minimum Grade of D
- ARH 370 Philosophy of Art** 3 cr  
Acquaints students with main issues in aesthetics. Includes such issues as the nature and function of art and the criteria of aesthetic judgment. Identical with PHL 370. Credit cannot be received for both ARH 370 and PHL 370.
- ARH 390 Special Topics -** 3 cr  
Different subjects or themes in art or architectural history as announced. This course may be repeated twice when content varies, for a maximum of nine credit hours. Fee.
- ARH 415 Gothic Architecture** 3 cr  
A study of art, architecture and sculpture during the Gothic Age, with special emphasis on France, Germany, England, Italy, and Scandinavia. Fee.  
Pre-requisite: ARH 103 Minimum Grade of D
- ARH 434 Baroque Art Flanders-Holland** 3 cr  
A study of the painting of the major artists of Baroque Flanders and Holland; the work of Rubens, Hals, Rembrandt, Vemeer, and others will be studied. Fee.  
Pre-requisite: ARH 123 Minimum Grade of D
- ARH 480 Women in Art** 3 cr  
A study of women throughout art history as both the subject and the creator of art. Prerequisite: Nine hours of Art History above the 200 level. Fee.
- ARH 492 Seminar - W -** 3 cr  
This seminar will treat variable subjects. This course may be repeated twice when content varies, for a maximum of nine credit hours. Fee.  
Pre-requisite: (ARH 103 Minimum Grade of D or CLA 103 Minimum Grade of D) and ARH 123 Minimum Grade of D and (ARH 344 Minimum Grade of D or ARH 244 Minimum Grade of D) and (EH 102 Minimum Grade of D or EH 105 Minimum Grade of C)
- ARH 493 Methodology of Art History-W** 3 cr  
An investigation of methodologies used by art historians in their examination of artistic production. Prerequisite: 9 hours of ARH courses above the 200 level.

**ARH 494 Directed Studies - 3 cr**

Research in a selected topic in art or architectural history under the direction of a faculty member, resulting in a scholarly paper. Prerequisites: Nine hours in Art History numbered 300 or higher and permission of the instructor. Fee. This course may be repeated twice for a total of nine credit hours.

**ARH 498 Art History Senior Thesis 3 cr**

Art History B.F.A. students will identify and carry out independent scholarly research on an art history topic over two semesters with the guidance of a faculty committee. At the end of the second semester, the project will be concluded with submission of the polished thesis and a thesis defense presented through a formal session given to the Visual Arts faculty. This course is to be taken as two sequential, three-credit units.  
Pre-requisite: ARH 493 Minimum Grade of C

**ARH 499 Honors Senior Thesis - H (W) 3 cr**

Honors students will identify and carry out independent scholarly research on an art history topic over two semesters with the guidance of a faculty mentor. At the end of the first semester, the project will be concluded with a formal oral presentation to the Visual Arts Faculty. At the end of the second semester, the students will submit the senior thesis. The work from both semesters will be graded by a three-member faculty committee, chaired by the mentor. This course is to be taken as two sequential, three-credit course units.  
Pre-requisite: HON 301 Minimum Grade of D

**ARH 590 Special Topics - 3 cr**

Different subjects or themes in art or architectural history as announced. This course may be repeated twice when content varies, for a maximum of nine credit hours. Fee.  
Pre-requisite: ARS 103 Minimum Grade of D and ARS 123 Minimum Grade of D

## Art Studio (ARS)

**ARS 101 Art Appreciation 3 cr**

A broad introduction to the nature, vocabulary, and media of the visual arts of drawing, painting, prints, the camera arts, graphic design, sculpture, crafts, and architecture.

**ARS 121 Perceptual Drawing I 3 cr**

An introductory course with emphasis on the development of drawing skills to realistically represent natural and man-made forms using dry drawing media.

**ARS 122 Perceptual Drawing II 3 cr**

A continuation of ARS 121 using wet and mixed drawing media.  
Pre-requisite: ARS 121 Minimum Grade of D

**ARS 123 Two-Dimensional Design 3 cr**

The study and application of art elements and principles, and principles of perception, for the purpose of increasing the student's skill in communicating visually with paints and other two-dimensional media.

**ARS 124 Three-Dimensional Design 3 cr**

A study and application of art principles to three-dimensional problems.

**ARS 200 Intro to Animation 3 cr**

The theory and practice of animation using short exercises, organic and digital media with the emphasis on frame by frame relationship, self-expression and the tactile experience. Fee.  
Pre-requisite: ARS 121 Minimum Grade of C

**ARS 201 Two Dimensional Animation I 3 cr**

This course offers instruction in various aspects of two-dimensional animation using appropriate software, to include developing concepts, storyboarding and production. Fee.  
Pre-requisite: ARS 122 Minimum Grade of C and ARS 121 Minimum Grade of C and ARS 123 Minimum Grade of C and ARS 200 Minimum Grade of C

**ARS 202 Three Dimensional Animation I 3 cr**

An introduction to three dimensional computer animation exploring the areas of modeling, animation and rendering. Fee.  
Pre-requisite: ARS 122 Minimum Grade of C and ARS 124 Minimum Grade of C and ARS 200 Minimum Grade of C

**ARS 211 Glass Art, Science, History 3 cr**

A survey of glass objects from 5,000 years ago, leads to a focus on the contemporary and international Studio Glass Movement in art. Methodologies of glass making and the work of artists utilizing the medium will be explored. The physical properties of glass including coloration and transition range ( heating and cooling) will be discussed and demonstrated with hands-on instruction. Fee.

**ARS 212 Intro to Glass Blowing 3 cr**

The manipulation, construction, and experimentation with glass as a sculptural and craft medium. Emphasis will be on glass blowing. Other investigations may include surface design, sandblasting, painting, and enameling on glass. 3 hours minimum of additional lab time beyond class time are required per week. Fee.

**ARS 222 Figure Drawing I 3 cr**

A study of the human figure using various drawing (dry) media. Fee.  
Pre-requisite: ARS 122 Minimum Grade of D and ARS 123 Minimum Grade of D

**ARS 225 Conceptual Drawing I 3 cr**

An introduction to the developmental process of drawing as an art form using various subject matter and drawing media. Pre-requisite: ARS 122 Minimum Grade of D and ARS 123 Minimum Grade of D

- ARS 231 Painting I** 3 cr  
An introduction to the techniques and concepts of oil painting using various subject matter.  
Pre-requisite: ARS 122 Minimum Grade of D and ARS 123 Minimum Grade of D
- ARS 232 Painting II** 3 cr  
A continuation of ARS 231 with an emphasis on color, composition and technical facility in oil paint.  
Pre-requisite: ARS 231 Minimum Grade of D
- ARS 241 Intro to Ceramics** 3 cr  
Introduction to the exploration of basic hand building and wheel techniques of working with clay. Included will be basic design considerations for traditional pottery forms as well as simple sculptural forms. There will be exposure to techniques for glazing and basic firing.
- ARS 250 Lithography** 3 cr  
An introduction to lithography. Technical skills related to processing and printing an edition will be studied. The course will consist of studio practice, lectures, quizzes, and critiques.  
Pre-requisite: ARS 121 Minimum Grade of D and ARS 123 Minimum Grade of D
- ARS 251 Intaglio/Etching** 3 cr  
An introduction to Intaglio printing techniques also known as etching. Technical skills related to drawing, processing, and printing the metal plates will be studied. The class will consist of studio problems in plate making and printing along with lectures, quizzes, and critiques.  
Pre-requisite: ARS 122 Minimum Grade of D and ARS 123 Minimum Grade of D
- ARS 252 Woodcut/Relief** 3 cr  
A study of relief printmaking. Techniques may include and are not limited to relief, linoleum cut, and wood engraving. The course will consist of studio practice, lectures, quizzes, and critiques. Emphasis will be given to the skills involved in the use of hand tools to cut the image and skills used in printing and editioning the block.  
Pre-requisite: ARS 121 Minimum Grade of D and ARS 123 Minimum Grade of D
- ARS 253 Silkscreen/Serigraphy** 3 cr  
An introduction to silkscreen printing as a fine art form. The class will explore various techniques used in waterbased screen printing, from simple stencils of hand drawn and cut paper designs to advanced photo processes. The course will consist of studio practice, lectures, quizzes, and critiques. Technical methods involved in color use, processing, and printing will be studied.  
Pre-requisite: ARS 121 Minimum Grade of C and ARS 123 Minimum Grade of C
- ARS 261 Sculpture I** 3 cr  
A basic course with additive sculpture materials dealing with problems of mass, volume, and form.  
Pre-requisite: ARS 124 Minimum Grade of D
- ARS 262 Sculpture II** 3 cr  
An introduction to basic metal fabrication, including cutting, brazing, and welding both ferrous and non-ferrous materials.  
Pre-requisite: ARS 261 Minimum Grade of D
- ARS 271 Introduction to Graphic Design** 3 cr  
An introduction to skills and techniques used in graphic design, problems in visual priorities, and use of selected materials. Restricted to Majors. Fee.  
Pre-requisite: ARS 122 Minimum Grade of D and ARS 123 Minimum Grade of D
- ARS 272 Typography** 3 cr  
This class will examine typography as a visual communication tool. Restricted to students who have been accepted into the graphic design program. Fee.  
Pre-requisite: ARS 271 Minimum Grade of C and ARS 273 Minimum Grade of C and ARS 273 Minimum Grade of C
- ARS 273 Graphic Design Applications** 3 cr  
An introduction to skills and techniques used in graphic design, problems in visual priorities, and use of selected materials. Restricted to Majors. Fee.  
Pre-requisite: ARS 122 Minimum Grade of D and ARS 123 Minimum Grade of D
- ARS 281 Intro to Photography** 3 cr  
An introduction to the technical and aesthetic aspects of photography. Investigation of picture-making problems and control of photographic media. Involves the use of color transparency materials and an introduction to black and white processing enlarging. Students must have 35 mm single lens reflex cameras capable of being operated in the manual exposure mode. Fee.
- ARS 290 Special Topics -** 3 TO 6 cr  
A lower level studio, lecture, or seminar course treating a special medium, subject, or theme, as announced. This course may be repeated when the topic varies for a maximum of 6 credit hours.
- ARS 304 Digital Modeling** 3 cr  
This course introduces the concepts and techniques used in the creation of three dimensional form in a digital space. Emphasis will be on the practical use and creation of three dimensional models for animation and texturing. The course will also explore how formal choices impact meaning, and discuss contemporary artists who incorporate digital modeling into their work.  
Pre-requisite: ARS 122 Minimum Grade of C and ARS 124 Minimum Grade of C and ARS 200 Minimum Grade of C
- ARS 311 Kiln Formed Glass** 3 cr  
The exploration of glass formed through a variety of kiln working methods including fusing, slumping, pate de verre, and casting. Fee.

**ARS 312 Intermediate Glass Blowing 3 TO 6 cr**

A continuation of ARS 212 focusing on refinement of form and investigation of complex techniques in order to develop proficiency in glass blowing as a means to service individual creativity. The use of glass color is explored. A minimum of 3 additional hours of lab time outside of class time are required weekly. Fee.

Pre-requisite: ARS 212 Minimum Grade of D and ARS 124 Minimum Grade of D

**ARS 322 Figure Drawing II 3 cr**

Further study of the human figure using various drawing (wet and dry) media.

Pre-requisite: ARS 222 Minimum Grade of D

**ARS 325 Conceptual Drawing II 3 cr**

A continuation of ARS 225 with emphasis on concept driven work. Fee.

Pre-requisite: ARS 225 Minimum Grade of D

**ARS 326 Color Theory 3 cr**

A studio course in the nature, theory and application of color in an aesthetic context.

Pre-requisite: ARS 222 Minimum Grade of C or ARS 225 Minimum Grade of C

**ARS 331 Painting III 3 TO 12 cr**

A continuation of ARS 231 and 232 with emphasis on conceptual exploration in oil and/or water media paint. May be repeated for a maximum of 12 hours.

Pre-requisite: ARS 231 Minimum Grade of D and ARS 232 Minimum Grade of D

**ARS 341 Intermediate Ceramics 3 TO 9 cr**

A continuation of ARS 241 with emphasis on hand building or wheel techniques. May be repeated for a total of 9 semester hours credit.

Pre-requisite: ARS 122 Minimum Grade of D and ARS 124 Minimum Grade of D and ARS 241 Minimum Grade of D

**ARS 351 Intermediate Printmaking 3 TO 12 cr**

Further work in printmaking. Students may work in one or more of the following print media: Intaglio, lithography, relief, screen printing. Students must have taken the 200 level of the appropriate print media to move to intermediate level of that same media. The course may be repeated for a maximum of 9 semester hours.

Pre-requisite: ARS 250 Minimum Grade of D or ARS 251 Minimum Grade of D or ARS 252 Minimum Grade of D or ARS 253 Minimum Grade of D

**ARS 361 Sculpture III 3 TO 6 cr**

An introduction to direct carving processes with wood and stone. This course may be repeated for a total of 6 semester hours credit.

Pre-requisite: ARS 262 Minimum Grade of D

**ARS 362 Sculpture IV 3 TO 6 cr**

Advanced mold making techniques. This course may be repeated for a total of 6 semester hours credit.

Pre-requisite: ARS 361 Minimum Grade of D

**ARS 373 Graphic Design Identity Systems 3 cr**

An intermediate course developing design skills used in the production of printed materials for visual communications with an emphasis on logos, letterheads, brochures and posters. Fee.

Pre-requisite: ARS 272 Minimum Grade of C and ARS 273 Minimum Grade of C

**ARS 374 Publication Design 3 cr**

An intermediate course developing design skills used in the production of printed materials for visual communications with an emphasis on newsletters, magazines, and newspaper graphics. Fee.

Pre-requisite: ARS 272 Minimum Grade of C and ARS 273 Minimum Grade of C and ARS 373 Minimum Grade of C

**ARS 375 Digital Graphic Design 3 cr**

An advanced level course utilizing computers to produce graphic design work for printed and digital media. Fee.

Pre-requisite: ARS 373 Minimum Grade of C and ARS 374 Minimum Grade of C

**ARS 376 Illustration 3 cr**

Conceptual approaches, materials and techniques used to solve problems in illustration, emphasizing developing rendering skills. Fee.

Pre-requisite: (ARS 222 Minimum Grade of C or ARS 225 Minimum Grade of C) or (ARS 373 Minimum Grade of C or ARS 374 Minimum Grade of C)

**ARS 381 Intermediate Photography I 3 cr**

This course is designed to allow you to begin to communicate your own vision and artistic voice. This course is intended to take your technical skills to the next level, by reading, writing and thinking about photography.

Pre-requisite: ARS 281 Minimum Grade of D

**ARS 382 Intermediate Photography II 3 cr**

The three main objectives of this course is to further your knowledge of the fine art photography, learn how to conceptualize ideas through the medium of photography, and to treat photography primarily as a creative medium for discussing personal, political, and social concerns. Since photography is tied to many technical processes, these concerns will also be acknowledged in this class.

Pre-requisite: ARS 281 Minimum Grade of C and ARS 381 Minimum Grade of C

**ARS 387 Digital Silver Photography 3 cr**

This studio course examines the intersecting theories and practices of photography with digital cameras and computer imaging.

Pre-requisite: ARS 382 Minimum Grade of D

**ARS 396 Professional Practices - W 3 cr**

This course prepares students for employment, graduate school, or a professional career in the visual arts. Restricted to majors. Fee.

Pre-requisite: (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

- ARS 411 Advanced Kiln Formed Glass** 3 cr  
Advanced kiln forming requires investigation into conceptual and technical problems in glass. The student becomes increasingly self-directed through further exploration of fusing, slumping, of casting. The development of firing schedules is emphasized. Fee.  
Pre-requisite: ARS 311 Minimum Grade of D and ARS 123 Minimum Grade of D
- ARS 412 Advanced Glassblowing** 3 cr  
Advanced techniques in hot glass will be explored for the development of refined sculpture and/or craft in glass. Course assignments will emphasize personal creativity and exploration. Instruction includes advanced finishing techniques and cold working techniques. A minimum of 3 additional weekly lab hours outside of class time are required. Fee.  
Pre-requisite: ARS 312 Minimum Grade of D and ARS 121 Minimum Grade of D
- ARS 422 Figure Drawing III** 3 cr  
Individual problems with the human figure as subject, emphasizing concept, composition, and media.  
Pre-requisite: ARS 322 Minimum Grade of D
- ARS 425 Conceptual Drawing III** 3 cr  
A continuation of ARS 325 with emphasis on exploration of personal concepts.  
Pre-requisite: ARS 325 Minimum Grade of D
- ARS 431 Painting IV** 3 TO 6 cr  
This class is a continuation of ARS 331 with emphasis on personal development of conceptual approaches in oil paint and/or water media paintings. Students with Primary Concentrations in Painting will use this course to prepare for thesis. This course may be repeated for a total of 6 semester hours credit.  
Pre-requisite: ARS 331 Minimum Grade of D or ARS 332 Minimum Grade of D
- ARS 441 Advanced Ceramics** 3 TO 12 cr  
A continuation of ARS 341 with emphasis on hand building or wheel processes. May be repeated for a total of 12 semester hours credit.  
Pre-requisite: ARS 341 Minimum Grade of D or ARS 342 Minimum Grade of D
- ARS 451 Advanced Printmaking** 3 TO 6 cr  
A continuation of ARS 351 with emphasis on each student's developing and refining an individual approach to creative work. For students with a Primary Concentration in Printmaking, this course is preparation for Thesis. Fee.  
Pre-requisite: ARS 351 Minimum Grade of D
- ARS 461 Sculpture V** 3 TO 6 cr  
Experimental work with synthetic materials. This course may be repeated for a total of 6 semester hours credit. Requires permission of instructor.  
Pre-requisite: ARS 362 Minimum Grade of D
- ARS 472 Senior Graphic Design** 3 cr  
An advanced workshop that addresses issues of visual communication using graphic design as a problem-solving tool. Fee.  
Pre-requisite: ARS 373 Minimum Grade of C and ARS 374 Minimum Grade of C
- ARS 473 Web Design** 3 cr  
An introduction to interactive applications. This course provides instruction in innovative, artistic design and development of visual communication skills related to interactive applications.  
Pre-requisite: ARS 373 Minimum Grade of C
- ARS 479 Design Business Practices-W** 3 cr  
A study of the business principles of Graphic Design. Projects encourage both collaborative and independent study. Students explore design as a commercial art and develop the skills to coordinate projects through all phases of a professional, business relationship. Fee.  
Pre-requisite: ARS 373 Minimum Grade of C and ARS 374 Minimum Grade of C and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)
- ARS 481 Advanced Photography** 3 cr  
This course will strive to help further develop each student's artistic strength in their use of the photographic medium. Each student will be required to write a statement explaining the body of work that they will create and what particular processes they might be interested in exploring.  
Pre-requisite: ARS 281 Minimum Grade of C and ARS 381 Minimum Grade of C and ARS 382 Minimum Grade of C
- ARS 483 Color Photography** 3 cr  
This is an introduction to color photography. The goals are to become familiar with all aspects of color photography including film selection, processing, printing, theory, and criticism.  
Pre-requisite: ARS 281 Minimum Grade of D and ARS 381 Minimum Grade of D and ARS 382 Minimum Grade of D
- ARS 485 Alternative Photo Processes** 3 cr  
This is an advanced studio art course designed for students with a background in photography (primarily black and white) who want to expand their image making vocabulary through the use of early photographic techniques.  
Pre-requisite: ARS 481 Minimum Grade of D
- ARS 487 Photo Bookmaking** 3 cr  
This class will focus on the design and construction of artist books. We will explore structure and form and how they support and influence the content of a book.  
Pre-requisite: ARS 481 Minimum Grade of D
- ARS 488 Graphic Design Thesis** 3 cr  
A self-directed creative project in the area of graphic design with the guidance of a faculty member. Evaluation of the project is by faculty committee. Fee.  
Pre-requisite: ARS 472 Minimum Grade of C and ARS 479 Minimum Grade of C

- ARS 490 Special Topics - 1 TO 12 cr**  
An advanced studio, lecture, or seminar course treating a special medium, subject, or theme, as announced. This course may be repeated for a maximum of twelve (12) credit hours. Requires junior standing and permission of the instructor.
- ARS 494 Directed Studies - 3 TO 6 cr**  
Independent work in an approved studio medium or topic under the direction of a studio faculty member. May be repeated for a maximum of 6 credits.
- ARS 496 Professional Studies Internship 3 cr**  
Students intern in a specialized area of interest. Written report required.
- ARS 497 Senior Thesis in Glass 6 cr**  
An independent project of creative work in the area of the Glass Concentration, with the guidance of one to three faculty advisors. The student is required to work at least 18 hours a week in the studio. The thesis must be publicly exhibited. Fee.
- ARS 498 Senior Thesis 6 cr**  
An independent project of creative work in the area of the Primary Concentration or one or more Secondary Concentrations, with the guidance of one to three faculty advisors. The student is required to work at least 18 hours a week in the studio. The thesis must be publicly exhibited. This course may be repeated once for credit.
- ARS 499 Honors Senior Thesis - H 3 cr**  
Honors student, the first semester, will identify and carry out independent scholarly research on a topic with the guidance of a faculty mentor. The second semester, students will produce a body of work that incorporates and exemplifies the ideas explored in the research paper. The project will be concluded with a formal presentation to the Visual Arts faculty. The Honors Project will be graded by a three-member faculty committee, chaired by the mentor. This course is to be taken as two, sequential, three-credit course units.  
Pre-requisite: HON 301 Minimum Grade of D
- ARS 500 Graduate Animation 3 cr**  
Intensive course structured as an exploration of the practice and production of animation. May be repeated for a total of 36 credit hours.
- ARS 510 Graduate Glass 3 cr**  
Intensive investigation of visual, expressive or technical problems in glass. May be repeated for a total of 18 credit hours. Pre-requisite: bachelor's degree in art or art education. Fee.  
Pre-requisite: ARS 411 Minimum Grade of C and ARS 412 Minimum Grade of C
- ARS 520 Graduate Drawing 3 TO 9 cr**  
Intensive course in drawing as both a set of skills and as a creative medium of expression. May be repeated for a total of 36 credit hours. Pre-requisites: complete either appropriate pre-requisites or bachelor's degree in art or art education. Fee.  
Pre-requisite: ARS 422 Minimum Grade of C or ARS 425 Minimum Grade of C
- ARS 530 Graduate Painting 3 TO 9 cr**  
Intensive course in painting with traditional or contemporary media, subjects and concepts. May be repeated for a total of 36 credit hours. Pre-requisites: complete either appropriate pre-requisites or bachelor's degree in art or art education. Fee  
Pre-requisite: ARS 431 Minimum Grade of C
- ARS 540 Graduate Ceramics 3 TO 9 cr**  
A study of clay as a creative medium of expression. Problems of form, volume, space, texture, decoration, and function will be investigated in their relation to selected ceramics processes and building techniques. May be repeated for a total of 36 semester hours. Pre-requisites: complete either appropriate pre-requisites or bachelor's degree in art or art education. Fee.  
Pre-requisite: ARS 441 Minimum Grade of C
- ARS 550 Graduate Printmaking 3 TO 9 cr**  
Intensive investigation of visual, expressive or technical problems in one or more printmaking media. This course may be repeated for a total of 36 hours credit. Pre-requisites: complete either appropriate pre-requisites or bachelor's degree in art or art education. Fee.  
Pre-requisite: ARS 451 Minimum Grade of C
- ARS 560 Graduate Sculpture 3 TO 9 cr**  
Intensive investigation of problem of mass, volume, form, and space using one or more sculptural media. This course may be repeated for a total of 36 hours credit. Pre-requisites: complete either appropriate pre-requisites or bachelor's degree in art or art education. Fee.  
Pre-requisite: ARS 461 Minimum Grade of C
- ARS 570 Graduate Graphic Design 3 cr**  
An intensive workshop that investigates advanced issues of visual communication using graphic design as both a problem-solving tool and as a medium for creative expression and communication. Emphasis on trending technology and/or professional practice. May be repeated for a total of 36 credit hours.  
Pre-requisite: ARS 488 Minimum Grade of B
- ARS 580 Graduate Photography 3 cr**  
Emphasizing theory, concept, and critical thinking, while expanding knowledge of the photographic medium. May be repeated for a total of 18 credit hours. Prerequisite: ARS 387 Minimum Grade of D or ARS 481 Minimum Grade of a D or bachelor's degree in art or education. Fee.  
Pre-requisite: ARS 387 Minimum Grade of C or ARS 481 Minimum Grade of C

**ARS 590 Special Topics - 3 TO 9 cr**

A graduate course treating a special medium, subject, or theme, as announced. This course may be repeated twice when the content varies, for a maximum of 9 credit hours.

**ARS 591 Graduate Seminar 3 cr**

A detailed examination of selected topics in art. Topics announced prior to registration. This course includes scholarly research, writing, and creative work. May be repeated up to five times for a total of 18 credit hours when course content changes. Prerequisite: Graduate standing in the Visual Art Department.

**ARS 592 Graduate Thesis 1 TO 3 cr**

An independent project of creative work, with the guidance of a faculty committee. The thesis must be an original project/production and have a visual component. May be repeated for a total of 6 credit hours. Prerequisite: Must have completed or be concurrently enrolled in 9 hours of graduate courses.

## Audiology (AUD)

**AUD 630L Electroac Char of Amp Sytm Lab 1 cr**

This class will take a practical, "hands-on approach" to working with hearing aid amplification and will compliment the written class work presented in AUD 630 - Electroacoustic Characteristics of Amplification Systems. Topics covered will include earmolds and earmold impressions, earmold and tubing modifications, hearing aid components, measurement of electroacoustic characteristics of hearing aids, troubleshooting hearing aid problems, and performing minor repairs on hearing aids. Co-requisite: AUD 630

**AUD 631L Sel Fit & Verif of Amp Sys Lab 1 cr**

This class will take a practical, "hands-on approach" to working with hearing aid amplification and will compliment the written class work presented in AUD 631 - Selection, Fitting, & Verification of Amplification Systems. Topics covered will include selection of appropriate hearing aids, modifications and adjustment of digital hearing aids, manipulation of hearing aid software, verification of hearing aid performance with real ear measurement, and use of FM systems and other hearing aid accessory devices. Co-requisite: AUD 631

**AUD 612 Anatomy-Physio Hearing Mech 4 cr**

Study of the anatomy and physiology of the nervous system, the anatomy and physiology of the outer, middle, inner ear, including the vestibular system, and the central auditory nervous system.

**AUD 613 Psychoacoustics 3 cr**

Study of the principles, procedures and research involved in the field of psychoacoustics and of the relationships between the physical dimensions of auditory stimuli and the resultant perceptual experience as well as the relationships among psychoacoustic testing and both auditory physiology and the audiologic evaluation process. Participation in laboratory assignments will be required.

**AUD 614 Instrumentation and Acoustics 3 cr**

Study of basic electricity, acoustics and measurement of sound properties, wave analysis, transducers, measuring and calibration systems, speech processing systems, and system interaction and integration.

**AUD 616 Resrch Design Hearing Sci 3 cr**

Research designs utilized in the hearing sciences; elements of research proposals and studies; how to critique a research study; how to conduct a literature review; APA format; students will be required to write precis of research articles and write a research proposal. Elements of modern statistics including sets and functions, probability theory, hypothesis testing, analysis of variance models, correlation, and regression.

**AUD 621 Professional Issues 2 cr**

This course will address a variety of professional issues such as organizations, societies, and their histories; codes of ethics; scopes of practice; credentialing and licensure; the development of the Au.D.; guidelines and position statements generated by ASHA, AAA, ADA, and AVI; standards and best practices; methods and models of service delivery; and infection control.

**AUD 622 Medical Audiology 3 cr**

This course will address acquired and congenital diseases and disorders of the outer, middle, and inner ear and the central auditory nervous system occurring across the lifespan; imaging techniques; non-audiologic medical and surgical interventions for these conditions; and cerumen management techniques.

**AUD 623 Pharma & Ototox Monitoring 3 cr**

This course will provide the basic science background necessary to understand the effects of medications on the auditory and balance systems. This course will also address drug treatment strategies for hearing loss and balance disorders. Topics will include mechanisms of drug actions, side effects, how age and disease affect these mechanisms, and specific effects of certain drugs on the hearing and balance system. This course will additionally address appropriate methods for identification and monitoring of patients prescribed potentially ototoxic medications.

**AUD 630 Electroac Char of Amp Systems 3 cr**

This course will address styles and types of earmolds, hearing aids, and assistive listening devices; components common to all amplification systems as well as optional features (such as directional microphones, volume controls, telecoils, etc.) and their electroacoustic properties and functioning; use of ANSI standards; physical, acoustic and electroacoustic modifications of earmolds and amplification systems.

**AUD 631 Sel, Fit & Verif of Amp Sys 3 cr**

This course will address the principles of selection, fitting, and verification of amplification systems, including hearing aids and assistive listening devices; subjective and objective audiologic assessments used to determine need for, select, and fit appropriate amplification systems for patients of all ages; and techniques used to select and fit amplification systems. The course will also address subjective and objective verification procedures, specifically addressing the importance of including Real-Ear Measures and subjective self-assessment measures in the amplification process.

**AUD 632 Hearing Aid Lab 1 cr**

This course will address the principles of verification and validation; tools used to verify appropriate fitting of amplification systems (such as real-ear probe-mic equipment) and techniques used to validate fitting (such as software packages, and subjective and objective audiologic measures); cochlear implant remapping.

**AUD 633 Advanced Sensory Aids 3 cr**

This course will address advanced technologies for individuals with hearing-impairment such as cochlear and brainstem implants, vibrotactile aids, and implantable devices, as well as the selection and fitting of these technologies.

**AUD 640 Basic Audiologic Assessment 3 cr**

This course will address the principles of cross-check, the test battery approach, differential diagnosis, relevant test equipment, instruments, and transducers, administration and interpretation of the pure-tone testing, clinical masking, case history, otoscopy, and tuning-fork tests, speech audiometry; tests for pseudo-hypoacusis, ototoxicity, site-of-lesion testing and historical assessments; and informal assessment procedures.

**AUD 641 Immit & Otoacous Emission Meas 3 cr**

This course will address administration and interpretation of acoustic immittance and otoacoustic emission measures across the lifespan. Topics will address standard and multi-frequency tympanometry, acoustic reflex testing, and eustachian tube function testing; spontaneous, transient and distortion-product OAE measurement; and the influence of intrinsic and extrinsic variables, including cochlear and retro-cochlear pathology, on outcomes and differential diagnosis.

**AUD 642 Pediatric Audiology 3 cr**

This course will address issues associated with providing audiologic services to pediatric and developmentally delayed populations. Issues will include gestational development, test administration and interpretation; genetic transmission of hearing loss, risk factors for hearing loss; principles of screening and the development and construction of a screening program; universal newborn hearing screening and early hearing detection and intervention programs.

**AUD 643 Audiology and Aging 3 cr**

This course will address the issues associated with providing audiologic services to older adults. Issues will include effects of aging on anatomy, physiology, and function, and test administration and interpretation issues specific to older adults.

**AUD 645 Evoked Potential Measures 3 cr**

This course will address instrumentation (transducers and electrode types); application and interpretation of evoked potential (EP) measures including ENOG, ECochG, ABR, middle and late potentials, across the lifespan; sedation protocols; assessment protocols associated with different EP measures and the populations to which they are applied; population norms; intrinsic and extrinsic variables affecting EP results; differential diagnosis of auditory neuropathy; troubleshooting.

**AUD 647 Adult Audio Rehabilitation 3 cr**

This course will address the implications of hearing loss in adulthood including the educational, vocational, social and legislative concerns of adults with hearing loss; assessment tools and intervention techniques used to maximize communication skills, including communication strategy training, speechreading, and group therapy approaches.

**AUD 648 Counseling Hear Imp-Families 3 cr**

This course will address various theories, principles and techniques associated with the social and psychological aspects of disability as well as issues specific to and techniques used when counseling patients with hearing loss and their families.

**AUD 649 Ped Habil & Educ Audiology 3 cr**

This course will address the speech, language, and communication of children with hearing impairment. Manual and oral modes of communication will be discussed, including American Sign Language, Signing Essential English I and II, Cued Speech, Total Communication, and Auditory-Verbal Therapy. Other issues to be addressed will include the development, management, and utilization of hearing and middle ear system screening programs, classroom acoustics, selection and fitting of classroom-based amplification, and federal law associated with children with special needs. Taught Spring Semester.

**AUD 651 Assess-Treatmnt Cent Aud Proc 3 cr**

This course will address the development, assessment, and interpretation of an auditory processing test battery across the lifespan, as well as intervention approaches.

**AUD 653 Industrial-Forensic Audiology 3 cr**

This course will address federal noise standards, effects of noise exposure on the auditory system, sound measurement and instrumentation, development and implementation of a hearing conservation program, hearing protection devices and forensic audiology.

**AUD 654 Tinnitus and Hyperacusis 3 cr**

This course will address assessment and intervention approaches used in the management of tinnitus and hyperacusis.

**AUD 655 Spch-Lang Path for Audiologist 2 cr**

This course will address specific topics in speech-language pathology relevant for audiology majors.

**AUD 656 Vestibular Assessment 4 cr**

This course will include a discussion of the peripheral and central anatomy and physiology of the balance system and the test measures used to assess the function of this complex system. Topics will include case history and screening measures, as well as test protocols and analysis of results on electronystagmography/videonystagmography, rotational testing, posturography, and vestibular evoked myogenic potentials. Taught Spring Semester.

**AUD 657 Management of Vestibular Disor 2 cr**

This course will focus on peripheral and central disorders of the vestibular system and the interpretation of results on diagnostic tests in disordered patients. Pharmacological and surgical treatments of dizziness will be discussed, as well as rehabilitative techniques to manage the vestibular pathology.

**AUD 658 Advanced Neurophys Measures 3 cr**

This course will address advanced electrophysiological techniques, including ENOG, ALR, ERPs (i.e. P300, etc), and neuroimaging techniques (fMRI and PET) with an emphasis on auditory and cognitive processing, across the lifespan; source localization techniques; instrumentation; stimulus and acquisition parameters; measurement procedures; analysis and interpretation.

**AUD 661 Developmnt-Managemnt Aud Prac 3 cr**

This course will address issues associated with audiology practice management including techniques involved in developing a mission statement and a business plan; working with an accountant; determining type, location, and name of practice; regulation, licensure, and hiring a legal advisor; equipment and service delivery decisions; establishing accounts with suppliers, paying bills and budgeting; third-party reimbursement, Medicaid, and Medicare; hiring and supervision; demographics and marketing; use of outcome data; and professional writing.

**AUD 670 Clinical Practicum I 1 TO 2 cr**

Students will become familiar with and conduct basic audiologic procedures on non-clinic populations New Course Description: by means of various lab assignments. Students will also be involved in clinical activities in the USA Speech & Hearing Center while under direct supervision. Special Fee.

**AUD 671 Clinical Practicum II 3 cr**

Students will obtain experience administering a number of audiologic assessments and intervention techniques to clinic populations in the USA Speech and Hearing Center and external practicum sites while under direct supervision.

**AUD 672 Clinical Practicum III 3 TO 6 cr**

Students will obtain experience administering a number of audiologic assessment and intervention techniques to clinic populations in the USA Speech and Hearing Center and external practicum sites while under direct supervision. Special Fee.

**AUD 673 Supervision in Audiology 2 cr**

This course includes a description of supervision and supervisors, the development of supervisory behaviors, components of the supervisory process, models for the assessment of supervisees, analyzing the supervisory process, supervision across settings, supervision of non-audiology personnel, and accountability.

**AUD 674 Special Projects in Audiology 3 cr**

Student will be required to develop a variety of projects during their academic training, some of which will be further developed and completed during this course.

**AUD 675 Special Topics in Audiology 1 cr**

Student will identify cases or service delivery issues of clinical or professional interest and present these cases or issues to fellow students, clinical supervisors, and faculty via chat room in a grand rounds format.

**AUD 676 Externship 3 TO 11 cr**

Off-campus opportunity to obtain clinical experience in a full-time setting. In addition, students may be required to identify cases or service delivery issues of clinical or professional interest and present these cases or issues to fellow students, clinical supervisors, and faculty via an online forum in a grand rounds format.

## Biochemistry - MD (BCH)

**BCH 400 Biochemistry Externship 1 TO 4 cr**

To be determined.

**BCH 410 Research in Biochem & Mol Biol 1 TO 4 cr**

: To carry out research under the supervision of a sponsoring faculty member. The student will help design experiments, learn and apply established techniques, record and evaluate data and make a final report both written and oral that describes the overall experimental results. The faculty member will assist the student in the project. This rotation is highly recommended for the student considering a career in academic medicine. Research areas include the biochemistry and molecular biology of cancer, lung diseases, and RNA viruses.

**BCH 526 Biochemistry Lit Reports 1 cr**

Students and faculty participate in a supervised reading of current literature and meet once a week to interact in a discussion of the selected article. The goal of this course is to maintain the student's level of information at a "state of the art" in both methods and theory in the discipline and to develop critical skills in reviewing the literature. Student presentation is required to receive credit.

**BCH 527 Dir Studies Biochemistry 1 TO 6 cr**

Students participate in research under the direction of a graduate faculty member. The student may pursue independent research or participate in a literature project. This course should be taken by students who have completed their laboratory rotations, but have not yet submitted a research proposal.

**BCH 590 Sp Top - 1 TO 3 cr**

This course provides in-depth tutorial exposure to specific areas in the discipline. Student and/or faculty presentations followed by group discussions (usually in the Socratic mode), examine the subject matter in an area of current interest either to one student or to a group of students. Credit and title are arranged with an individual faculty member.

**BCH 622 Molecular Biology 3 cr**

The focus of this course is on cellular processes involving DNA repair, replication and translation. Current concepts regarding the organization and structure of chromosomes, genes and the regulation of gene expression will be discussed. Eukaryotic molecular biology is emphasized, however some eukaryotic and prokaryotic processes are compared and contrasted. This course stresses the methods and experimental design used to delineate and understand cellular information transfer and molecular phenomena.

**BCH 626 Biochemistry Research Seminar 1 cr**

Students and faculty present a research topic for discussion before members of the department. The presentations are usually scheduled on a rotational basis. The student may present research data for critique by the faculty.

**BCH 799 Research-Dissertation 1 TO 6 cr**

Independent research by the student under the sponsorship of the graduate faculty. Students are required to submit a research project description form before enrolling in this course. Progress reports of the work accomplished are required every six months.

## Biology (BLY)

**BLY 101L Life Science I Laboratory 1 cr**

Laboratory exercises associated with BLY 101. Together, BLY 101 and BLY 101L count as one laboratory science course, partially fulfilling general education requirements. Fee.

Pre-requisite: BLY 101 Minimum Grade of D

**BLY 102L Life Science II Lab 1 cr**

Laboratory exercises associated with BLY 102. Together, BLY 102 and 102L count as one laboratory science course, partially fulfilling general education requirements. Fee.

Pre-requisite: BLY 101 Minimum Grade of D and BLY 102 Minimum Grade of D

**BLY 121L General Biology I Lab 1 cr**

Laboratory exercises associated with BLY 121. Together, BLY 121 and BLY 121L count as one laboratory science course, partially fulfilling general education requirements. Fee.

Pre-requisite: BLY 121 Minimum Grade of D or BLY 141 Minimum Grade of D

**BLY 122L General Biology II Laboratory 1 cr**

Laboratory exercises associated with BLY 122. Together, BLY 122 and 122L count as one laboratory science course, partially fulfilling general education requirements. Fee.

Pre-requisite: (BLY 122 Minimum Grade of D or BLY 142 Minimum Grade of D) and (BLY 121 Minimum Grade of D or BLY 141 Minimum Grade of D)

**BLY 134L Ocean Science Lab 1 cr**

Lab experiences associated with BLY 134.

Pre-requisite: BLY 134 Minimum Grade of D

**BLY 101 Life Science I 3 cr**

The first of a two-semester sequence designed for the non-major. The basic principles of biological phenomena are emphasized by examples relating to the human. Cell structure and function, energy and organ systems are studied.

**BLY 102 Life Science II 3 cr**

A continuation of BLY 101. Organ systems, cell reproduction, plant and animal development, heredity, evolution, and ecology area studied.

Pre-requisite: BLY 101 Minimum Grade of D

- BLY 121 General Biology I** 3 cr  
A study of general biological principles, including the chemical basis of life; cellular biology, including cell structure and metabolism, genetics, microevolution; and a survey of simple organisms, including bacteria, protists and fungi.  
Pre-requisite: ACT Math 22 or CH 100 Minimum Grade of D or CH 131 Minimum Grade of D or BLY 101 Minimum Grade of C
- BLY 122 General Biology II** 3 cr  
A study of plants, major invertebrate phyla, vertebrate morphology, plant and animal physiology, animal behavior, macroevolution and ecology. Core course.  
Pre-requisite: BLY 121 Minimum Grade of D or BLY 141 Minimum Grade of D
- BLY 134 Ocean Science** 3 cr  
An introduction to physical, chemical, and biological oceanography.
- BLY 205 Intro Environmental Sci** 3 cr  
Environmental science, including the fundamentals required to understand how ecosystems work, how environmental modifications affect ecosystems and living things, and how living things affect their environment. Topics to be emphasized include the effects of pollution, habitat modification and other environmental changes, on ecosystems, plants, wildlife, man, outdoor recreation and the future. Public health and medical effects will also be considered. Many topics covered are of special significance to this region: wetlands, the effects of dredging and filling, artificial lake construction, development, agricultural and forestry practices on ecosystems, plants and animals. Requires college biology, or permission of instructor.  
Pre-requisite: BLY 101 Minimum Grade of C or BLY 121 Minimum Grade of C
- BLY 207 Biology of Aging** 3 cr  
A descriptive review of processes of aging. Emphasis is placed on studying structural and functional changes that could occur with increase in chronological age. Usually taught in the fall, spring and summer terms.  
Pre-requisite: BLY 101 Minimum Grade of D
- BLY 213 Microbiology** 3 cr  
A survey of bacteria, fungi, protozoa and viruses with emphasis on host-microbe interactions, immune responses, and control mechanisms.  
Pre-requisite: BLY 101 Minimum Grade of D
- BLY 214 Lab Studies Microbiology** 1 cr  
A series of laboratory experiments designed to provide practical experiments in basic microbial techniques.  
Pre-requisite: (BLY 213 Minimum Grade of D or BMD 210 Minimum Grade of D)
- BLY 301 Cell Biology** 3 cr  
A course designed to integrate cell structure and function: the study of the ultrastructure, organization, physiology, genetics, and other functions of the cell. Core course.  
Pre-requisite: BLY 121 Minimum Grade of C and BLY 122 Minimum Grade of C and CH 131 Minimum Grade of D
- BLY 302 Genetics** 3 cr  
An introduction to both classical and modern genetic concepts and theory, with an emphasis on problem-solving. Topics covered include Mendelian genetics, molecular genetics, and evolutionary genetics. Core course.  
Pre-requisite: BLY 121 Minimum Grade of C and BLY 122 Minimum Grade of C and CH 131 Minimum Grade of D
- BLY 303 Ecology and Evolution** 3 cr  
Introduction to the fundamental concepts of ecology and evolution, with emphasis on their status as interrelated, central organizing principles of biology. Major topics will include community structure, biotic and abiotic interactions, mechanisms of evolution, adaption, and phylogenetics. Theoretical and practical issues will be addressed. Core course.  
Pre-requisite: BLY 121 Minimum Grade of C and BLY 122 Minimum Grade of C and CH 131 Minimum Grade of D
- BLY 304 Exp. Designs in Biology** 3 cr  
Experimental designs in Biology is intended to provide students with basic skills of experimental design and statistical methodology needed in modern biological research. Additionally, students will learn basic statistical software (e.g., Minitab, Ecosim, Resampling Procedures). The use of statistical software will be fully integrated with lecture material to provide a 'holistic' learning experience. Having completed this course, students will have gained a basic foundation in quantitative procedures for analyzing and interpreting biological data. This course requires each student to have a lap-top computer and a copy of Minitab Student v 14, which is provided with the required text.  
Pre-requisite: BLY 121 Minimum Grade of C and BLY 122 Minimum Grade of C and MA 112 Minimum Grade of C
- BLY 314 Molecular Microbiology - W** 4 cr  
Study of procaryotic and eucaryotic microorganisms and their relationship to their environment. Molecular, genetic and biochemical aspects of each will be emphasized.  
Pre-requisite: EH 102 Minimum Grade of C and CH 131 Minimum Grade of C and BLY 301 Minimum Grade of C and BLY 302 Minimum Grade of C and BLY 303 Minimum Grade of C

**BLY 321 Genetics of Development 3 cr**

An in-depth laboratory experience to determine the genetic regulation involved in organ development using the *C. elegans* model system. The research experience gained in this laboratory class is designed to generate novel results to ultimately be shared with the larger scientific community. Emphasis will be placed on mastering experimental design and data analysis. Students will work together in laboratory groups to carry out experiments, to discuss progress and conclusions, and review the primary literature relating to the project.

Pre-requisite: BLY 301 Minimum Grade of C and BLY 302 Minimum Grade of C and BLY 303 Minimum Grade of C

**BLY 332 Biology of Algae 4 cr**

A survey of non-vascular plants: algae, fungi, liverworts, and mosses, with emphasis on morphology and taxonomy.

Pre-requisite: (BLY 121 Minimum Grade of D or BLY 141 Minimum Grade of D) and (BLY 122 Minimum Grade of D or BLY 142 Minimum Grade of D) and (BLY 301 Minimum Grade of C or BLY 341 Minimum Grade of C) and (BLY 302 Minimum Grade of C or BLY 311 Minimum Grade of C) and (BLY 303 Minimum Grade of C or BLY 325 Minimum Grade of C)

**BLY 342 Experimental Cell Biology-W 2 cr**

Laboratory experience with instrumentation and techniques utilized in modern cell biology research including organellar isolation, enzyme assay, protein analysis, and microscope techniques. Students develop and conduct group projects.

Pre-requisite: BLY 301 Minimum Grade of C and BLY 302 Minimum Grade of C and BLY 303 Minimum Grade of C

**BLY 350 Human Physiology 3 cr**

The function and regulation of the organ systems of the body and physiological integration of the systems to maintain homeostasis. Course content will include neural and hormonal homeostatic control mechanisms, and study of the musculoskeletal, circulatory, respiratory, digestive, urinary, immune, reproductive, and endocrine systems.

Pre-requisite: (BLY 301 Minimum Grade of C or BLY 341 Minimum Grade of C) and (BLY 302 Minimum Grade of C or BLY 311 Minimum Grade of C) and (BLY 303 Minimum Grade of C or BLY 325 Minimum Grade of C) and CH 115 Minimum Grade of C or (CH 131 Minimum Grade of C and CH 131L Minimum Grade of C) and (BLY 121 Minimum Grade of C or BLY 141 Minimum Grade of C) and BLY 121L Minimum Grade of C and (BLY 122 Minimum Grade of C or BLY 142 Minimum Grade of C) and BLY 122L Minimum Grade of C

**BLY 352 Biol Terrestrial Verts - W 4 cr**

Evolution, characteristics, classification, life history, ecology, and behavior of amphibians, reptiles, birds, and mammals. Laboratory and field work emphasize local species.

Pre-requisite: BLY 301 Minimum Grade of C and BLY 302 Minimum Grade of C and BLY 303 Minimum Grade of C

**BLY 354 General Entomology 4 cr**

Classification and habits of insects, including collection, preservation, and identification of those occurring in south Alabama.

Pre-requisite: BLY 301 Minimum Grade of C and BLY 302 Minimum Grade of C and BLY 303 Minimum Grade of C

**BLY 360 Invertebrate Zoology 4 cr**

Detailed study of the invertebrate phyla, taxonomy, ecology and phylogenetic relationship. Terrestrial, fresh-water, and marine forms are studied.

Pre-requisite: BLY 301 Minimum Grade of C and BLY 302 Minimum Grade of C and BLY 303 Minimum Grade of C

**BLY 363 Vertebrate Embryology 4 cr**

Avian and amphibian histogenesis and organogenesis from fertilization to time of histological maturity.

Pre-requisite: BLY 301 Minimum Grade of C and BLY 302 Minimum Grade of C and BLY 303 Minimum Grade of C

**BLY 367 Marine Biology 4 cr**

A general survey of marine plants, invertebrates and vertebrates, the communities they form and the physical and chemical factors that influence them. Field trips include marsh, seagrass, and dune habitats. Sampling from research vessels and laboratory exercises will serve to introduce students to the diversity of marine habitats and organisms. Organisms will be identified using dichotomous keys. Participation in overnight field trips is a part of this course. Snorkeling gear is required.

Pre-requisite: (BLY 121 Minimum Grade of D or BLY 141 Minimum Grade of D) and (BLY 122 Minimum Grade of D or BLY 142 Minimum Grade of D) and (BLY 301 Minimum Grade of C or BLY 341 Minimum Grade of C) and (BLY 302 Minimum Grade of C or BLY 311 Minimum Grade of C) and (BLY 303 Minimum Grade of C or BLY 325 Minimum Grade of C) and (CH 115 Minimum Grade of D or CH 131 Minimum Grade of D) and (CH 116 Minimum Grade of D or CH 132 Minimum Grade of D)

**BLY 368 Dolphins and Whales 2 cr**

Classification, anatomy, and ecology of cetaceans and manatees. Course offered only through Marine Environmental Science Consortium (DISL). Offered during the summer term.

Pre-requisite: (BLY 121 Minimum Grade of D or BLY 141 Minimum Grade of D) and (BLY 122 Minimum Grade of D or BLY 142 Minimum Grade of D) and (BLY 301 Minimum Grade of C or BLY 341 Minimum Grade of C) and (BLY 302 Minimum Grade of C or BLY 311 Minimum Grade of C) and (BLY 303 Minimum Grade of C or BLY 325 Minimum Grade of C)

**BLY 369 Blgy/Conserv Marine Turtles 2 cr**

Introductory course providing an overview of the biology and conservation of marine turtles. The course will culminate with a multi-day field trip to sea turtle nesting beaches and foraging grounds in the southeastern U.S. Class also will visit sea turtle research and rehabilitation facilities. Course offered only through Marine Environmental Science Consortium (DISL). Offered during the summer term. Special fees apply and will be posted on the website: [www.disl.org](http://www.disl.org)

Pre-requisite: (BLY 121 Minimum Grade of D or BLY 141 Minimum Grade of D) and (BLY 122 Minimum Grade of C or BLY 142 Minimum Grade of C) and (BLY 301 Minimum Grade of C or BLY 341 Minimum Grade of C) and (BLY 302 Minimum Grade of C or BLY 311 Minimum Grade of C) and (BLY 303 Minimum Grade of C or BLY 325 Minimum Grade of C)

**BLY 370 Marine Aquaculture 2 cr**

Techniques and issues involved with the commercial culture of marine organisms including nutrition, reproductive biology, production, water quality, processing, marketing, and economics. Course offered only through Marine Environmental Science Consortium (DISL). Offered during the summer term.

Pre-requisite: (BLY 121 Minimum Grade of D or BLY 141 Minimum Grade of D) and (BLY 122 Minimum Grade of D or BLY 142 Minimum Grade of D) and (BLY 301 Minimum Grade of C or BLY 341 Minimum Grade of C) and (BLY 302 Minimum Grade of C or BLY 311 Minimum Grade of C) and (BLY 303 Minimum Grade of C or BLY 325 Minimum Grade of C)

**BLY 371 Shark and Ray Biology 2 cr**

This course will provide an introduction to the biology of sharks and rays, with special emphasis on regional shark fauna and field techniques. Lectures will be supplemented with discussions of papers from the primary literature to familiarize students with current research; in addition, longline and gillnet sampling will provide students with first hand knowledge of field techniques and local shark identification. Course offered only through Marine Environmental Science Consortium (DISL). Offered during the summer term.

Pre-requisite: (BLY 121 Minimum Grade of D or BLY 141 Minimum Grade of D) or (BLY 122 Minimum Grade of D or BLY 142 Minimum Grade of D) and (BLY 301 Minimum Grade of C or BLY 341 Minimum Grade of C) and (BLY 302 Minimum Grade of C or BLY 311 Minimum Grade of C) and (BLY 303 Minimum Grade of C or BLY 325 Minimum Grade of C)

**BLY 372 Coastal Birds of Alabama 2 cr**

An introductory-level, field-based course covering identification, population dynamics and behavior of coastal avian fauna. Field trips will be taken to local coastal ecosystems and island rookeries. Course offered only through Marine Environmental Science Consortium (DISL). Offered during the summer term.

Pre-requisite: (BLY 121 Minimum Grade of D or BLY 141 Minimum Grade of D) and (BLY 122 Minimum Grade of D or BLY 142 Minimum Grade of D) and (BLY 301 Minimum Grade of C or BLY 341 Minimum Grade of C) and (BLY 302 Minimum Grade of C or BLY 311 Minimum Grade of C) and (BLY 303 Minimum Grade of C or BLY 325 Minimum Grade of C)

**BLY 411 Developmental Biology 3 cr**

A study of the principles that regulate the development of a complex, multicellular from a single cell with a focus on the underlying molecular mechanism and genetic regulation. Topics to be covered will include fertilization, differentiation, cell fate determination, pattern formation, organogenesis and regeneration. Particular emphasis will be placed on the experimental approaches, both historical and contemporary, that led to our current understanding of the development of multicellular organisms.

Pre-requisite: BLY 301 Minimum Grade of C and BLY 302 Minimum Grade of C and BLY 303 Minimum Grade of C

**BLY 414 Expt Bacterial Genomics - W 4 cr**

An integrated lab-lecture course utilizing real-world research experiences to explore the molecular genetics and genomics of bacteria. Students will be directly involved in the design, execution, analysis, and presentation of group research projects determining the function of genes from completed microbial genomes. A basic foundation in microbiology and genetics is required for this course.

Pre-requisite: BLY 301 Minimum Grade of C and BLY 302 Minimum Grade of C and BLY 303 Minimum Grade of C and BLY 314 Minimum Grade of C and EH 101 Minimum Grade of C and EH 102 Minimum Grade of C

**BLY 425 Chemical Ecology - W 3 cr**

This class focuses on chemically mediated interactions between, among, and within organisms in both the aquatic and terrestrial environments. The topics covered include: chemoreception, chemical defense, chemical attraction, and the impact of chemical ecology on humans. This course includes a writing component. Students will gain experience in critical analysis, research development, grant writing, and computer-based presentation.

Pre-requisite: (BLY 301 Minimum Grade of C or BLY 341 Minimum Grade of C) and (BLY 302 Minimum Grade of C or BLY 311 Minimum Grade of C) and (BLY 303 Minimum Grade of C or BLY 325 Minimum Grade of C)

- BLY 426 Freshwater Ecology** 3 cr  
This course examines four aspects of freshwater ecology; physical and chemical properties of water, biotic communities, links among freshwater systems, and human influence on freshwater ecosystems. Students will be required to submit a collection of local freshwater invertebrates.  
Pre-requisite: (BLY 301 Minimum Grade of C or BLY 341 Minimum Grade of C) and (BLY 302 Minimum Grade of C or BLY 311 Minimum Grade of C) and (BLY 303 Minimum Grade of C or BLY 325 Minimum Grade of C)
- BLY 430 Marine Botany** 4 cr  
A general survey of marine algae and vascular and non-vascular plants associated with the marine environment. Distribution, identification, structure, ecology, and reproduction will be considered. Course offered only through Marine Environmental Science Consortium (DISL). Offered during the summer term.  
Pre-requisite: (BLY 121 Minimum Grade of C or BLY 141 Minimum Grade of C) and (BLY 122 Minimum Grade of C or BLY 142 Minimum Grade of C) and (BLY 301 Minimum Grade of C or BLY 341 Minimum Grade of C) and (BLY 302 Minimum Grade of C or BLY 311 Minimum Grade of C) and (BLY 303 Minimum Grade of C or BLY 325 Minimum Grade of C)
- BLY 431 Plant Physiology - W** 4 cr  
An integrative study of higher plant functions. This course includes a study of water relations, plant biochemistry, plant development, and plant-environmental interactions.  
Pre-requisite: BLY 301 Minimum Grade of C and BLY 302 Minimum Grade of C and BLY 303 Minimum Grade of C and CH 132 Minimum Grade of D
- BLY 432 Morphology Vascular Plants** 4 cr  
Morphological features and possible relationships of psilophytes, club mosses, horsetails, ferns, and seed plants. Illustrated whenever feasible with local plants.  
Pre-requisite: BLY 301 Minimum Grade of C and BLY 302 Minimum Grade of C and BLY 303 Minimum Grade of C
- BLY 433 Evolution of Vascular Plants** 4 cr  
A survey of the systematics, taxonomy, and structure of the major groups of vascular plants. Fossil plants (paleobotany) will also be covered where relevant. Many labs are outdoors and focus on plant structure and identification utilizing the rich local flora.  
Pre-requisite: BLY 301 Minimum Grade of C and BLY 302 Minimum Grade of C and BLY 303 Minimum Grade of C
- BLY 434 Plant Physiological Ecology** 3 cr  
Plant Physiological Ecology is an investigation into the relatively "new" scientific field of physiological ecology (i.e., the study of how plants function in their environment) and is designed to meet the needs of students majoring in biology, ecology and/or various disciplines in plant biology. This course explores plant biology, plant-animal interactions, as well as, principles of ecology and evolution. Category B.  
Pre-requisite: BLY 121 Minimum Grade of C and BLY 122 Minimum Grade of C and BLY 301 Minimum Grade of C and BLY 302 Minimum Grade of C and BLY 303 Minimum Grade of C and BLY 431 Minimum Grade of C
- BLY 435 Biology of Fungi** 4 cr  
Identification and morphology of fungi with some emphasis on their relation to human affairs. Collection required.  
Pre-requisite: (BLY 121 Minimum Grade of D or BLY 141 Minimum Grade of D) and (BLY 122 Minimum Grade of D or BLY 142 Minimum Grade of D) and (BLY 301 Minimum Grade of C or BLY 341 Minimum Grade of C) and (BLY 302 Minimum Grade of C or BLY 311 Minimum Grade of C) and (BLY 303 Minimum Grade of C or BLY 325 Minimum Grade of C)
- BLY 436 Animal Physiology - W** 4 cr  
This class will take a comparative approach to animal physiology. Comparisons of structural and functional relationships in the body systems of invertebrates and vertebrates, including humans, will be made. A basic foundation in chemistry and cell biology is required for this course. This course incorporates writing and computer components. Students will gain experience in critical analysis, research development and analysis, word processing, computer based statistical and graphical analysis, and in computer based presentation programs. Fee.  
Pre-requisite: (BLY 301 Minimum Grade of C or BLY 341 Minimum Grade of C) and (BLY 302 Minimum Grade of C or BLY 311 Minimum Grade of C) and (BLY 303 Minimum Grade of C or BLY 325 Minimum Grade of C)
- BLY 440 Biochemistry I** 3 cr  
Study of the fundamental biochemical concepts; emphasis is placed on protein, carbohydrate, and lipid structure as related to their functional behavior; enzymes kinetics and mechanisms of action; thermodynamic relationships in biochemical systems. Offered only in Fall term. Cross-listed with CH 440.  
Pre-requisite: CH 202 Minimum Grade of D and BLY 301 Minimum Grade of C and BLY 302 Minimum Grade of C and BLY 303 Minimum Grade of C
- BLY 441 Biochemistry II** 3 cr  
Study of the reaction and regulations of intermediary metabolism; the biochemistry of genetics systems to include regulatory mechanisms and protein synthesis. Offered only in Spring term. Cross-listed with CH 441.  
Pre-requisite: BLY 440 Minimum Grade of D or CH 440 Minimum Grade of D

**BLY 443 Lab Studies Biochemistry 2 cr**

Course familiarizes the student with basic laboratory techniques commonly employed in biochemical research. Offered only in Spring term. Cross-listed with CH 443. Fee. Pre-requisite: (BLY 440 Minimum Grade of D or CH 440 Minimum Grade of D) and (BLY 441 Minimum Grade of D or CH 441 Minimum Grade of D)

**BLY 445 Computational Genetics-W 3 cr**

An ever growing body of online genetic datasets and publically available software makes basic informatic analysis of genetic systems no longer restricted to programmers. Utilizing the principle online resources employed by researchers today, this course will provide advanced undergraduates with a solid foundation in computational biology as well as the competency to independently evaluate emerging resources in the future. Students enrolled in this course will gain real world experience in the application of informatic techniques through participating in an actual collaborative research analysis and through directly contributing to a peer-reviewed manuscript reporting their results. Requires permission of instructor. Pre-requisite: BLY 301 Minimum Grade of C and BLY 302 Minimum Grade of C and BLY 303 Minimum Grade of C

**BLY 450 Animal Behavior 4 cr**

Course examines animal behavior from a biological and empirical viewpoint, with an emphasis on behavioral adaptations of animals to their environment. Orientation, migration, rhythms, communication, territoriality, social and courtship behaviors will be considered within the context of ecology and evolution. Pre-requisite: BLY 301 Minimum Grade of C and BLY 302 Minimum Grade of C and BLY 303 Minimum Grade of C

**BLY 451 Marine Vertebrate Zoology 4 cr**

A study of marine vertebrates, with emphasis on fishes; their systematics, zoogeography, and ecology. Course offered only through Marine Environmental Science Consortium (DISL). Offered during the summer term. Pre-requisite: (BLY 121 Minimum Grade of C or BLY 141 Minimum Grade of C) and (BLY 122 Minimum Grade of C or BLY 142 Minimum Grade of C) and (BLY 301 Minimum Grade of C or BLY 341 Minimum Grade of C) and (BLY 302 Minimum Grade of C or BLY 311 Minimum Grade of C) and (BLY 303 Minimum Grade of C or BLY 325 Minimum Grade of C)

**BLY 452 Marine Mammals 4 cr**

This is a marine field course designed to engage students in the collection, identification, and preservation of parasites of marine vertebrates and invertebrates. Each student will be required to submit a collection of parasites taken from beach, barrier island, estuarine, and pelagic (10-200km) offshore localities. Pre-requisite: BLY 301 Minimum Grade of C and BLY 302 Minimum Grade of C and BLY 303 Minimum Grade of C

**BLY 455 Ornithology 4 cr**

Principles of classification, structure, distribution, migration, natural history and adaptations of birds within an ecological context. Field & laboratory identification of birds by habitat, size, form, color, and sound. Some field activities may occur at times other than regularly scheduled laboratory hours. Pre-requisite: BLY 301 Minimum Grade of C and BLY 302 Minimum Grade of C and BLY 303 Minimum Grade of C and BLY 121 Minimum Grade of C and BLY 121L Minimum Grade of C and BLY 122 Minimum Grade of C and BLY 122L Minimum Grade of C and BLY 121 Minimum Grade of C

**BLY 459 General Parasitology 4 cr**

Ecology and evolution of parasites and a survey of all major parasitic groups. Pre-requisite: (BLY 121 Minimum Grade of C or BLY 141 Minimum Grade of C) and (BLY 122 Minimum Grade of C or BLY 142 Minimum Grade of C) and (BLY 301 Minimum Grade of C or BLY 341 Minimum Grade of C) and (BLY 302 Minimum Grade of C or BLY 311 Minimum Grade of C) and (BLY 303 Minimum Grade of C or BLY 325 Minimum Grade of C)

**BLY 466 Introduction to Neurobiology 3 cr**

Neuroanatomy and neurophysiology of marine invertebrates and vertebrates. Topics include resting and action potentials, synaptic transmission, neurotransmitters, sensory transduction, muscle innervation, sensorimotor transformations, and the neurophysiological basis of behavior. Course offered only through Marine Environmental Science Consortium (DISL). Offered during the summer term. Pre-requisite: (BLY 121 Minimum Grade of D or BLY 141 Minimum Grade of D) and (BLY 122 Minimum Grade of D or BLY 142 Minimum Grade of D) and (BLY 301 Minimum Grade of C or BLY 341 Minimum Grade of C) and (BLY 302 Minimum Grade of C or BLY 311 Minimum Grade of C) and (BLY 303 Minimum Grade of C or BLY 325 Minimum Grade of C)

**BLY 470 Herpetology 4 cr**

A field course that emphasizes the ecology, evolution, natural history, characteristics, structure, function, geographic distribution, behavior, and systematics of amphibians and reptiles. Course includes structured writing assignments and focuses on good writing skills and forms. Laboratory and field work emphasize identification of specimens by name, habitat, and characteristics. Some field activities will occur at times other than the scheduled laboratory hours. Pre-requisite: BLY 301 Minimum Grade of C and BLY 302 Minimum Grade of C and BLY 303 Minimum Grade of C

**BLY 471 Mar Invertebrate Zoology 4 cr**

A study of the natural history, systematics, and morphology of marine invertebrates. Course offered only through Marine Environmental Science Consortium (DISL). Offered during the summer term.

Pre-requisite: (BLY 121 Minimum Grade of C or BLY 141 Minimum Grade of C) and (BLY 122 Minimum Grade of C or BLY 142 Minimum Grade of C) and (BLY 301 Minimum Grade of C or BLY 341 Minimum Grade of C) and (BLY 302 Minimum Grade of C or BLY 311 Minimum Grade of C) and (BLY 303 Minimum Grade of C or BLY 325 Minimum Grade of C)

**BLY 472 Marine Behavioral Ecology 4 cr**

The ecological and evolutionary significance of animal behaviors in the marine environment. Exercises will include analysis of data collected from laboratory and field experiments. Statistics recommended. Course offered only through Marine Environmental Science Consortium (DISL). Offered during the summer term.

Pre-requisite: (BLY 121 Minimum Grade of D or BLY 141 Minimum Grade of D) and (BLY 122 Minimum Grade of D or BLY 142 Minimum Grade of D) and (BLY 301 Minimum Grade of C or BLY 341 Minimum Grade of C) and (BLY 302 Minimum Grade of C or BLY 311 Minimum Grade of C) and (BLY 303 Minimum Grade of C or BLY 325 Minimum Grade of C)

**BLY 474 Intro to Oceanography 4 cr**

A general introduction to the oceans, with emphasis on chemical, physical, and geological processes and their relation to biological systems. Course offered only through Marine Environmental Science Consortium (DISL). Offered during the summer term.

Pre-requisite: (BLY 121 Minimum Grade of C or BLY 141 Minimum Grade of C) and (BLY 122 Minimum Grade of C or BLY 142 Minimum Grade of C) and (BLY 301 Minimum Grade of C or BLY 341 Minimum Grade of C) and (BLY 302 Minimum Grade of C or BLY 311 Minimum Grade of C) and (BLY 303 Minimum Grade of C or BLY 325 Minimum Grade of C)

**BLY 475 Marine Ecology 4 cr**

The relationship of marine organisms to their environment. Course offered only through Marine Environmental Science Consortium (DISL). Offered during the summer term.

Pre-requisite: (BLY 121 Minimum Grade of C or BLY 141 Minimum Grade of C) and (BLY 122 Minimum Grade of C or BLY 142 Minimum Grade of C) and (BLY 301 Minimum Grade of C or BLY 341 Minimum Grade of C) and (BLY 302 Minimum Grade of C or BLY 311 Minimum Grade of C) and (BLY 303 Minimum Grade of C or BLY 325 Minimum Grade of C)

**BLY 478 Marsh Ecology 4 cr**

Study of the floral and faunal elements of various coastal and near-coastal marsh communities and the interaction with the environment. The course will focus upon the main indicators of marsh wetlands (vegetation, soil, and hydrology), how they interact to form functional wetlands, and how these wetlands are linked to the estuaries and seas beyond. Attention will be given to identification of indicators for the delineation of jurisdictional wetlands accounting to current federal guidelines. Participation in overnight field trips is part of this course. Course offered only through Marine Environmental Science Consortium (DISL). Offered during the summer term.

Pre-requisite: BLY 301 Minimum Grade of C and BLY 302 Minimum Grade of C and BLY 303 Minimum Grade of C

**BLY 483 Field Marine Science 1 TO 4 cr**

Course consists of a 10-day field exercise in the tropical southeastern Gulf of Mexico (Florida Keys) and the temperate north Atlantic. Sites alternate annually. Faculty members with diverse interest accompany the students, participate in pre-trip readings and discussion sessions and evaluate the product developed by each student. Course offered only through Marine Environmental Science Consortium (DISL). Offered during the summer term.

Requires Senior or Graduate standing in a major related to Marine Sciences and permission of instructor.

Pre-requisite: BLY 301 Minimum Grade of C and BLY 302 Minimum Grade of C and BLY 303 Minimum Grade of C

**BLY 484 Conservation Biology 3 cr**

The study of preserving biodiversity and sustaining ecosystems using a multidisciplinary approach. Primary emphasis will focus on the development of strategies for preservation and management using scientific principles and theory.

Pre-requisite: (BLY 301 Minimum Grade of C or BLY 341 Minimum Grade of C) and (BLY 302 Minimum Grade of C or BLY 311 Minimum Grade of C) and (BLY 303 Minimum Grade of C or BLY 325 Minimum Grade of C)

**BLY 485 Evolutionary Biology 3 cr**

The study of mechanisms and historical patterns of evolutionary change in biological systems ranging from genes to phylogeny.

Pre-requisite: (BLY 301 Minimum Grade of C or BLY 341 Minimum Grade of C) and (BLY 302 Minimum Grade of C or BLY 311 Minimum Grade of C) and (BLY 303 Minimum Grade of C or BLY 325 Minimum Grade of C)

**BLY 490 Special Topics - 1 TO 4 cr**

Small interested groups of students will study specialized topics not generally listed in the course offerings. Faculty and visiting professors will offer courses in their areas of specialization. This course may be taken more than once if the topic changes for a total of eight hours. Requires permission of the department.

Pre-requisite: BLY 301 Minimum Grade of C and BLY 302 Minimum Grade of C and BLY 303 Minimum Grade of C

**BLY 494 Directed Studies - 1 TO 4 cr**

Course is designed to enable the capable student to pursue independent research under the direction of a member of the faculty. Six hours of credit can be used to satisfy the 37 credit hours for the Biology major. Requires permission of the department chair.

Pre-requisite: BLY 301 Minimum Grade of C and BLY 302 Minimum Grade of C and BLY 303 Minimum Grade of C

**BLY 499 Honors Research in Biology-H-W 1 TO 6 cr**

Experience in planning, conducting, and reporting a research project under the direction of the faculty. Requires overall GPA 3.0, Biology GPA 3.5, and permission of the faculty. Fee.

Pre-requisite: (BLY 121 Minimum Grade of D or BLY 141 Minimum Grade of D) and (BLY 122 Minimum Grade of D or BLY 142 Minimum Grade of D) and (CH 115 Minimum Grade of D or CH 131 Minimum Grade of D) and (CH 116 Minimum Grade of D or CH 132 Minimum Grade of D)

**BLY 510 Prof in Science 3 cr**

The overall goal for this course to convey expectations and important "survival skills" required to succeed in the competitive world of science. Emphasis is placed on grant writing, publications, tenure and promotion, collegiality, productivity creativity, building a CV, alternative paths, and achieving balance between the professional and private life.

**BLY 511 Developmental Biology 3 cr**

A study of the principles that regulate the development of a complex, multicellular organism from a single cell with a focus on the underlying molecular mechanism and genetic regulation. Topics to be covered will include fertilization, differentiation, cell fate determination, pattern formation, organogenesis, and regeneration. Particular emphasis will be placed on the experimental approaches, both historical and contemporary, that led to our current understanding of the development of multicellular organisms.

Pre-requisite: (BLY 302 Minimum Grade of D or BLY 311 Minimum Grade of D) and (BLY 301 Minimum Grade of C or BLY 341 Minimum Grade of C) and BLY 363 Minimum Grade of D

**BLY 515 Ecotoxicology 4 cr**

The impact of chemicals as toxic agents on ecosystems. Students will understand types, sources, and effects of environmental toxicants, methods of testing and interpretation, and regulation of environmental toxicants. This material will be presented in the context of ecosystem health rather than human health. This is a core course for MS degree students in the Environmental Toxicology program.

**BLY 520 Biometry 4 cr**

The application of statistical methodology, both univariate and multivariate techniques, to the solution of biological problems. This course is not designed as a substitute for instruction in statistics, but rather to complement previous course work. The laboratory will involve the use of PC computers to perform procedures on biological data and subsequent interpretation of the results. Prerequisites can be waived at the discretion of the instructor.

Pre-requisite: (BLY 121 Minimum Grade of D or BLY 141 Minimum Grade of D) and (BLY 122 Minimum Grade of D or BLY 142 Minimum Grade of D) and (ST 175 Minimum Grade of D or ST 210 Minimum Grade of D or ST 540 Minimum Grade of C)

**BLY 525 Chemical Ecology 3 cr**

Chemical Ecology focuses on chemically mediated interactions within organisms in both aquatic and terrestrial environments. The topics covered include: chemoreception, chemical defense, chemical attraction, and the impact of chemical ecology on humans. Students will gain experience in critical analysis, research development, grant writing, and computer-based presentation. Requires permission of instructor.

Pre-requisite: (BLY 301 Minimum Grade of C or BLY 341 Minimum Grade of C) and (BLY 302 Minimum Grade of C or BLY 311 Minimum Grade of C) and (BLY 303 Minimum Grade of C or BLY 325 Minimum Grade of C) and (CH 201 Minimum Grade of C or CH 222 Minimum Grade of C)

**BLY 526 Freshwater Ecology 3 cr**

Course examines four aspects of freshwater ecology: physical and chemical properties of water, biotic communities, links among freshwater systems, and human influences on freshwater ecosystems. Students will be required to submit a collection of local freshwater invertebrates. Prerequisite: Ecology (equivalent to BLY 303). This prerequisite may be waived at the discretion of the instructor. Dual listed with BLY 426.

Pre-requisite: BLY 303 Minimum Grade of C

**BLY 530 Marine Microbial Ecology 3 cr**

A general survey of the types of microorganisms found in the marine environment. Emphasis will be on the interaction of microorganisms with each other and with their environment. In particular, the role of microorganisms in the carbon cycling and biogeochemical processes will be stressed. Readings from current literature will expose students to the latest techniques and research.

**BLY 533 Topics in Parasitology 3 cr**

Theoretical aspects of parasite ecology, evolution, and physiology, with emphasis on current literature.

**BLY 534 Plant Physiological Ecology 3 cr**

This course is an investigation into how plants function in their environment and is designed to meet the needs of students majoring in biology, ecology and/or various disciplines in plant biology. This course explores plant biology, plant-animal interactions, as well as, principles of ecology and evolution.

Pre-requisite: BLY 121 Minimum Grade of C and BLY 122 Minimum Grade of C and BLY 301 Minimum Grade of C and BLY 302 Minimum Grade of C and BLY 303 Minimum Grade of C and BLY 431 Minimum Grade of C

**BLY 535 Biology of Fungi 4 cr**

Identification and morphology of fungi with some emphasis on their relation to human affairs. Collection required. Credit for both BLY 535 and 435 is not allowed.

**BLY 540 Biochemistry I 3 cr**

Study of the fundamental biochemical concepts; emphasis is placed on protein, carbohydrate, and lipid structure as related to their functional behavior; enzymes kinetics and mechanisms of action; thermodynamic relationships in biochemical systems. Offered only in Fall term. Cross-listed with CH 540.

Pre-requisite: (CH 201 Minimum Grade of D or CH 222 Minimum Grade of D) and (CH 202 Minimum Grade of D or CH 223 Minimum Grade of D)

**BLY 541 Biochemistry II 3 cr**

Study of the reaction and regulations of intermediary metabolism; the biochemistry of genetics systems to include regulatory mechanisms and protein synthesis. Offered only in Spring term. Cross-listed with CH 541.

Pre-requisite: BLY 540 Minimum Grade of B

**BLY 543 Lab Studies Biochemistry 2 cr**

Course familiarizes the student with basic laboratory techniques commonly employed in biochemical research. Offered only in Spring term. Cross-listed with CH 543. Fee.

Pre-requisite: BLY 440 Minimum Grade of D or BLY 441 Minimum Grade of D or BLY 540 Minimum Grade of B or BLY 541 Minimum Grade of B

**BLY 544 Molecular Biology 3 cr**

BLY 544 is a graduate course that covers the basic mechanisms by which organisms utilize, maintain and duplicate their genetic information. Topics to be covered include: organization of genes, the mechanisms and regulation of transcription, RNA processing and translation, the packaging of DNA as chromatin and its impact on gene expression, DNA replication, recombination and repair, and genomics and proteomics.

**BLY 545 Bioinformatics of Genetics 1 cr**

The sequencing of whole genomes and the analysis of genetic information continues fundamentally change biological and medical research. Recent advances in high-throughput sequencing have generated massive amounts of largely untapped genetic information. Utilizing the principal online resources employed by researchers today, this course will provide graduate students with a solid bioinformatic foundation to analyze current sequencing data sets, as well as the competency to independently evaluate emerging computational resources in the future.

Pre-requisite: BLY 302 Minimum Grade of C or BLY 311 Minimum Grade of C

**BLY 550 Animal Behavior 4 cr**

This course will examine animal behavior from a biological and empirical viewpoint, with an emphasis on behavioral adaptations of animals to their environment. Orientation, migration, rhythms, communication, territoriality, social and courtship behaviors will be considered within the context of ecology and evolution. Credit for both BLY 450 and BLY 550 is not allowed.

**BLY 551 Marine Vertebrate Zoology 4 cr**

A study of marine vertebrates with emphasis on fishes; their systematics, zoogeography, and ecology. Students will have an opportunity to assemble a collection of vertebrate species. Course offered only through Marine Environmental Sciences Consortium. Credit for both BLY 551 and BLY 451 is not allowed.

**BLY 554 Advanced Entomology 4 cr**

Course emphasizes form, function, classification, behavior, taxonomy and evolution of insects. In addition, the student is required to make an insect collection of adult and immature insects.

**BLY 566 Introduction to Neurobiology 4 cr**

Neuroanatomy and neurophysiology of marine invertebrates and vertebrates. Topics include resting and action potentials, synaptic transmission, neurotransmitters, sensory transduction, muscle innervation, sensorimotor transformations, and the neurophysiological basis of behavior. Credit for BLY 566 and 466 is not allowed.

Pre-requisite: ( BLY 121 Minimum Grade of C and BLY 121L Minimum Grade of C) or BLY 141 Minimum Grade of C) and ( BLY 122 Minimum Grade of C and (BLY 122L Minimum Grade of C) or BLY 142 Minimum Grade of C)

**BLY 570 Herpetology 4 cr**

A field course that emphasizes the ecology, evolution, natural history, characteristics, structure, function, geographic distribution, behavior, and systematics of amphibians and reptiles. Course includes structured writing assignments and focuses on good writing skills and forms. Laboratory and field work emphasize identification of specimens by name, habitat, and characteristics. Some field activities will occur at times other than the scheduled laboratory hours. Oral classroom presentations required. Credit for BLY 470 and BLY 570 is not allowed.

**BLY 571 Marine Invertebrate Zoology 4 cr**

A study of the natural history, systematics and morphology of marine invertebrates. Credit for both BLY 571 and BLY 471 is not allowed.

**BLY 572 Marine Behavioral Ecology 4 cr**

The ecological and evolutionary significance of animal behaviors in the marine environment. Exercises will include analysis of data collected from laboratory and field experiments. Statistics recommended. Credit for BLY 572 and BLY 472 is not allowed.

Pre-requisite: (BLY 122 Minimum Grade of C and BLY 122L Minimum Grade of C) or BLY 142 Minimum Grade of C

**BLY 573 Oceanol Gulf of Mexico 3 cr**

A descriptive study of the oceanology of the Gulf of Mexico, and adjacent waters, including coastal zone, continental shelf, and deep ocean.

**BLY 575 Marine Ecology 4 cr**

Their relationship of marine organisms to their environment. Credit for both BLY 575 and BLY 475 is not allowed.

**BLY 583 Field Marine Science I 1 TO 4 cr**

The Field Marine Science course will consist of an 8 - 12 day field exercise in representative coastal sites. The field exercise is conducted in the term break prior to the term of registration for the course. Faculty members with diverse interests will accompany the students, participate in pre-trip discussions and evaluate the product developed by each student. The course is designed to familiarize students with habitats and research conditions different from those they experience on the Northern Gulf Coast. Field trip locations are selected on the basis of faculty and student interest, economics, and availability of logistical support. Students pay their room and board costs for the field exercise. The course is primarily for graduate students, but advanced undergraduates may enroll with consent of instructor. Both BLY 483/583 and 488/588 may be taken for credit when each is taught in a different environment.

**BLY 585 Evolutionary Biology 3 cr**

The study of mechanisms and historical patterns of evolutionary change in biological systems ranging from genes to phylogeny.

**BLY 589 Marine Plankton 3 cr**

The course familiarizes the student with the taxonomic breadth of phytoplankton, bacterioplankton and zooplankton in estuaries, coastal seas and open oceans. Though the focus is on taxonomic familiarization, basic biology of all major taxa, represented in the plankton will be covered. Students will learn fundamental, as well as "cutting-edge", field, lab, and statistical techniques.

**BLY 590 Special Topics - 1 TO 4 cr**

Small, interested groups of students will study specialized topics not generally listed in the course offerings. Faculty and visiting professors will offer courses in their areas of specialization. This course may be taken more than once if the topic changes for a total of eight hours. Requires permission of the department.

**BLY 592 Seminar 1 cr**

Recent research in areas of special academic interest to students and faculty.

**BLY 594 Directed Studies - 1 TO 4 cr**

Independent research under the direction of a member of the graduate faculty. A maximum of six credits may be used to meet degree requirements. Permission of instructor required.

**BLY 599 Thesis 1 TO 4 cr**

Requires approval of research prospectus by student's graduate committee.

## Biomedical Sciences (BMD)

**BMD 114 Anatomy and Physiology I 4 cr**

This is the first of a two-course sequence that covers an introduction to basic human anatomy and physiology, including the study of the structure and function of various body systems. Included is a study of basic principles of organism homeostasis, biochemical makeup, a study of cells and tissues, cellular metabolism, joints, the integumentary and skeletal systems, muscular and nervous systems, and the senses. Laboratory experiences are provided through demonstration and interactive (virtual) laboratories.

Pre-requisite: BLY 101 Minimum Grade of D or BLY 121 Minimum Grade of D or CH 101 Minimum Grade of D or CH 131 Minimum Grade of D

**BMD 115 Anatomy and Physiology II 4 cr**

A continuation of BMD 114. Topics include nervous, cardiovascular, lymphatic, immune, respiratory, digestive, and urinary systems. Additional topics may include blood, metabolism, immunology and reproduction. Laboratory experience is provided through demonstration and interactive (virtual) laboratories.

Pre-requisite: BMD 114 Minimum Grade of D

**BMD 200 Career Planning 1 cr**

Clinical Observations (Medicine, Dentistry, Optometry and Veterinary Medicine). This course gives the student clinical exposure to various health-care services. It is designed to help students make informed decisions when selecting a career in the health professions. A written report on the clinical experience or scenario dealing with "medical ethics" is required. May be repeated for a maximum of six hours' credit. Prereq: Permission of the Director of Health Pre-Professional Program.

Pre-requisite: CH 131 Minimum Grade of D and BLY 121 Minimum Grade of D

**BMD 201 Seminars in Biomedical Science 1 cr**

This course introduces students to contemporary biomedical research and career possibilities in the biomedical sciences. Students will use the resources of the Biomedical Library to perform a literature search.

**BMD 210 Infectious Disease Hlth Cr Env 3 cr**

This course introduces the fundamental concepts of host-microbial relationships resulting in infectious diseases. Included topics are microorganism virulence factors, host defenses, mechanisms, epidemiology, antimicrobial chemotherapy, and microbial resistance. Principles of microbial physiology, taxonomy, and genetics are provided as background. Specific infectious diseases of various anatomical systems are emphasized.

Pre-requisite: BLY 101 Minimum Grade of D or BLY 121 Minimum Grade of D or BMD 114 Minimum Grade of D

**BMD 290 Sp Top - H - 1 TO 6 cr**

Topics of current health interest.

**BMD 311 Human Anatomy 3 cr**

A course in human gross and microscopic anatomy in a systematic approach, with an emphasis on structure-function relationships at the cell, tissue and organ level. The topics include anatomy of integumentary, musculoskeletal, nervous, cardio-vascular, lymphatic, respiratory, digestive, urinary and reproductive systems. This course is lecture - based with no lab component.

Pre-requisite: BLY 122 Minimum Grade of D

**BMD 321 Biochemistry I-Molecular Biol 3 cr**

The course covers different aspects of molecular biology including protein structure and function, carbohydrate, lipids, DNA replication, transcription and translation and applications to medical problems (i.e., forensic medicine, diagnosis of genetic diseases, etc).

Pre-requisite: CH 201 Minimum Grade of D

**BMD 322 Biochemistry II-Metabolism 3 cr**

The course discusses the chemical basis of metabolism including the conversion of nutrients from digestion to either molecules of biological relevance or to energy. Genetic diseases affecting these pathways are described and discussed.

Co-requisite: BMD 323

Pre-requisite: BMD 321 Minimum Grade of D and CH 202 Minimum Grade of D

**BMD 323 Biochemistry Laboratory 1 cr**

This laboratory is designed to provide hands-on experience on several biochemical techniques including cell fractionation, chromatography, DNA isolation, electrophoresis, determination of enzyme activity, etc.

Co-requisite: BMD 322

Pre-requisite: BMD 321 Minimum Grade of D

**BMD 334 Human Physiology I 3 cr**

The objectives of this course are to study human physiology with emphasis on cellular physiology ( cell structure, metabolism, and transport) and the endocrine and nervous systems and skeletal muscle. This course is the first of a 2 course sequence.

Pre-requisite: BLY 121 Minimum Grade of D and BLY 122 Minimum Grade of D or CH 131 Minimum Grade of D or CH 132 Minimum Grade of D

**BMD 335 Human Physiology II 3 cr**

Study of human physiology with emphasis on the basic principles of organ system physiology. The course emphasizes muscle, cardiovascular, renal, respiratory, digestive, and reproductive physiology and an introduction to immunology. This is the second course in a 2 course sequence.

Pre-requisite: BMD 334 Minimum Grade of D

**BMD 336 Physiology Lab - W 1 cr**

This laboratory is designed to provide students with hands-on laboratory experience in physiology, with emphasis on the musculoskeletal, cardiovascular, respiratory and nervous systems. Limited to BMD majors unless by special permission. Special fee.

Co-requisite: BMD 335

Pre-requisite: BMD 334 Minimum Grade of D and EH 102 Minimum Grade of C or EH 105 Minimum Grade of C

**BMD 350 Molecular Basis of Genomics 3 cr**

The course is designed to introduce students to the fundamental concepts of molecular genetics and genomics. The concepts that will be covered in this course include nucleic acid structure and function, mechanisms of replication, transcription, translation, gene expression and regulation. In addition, the course aims to familiarize students with modes of analysis used in comparative genomic research.

Pre-requisite: BMD 321 or BLY 301 or BLY 440

**BMD 390 Sp Top - 1 TO 8 cr**

Topics of current health interest.

- BMD 401 Immunology** 3 cr  
This course presents the basic concepts of immunochemistry, immunobiology and host immune responses to disease. Antigens, antibodies, cells and structures of the immune system will be discussed as well as their roles in the processes of immunity, allergies, transplantation, and diseases.  
Pre-requisite: BMD 321 Minimum Grade of D or CH 201 Minimum Grade of D or BMD 114 Minimum Grade of D and (BMD 210 Minimum Grade of D or BLY 213 Minimum Grade of D)
- BMD 402 Medical Microbiology** 5 cr  
This course presents the concepts of pathogenicity and virulence as they relate to disease causing bacteria, viruses, and fungi. Mechanisms of pathogenicity, interrelationships and interactions that occur between the host, the parasite and their environments will be emphasized in molecular terms. General concepts of microbial physiology, genetics and antimicrobial therapy are also presented. The laboratory portion of the course will provide hands-on experience in the handling and identification of bacteria. Special fee.  
Pre-requisite: BMD 401 Minimum Grade of D
- BMD 410 Pathophysiology** 3 cr  
A systematic study of disease processes involving relationships between pathophysiological changes and clinical manifestations.  
Pre-requisite: BMD 321 Minimum Grade of D and BMD 322 Minimum Grade of D and BMD 334 Minimum Grade of D and BMD 335 Minimum Grade of D
- BMD 420 Pharmacology** 3 cr  
An introduction to pharmacological concepts and effects and uses of major drug classes. Drug design, pharmacodynamics (receptors, mechanisms, dose-response) and pharmacokinetics (time action) are discussed in general (principles), and in particular, for selected classes of drugs.  
Pre-requisite: BMD 321 Minimum Grade of D and BMD 322 Minimum Grade of D and BMD 334 Minimum Grade of D and BMD 335 Minimum Grade of D
- BMD 430 Neurosciences** 4 cr  
A study of neuroscience which integrates neurochemistry, neuroanatomy, and neurophysiology, emphasizing cellular neurobiology, neural systems, and the neurobiology of behavior. Course includes laboratory experience.  
Pre-requisite: BMD 311 Minimum Grade of D and BMD 334 Minimum Grade of D or BMD 335 Minimum Grade of D
- BMD 450 Introduction to Research** 2 cr  
Fundamental principles of research will be presented and applied. Students will examine and evaluate a selection of contemporary research and learn many of the responsibilities of professional researchers, particularly in academic settings. Oral classroom presentations are required.  
Pre-requisite: BMD 311 Minimum Grade of D and BMD 321 Minimum Grade of D and BMD 322 Minimum Grade of D and BMD 335 Minimum Grade of D and BMD 334 Minimum Grade of D and BMD 336 Minimum Grade of D
- BMD 490 Sp Top -** 1 TO 8 cr  
Topics of current health interest.
- BMD 493 Issues in Biomed Sciences - W** 3 cr  
This course will provide an open forum for discussion of current controversial issues in biomedical sciences. The topics will include research integrity, discussions on the impact of medical advances in society as well as issues of historical relevance.  
Pre-requisite: BMD 321 Minimum Grade of D
- BMD 494 Directed Research Studies** 3 cr  
The student will perform a biomedical research project under the direction of a faculty mentor. This will include literature searches and presenting the project in a written format. Permission of Instructor and Department Chair required.  
Pre-requisite: BMD 321 Minimum Grade of D
- BMD 499 Honors Research Thesis - W - H** 2 OR 3 cr  
Literature survey and laboratory research experience under the direction of the faculty.  
Pre-requisite: BMD 311 Minimum Grade of D and BMD 321 Minimum Grade of D and BMD 322 Minimum Grade of D and BMD 323 Minimum Grade of D or BMD 335 Minimum Grade of D or BMD 336 Minimum Grade of D
- BMD 501 Immunology** 3 cr  
This course presents the basic concepts of immunochemistry, immunobiology, and host immune responses to disease, antigens, antibodies, cells and structures of the immune system will be discussed as well as their roles in the process of immunity, allergies, transplantation and diseases. A term paper is required.
- BMD 502 Medical Microbiology** 5 cr  
The course presents the concept of pathogenicity and virulence as they relate to disease causing bacteria, viruses, and fungi. Mechanisms of pathogenicity, interrelationships, and interactions that occur between the host, the parasite and their environments will be emphasized in molecular terms. General concepts of microbial physiology, genetics, and antimicrobial therapy are also presented. The laboratory portion of the course will provide hands-on experience in the handling and identification of bacteria. A term paper is required.

## Business (BUS)

### **BUS 101 Prof Experience I** 1 cr

An introduction to career success tools including: personality and career interest inventories, steps to succeed basic resume preparation, business ethics, personal branding, university and community involvement and other career preparation activities. This course is designed for students in their first and second semester within the MCOB.  
Pre-requisite: EH 101 Minimum Grade of C or EH 102 Minimum Grade of C

### **BUS 150 Intro to Business and Mgt** 3 cr

A survey of the field of business, including profit-seeking firms, not-for-profit organizations, and new businesses created by entrepreneurs. Emphasis on the business environment, organization and management, current economic and international issues, and career opportunities. Societal and ethical issues are also examined. Open to University of South Alabama freshmen only.  
Pre-requisite: EH 101 Minimum Grade of C or EH 102 Minimum Grade of C

### **BUS 201 Professional Experience II** 1 cr

Continued introduction to Career success tools including: resume building activities, cover letter and references development, career for a day shadowing, speed branding, dress for success, networking, career fair tools for success, university and community involvement and other career preparation activities. Prerequisite: C or better in BUS 101, Sophomore standing.  
Pre-requisite: BUS 101 Minimum Grade of C

### **BUS 245 Applied Bus Statistics I** 3 cr

An examination of statistical techniques that are used to support managerial decision-making and problem solving. Topics include measures of central tendency and dispersion, probability theory, discrete and continuous sampling distributions, methods of estimation, and tests of hypotheses.  
Pre-requisite: University test - Math 75 or MyMathTest 080 or ACT Math 23 or MA 112 Minimum Grade of D or MA 113 Minimum Grade of D or MA 115 Minimum Grade of D or MA 120 Minimum Grade of D or MA 121 Minimum Grade of D or MA 125 Minimum Grade of D or MA 126 Minimum Grade of D or MA 131 Minimum Grade of D or MA 132 Minimum Grade of D or MA 171 Minimum Grade of D or MA 172 Minimum Grade of D or MA 287 Minimum Grade of D

### **BUS 255 Applied Business Stats II** 3 cr

The application of statistical techniques for analysis for business problems. Emphasis will be placed on forecasting techniques. Topics will include: sources of data, index numbers, time-series analysis, correlation and regression analysis, step-wise regression, and problems associated with the regression of time-series data.  
Pre-requisite: (BUS 245 Minimum Grade of C or BMS 245 Minimum Grade of D or BMS 250 Minimum Grade of D or ST 175 Minimum Grade of D or ST 210 Minimum Grade of D) and University test - Math 75( or (MA 112 Minimum Grade of D or MA 171 Minimum Grade of D) or (MA 113 Minimum Grade of D or MA 172 Minimum Grade of D) or (MA 115 Minimum Grade of D or MA 121 Minimum Grade of D) or (MA 120 Minimum Grade of D or MA 287 Minimum Grade of D) or (MA 125 Minimum Grade of D or MA 132 Minimum Grade of D) or (MA 126 Minimum Grade of D or MA 233 Minimum Grade of D) )

### **BUS 265 Legal Environ of Business I** 3 cr

A study of the global legal environment in which contemporary American business functions, including a review of legal thought and ethical considerations and the foundations and impacts of governmental regulation in areas such as labor and employment, environmental concerns, consumer protection, and antitrust. Contemporary issues, domestic and international concepts and institutions, and social forces that shape the legal environment are emphasized. Requires sophomore standing

### **BUS 302 Professional Preparation** 3 cr

This course adds further career success tools including: personal professional strategic plan development, mock interviewing, dining etiquette, personal and professional mentoring, defining the employment process, creating a career plan, university and community involvement, and other career preparation activities. Junior Standing.

### **BUS 305 Information Systems and Tech** 3 cr

The analysis, design and implementation of information systems. Analysis of the functional area of business and integration of computer tools to satisfy information requirements. Current developments in business computer systems, including surveys of current systems and the Internet. Computer classrooms are utilized to provide students with "hands on" experience.  
Pre-requisite: CIS 250 Minimum Grade of D

### **BUS 490 Special Topics -** 3 cr

Designed to provide senior students an opportunity to study selected topics of particular interest. A student may count no more than six hours of Special Topics in the concentration.  
Prerequisite: Approval of Department Chair.

**BUS 496 MCOB Honors Sr Project I - H 3 cr**

Applied business project and paper prepared under the direction of a project advisor plus two other persons selected by the advisor in consultation with the student. The student must have developed a proposal for the project and paper in consultation with the advisor and received permission from the committee to proceed. In addition, the student must be entering his or her senior year and be a major in the Mitchell College of Business. The project proposal must be formulated no later than the end of the first semester of the student's senior year and the project must be completed by the student's graduation date. The student must have maintained his or her standing in the university honors program to be eligible to enroll in this course in his or her last full semester in school. The course may be counted in one of two ways: 1) as an additional course not counting towards the business degree, or 2) in special cases, as a major or business elective, to be decided by the committee. Pre-requisite: (HON 399 Minimum Grade of D or HON 301 Minimum Grade of D) and BUS 305 Minimum Grade of D and (FIN 315 Minimum Grade of D or FIN 341 Minimum Grade of D) and (MGT 300 Minimum Grade of D or MGT 322 Minimum Grade of D) and (MGT 305 Minimum Grade of D or MGT 324 Minimum Grade of D) and (MGT 310 Minimum Grade of D or MGT 322 Minimum Grade of D or MGT 422 Minimum Grade of D) and (MGT 325 Minimum Grade of D or MGT 396 Minimum Grade of D) and (MKT 320 Minimum Grade of D or MKT 371 Minimum Grade of D)

**BUS 497 MCOB Honors Sr Project II - H 3 cr**

Applied business project and paper prepared under the direction of a project advisor plus two other persons selected by the advisor in consultation with the student. The student must have developed a proposal for the project and paper in consultation with the advisor and received permission from the committee to proceed. In addition, the student must be entering his or her senior year and be a major in the Mitchell College of Business. The project proposal must be formulated no later than the end of the first semester of the student's senior year and the project must be completed by the student's graduation date. The student must have maintained his or her standing in the university honors program to be eligible to enroll in this course. The student will formally enroll in the course in his or her last full semester in school. The course may be counted in one or two ways: 1) as an additional course not counting towards the business degree, or 2) in special cases, as a major or business elective, to be decided by the committee. Requires completion of the business core with the exception of MGT 485.

Pre-requisite: BUS 496 Minimum Grade of C

**BUS 498 Mitchell Scholars Sr Project 3 cr**

Applied business project and presentation prepared under the direction of the instructor in consultation with the student. This course will have irregular meetings scheduled by the instructor and will have both a classroom component and a project component. The student must have maintained his/her standing in the Mitchell Scholars program and be a senior to be eligible to enroll in this course. This class will be counted in one of three ways: 1) as a business elective, 2) as an additional course not counting towards the business degree; or 3) in special cases, as a major elective to be decided by the major department's faculty. Requires completion of the business core with the exception of MGT 485 and approval of Associate Dean.

Pre-requisite: Mitchell Scholars 10 and BUS 305 Minimum Grade of D and FIN 315 Minimum Grade of D and MGT 300 Minimum Grade of D and MGT 305 Minimum Grade of D and MGT 310 Minimum Grade of D and MGT 325 Minimum Grade of D and MKT 320 Minimum Grade of D

**BUS 555 Study Abroad 3 TO 6 cr**

Examines issues in business administration in an international setting at the graduate level. Specific topics selected from the fields of accounting, economics, finance, information systems, management or marketing depending on the instructor's area of expertise. Part or all of the course will be conducted outside the United States. Prerequisite: Permission to enroll in a relevant Mitchell College of Business study abroad program.

**BUS 600 Fund of Research 3 cr**

This course provides students with the tools and perspective necessary to succeed in the DBA program. Readings are drawn from several sources and provide participants with a better understanding of the way to approach their work.

**BUS 602 Applied Stat and Reg 3 cr**

This course provides an examination of statistical concepts used for business research. Topics include: fundamentals of probability, sampling, statistical estimation, test of hypotheses, analysis of variance, chi-square analysis and regression analysis. Emphasis is placed on the use of statistical techniques for business research applications.

**BUS 604 Multivariate Analysis 3 cr**

The course is designed to broaden and enrich a student's knowledge and understanding of statistical methodology as it pertains to the study of multivariate techniques used in behavioral research.

**BUS 606 Research Design and Methods 3 cr**

This course focuses on the general concepts related to conducting academic research and the various research methods commonly used in business research, including quantitative and qualitative analysis.

**BUS 608 Adv Stats & App Res 6 cr**

An examination of advanced statistical concepts used for business research. This course is designed to broaden and enrich students' knowledge and understanding of statistical methodology as it pertains to advanced techniques used in behavioral research. In addition, this course provides applied research opportunities to assist in advancing the student's research requirements necessary for degree completion.

**BUS 610 Struct Equation Modeling 3 cr**

This course provides students with a functional understanding of path analysis theory and procedures of structural equation modeling. Students will learn to specify, estimate, and evaluate models using software packages designed for this purpose.

**BUS 699 Res and Teaching Concepts 1 cr**

Presentations and discussions related to teaching and research concepts.

## Cardiorespiratory Care (CRC)

**CRC 330 Cardioresp Care Assessmt Skill 5 cr**

A presentation of patient assessment skills to prepare for subsequent courses in the curriculum. Modules included are chart review and history, vital signs, physical assessment of the chest, chest radiography, laboratory assessment, bedside pulmonary function testing, electrocardiography, and cardiopulmonary resuscitation. Students are prepared to function in a problem-based learning curriculum. Special Fee.

**CRC 331 Respiratory Anatomy-Physiology 3 cr**

The structure and function of the respiratory system will be discussed. Emphasis will be placed on (1)the physiologic ramifications associated with respiratory therapeutic intervention and (2)interrelationships between the pulmonary and renal systems and how these two systems influence and control the body's acid-base status.

**CRC 332 Intermittent-Diag Cardio Care 4 cr**

This course will focus on cases involving patients receiving intermittent respiratory care modalities including oxygen and aerosol therapy, resuscitation, airway care, pharmacology, chest physiotherapy, incentive spirometry, and IPPB. Infection control issues will be included. Diagnostic issues include pulmonary function testing and arterial blood gas analysis. Students will discuss the pathophysiology, health promotion and disease prevention aspects of each case. Relevant laboratory exercises will be conducted.

**CRC 334 Pharmacology 3 cr**

An overview of pharmacological principles will be presented. Emphasis will be given to drugs influencing the respiratory, cardiovascular, nervous, and renal systems.

**CRC 335 Intensive Cardioresp Care 5 cr**

This course will focus on cases involving patients receiving intensive cardiorespiratory care modalities including mechanical ventilation, invasive and non-invasive monitoring, artificial airways, and hyperbaric oxygen therapy. Diagnostic issues will include hemodynamic monitoring and fiberoptic bronchoscopy. Students will discuss the pharmacology, pathophysiology, health promotion and disease prevention aspects of each case. Relevant laboratory exercises will be conducted.

**CRC 342 Inter Cardioresp Care Pract 3 cr**

Clinical experiences are conducted in the care of patients who are receiving respiratory care modalities, as discussed in the cases in CRC 332. Students prepare and present case studies relevant to this patient population.

**CRC 345 Intensive Cardioresp Care Prac 5 cr**

Clinical experiences will involve patients who receive intermittent and intensive care modalities and diagnostic procedures discussed in the cases in CRC 335. Students will prepare and present case studies relevant to this patient population.

**CRC 415 Research Methodology 2 cr**

A survey of research designs, methods, and evaluative techniques, applicable to basic science and clinical research studies.

**CRC 428 Cardiorespiratory Diseases 3 cr**

This course will discuss the pathophysiology, signs and symptoms, patient assessment, diagnostic testing, laboratory data, and respiratory therapeutic interventions pertaining to common pulmonary, cardiac, and cardiovascular disease. Review of electrocardiography and Advanced Cardiac Life Support are included. The role of the respiratory therapist during bronchoscopy is also presented.

**CRC 430 Neonatal-Pediatric Cardio Care 3 cr**

This course will focus on cases involving infants and children. Topics include developmental anatomy and physiology, assessment, pathophysiology, basic and intensive care, pharmacology, extracorporeal membrane oxygenation, and resuscitation. Students will discuss the pharmacology, pathophysiology, health promotion and disease prevention aspects of each case. Relevant laboratory exercises will be conducted.

**CRC 435 Critical Care Concepts 3 cr**

This course presents current theories and applications of adult critical care, in addition to those of mechanical ventilation. It focuses on pathophysiology, diagnostic procedures, and clinical presentation of disease.

**CRC 440 Advanced Clinical I - W 6 cr**

Clinical experiences will involve the care of neonatal and pediatric patients who receive intermittent and intensive cardiorespiratory care, as discussed in the cases in CRC 430. Students will prepare and present case studies relevant to this patient population.

**CRC 441 Advanced Clinical II 6 cr**

Clinical experiences involve the care of patients who are placed in subacute settings, in the sleep laboratory, and those who receive intensive cardiovascular procedures and pulmonary function testing, and bronchoscopy. Students will prepare and present case studies relevant to this patient population.

**CRC 446 Cardiorespiratory Care Educ -W 2 cr**

General educational principles and projects will receive major emphasis. These principles and projects include writing instructional objectives, developing didactic and clinical instructional strategies, and constructing evaluation instruments. Accreditation and credentialing issues will also be addressed. Developing and presenting instructional units will be among the various projects initiated by the students.

**CRC 447 Cardiorespiratory Care Mgt 2 cr**

This course will provide the student with experiences and projects pertaining to the management of a respiratory therapy and cardiopulmonary department. Some management functions include: JCAHO respiratory therapy standards, staff scheduling, departmental budgeting, quality assurance, evaluation of personnel, purchasing, and grievance procedures.

**CRC 450 Clinical Research I - W 2 cr**

This is the first part of a two-part course. Students will design and perform a research project, relating to either clinical practice, education, or management. The work involved in this course will extend through two successive semesters. Students register for CRC 450 in the Fall Semester of the senior year for two credit hours and for CRC 451 in the Spring Semester for two credit hours. Special Fee.

**CRC 451 Clinical Research II - W 2 cr**

This is the second part of a two-part course. Students will design and perform a research project, relating to either clinical practice, education, or management. The work involved in this course will extend through two successive semesters. Students register for CRC 450 in the Fall Semester of the senior year for two credit hours and for CRC 451 in the Spring Semester for two credit hours. Special Fee.

**CRC 460 Advanced-Level Exam Review 3 cr**

This course is designed to assist students in preparing for the Therapist Multiple-Choice and Clinical Simulation Examinations offered by the National Board for Respiratory Care (NBRC). Respiratory therapy equipment, therapeutic modalities, therapeutic interventions, medications, and related procedures relevant to these examinations will be reviewed in the form of assignments, discussions, and practice examinations.

**CRC 499 Senior Honors Project - W - H 3 TO 6 cr**

Under the advice and guidance of a faculty mentor, honors students will identify and carry out a research project relevant to the field of Cardiorespiratory Care study that will lead to a formal presentation at the annual Honors Student Colloquium. The senior project will be judged and graded by three faculty members, chaired by the honors mentor. This course is required for Honors recognition and may be repeated for up to 6 credit hours. Requires permission of department chair and completion of an approved project prospectus.

**CRC 533 Obstructive Pulmonary Dis Mgt 3 cr**

This course provides the information necessary for disease management of patients with obstructive pulmonary diseases (OPD). Emphasis will be placed on epidemiology, clinical manifestations, diagnosis, patient and family teaching skills, and patient management. Smoking cessation techniques are included. The administrative aspects of establishing a program/clinic and reimbursement issues will be discussed. This course is open to registered respiratory therapists and registered nurses (with a baccalaureate degree), nurse practitioners, NP students, physician assistants and PA students. Successful completion of this course will help prepare for the National Asthma Education Certification Board examination.

**CRC 543 Obstruct Pulm Dis Mgt-Clinical 3 cr**

This course provides the clinical skills necessary for COPD and asthma management. Emphasis is on the clinical manifestations, verifying diagnosis, patient and family teaching skills, smoking cessation techniques, administrative aspects of establishing a clinic and reimbursement, and disease management, in several clinical settings. This course is the clinical correlate of CRC 533, open to registered respiratory therapists and registered nurses (with a baccalaureate degree), nurse practitioners, NP students, physician assistants, and PA students. Successful completion of this course will help prepare for the National Asthma Education Certification Board examination.

**CRC 590 Sp Topics Resp Ther Education 3 cr**

Topics will include accreditation, use of NBRC school score reports and self-assessment examinations, roles of key personnel, tenure and promotion policies, the instructor's roles in classroom, laboratory and clinical instruction, student evaluation, student counseling and services, higher education law, and current issues in respiratory therapy and allied health education.

## Career Planning (CP)

**CP 101 Freshman Sem-Continuing Educ 2 cr**

A course for first-time students that assists with maximizing the student's potential to achieve academic success and to adjust responsibly to the individual and interpersonal challenges presented by college life. This course provides an introduction to the nature of higher education and a general orientation to the functions and resources of the University. Extensive reading and writing assignments relevant to the student's first year experience are required.

**CP 250 Career Planning and Develop 3 cr**

Principles, methods, and practice in career planning and development with emphasis on career information, self-analysis, exploration of careers, career opportunities, guidelines for goal achievement.

**CP 450 The Job Campaign 3 cr**

Practical approach to career development designed to help students develop strategies for obtaining suitable employment and making career choices. Emphasis is on the principles, methods, and practice in achieving career goals through the study of careers, preparing resumes, writing letters of application, practicing job interview techniques, and identifying prospective employers.

## Cell Biology And Neuroscience (CBN)

**CBN 112R Medical Histology 8 cr**

Summer make-up course in Medical Histology at an LCME approved medical school.

**CBN 114 Neuroanatomy 4 cr**

The course consists of both laboratory and lecture material. Emphasis is given to the functional neurobiology of the human central nervous system. In addition to basic anatomical systems, considerable time is given to the delineation of the anatomical bases of human CNS dysfunction.

**CBN 400 Cell Biol & Neuro Externship 4 cr**

To be determined.

**CBN 405 Research Assistantship 1 TO 4 cr**

Teaching assistantships are available in the following areas: head and neck; thorax and abdomen; pelvis and perineum; or extremities.

**CBN 406 Teach Asst-Histology 1 TO 4 cr**

Participants will assist the faculty in teaching histology laboratories either pertaining to tissues (4 weeks) or organ systems (4 weeks, or 8 weeks for both). The student will be mentored by one of the listed faculty who will assume responsibility for the final evaluation of the student.

**CBN 407 Teach Assistantship - Anatomy 1 TO 4 cr**

Teaching assistantships are available in the following areas: head and neck; thorax and abdomen; pelvis and perineum or extremities.

**CBN 516 Cell Biol-Neurosci Lit Reports 1 cr**

Students and faculty participate in a supervised reading of the current literature and meet periodically (usually once a week) to interact in a discussion of the selected article or topic. The goal of this course is to maintain the faculty's and students' level of information at the "state of the art" in both methods and theory in the discipline to develop critical review skills in reviewing the literature. Student presentation is required to receive credit.

**CBN 517 Dir St - Cell Bio Neuroscience 1 TO 6 cr**

Students participate in research under the direction of a graduate faculty member. The student may pursue independent research or participate in a literature project. This course should be taken by students who have completed their laboratory rotations, but have not yet submitted a research proposal.

**CBN 590 Sp Top - 1 TO 3 cr**

This course provides in-depth tutorial exposure to specific areas in the discipline. Student and/or faculty presentations followed by group discussion (usually in the Socratic mode), examine the subject matter in an area of current interest either to one student or to a group of students. Credit and title are arranged with an individual faculty member.

**CBN 610 Molecular-Cellular Neuroscienc 2 cr**

A course which requires students to read and evaluate critically the contemporary literature dealing with the cellular and molecular mechanisms of neural function.

**CBN 614 Gene Expr- Reg- Repair- Ther 2 cr**

This course requires students to read, present, and evaluate critically the modern literature on gene expression and regulation, repair and therapy.

**CBN 616 Cell Biol-Neurosci Resrch Sem 1 cr**

Students and faculty present a research topic for discussion before members of the department. The presentations are usually scheduled on a rotational basis. The student may present research data for critique by the faculty.

**CBN 799 Research Dissertation 1 TO 6 cr**

Independent research by the student under the sponsorship of the graduate faculty. Students are required to submit a research project description form before enrolling in this course. Progress reports of the work accomplished are required every six months.

## Chemical Engineering (CHE)

**CHE 190 Special Topics - 1 TO 5 cr**

Topics of current Chemical Engineering interest. Requires permission of department chair. Fee.

**CHE 203 Elementary Prin of Chem Proces 4 cr**

Application of multicomponent material and energy balances to chemical processes involving phase changes and chemical reactions. Minimum grade of 'C' is required and only 2 attempts are permitted. Fee

Pre-requisite: CH 132 Minimum Grade of C and CH 132L Minimum Grade of C and MA 126 Minimum Grade of C

**CHE 290 Special Topics - 1 TO 5 cr**

Topics of current chemical engineering interest. Requires consent of department chair. Fee.

**CHE 311 CHE Separations I 3 cr**

Applications of material balances and equilibrium relations to equilibrium stage design. Design of single stages and cascades for absorption, stripping, distillation, liquid-liquid extraction, and bioseparations. Fee.

Pre-requisite: CHE 203 Minimum Grade of C and CHE 331 Minimum Grade of C

**CHE 321 Transport Phenomena I 3 cr**

Fundamentals of momentum transfer with applications in fluid flow through pipes and process equipment. Fee.

Pre-requisite: MA 238 Minimum Grade of C and CHE 203 Minimum Grade of C and PH 201 Minimum Grade of C and CHE 202 Minimum Grade of D

**CHE 322 Transport Phenomena II 3 cr**

Fundamentals of conductive, convective, and radiative modes of heat transfer with applications in the design of heat exchangers. Fee.

Pre-requisite: CHE 321 Minimum Grade of C

**CHE 331 CHE Thermodynamics I 3 cr**

This course introduces the fundamentals of thermophysical property estimation and modeling of non-ideal pure and multicomponent fluid systems, including an introduction to multicomponent vapor/liquid equilibria. Fee.

Co-requisite: CHE 351

Pre-requisite: CH 201 Minimum Grade of C and CHE 203 Minimum Grade of C and MA 238 Minimum Grade of C and CH 201L Minimum Grade of C and PH 201 Minimum Grade of C

**CHE 332 CHE Thermodynamics II 3 cr**

This class is an advanced thermodynamics course that uses a molecular level viewpoint to introduce students to applications of thermodynamics principles to complex chemical engineering problems including multicomponent, non-ideal fluid phase equilibria (VLE, VLLE, SLE), and chemical reaction equilibria. The concepts of chemical potential, fugacity, partial molar and excess properties as well as complex activity coefficient models are introduced to solve these problems. Fee.

Co-requisite: CHE 352

Pre-requisite: CHE 331 Minimum Grade of C

**CHE 342 Engineering Communication - W 3 cr**

Formal and informal reports, oral presentations, and visual aids. Fee.

Co-requisite: CHE 321

Pre-requisite: (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C) and BLY 121 Minimum Grade of C

**CHE 351 Process Measurements Lab I 1 cr**

Laboratory practices for measurement of thermodynamic and transport properties. Numerical tools for modeling chemical phenomenon using experimental data. Fee.

Co-requisite: CHE 331, CHE 342

**CHE 352 Process Measurements Lab II 1 cr**

Laboratory practices for measurement of reaction and phase change parameters. Statistical tools for assessing experimental data. Fee.

Co-requisite: CHE 332, CHE 372

Pre-requisite: CHE 351 Minimum Grade of C

**CHE 372 Chemical Reactor Design 3 cr**

Fundamentals of systems involving chemical reactions, including batch and flow systems. Design of thermal and catalytic systems with single and multiple reactions. Analysis of kinetic data and mechanisms. Fee.

Co-requisite: CHE 322, CHE 332

Pre-requisite: CHE 331 Minimum Grade of C

**CHE 390 Special Topics - 1 TO 5 cr**

Topics of current chemical engineering interest. Requires consent of department chair. Fee.

**CHE 421 CHE Separations II 3 cr**

Fundamentals of mass transfer. Mass, energy, and momentum transfer analogies. Design of mass transfer equipment. Fee.

Pre-requisite: CHE 311 Minimum Grade of C and CHE 322 Minimum Grade of C

**CHE 441 Chem Engr Ops Lab I - W 2 cr**

Laboratory Studies of the unit operations of chemical engineering with emphasis on momentum and heat transfer. Fee.

Pre-requisite: CHE 322 Minimum Grade of C and CHE 342 Minimum Grade of C and CHE 351 Minimum Grade of C and CHE 352 Minimum Grade of C

**CHE 442 Chem Engr Ops Lab II - W 2 cr**

Laboratory studies of the unit operations of chemical engineering with emphasis on stage-wise and differential contactors. Fee.

Pre-requisite: CHE 441 Minimum Grade of C and CHE 311 Minimum Grade of C and CHE 421 Minimum Grade of C

**CHE 451 Process Models 3 cr**

Mathematical modeling, simulation, and dynamics of chemical process systems for design and analysis. Fee.

Pre-requisite: CHE 322 Minimum Grade of C

- CHE 452 Process Dynamics and Control 3 cr**  
Mathematical modeling, simulation and dynamics of chemical process systems. Feedback and Feed-forward control of chemical processes. Specification of control loops. Selection and tuning of controller modes. Fee.  
Pre-requisite: CHE 372 Minimum Grade of C
- CHE 461 Process Design I 3 cr**  
Engineering economics and elements of process design, including energy and material balances, manufacturing and product cost. Unit operation equipment sizing, and cost. This course is considered a "Senior Capstone Design" course. Fee.  
Pre-requisite: EG 231 Minimum Grade of C and CHE 332 Minimum Grade of C and CHE 342 Minimum Grade of C and CHE 372 Minimum Grade of C
- CHE 462 Process Design II 3 cr**  
Selection, design and specification of principal chemical processes. This course is considered a "Senior Capstone Design" course. Fee.  
Pre-requisite: CHE 461 Minimum Grade of C
- CHE 463 Simulation of Chemical Process 3 cr**  
In this course, students utilize modern software tools, such as Aspen Plus, to model steady rate chemical processes. Simulation topics include physical property selection, flowsheet generation, separations, and reactors. Fee.  
Pre-requisite: CHE 311 Minimum Grade of C and CHE 332 Minimum Grade of C and CHE 372 Minimum Grade of C
- CHE 490 Special Topics - 1 TO 3 cr**  
Topics of current chemical engineering interest. Requires consent of department chair or departmental approval. Fee.
- CHE 494 Directed Independent Study 1 TO 3 cr**  
Directed study, under the guidance of a faculty advisor, of a topic from the field of chemical engineering, not offered in a regularly scheduled course. A written report is required. May be repeated for a maximum of 6 credit hours. Requires consent of the department chair and minimum GPA of 3.00 for admission or departmental approval. Fee.
- CHE 499 Honors Senior Project - H 1 TO 6 cr**  
Under the advice and guidance of a faculty mentor, honors students will identify and carry out a research project, relevant to the field of chemical engineering. The senior project will be judged and graded by three faculty chaired by the honors mentor. This course is required for Honors recognition. A minimum of 4 credit hours is required, but students may enroll for a maximum of 6 credit hours over two semesters. Requires completion of an approved project prospectus.  
Pre-requisite: CHE 322 Minimum Grade of C and CHE 332 Minimum Grade of C
- CHE 501 Chemical Engineering Seminar 0 TO 1 cr**  
A weekly research seminar for Chemical Engineering graduate students. Students will attend research presentations by faculty, invited speakers and other students rehearsing for their proposal presentations, thesis defenses or conference presentations. Topics will include research, research methods, safety and responsible conduct of research.
- CHE 510 Adv Chemical Thermodynamics 3 cr**  
Advanced classical and molecular thermodynamics as applied to non-ideal multicomponent phase and reaction equilibria for chemical engineering applications. An introduction to statistical thermodynamics will also be given. Fee.
- CHE 520 Adv Transport Phenomena I 3 cr**  
An advanced treatment of the principles and methods of transport phenomena. Detailed coverage of several key aspects of energy and momentum transfer including creeping flows, boundary layers and lubrication theory.
- CHE 521 Adv Transport Phenomena II 3 cr**  
An advanced treatment of the principles and methods of mass transfer, diffusion and adsorption phenomena. Coverage of conservation equations, mass transfer at interfaces and boundary conditions. Includes coverage of adsorption and diffusion on surfaces, porous structures and membranes.
- CHE 525 Chemical Reactor Analysis 3 cr**  
Design, modeling and analysis of non-ideal chemical reactor systems. Includes effects of mass transfer in heterogeneous catalytic reactors, non-steady-state heat transfer and residence time distributions.
- CHE 530 Synthetic Fuels 3 cr**  
Fundamentals of gasification and liquefaction concepts applied to fossil fuels and biomass conversion.
- CHE 550 Chemical Process Control 3 cr**  
Sampled-data algorithms, feedback, feedforward, deadtime compensation, advanced control schemes applied to chemical engineering processes. Fee.
- CHE 551 Adv Chem Engineering Modeling 3 cr**  
Advanced mathematical modeling of chemical process systems for design and analysis.
- CHE 563 Simulation of Chem Processes 3 cr**  
In this course, students utilize modern software, tools, such as Aspen Plus, to model steady state chemical processes. Simulation topics include physical property selection, flowsheet generation, separations and reactors. Fee.
- CHE 570 Separation Processes 3 cr**  
Analysis and design of separation processes. Topics include molecular diffusion and convective mass transfer with applications in the chemical, petroleum and pharmaceutical industries. Fee.

**CHE 575 Chem Proc Synth Optimization 3 cr**

Use of analysis, synthesis, and optimization in process development. Fee.

**CHE 580 Chem Process Safety and Design 3 cr**

Fundamental principles of chemical process safety, fires and explosions and design for the mitigation of associated hazards. Fee.

**CHE 590 Special Topics - 3 cr**

Topics of current chemical engineering interest. Requires consent of the department chair or departmental approval. Fee.

**CHE 592 Directed Independent Study 1 TO 4 cr**

Directed study, under the guidance of a faculty advisor, of a topic from the field of chemical engineering, not offered in a regularly scheduled course. A written report is required. Requires consent of the department chair and overall minimum GPA of 2.5 for admission or departmental approval. Fee.

**CHE 594 Project in Chem Engineering 3 cr**

Approved investigation of original problems under direction of a faculty member. Requires approved prospectus. Fee.

**CHE 599 Thesis 1 TO 6 cr**

May be taken more than once. Only 6 hours may be applied for credit toward a degree. Requires approved prospectus. Fee.

## Chemistry (CH)

**CH 101L Survey Inorg-Org Chem Lab 1 cr**

Laboratory exercises associated with CH 101. CH 101 must be taken concurrently or as a prerequisite. Together, CH 101 and CH 101L count as one laboratory science course, partially fulfilling general education requirements. Fee. Core Course.

Pre-requisite: CH 101 Minimum Grade of D or CH 121 Minimum Grade of D

**CH 103L Chemistry-Its Role Society Lab 1 cr**

Laboratory exercises associated with CH 103. CH 103 must be taken concurrently or as a prerequisite. Together, CH 103 and CH 103L count as one laboratory science course, partially fulfilling general education requirements. Fee. Core course.

Co-requisite: CH 103

Pre-requisite: CH 103 Minimum Grade of D or CH 105 Minimum Grade of D

**CH 131L General Chemistry I Lab 1 cr**

Laboratory exercises associated with CH 131. CH 131 must be taken concurrently or as a prerequisite. Together, CH 131 and CH 131L count as one laboratory science course, partially fulfilling general education requirements. Fee. Core course.

Pre-requisite: CH 115 Minimum Grade of D or CH 131 Minimum Grade of D

**CH 132L General Chemistry II Lab 1 cr**

Laboratory exercises associated with CH 132. CH 132 must be taken concurrently or as a prerequisite. Together, CH 132 and CH 132L count as one laboratory science course, partially fulfilling general education requirements. Fee. Core course.

Pre-requisite: CH 116 Minimum Grade of D or CH 132 Minimum Grade of D and (CH 131L Minimum Grade of D and CH 131 Minimum Grade of D)

**CH 201L Organic Chemistry I Lab 1 cr**

Laboratory exercises associated with CH 201. (Offered Fall and Spring Semesters.) The laboratory introduces basic organic laboratory practices such as the collection of physical properties data, separation and purification techniques, synthesis, and spectroscopic methods. CH 201 must be taken concurrently or as a prerequisite. Fee.

Co-requisite: CH 201

Pre-requisite: ( CH 116 Minimum Grade of D) or (CH 132 Minimum Grade of D and CH 132L Minimum Grade of D)

**CH 202L Organic Chemistry II Lab 1 cr**

Laboratory exercises associated with CH 202. The laboratory continues with the basic organic laboratory practices with additional synthetic methods. (Offered Fall and Spring Semesters.) CH 202 must be taken concurrently or as a prerequisite. Fee.

Co-requisite: CH 202

Pre-requisite: (CH 222 Minimum Grade of D) or (CH 201 Minimum Grade of D and CH 201L Minimum Grade of D)

**CH 265L Introductory Analysis Lab 1 cr**

Laboratory exercises associated with CH 265. (Offered Fall and Spring Semesters.) CH 265 must be taken concurrently or as a prerequisite. Fee.

Co-requisite: CH 265

Pre-requisite: (CH 116 Minimum Grade of D or (CH 132 Minimum Grade of D and CH 132L Minimum Grade of D) )

**CH 300L Phys Chem for Life Sci Lab-W 1 cr**

Laboratory exercises associated with CH 300. (Offered Fall Semester.) CH 300 must be taken concurrently or as a prerequisite. Fee.

Co-requisite: CH 300

Pre-requisite: ( (CH 265 Minimum Grade of D and CH 265L Minimum Grade of D) or CH 266 Minimum Grade of D ) and (MA 126 Minimum Grade of D or MA 223 Minimum Grade of D) and (PH 202 Minimum Grade of D or PH 217 Minimum Grade of D) and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**CH 301L Physical Chemistry I Lab-W 1 cr**

Laboratory exercises associated with CH 301. (Offered Fall Semester.) Lab is required for chemistry majors. Fee.

Co-requisite: CH 301

Pre-requisite: ( (CH 265 Minimum Grade of D and CH 265L Minimum Grade of D) or CH 266 Minimum Grade of D ) and (MA 126 Minimum Grade of D or MA 223 Minimum Grade of D) and (PH 202 Minimum Grade of D or PH 217 Minimum Grade of D or MA 227 Minimum Grade of D or MA 234 Minimum Grade of D) and (PH 115 Minimum Grade of D or PH 113 Minimum Grade of D) and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**CH 302L Physical Chemistry II Lab - W 1 cr**

Laboratory exercises associated with CH 302. (Offered Spring Semester.) Lab is required for chemistry majors. Fee.

Co-requisite: CH 302

Pre-requisite: ( (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C) and CH 265 Minimum Grade of D) and (CH 265L Minimum Grade of D or CH 266 Minimum Grade of D) and (MA 126 Minimum Grade of D or MA 233 Minimum Grade of D) and (PH 202 Minimum Grade of D or PH 217 Minimum Grade of D) or (MA 227 Minimum Grade of D or MA 234 Minimum Grade of D) and (PH 115 Minimum Grade of D or PH 113 Minimum Grade of D)

**CH 401L Intermed Inorganic Chem Lab 2 cr**

Laboratory exercises associated with CH 401. (Offered Spring Semester). Fee.

Co-requisite: CH 401

Pre-requisite: (CH 301 Minimum Grade of D and CH 301L Minimum Grade of D) or CH 332 Minimum Grade of D and (CH 302 Minimum Grade of D and CH 302L Minimum Grade of D) or CH 333 Minimum Grade of D

**CH 414L Environmental Chemistry Lab 1 cr**

Laboratory exercises associated with CH 414. Real-world examples will be used to learn appropriate isolation techniques followed by chemical and instrumental analysis. CH 414 must be taken concurrently. (Offered in Fall Semester.) Fee.

Co-requisite: CH 414

Pre-requisite: (CH 201 Minimum Grade of D or CH 222 Minimum Grade of D) and (CH 265 Minimum Grade of D or CH 266 Minimum Grade of D)

**CH 465L Instrumental Analysis Lab 2 cr**

Laboratory exercises associated with CH 465. (Offered Fall Semester.) Fee.

Co-requisite: CH 465

Pre-requisite: ( (CH 265 Minimum Grade of D and CH 265L Minimum Grade of D) or CH 266 Minimum Grade of D ) and (CH 300 Minimum Grade of D and CH 300L Minimum Grade of D) or ( (CH 302 Minimum Grade of D and CH 302L Minimum Grade of D) or CH 333 Minimum Grade of D) or ( (CH 301 Minimum Grade of D and CH 301L Minimum Grade of D) or CH 332 Minimum Grade of D)

**CH 514L Environmental Chemistry Lab 1 cr**

Laboratory exercises associated with CH 514. Real-world samples will be used to learn appropriate isolation techniques followed by chemical and instrumental analysis. CH 514 must be taken concurrently. (Offered in Fall Semester.) Fee.

Co-requisite: CH 514

Pre-requisite: (CH 202 Minimum Grade of D or CH 223 Minimum Grade of D)

**CH 565L Instrumental Analysis Lab 2 cr**

Laboratory exercises associated with CH 565. (Offered Fall Semester.) Requires Graduate status. Fee.

Pre-requisite: ( (CH 265 Minimum Grade of D and CH 265L Minimum Grade of D) or CH 266 Minimum Grade of D ) and (CH 300 Minimum Grade of D and CH 300L Minimum Grade of D) or ( (CH 302 Minimum Grade of D and CH 302L Minimum Grade of D) or CH 333 Minimum Grade of D) or ( (CH 301 Minimum Grade of D and CH 301L Minimum Grade of D) or CH 332 Minimum Grade of D)

**CH 100 Fundamentals of Chemistry 4 cr**

An introduction to the fundamental concepts of chemistry. Requires Mathematics Placement Test score which allows registration for MA 112 and CH 100. Students whose Mathematics Placement Exam score does not allow them to register for MA 112 should first complete MTH 100 with a C or better as a prerequisite for CH 100. CH 100 may not be used to satisfy the Natural Science requirement for the College of Arts and Sciences. (Offered Fall and Spring Semesters)

Pre-requisite: University test - Math 66 or MyMathTest 070 or ACT Math 22 or DS 090 Minimum Grade of C or (MTH 100 Minimum Grade of C or MTH 101 Minimum Grade of C) or (MA 112 Minimum Grade of D or MA 171 Minimum Grade of D) or MTH 101 Minimum Grade of C

**CH 101 Survey of Inorg and Org Chem 3 cr**

An intensive presentation of inorganic and organic chemistry principles selected to convey a basic understanding of their relationship to and function in the life process. Laboratory exercises will introduce students to basic laboratory procedures, often using exercises related to life process. This course is generally taken by students in the College of Nursing. CH 101L must be taken concurrently. Together, CH 101 and CH 101L count as one laboratory science course, partially fulfilling general education requirements. (Offered Fall and Spring Semesters.) Core Course.

Co-requisite: CH 101L

**CH 103 Chemistry-Its Role in Society 3 cr**

Chemical principles to allow understanding of the technical aspects of air and water pollution, chemical solutions of the energy crisis, the polymer industry, drugs, nutrition, and genetic engineering. CH 103 is not designed to lead to other chemistry courses and may not be used to substitute for CH 131 for students majoring or minoring in Chemistry. CH 103L must be taken concurrently. Together, CH 103 and CH 103L count as one laboratory science course, partially fulfilling general education requirements. (Offered Fall and Spring Semesters) Core course.  
Co-requisite: CH 103L

**CH 131 General Chemistry I 3 cr**

First of a two-semester sequence for majors, minors, and others seeking quantitative treatment. Topics include the nuclear model, stoichiometry, chemical reactions, gas laws, thermochemistry, atomic structure, and molecular bonding. CH 131 and CH 131L must be taken concurrently. Together, CH 131 and CH 131L count as one laboratory science course partially fulfilling general education requirements. (Offered Fall and Spring Semesters) Requires CH 100 or ACT Math score of 24 or greater (or its equivalent as determined by the University) or letter grade of C or higher in MA 112 (or any higher level MA experience) or a score of 80 or greater on the Mathematics Placement Test and the completion of a high school physical science unit (or its equivalent) or one term of college chemistry. Core Course.  
Co-requisite: CH 131L

Pre-requisite: (CH 100 Minimum Grade of D or CH 110 Minimum Grade of D) or ACT Math 24 or SAT Mathematics 590 or MA 112 Minimum Grade of C or (MA 113 Minimum Grade of C or MA 172 Minimum Grade of C) or (MA 115 Minimum Grade of C or MA 121 Minimum Grade of C) or (MA 120 Minimum Grade of C or MA 287 Minimum Grade of C) or (MA 125 Minimum Grade of C or MA 132 Minimum Grade of C) or (MA 126 Minimum Grade of C or MA 233 Minimum Grade of C) or MyMathTest 080( or University test - Math 85 )

**CH 132 General Chemistry II 3 cr**

Continuation of CH 131. Topics include solutions, colligative properties, chemical kinetics, equilibrium, acids and bases, pH, buffers, titrations, thermodynamics, and electrochemistry. Additional topics may include nuclear chemistry, organic and biochemistry, chemistry of inorganic compounds, transition metal complexes, and industrial chemistry. Both the lecture and laboratory experiences of CH 131 (General Chemistry I) are prerequisites. CH 132L must be taken concurrently. Together, CH 132 and CH 132L count as one laboratory science course, partially fulfilling general education requirements. (Offered Fall and Spring Semesters.) Core Course.

Co-requisite: CH 132L

Pre-requisite: CH 115 Minimum Grade of D or (CH 131 Minimum Grade of D and CH 131L Minimum Grade of D)

**CH 150 Intro to Computer Chemistry 2 cr**

This course will introduce the student to direct application and use of computer activity for applications in chemistry; acquisition of data from instrumentation, data analysis, presentation of experimental data, and chemical structure and modeling programs. Fee.

Pre-requisite: (CH 115 Minimum Grade of D or (CH 131 Minimum Grade of D and CH 131L Minimum Grade of D) or (CH 141 Minimum Grade of D and CH 141L Minimum Grade of D) ) and ( MA 113 Minimum Grade of D or MA 172 Minimum Grade of D) or (MA 115 Minimum Grade of D or MA 121 Minimum Grade of D) or (MA 125 Minimum Grade of D or MA 132 Minimum Grade of D) or (MA 126 Minimum Grade of D or MA 233 Minimum Grade of D) )

**CH 201 Organic Chemistry I 3 cr**

Fundamentals of structure and chemical behavior of organic molecules including nomenclature, properties, structure, stereochemistry, spectroscopy (both infrared and nuclear magnetic resonance), reactions, synthesis, and mechanisms of alkanes, alkenes, alkyl halides, and alcohols. (Offered Fall and Spring Semesters). CH 201L must be taken concurrently.

Co-requisite: CH 201L

Pre-requisite: CH 116 Minimum Grade of D or (CH 132 Minimum Grade of D and CH 132L Minimum Grade of D) or (CH 141 Minimum Grade of D and CH 141L Minimum Grade of D)

**CH 202 Organic Chemistry II 3 cr**

Continuation of study of structure and chemical behavior of organic molecules including aromatic compounds, ketones and aldehydes amines, carboxylic acids and their derivatives, carbohydrates, amino acids, peptides and proteins, nucleic acids, alkynes, ethers and epoxides, and conjugated dienes. (Offered Fall and Spring Semesters.) CH 202L must be taken concurrently. Fee.

Co-requisite: CH 202L

Pre-requisite: (CH 201 Minimum Grade of D and CH 201L Minimum Grade of D) or CH 222 Minimum Grade of D

**CH 265 Introductory Analysis 3 cr**

A detailed study of the fundamental theories and principles of chemistry with emphasis on their application to quantitative analysis. Because proficiency of the material covered in CH 132 is vital for success in this course, students are strongly advised to take the two courses as close together as schedules permit. (Offered Fall and Spring Semesters.)

Co-requisite: CH 265L

Pre-requisite: (CH 116 Minimum Grade of D or (CH 132 Minimum Grade of D and CH 132L Minimum Grade of D) )

- CH 300 Physical Chem for Life Sci** 3 cr  
Designed to introduce the concepts of physical chemistry to students interested in the biochemical and biological aspects of chemistry. Topics are presented from viewpoint of their applications to biochemical problems; thermodynamics/biochemical energetics, properties of solutions, biological redox reactions, chemical/enzyme kinetics. (Offered Fall Semester.) CH 300L must be taken concurrently.  
Co-requisite: CH 300L  
Pre-requisite: ( CH 265 Minimum Grade of D and CH 265L Minimum Grade of D) or CH 266 Minimum Grade of D ) and (MA 126 Minimum Grade of D or MA 223 Minimum Grade of D) and (PH 202 Minimum Grade of D or PH 217 Minimum Grade of D) and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)
- CH 301 Physical Chemistry I** 3 cr  
Gas Laws, First and Second Law of Thermodynamics, Phase Equilibrium, Chemical Equilibrium, Physical Chemistry of Solutions, Electrochemistry, Transport Properties, and Chemical Kinetics. (Offered Fall Semester).  
Co-requisite: CH 301L  
Pre-requisite: ( EH 102 Minimum Grade of C or EH 105 Minimum Grade of C) and (CH 265 Minimum Grade of D and CH 265L Minimum Grade of D) or CH 266 Minimum Grade of D) and (MA 126 Minimum Grade of D or MA 233 Minimum Grade of D) and (PH 202 Minimum Grade of D or PH 217 Minimum Grade of D) or (MA 227 Minimum Grade of D or MA 234 Minimum Grade of D) and (PH 115 Minimum Grade of D or PH 113 Minimum Grade of D)
- CH 302 Physical Chemistry II** 3 cr  
Quantum Theory and Applications to Atoms and Molecules, Spectroscopy, and Statistical Thermodynamics. (Offered Spring Semester.) Required for chemistry majors.  
Co-requisite: CH 302L  
Pre-requisite: ( CH 265 Minimum Grade of D and CH 265L Minimum Grade of D) or CH 266 Minimum Grade of D ) and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C) and (MA 126 Minimum Grade of D or MA 223 Minimum Grade of D) and (PH 202 Minimum Grade of D or PH 217 Minimum Grade of D) or (MA 227 Minimum Grade of D or MA 234 Minimum Grade of D) and (PH 115 Minimum Grade of D or PH 113 Minimum Grade of D)
- CH 394 Directed Studies -** 1 TO 4 cr  
Student works in a research laboratory under faculty guidance. May be repeated; sum of all directed studies cannot exceed eight (8) credits. Requires Junior standing or permission of Department Chair.
- CH 401 Interm Inorganic Chemistry** 3 cr  
Atomic and molecular structure and bonding emphasizing the use of symmetry, group theory, and molecular orbitals; NMR spectrometry; coordination chemistry; organometallic chemistry and homogeneous catalysis. (Offered Spring Semester).  
Co-requisite: CH 401L  
Pre-requisite: (CH 301 Minimum Grade of D and CH 301L Minimum Grade of D and CH 302 Minimum Grade of D and CH 302L Minimum Grade of D) or CH 333 Minimum Grade of D
- CH 403 Bioinorganic Chemistry** 3 cr  
Survey of bioinorganic chemistry appropriate for upper-level undergraduate and beginning graduate students. The approach will be molecular and chemical in nature with a focus on the study of the non-carbon elements, especially the transition metals, as related to biological activity. (Offered Fall Semester). Recommended: CH 301, CH 302, or CH 440. Fee.  
Pre-requisite: CH 202 Minimum Grade of D or CH 223 Minimum Grade of D
- CH 414 Environmental Chemistry** 3 cr  
Introduces the cycling of elements in the earth as groundwork for understanding the chemical reactions and fate of chemical species introduced as contaminants to the environment. The chemistry of natural and anthropogenic contaminants in the atmosphere, the hydrosphere, the lithosphere and the transport and transformation of chemical species in the environment are discussed. CH 414L must be taken concurrently. (Offered in Fall Semester.)  
Co-requisite: CH 414L  
Pre-requisite: (CH 201 Minimum Grade of D or CH 222 Minimum Grade of D) and (CH 265 Minimum Grade of D or CH 266 Minimum Grade of D)
- CH 440 Biochemistry I** 3 cr  
Study of fundamental biochemical concepts; emphasis is placed on protein, carbohydrate, and lipid structures as related to their functional behavior; enzyme kinetics and mechanisms of action; thermodynamic relationships in biochemical systems. (Offered Fall Semester). Cross-listed with BLY 440.  
Pre-requisite: (CH 202 Minimum Grade of D or CH 223 Minimum Grade of D)
- CH 441 Biochemistry II** 3 cr  
Study of the reaction and regulations of intermediary metabolism; the biochemistry of genetic systems to include regulatory mechanisms and protein synthesis. (Offered Spring Semester). Cross-listed with BLY 441.  
Pre-requisite: CH 440 Minimum Grade of D or BLY 440 Minimum Grade of D
- CH 443 Lab Studies in Biochemistry** 2 cr  
Course familiarizes the student with the basic laboratory techniques commonly employed in biochemical research. (Offered Spring Semester). Cross-listed with BLY 443. Fee.  
Pre-requisite: CH 440 Minimum Grade of D or BLY 440 Minimum Grade of D

**CH 465 Instrumental Analysis 3 cr**

Modern analytical instruments, their operating principles, and their applications. (Offered Fall Semester).

Co-requisite: CH 465L

Pre-requisite: ( (CH 265 Minimum Grade of D and CH 265L Minimum Grade of D) or CH 266 Minimum Grade of D ) and (CH 300 Minimum Grade of D and CH 300L Minimum Grade of D) or ( (CH 302 Minimum Grade of D and CH 302L Minimum Grade of D) or CH 333 Minimum Grade of D) or ( (CH 301 Minimum Grade of D and CH 301L Minimum Grade of D) or CH 332 Minimum Grade of D)

**CH 470 Computational Chemistry 4 cr**

Designed to provide an introduction to some of the techniques used in molecular modeling and computational chemistry, and to illustrate how these techniques can be used to study physical, chemical and biological phenomena. Topics: quantum mechanical methods, empirical force fields, molecular mechanics and dynamics, Monte Carlo, continuum electrostatics, and free energy perturbation methods. (Offered Spring Semester). Permission of instructor. Fee.

Pre-requisite: ( (CH 132 Minimum Grade of D and CH 132L Minimum Grade of D) or (CH 141 Minimum Grade of D and CH 141L Minimum Grade of D) ) and CH 202 Minimum Grade of D

**CH 490 Sp Top - 1 TO 4 cr**

Study of a significant topic in Chemistry. May be repeated for a maximum of four credits when the content varies. Requires Senior standing.

**CH 492 Seminar I 1 cr**

Information retrieval from scientific references, journals, and on-line databases directed toward computer-based preparation of a student seminar having as the capstone experience a formal seminar for Department Faculty and students. (Offered Spring Semester). Requires Senior standing or permission of Department Chair. Fee.

**CH 493 Seminar II 1 cr**

Continuation of CH 492. Taken the next semester registered after successful completion of CH 492 unless special permission granted by the Department Chair. Presentation of a formal seminar for Department Faculty and students. (Offered Fall and Spring Semesters). Fee. Requires Permission of Department Chair.  
Pre-requisite: CH 492 Minimum Grade of D

**CH 494 Directed Studies - 1 TO 4 cr**

Student works in a research laboratory under faculty guidance. May be repeated; sum of all directed studies cannot exceed eight (8) credits. Requires Senior standing or permission of Department Chair. Fee.

**CH 499 Sr Honors Chemistry Project-H 3 cr**

Student research under faculty direction; written report and oral presentation of research work to faculty and students. This course may be repeated once for a maximum of six credits. Requires permission of department chair. Fee.

**CH 514 Environmental Chemistry 3 cr**

Introduces the cycling of elements in the earth as groundwork for understanding the chemical reactions and fate of chemical species introduced as contaminants to the environment. The chemistry of natural and anthropogenic contaminants in the atmosphere, the hydrosphere, the lithosphere and the transport and transformation of chemical species in the environment are discussed. CH 514L must be taken concurrently. (Offered in Fall Semester.)

Co-requisite: CH 514L

Pre-requisite: (CH 202 Minimum Grade of D or CH 223 Minimum Grade of D)

**CH 515 Environmental Toxicology 3 cr**

Introduction to the scientific and technical principles of toxicological processes in the context of the ecosystem. Students will understand both the types of major environmental toxicants and how to properly evaluate their toxicity and factors that influence toxicity. Students will recognize and coherently formulate risk assessment and by using the tools and techniques acquired, develop and communicate proposals for remedy.

**CH 521 Marine Nat Product Chemistry 3 cr**

Chemical-physical analysis and synthesis of alkaloids, antibiotics, algae and bacterial metabolites, plant pigments, steroids, and terpenes found in the marine environment. (Offered as required.) Requires Graduate status. Fee.

Pre-requisite: (CH 202 Minimum Grade of D or CH 223 Minimum Grade of D)

**CH 530 Biochem of Marine Organism 3 cr**

Study of biochemical regulatory processes associated with energy production, vision, defense mechanisms and other physiological activities within vertebrate and invertebrate species of the marine environment. (Offered as required.) Requires Graduate status. Fee.

**CH 540 Biochemistry I 3 cr**

Study of fundamental biochemical concepts; emphasis is placed on protein, carbohydrate, and lipid structures as related to their functional behavior, enzyme kinetics and mechanisms of action; thermodynamic relationships in biochemical systems. (Offered Fall Semester.) Requires Graduate status. Cross-listed with BLY 540.

Pre-requisite: (CH 202 Minimum Grade of D or CH 223 Minimum Grade of D)

**CH 541 Biochemistry II 3 cr**

Study of the reactions and regulations of intermediary metabolism; the biochemistry of genetic systems to include regulatory mechanisms and protein synthesis. (Offered Spring Semester.) Requires Graduate status. Cross-listed with BLY 541.

Pre-requisite: CH 540 Minimum Grade of B or BLY 540 Minimum Grade of B

**CH 543 Lab Studies in Biochemistry 2 cr**

Course familiarizes the student with the basic laboratory techniques commonly employed in biochemical research. (Offered Spring Semester.) Requires Graduate status. Cross-listed with BLY 543. Fee.  
Pre-requisite: CH 441 Minimum Grade of D or CH 540 Minimum Grade of B or CH 541 Minimum Grade of B

**CH 550 Readings in Marine Chemistry 3 cr**

Readings of primary literature on topics of special interest in the area of marine chemistry and biochemistry. Offered as required. Requires Graduate status. Fee.

**CH 565 Instrumental Analysis 3 cr**

Modern analytical instruments, their operating principles, and their applications. (Offered Fall Semester). Requires Graduate status.  
Pre-requisite: ( (CH 265 Minimum Grade of D and CH 265L Minimum Grade of D) or CH 266 Minimum Grade of D ) and (CH 300 Minimum Grade of D and CH 300L Minimum Grade of D) or ( (CH 302 Minimum Grade of D and CH 302L Minimum Grade of D) or CH 333 Minimum Grade of D) or ( (CH 301 Minimum Grade of D and CH 301L Minimum Grade of D) or CH 332 Minimum Grade of D)

**CH 570 Computational Chemistry 4 cr**

Designed to provide an introduction to some of the techniques used in molecular modeling and computational chemistry, and to illustrate how these techniques can be used to study physical, chemical, and biological phenomena. Topics: quantum mechanical methods, empirical force fields, molecular mechanics and dynamics, Monte Carlo, continuum electrostatics, and free energy perturbation methods. (Offered as required.) Requires Graduate status. Fee.  
Pre-requisite: (CH 116 Minimum Grade of C or CH 132 Minimum Grade of C or CH 141 Minimum Grade of C) and (CH 202 Minimum Grade of C or CH 223 Minimum Grade of C)

**CH 590 Special Topics - 1 TO 4 cr**

Study of a significant topic in chemistry. May be repeated for a maximum of four credits when the content varies. Requires Graduate status.

**CH 592 Seminar 1 cr**

The use of scientific references and journals retrieval. Library assignment may be directed toward preparation of student seminars which are scheduled concurrently. (Offered as required). Requires Graduate status. Fee.

**CH 594 Directed Studies- 1 TO 4 cr**

Literature survey and research under senior staff guidance. May be repeated but not to exceed four credits. Fee.

**CE 102 Intro to Civil Engineering 2 cr**

Introduction to Civil Engineering as a profession and the issues facing today's Civil Engineers. Team work, freehand sketching and Computer Aided Design (CAD) will be introduced. Students will be introduced to powerful computational tools such as spreadsheets and MathCad and learn their application in Civil Engineering. Techniques of writing a successful research paper will also be presented.  
Pre-requisite: MA 113 Minimum Grade of D or MA 125 Minimum Grade of D

**CE 204 Surveying Fundamentals 2 cr**

Applications of fundamental surveying techniques. Students will be introduced to the applications of Global Positioning Systems (GPS) and Geographical Information Systems (GIS) in Civil Engineering.  
Co-requisite: CE 205  
Pre-requisite: MA 113 Minimum Grade of C or MA 115 Minimum Grade of C or MA 125 Minimum Grade of C and CE 102 Minimum Grade of C

**CE 205 Surveying Fundamentals Lab 1 cr**

Students will collect field data and using state-of-the-art surveying and GPS equipment. Collected data will be used in Geographical Information Systems (GIS) software.  
Co-requisite: CE 204  
Pre-requisite: MA 113 Minimum Grade of C or MA 115 Minimum Grade of C or MA 125 Minimum Grade of C and CE 102 Minimum Grade of C University test - Math 85(

**CE 314 CE Materials 3 cr**

Study of Engineering Properties of Materials used in civil engineering including steel, concrete, asphalt, and timber.  
Co-requisite: CE 315  
Pre-requisite: EG 315 Minimum Grade of D

**CE 315 CE Materials Lab 1 cr**

Study of experimental techniques used to evaluate engineering properties of materials. These techniques will be used to test materials used in civil engineering according to ASTM standards.  
Co-requisite: CE 314  
Pre-requisite: EH 102 Minimum Grade of C or EH 105 Minimum Grade of C and EG 315 Minimum Grade of D

**CE 340 Soil Mechanics 3 cr**

An introduction to Soil Mechanics. Soil identification and engineering properties of soils. Analysis of elementary geohydraulics and geo-mechanics problems.  
Co-requisite: CE 341  
Pre-requisite: EG 315 Minimum Grade of D and (EG 360 Minimum Grade of D or CE 365 Minimum Grade of D or ME 324 Minimum Grade of D)

## Civil Engineering (CE)

- CE 341 Geotechnical Laboratory-W** 1 cr  
Soil identification and classification: experimental measurement of soil properties and technical reporting.  
Co-requisite: CE 340  
Pre-requisite: (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C) and CE 340 Minimum Grade of D
- CE 352 Intro to Transportation** 3 cr  
Principles of transportation engineering with emphasis on highways and traffic.  
Pre-requisite: CE 204 Minimum Grade of C and CE 205 Minimum Grade of C and ST 315 Minimum Grade of C and ST 315 Minimum Grade of D
- CE 353 Transp-Geometric Design** 3 cr  
Basic principles and techniques of highway design, including route layout, alignment, intersection design, and materials/earthwork estimation. Use of computer tools to generate and analyze highway designs.  
Pre-requisite: CE 352 Minimum Grade of D
- CE 360 Water Resources Engineering I** 2 cr  
The application of fluid mechanics and other science and engineering disciplines in the development of structures, projects, and systems involving water resources. Introductions to open-channel flow, closed-conduit flow, hydraulic structures, hydraulic machinery, and groundwater flow. Fee.  
Co-requisite: CE 367  
Pre-requisite: EG 360 Minimum Grade of D
- CE 367 Hydraulics Laboratory - W** 1 cr  
Laboratory and field measurement of fluid and flow properties; hydraulic laboratory practice and model stimulation techniques.  
Co-requisite: CE 360  
Pre-requisite: EG 360 Minimum Grade of D or CE 365 Minimum Grade of D
- CE 370 Intro to Enviro Eng** 3 cr  
Introduction to the fundamentals of water quality characterization, water pollution hazardous waste management, water and wastewater treatment, solid waste management, waste minimization and control.  
Co-requisite: CE 374  
Pre-requisite: CH 132 Minimum Grade of C and MA 238 Minimum Grade of D
- CE 374 Intro to Environmental Eng Lab** 1 cr  
Introduction to specific physical, chemical, and microbiological methods of analysis common to environmental engineering; including laboratory and field measurement of water quality characteristics and interpretation of results.  
Co-requisite: CE 370  
Pre-requisite: CH 132 Minimum Grade of C and MA 238 Minimum Grade of D
- CE 384 Structural Analysis** 3 cr  
Analysis of statically determinate structures such as trusses, beams, and frames including the calculation of deflections. Introduction to analysis of indeterminate structures.  
Co-requisite: CE 385  
Pre-requisite: EG 315 Minimum Grade of D
- CE 385 Structural Analysis Lab** 1 cr  
Modeling and analysis of determinate and indeterminate structures. Use of state-of-the-art structural analysis software.  
Co-requisite: CE 384  
Pre-requisite: EG 315 Minimum Grade of D
- CE 410 Construction Engineering** 3 cr  
An introduction to the construction industry and the role of civil engineering in construction. Construction engineering methods including preparation of cost estimates, critical path scheduling and resource allocation. Instructor permission. Fee.
- CE 412 Mgmt & Sustainability of C.I.** 3 cr  
Management and sustainability of Civil infrastructure is designed to present an overview of infrastructure engineering and management systems and to use project management, decision support tools, and life cycle costing tools in connection with infrastructure planning and assessment. Students will be presented with the understanding that achieving sustainability requires the consideration to meeting present and future human needs and respecting "triple bottom line: economic, social, and environmental goals. The course also provides a review of several important design and management tools to support sustainable development and communities.
- CE 431 Civil Engineering Design I** 2 cr  
Introduction to the practice of civil engineering and the engineering design process. In depth consideration of ethical issues in engineering practice. Participation in engineering design teams for project planning, proposal development, and completion of a feasibility study. Written and oral presentations of results. Senior Capstone Course. Fee.  
Pre-requisite: CE 352 Minimum Grade of D or CE 443 Minimum Grade of D or CE 460 Minimum Grade of D or CE 470 Minimum Grade of D or CE 480 Minimum Grade of D or CE 485 Minimum Grade of D
- CE 432 Civil Engineering Design II** 4 cr  
A multidisciplinary development of a project involving analysis and design in Civil Engineering. Implementation of design concepts and methodologies from conception to final design. Completion of a comprehensive design project including cost estimates, oral and written presentation of results. A senior capstone course. Fee.  
Pre-requisite: CE 431 Minimum Grade of D

- CE 440 Intro to Geotech Eng 3 cr**  
An Introduction to Geotechnical Engineering designed to provide tools to analyze geomechanical and geohydraulic problems associated with the design of foundations, retaining structures, slopes and other geotechnically related designs.  
Pre-requisite: CE 340 Minimum Grade of D and CE 341 Minimum Grade of D
- CE 442 Foundation Engineering 3 cr**  
Principles of foundation analysis, design and construction in engineering practice.  
Pre-requisite: CE 443 Minimum Grade of D
- CE 443 Geotechnical Engineering 2 cr**  
An introduction to Geotechnical Engineering. Analysis of geomechanical and geohydraulic problems accompanying the design of foundations, retaining structures and slopes.  
Pre-requisite: CE 340 Minimum Grade of D
- CE 452 Transportation Geometric Desgn 3 cr**  
This course will provide students with an understanding of the basic principles and techniques of highway design. This will include laying out potential routes, design of the alignment and intersections, and evaluation of earthwork requirements. The student should be able to understand and apply these principles to highway design problems. The student should also be able to use existing computer tools to generate and analyze designs. Upon completion, students should be prepared to work in the field of highway design.  
Fee.  
Pre-requisite: CE 352 Minimum Grade of D
- CE 460 Water Resources Engineering II 3 cr**  
The application of hydrologic and hydraulic principles for hydrologic analysis, frequency analysis, flood routing, hydrologic simulation, urban hydrology, floodplain hydraulics, and coastal engineering.  
Pre-requisite: CE 360 Minimum Grade of D and CE 367 Minimum Grade of D
- CE 466 Coastal and Harbor Eng 3 cr**  
An introduction to the principles of coastal hydraulic and sedimentary processes and the design of coastal and harbor works such as ship channels, marinas, jetties, breakwaters, groins, seawalls and beach nourishment projects.  
Pre-requisite: CE 460 Minimum Grade of D
- CE 470 Water-Wastewater Trtmnt Design 3 cr**  
Development of the principles of design for components of water supply and wastewater treatment facilities, including drinking water distribution and wastewater collection systems.  
Co-requisite: CE 471  
Pre-requisite: CE 360 Minimum Grade of D and CE 370 Minimum Grade of D and CE 374 Minimum Grade of D
- CE 471 Water-Wastewater Design Lab 1 cr**  
Application of design principles and criteria to analyze, design, and evaluate water and wastewater treatment facility components, including water distribution and wastewater collection systems.  
Co-requisite: CE 470  
Pre-requisite: CE 360 Minimum Grade of D and CE 370 Minimum Grade of D and CE 374 Minimum Grade of D
- CE 474 Industrial Waste Treatment 3 cr**  
Topics in Industrial Waste Treatment unit processes and their design, including those addressing wastewater treatment, air pollution control, solid waste, and hazardous management.  
Pre-requisite: CE 470 Minimum Grade of D
- CE 480 Design of Steel Structures 3 cr**  
Design of Steel Trusses, Girders, Building Frames, and other Steel Structures.  
Co-requisite: CE 481  
Pre-requisite: CE 384 Minimum Grade of D and CE 314 Minimum Grade of D and CE 315 Minimum Grade of D
- CE 481 Steel Design Lab 1 cr**  
Application of structural steel design methods to specific cases.  
Co-requisite: CE 480  
Pre-requisite: CE 384 Minimum Grade of D and CE 314 Minimum Grade of D and CE 315 Minimum Grade of D
- CE 482 Timber Design 3 cr**  
This course will cover the design of timber structures. Design loads, structural behavior, properties and grades of wood will be covered. Design of beams, columns, diaphragms, shearwalls, structural glued laminated timber, and structural connections. Instructor Approval Required  
Pre-requisite: CE 384 Minimum Grade of D and CE 385 Minimum Grade of D
- CE 485 Reinforced Concrete Design 3 cr**  
Fundamentals of reinforced concrete analysis and design. Design of beams, one-way slabs, short columns, and single footings. Calculations of cracking and deflection of beams.  
Co-requisite: CE 486  
Pre-requisite: CE 384 Minimum Grade of D and CE 314 Minimum Grade of D and CE 315 Minimum Grade of D
- CE 486 Reinforced Concrete Design Lab 1 cr**  
Integrated reinforced concrete design problems similar to those found in practice will be presented. Students will solve similar problems in class during the lab period.  
Co-requisite: CE 485  
Pre-requisite: CE 384 Minimum Grade of D and CE 314 Minimum Grade of D and CE 315 Minimum Grade of D
- CE 490 Special Topics - 1 TO 4 cr**  
Topics of current civil engineering interest.

**CE 494 Directed Independent Study - 1 TO 4 cr**

Directed study, under the guidance of a faculty advisor, of a topic from the field of civil engineering not offered in a regularly scheduled course. Requires department chair permission.

**CE 499 Honors Senior Project - H 1 TO 6 cr**

Under the advice and guidance of a faculty mentor, honors students will identify and carry out a research project, relevant to the field of Civil Engineering study, that will lead to a formal presentation at the Annual Honors Student Colloquium. The senior project will be judged and graded by three faculty, chaired by the honors mentor. This course is required for Honors recognition. A minimum of 4 credit hours is required, but a student may enroll for a maximum of 6 credit hours over two semesters. Prerequisites: Completion of the most advanced required course in the subdiscipline of the project (CE 440, CE 366, CE 470, or CE 384) and completion of an approved project prospectus.

Pre-requisite: CE 352 Minimum Grade of C or CE 366 Minimum Grade of D or CE 384 Minimum Grade of C or CE 443 Minimum Grade of C or CE 470 Minimum Grade of C

**CE 501 Intro to Coastal Design Enviro 3 cr**

An overview of the unique aspects of the design environment faced by civil engineers along the coast including water wave mechanics, coastal water levels, coastal circulations and mixing, coastal groundwater levels and flow, coastal sediment transport, and hurricane winds.

**CE 502 Intro to CE Dsn-Coastal Enviro 3 cr**

An introduction to the design of civil engineering infrastructure in the coastal environment including beaches, seawalls, revetments, bulkheads, piers, jetties, constructed wetlands, coastal bridges and roadways, hurricane resistant buildings, sewer outfalls and other environmental protection devices and coastal regulatory policy.

Pre-requisite: CE 501 Minimum Grade of C

**CE 510 Construction Engineering 3 cr**

An introduction to the construction industry and the role of civil engineering in construction. Construction engineering methods including preparation of cost estimates, critical path scheduling and resource allocation. Instructor permission required. Fee.

**CE 512 Mgmt & Sustainability of Infr 3 cr**

This course is designed to present an overview of infrastructure systems and how to manage and maintain these systems. Project management, decision support tools, and life cycle costing tools will be presented, in connection with infrastructure planning and assessment. Infrastructure sustainability will also be addressed, particularly considering the "triple bottom line" of economic, social, and environmental goals. The course also provides a review of several important design and management tools to support sustainable development and communities. A course project is required.

**CE 540 Advanced Soil Mechanics 3 cr**

Shearing strength and deformation behavior of soils with applications to retaining structures, slopes and bearing capacity. Behavior of cohesionless soils and cohesive soils under drained and undrained conditions. Permeability, steady state flow and effective stress in soils. Consolidation theory.

Pre-requisite: CE 443 Minimum Grade of C

**CE 542 Foundation Engineering 3 cr**

This course is to provide advanced knowledge of selected geotechnical principals for analysis, design and construction of a variety of foundations systems. This course is dually listed with an equivalent 400 level course(CE 442). Fee. Pre-requisite: CE 441 Minimum Grade of C and CE 443 Minimum Grade of C

**CE 547 Groundwater 3 cr**

Principals of fluid flow through porous media, well hydraulics. Ground water contamination, including principals that govern fate, transport, and remediation. Fee.

Pre-requisite: CE 340 Minimum Grade of C and CE 470 Minimum Grade of C

**CE 551 Traffic Engineering 3 cr**

This course will focus on traffic flow parameters and their influence on roadway traffic conditions, with emphasis on traffic data collection, traffic safety analysis, roadway markings, traffic signs, traffic signal timing and signal capacity analysis, and traffic management systems.

Pre-requisite: CE 352 Minimum Grade of C

**CE 552 Transportation Geometric Design 3 cr**

This course will provide students with an understanding of the basic principles and techniques of highway design. This will include laying out potential routes, design of the alignment and intersections, and evaluation of earthwork requirements. The student should be able to understand and apply these principles to highway design problems. The student should also be able to use existing computer tools to generate and analyze designs. Upon completion, students should be prepared to work in the field of highway design. This course is dually listed with an equivalent 400 level course (DE 452). Fee.

Pre-requisite: CE 352 Minimum Grade of C

**CE 553 Transportation Systems Eval 3 cr**

This course will focus on concepts and principles of transportation economic analysis, transportation costs and benefits, user and nonuser consequences, methods of evaluation of plans and projects, environmental impact assessments, and transportation programming and management. Requires Instructor Permission.

**CE 560 Coastal Hydrodynamics 3 cr**

Theory and analysis of advanced coastal and estuarine hydrodynamics. Potential topics to be covered include: wave mechanics; tidal dynamics; coastal and estuarine circulation; and transport and mixing in coastal waters.

Pre-requisite: CE 501 Minimum Grade of C

- CE 563 Hydrodynamic Modeling** 3 cr  
Theory and application of numerical models to coastal hydrodynamics. Potential topics to be covered include: overview of numerical simulation techniques; wave transformation processes; engineering wave models; principles of circulation; and advanced circulation models. Pre-requisite: CE 501 Minimum Grade of C
- CE 566 Coastal and Harbor Engineering** 3 cr  
Advanced principles of coastal hydraulic and sedimentary processes and the design of coastal and harbor works such as ship channels, marina, jetties, breakwaters, groins, seawalls, and beach nourishment projects. This course is dually listed with an equivalent 400 level course (CE 466). Fee. Pre-requisite: CE 460 Minimum Grade of C and CE 501 Minimum Grade of C
- CE 571 Biological Wastewater Treatment** 3 cr  
Theory, analysis and design criteria of biological treatment systems for municipal and industrial wastewaters, including suspended and attached growth processes in both the aerobic and anaerobic environments. Pre-requisite: CE 470 Minimum Grade of C
- CE 572 Physical Wastewater Treatment** 3 cr  
Advanced theory and applications in physical and chemical wastewater treatment. Topics covered include mass balance; reactor design, modeling, and analysis; filtration; mixing and flocculation; flotation; dissolved oxygen transfer optimization; chemical treatment of nutrient loads; disinfection; and residuals management. Pre-requisite: CE 470 Minimum Grade of C
- CE 574 Industrial Waste Treatment** 3 cr  
Topics in Industrial Waste Treatment unit processes and their design, including those addressing waste water treatment, air pollution, solid waste, and hazardous waste management. This course is dually listed with an equivalent 400 level course (CE 474). Credit for both CE 474 and CE 574 is not permitted. Fee. Pre-requisite: CE 470 Minimum Grade of C
- CE 579 Fundamentals Environmental Eng** 3 cr  
Fundamentals of water quality characterization, water pollution, hazardous waste management, water and wastewater treatment, solid waste management, and waste minimization and control. This course includes a comprehensive project in addition to the lecture class. Note: This course is a core course for MS degree students in the Environmental Toxicology Program and not intended for Engineering Majors. Instructor Permission. (This course is dual listed with CE 370.) Fee. Pre-requisite: (CH 116 Minimum Grade of C or CH 132 Minimum Grade of C)
- CE 580 Steel Design** 3 cr  
Design of steel trusses, girders, building frames, and other steel structures. This course is dually listed with an equivalent 400 level course (CE 480). Fee. Co-requisite: CE 581 Pre-requisite: CE 384 Minimum Grade of C or CE 385 Minimum Grade of C
- CE 581 Steel Design Lab** 1 cr  
Application of structural steel design methods to specific cases. This course is dually listed with an equivalent 400 level course (CE 481). Fee. Co-requisite: CE 580 Pre-requisite: CE 384 Minimum Grade of C and CE 385 Minimum Grade of C
- CE 582 Timber Design** 3 cr  
This course will cover the design of timber structures. Design loads, structural behavior, properties and grades of wood will be covered. Design of beams, columns, diaphragms, shearwalls, structural glued laminated timber, and structural connections. This course is dually listed with an equivalent 400 level course (CE 482). Instructor Approval Required.
- CE 583 Advanced Steel Design** 3 cr  
This course covers the design of built-up members, composite beams, columns and floors. Design of advanced bolted and welded connections will also be covered. Students will use state-of-the-art software to model and design complex steel structures. Pre-requisite: CE 480 Minimum Grade of C or CE 481 Minimum Grade of C
- CE 584 Advanced Structural Analysis** 3 cr  
Students will be introduced to the analysis of indeterminate structures using classical and matrix methods. Students will also be introduced to advanced structural modeling techniques using state-of-the-art software. Fee. Pre-requisite: CE 384 Minimum Grade of C and CE 385 Minimum Grade of C
- CE 585 Concrete Design** 3 cr  
Fundamentals of reinforced concrete analysis and design. Design of beams, one-way slabs, short columns, and single footings. Calculations of cracking and deflection of beams. This course is dually listed with an equivalent 400 level course (CE 485). Fee. Co-requisite: CE 586 Pre-requisite: CE 384 Minimum Grade of C or CE 385 Minimum Grade of C
- CE 586 Concrete Design Lab** 1 cr  
Integrated reinforced concrete design problems similar to those found in practice will be presented. Students will solve similar problems in class during the lab period. This course is dually listed with an equivalent 400 level course (CE 486). Fee. Co-requisite: CE 585 Pre-requisite: CE 384 Minimum Grade of C and CE 385 Minimum Grade of C

**CE 587 Advanced Concrete Design 3 cr**

Students will be introduced to the analysis and design of reinforced concrete footings, retaining walls, two-way floor systems, long columns, beams subjected to torsion and deep beams. Fee.

Pre-requisite: CE 485 Minimum Grade of C and CE 486 Minimum Grade of C

**CE 588 Prestressed Concrete Design 3 cr**

Students will be introduced to the concepts of prestressing, loss of prestress, design of prestressed beams, columns and slabs. Fee.

Pre-requisite: CE 485 Minimum Grade of C and CE 486 Minimum Grade of C

**CE 590 Special Topics - 1 TO 4 cr**

Topics of current civil engineering interest.

**CE 592 Directed Independent Study - 1 TO 3 cr**

Directed study, under the guidance of a faculty advisor, of a topic from the field of Civil Engineering not offered in a regularly scheduled course. Requires Instructor Permission. Fee.

**CE 594 Projects in Civil Engineering 1 TO 3 cr**

May be repeated for credit. Requires approved proposal and consent of director of engineering graduate studies. Fee.

**CE 599 Thesis 1 TO 6 cr**

Thesis research. May be taken more than once. Requires approved prospectus. Fee.

## Classics (CLA)

**CLA 103 Art History I 3 cr**

A survey of art and architecture of Europe and the Near East from the prehistoric to the end of the Gothic era. Identical with ARH 103. Credit cannot be received for both CLA 103 and ARH 103. Fee. Core Course.

**CLA 105 Encounter with the Humanities 3 cr**

Introduction to the various disciplines within the humanities with emphasis on the role each plays in a liberal arts education. Identical with AIS 105. Credit cannot be received for both CLA 105 and AIS 105. Core Course.

**CLA 110 Intro Anc Greek Roman Culture 3 cr**

A survey of the history, literature, philosophy, religion, art architecture, sociology, and political institutions of the Greek and Roman world with readings in translation from major Greek and Latin authors.

**CLA 240 Western Philosophy: Classical 3 cr**

Survey of classical Greek philosophy. The philosophers surveyed may include Presocratic philosophers, Socrates, Plato, Aristotle, and Hellenistic philosophers. Fulfills the General Education Requirement. Identical with PHL 240. Credit cannot be received for both CLA 240 and PHL 240. Pre-requisite: CA 101 Minimum Grade of D

**CLA 290 Sp Top - 3 cr**

Different figures, periods or topics of significance in Classics will be studied as announced. May be repeated, when content varies, for a total of six hours.

**CLA 304 Ancient Greek Art Architecture 3 cr**

Architecture, sculpture, and painting in Ancient Greece and the expansion and influence of Greek culture in the Ancient World.

Pre-requisite: ARH 103 Minimum Grade of C or CLA 110 Minimum Grade of C

**CLA 306 Roman Art 3 cr**

Roman Art: Architecture, sculpture, and painting in Ancient Rome and its empire. Fee.

Pre-requisite: (ARH 103 Minimum Grade of C or CLA 103 Minimum Grade of C) or CLA 110 Minimum Grade of C

**CLA 310 Classical Mythology 3 cr**

Through the disciplines of English and Philosophy, this course will provide an introduction to myths and to the literature that recounts the myths and to the literature that recounts the myths, legends, and folktales of ancient Greece and Rome. This course will also look at how different writers treat the material and why their treatments vary. Cross-listed with PHL 310, REL 310, and EH 310. Credit cannot be received for both CLA 310 and either PHL 310 or REL 310 or EH 310.

Pre-requisite: ACT English 27( or SAT Critical Reading 550 or University - EH101 Exempt P or EH 101 Minimum Grade of C or EH 110 Minimum Grade of D or EH 190 Minimum Grade of D or USA 010 Minimum Grade of S) and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**CLA 311 Political Philosophy I 3 cr**

An examination of the central themes of classical Western political philosophy through the reading and discussing of the primary works of such thinkers as Plato, Aristotle, Augustine, and Aquinas. Cross-listed as PSC 311 and PHL 311. Credit cannot be received for both CLA 311 and either PSC 311 or PHL 311.

**CLA 390 Sp Top - 3 cr**

Different figures, periods or topics of significance in Classics will be studied as announced. May be repeated, when content varies, for a total of six hours.

**CLA 402 Rhetoric: Ancient and Modern 3 cr**

Readings in rhetorical theory, ancient and modern, are applied in specific writing assignments which encourage students to adopt a point of view and address a specific audience.

Pre-requisite: EH 101 Minimum Grade of C and EH 102 Minimum Grade of C

**CLA 454 Ancient Greek Culture 3 cr**

Through the disciplines of History and Philosophy, ancient Greek culture, including its history, literature, philosophy, art and architecture will be examined.

Pre-requisite: (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**CLA 455 Ancient Roman Culture 3 cr**

Through the disciplines of History and Philosophy, ancient Roman culture, including its history, literature, philosophy, art and architecture will be examined.

Pre-requisite: (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**CLA 492 Seminar - 3 cr**

An in-depth investigation of figures, periods or topics in Classics for advanced undergraduates. May be repeated, when content varies, for a total of six hours.

**CLA 494 Dir St - 1 TO 3 cr**

Directed research in Classics under the guidance of a member of the department. Credit according to the magnitude of the individual project. May be repeated, if content varies, for a total of three hours. Prerequisites: Junior or senior standing and approval of directing professor and department chair.

**CLA 499 Honors Thesis -W 3 TO 6 cr**

Extended research paper prepared under the direction of thesis advisor plus two-person committee selected by advisor in consultation with student. Prerequisites: The student must have developed a proposal for the thesis in consultation with the advisor, and received permission for the work from the committee. In addition, the student must be a senior major or minor, have completed the common core, and have at least 3.3 GPA in the Classics concentration of the Philosophy major. Credit for this course is only given as an addition to the hours required for the major.

Pre-requisite: (PHL 120 and PHL 240 and PHL 245 and PHL 321 and PHL 461 and PHL 310 ) or (REL 310 or CLA 310 )

**CLA 594 Directed Studies 3 cr**

Directed research in philosophy under the guidance of a member of the department. May be repeated, if content varies, for a total of six hours. Prerequisite: Graduate Student in Department conferring a Graduate Degree (hence not open to Philosophy majors in any Concentration in Philosophy.)

## Clinical/Counseling Psychology (CCP)

**CCP 742 Advanced Psych Assessment 3 cr**

This course will offer an in-depth understanding of the assessment of complex cases, which includes both mental illness and physical disorders, as well as the impact of complex social issues, such as culture, ethnicity, and economic issues. The course covers topics pertaining to adults and children. The emphasis will be on the integration of nomothetic and empirical perspectives with idiographic approaches in an evidence-based assessment model. Topics covered will be assessing special populations (e.g., severely mentally ill, trauma, forensic, parents), therapeutic assessment, person-centered report writing, providing feedback, theoretical and scientific issues in assessment, and current controversies.

Pre-requisite: CCP 706 Minimum Grade of B

**CCP 745 Teaching of Psychology 3 cr**

This course will offer an in-depth understanding of the teaching of psychology at the post secondary level.

**CCP 750 Applied Psychophys Biofeedback 3 cr**

This course will survey theory, research, and applications of psychophysiology and biofeedback in the prevention and treatment of illness and the enhancement and maintenance of health.

Pre-requisite: CCP 706 Minimum Grade of B

**CCP 752 Clinical Neuropsychology 3 cr**

This course will offer an in-depth understanding of the different theories of brain function in humans. Assessment methods for detecting abnormal functioning and the localization of functioning by behavioral methods will also be examined. The possible etiologies of abnormal functioning as well as their treatment will be reviewed.

Pre-requisite: CCP 706 Minimum Grade of B and CCP 742 Minimum Grade of B

**CCP 756 Practicum Therapy 1 TO 3 cr**

Supervised experience with child and/or adult populations; includes case conference and seminars. This course may include supervised placement in an applied setting.

Pre-requisite: CCP 706 Minimum Grade of B or PSY 506 Minimum Grade of B

**CCP 758 Psychology Resilience & Trauma 3 cr**

This course will offer an in-depth understanding of resilience, as it manifests across the lifespan in response to various types of traumas (natural vs. manmade; community-wide versus family- or individually-specific). Prevention and reduction of psychological impact related to trauma and the development, enhancement, and maintenance of resilience in the face of adversity will be emphasized.

Pre-requisite: CCP 706 Minimum Grade of B

**CCP 759 Group and Systems Theory 3 cr**

This course will survey group and systems theories and the interventions that have been derived from this perspective. The dynamics of group processes will be delineated.

Pre-requisite: CCP 706 Minimum Grade of B

**CCP 763 Prevention Treat Public Health 3 cr**

This course will survey the basic theory and techniques underlying the study of public health problems. Research related to the prevention and treatment of several specific public health problems (e.g. suicide, HIV/AIDS, youth violence) will be covered in depth.

**CCP 764 Consult Psych Program Develop 3 cr**

This course provides an overview of approaches to psychological consulting and program development in individual, small group and large organization contexts. Specific aspects of psychological consulting in mental health, business, and educational settings will be reviewed

**CCP 766 Clinical Supervision 3 cr**

This course provides an overview of the various theoretical approaches to supervision of professional psychological services, particularly psychotherapy services. In addition, relevant research findings in the area of supervision are reviewed. Students also have the opportunity to receive feedback on audio/video tapes of their supervision sessions with a junior graduate student clinician

Pre-requisite: CCP 706 Minimum Grade of B and CCP 756 Minimum Grade of S

**CCP 772 Child Family Psychopath Interv 3 cr**

This course provides an overview of current theory and research findings relevant to psychological disorders typically occurring in childhood and adolescence. In addition, evidence-based interventions for various childhood disorders are reviewed. A focus will be upon an ecological and developmental view of childhood psychopathology that integrates family, community, and societal forces in a comprehensive view of such disorders.

Pre-requisite: CCP 706 Minimum Grade of B

**CCP 780 Applied Health Psychology 3 cr**

This course will survey theory, research, and applications of health psychology in the prevention and treatment of illness and the enhancement and maintenance of health.

Pre-requisite: CCP 706 Minimum Grade of B

**CCP 782 Advanced Practicum 1 TO 3 cr**

Supervised experience with child and/or adult populations in a variety of settings; includes case conferences and advanced psychological assessment and interventions and supervision of lower level graduate students.

Pre-requisite: CCP 756 Minimum Grade of B

**CCP 790 Special Topics- 0 TO 3 cr**

Selected topics in psychology and may be repeated or credit when course varies.

**CCP 795 MCPP 3 cr**

CCP 795 Multicultural Counseling in Professional Psychology. Provides a foundation in multicultural awareness, knowledge, and skills from a clinical and counseling psychology perspective.

**CCP 796 Directed Studies 1 TO 3 cr**

Directed study and research.

**CCP 797 Psychology Internship 1 TO 3 cr**

The predoctoral internship is a supervised learning experience in a work setting similar to that in which students will eventually be employed. The internship provides students with an opportunity to apply the theories and concepts learned during their graduate program. Not more than 18 hours may be taken.

**CCP 799 Dissertation Research 1 TO 6 cr**

Completion and oral defense of a dissertation based upon original research. May be repeated for up to 12 hours credit. A minimum of nine hours is required to meet degree requirements.

## Co-op (COE)

**COE 100 COOP Alternating I 0 cr**

Work assignment as per program.

**COE 101 COOP Alternating II 0 cr**

Work assignment as per program.

Pre-requisite: COE 100 Minimum Grade of S

**COE 110 COOP Parallel I 0 cr**

Work assignment as per program.

**COE 111 COOP Parallel II 0 cr**

Work assignment as per program.

Pre-requisite: COE 110 Minimum Grade of S

**COE 120 Internship I 0 cr**

Work assignment as per program.

**COE 121 Internship II 0 cr**

Work assignment as per program.

Pre-requisite: COE 120 Minimum Grade of S or COE 120

Minimum Grade of C

**COE 200 COOP Alternating III 0 cr**

Work assignment as per program

Pre-requisite: COE 101 Minimum Grade of S

**COE 201 COOP Alternating IV 0 cr**

Work assignment as per program.

Pre-requisite: COE 200 Minimum Grade of S

**COE 210 COOP Parallel III 0 cr**

Work assignment as per program.

Pre-requisite: COE 111 Minimum Grade of S

**COE 211 COOP Parallel IV 0 cr**

Work assignment as per program.

Pre-requisite: COE 210 Minimum Grade of S

**COE 220 Internship III 0 cr**

Work assignment as per program.

Pre-requisite: COE 121 Minimum Grade of S

**COE 221 Internship IV 0 cr**

Work assignment as per program.

Pre-requisite: COE 220 Minimum Grade of S

<b>COE 300 COOP Alternating V</b>	<b>0 cr</b>
Work assignment as per program. Pre-requisite: COE 201 Minimum Grade of S	
<b>COE 301 COOP Alternating VI</b>	<b>0 cr</b>
Work assignment as per program. Pre-requisite: COE 300 Minimum Grade of S	
<b>COE 310 COOP Parallel V</b>	<b>0 cr</b>
Work assignment as per program. Pre-requisite: COE 211 Minimum Grade of S	
<b>COE 311 COOP Parallel VI</b>	<b>0 cr</b>
Work assignment as per program. Pre-requisite: COE 310 Minimum Grade of S	
<b>COE 400 COOP Alternating VII</b>	<b>0 cr</b>
Work assignment as per program. Pre-requisite: COE 301 Minimum Grade of S	
<b>COE 401 COOP Alternating VIII</b>	<b>0 cr</b>
Work assignment as per program. Pre-requisite: COE 400 Minimum Grade of S	
<b>COE 410 COOP Parallel VII</b>	<b>0 cr</b>
Work assignment as per program. Pre-requisite: COE 311 Minimum Grade of S	
<b>COE 411 COOP Parallel VIII</b>	<b>0 cr</b>
Work assignment as per program. Pre-requisite: COE 410 Minimum Grade of S	
<b>COE 500 COOP Alternating I</b>	<b>0 cr</b>
Work assignment as per program	
<b>COE 501 COOP Alternating II</b>	<b>0 cr</b>
Work assignment as per program Pre-requisite: COE 500 Minimum Grade of S	
<b>COE 510 COOP Parallel I</b>	<b>0 cr</b>
Work assignment as per program	
<b>COE 511 COOP Parallel II</b>	<b>0 cr</b>
Work assignment as per program Pre-requisite: COE 510 Minimum Grade of S	
<b>COE 600 COOP Alternating III</b>	<b>0 cr</b>
Work assignment as per program. Pre-requisite: COE 501 Minimum Grade of S	
<b>COE 601 COOP Alternating IV</b>	<b>0 cr</b>
Work assignment as per program. Pre-requisite: COE 600 Minimum Grade of S	
<b>COE 610 COOP Parallel III</b>	<b>0 cr</b>
Work assignment as per program. Pre-requisite: COE 511 Minimum Grade of S	
<b>COE 611 COOP Parallel IV</b>	<b>0 cr</b>
Work assignment as per program. Pre-requisite: COE 610 Minimum Grade of S	

## College Of Arts And Sciences (CAS)

<b>CAS 100 First Yr Exp -</b>	<b>2 cr</b>
A course for first-year students majoring in the College of Arts & Sciences that assists with maximizing the student's potential to achieve academic success and to adjust responsibly to the individual and interpersonal challenges presented by college life. Taught in small groups, the course provides an introduction to the nature of higher education and a general orientation to the functions and resources of the University.	
<b>CAS 190 Special Topics -</b>	<b>1 TO 3 cr</b>
This variable content course deals with selected topics from any of the disciplines in the College of Arts and Sciences. Topics will focus on current and relevant issues and may contain a service-learning component. The course may be repeated for credit when the topic varies for a maximum of six credit hours.	

## Commun Mental Health Nursing (CMN)

<b>CMN 350 Psy-Mental Health Nsg</b>	<b>2 cr</b>
Analysis of theories, concepts, evidence, issues and trends from contemporary nursing science and related disciplines in promoting the health of individuals and families experiencing psychiatric-mental health concerns. The emphasis is on the use of the nursing process and other systematic approaches to plan, implement, and evaluate health promotion and maintenance activities, illness care, and rehabilitation with individuals and families experiencing psychiatric-mental health concerns in a variety of acute and community settings. Co-requisite: CMN 351	
<b>CMN 351 Psy-Mental Health Nsg Clin</b>	<b>2 cr</b>
The purpose of this course is to provide students the opportunity to analyze theories, concepts, research, and issues and trends in psychiatric-mental health nursing. The focus of the course is on internal and external factors affecting the mental health of children, adolescents, adults, elderly, and families. The emphasis is on the role of the professional nurse in health promotion and maintenance, illness care, and rehabilitation of children, adolescents, adults, elderly, and families experiencing psychiatric-mental health concerns. Co-requisite: CMN 350	

**CMN 411 Nursing in Community Systems 4 cr**

The purpose of this course is to provide students an in-depth exploration of community health nursing concepts and principles from a population health care perspective. The course focuses on the prevention of disease and promotion of health. Resources which support disease prevention and health promotion are investigated and evaluated. The changing needs of an increasingly culturally diverse population within the social context of community systems are examined along with the environmental, economical, political, and legal constraints to the health of community systems. Course content includes concepts from nursing and the public health sciences. The course will emphasize the use of nursing process and public health concepts to assess the complex factors in the community that affect the health of populations.

**CMN 420 Community Health Nursing 3 cr**

The purpose of this course is to provide students an opportunity to explore community health nursing concepts and principles from a population health care perspective. The changing needs of an increasingly culturally diverse population within the social context of the community systems are examined along with the environmental, economical, political, and legal constraints to the health of systems.

Co-requisite: CMN 421

Pre-requisite: (AHN 330 Minimum Grade of C or AHN 447 Minimum Grade of C) and (AHN 331 Minimum Grade of C or AHN 448 Minimum Grade of C) and CMN 350 Minimum Grade of C and CMN 351 Minimum Grade of C and MCN 347 Minimum Grade of C and MCN 348 Minimum Grade of C

**CMN 421 Community Health Nurs Clinical 1 cr**

The purpose of this course is to provide students the opportunity to complete a clinical project integrating community health nursing concepts and principles from an aggregate health care perspective. The changing needs of an increasingly culturally diverse population within the social context of the community are examined. Course content includes environmental, economical, political, and legal constraints to the health of aggregates.

Co-requisite: CMN 420

Pre-requisite: (AHN 330 Minimum Grade of C or AHN 447 Minimum Grade of C) and (AHN 331 Minimum Grade of C or AHN 448 Minimum Grade of C) and CMN 350 Minimum Grade of C and CMN 351 Minimum Grade of C and MCN 347 Minimum Grade of C and MCN 348 Minimum Grade of C

**CMN 548 Intro to Family Psych NP 3 cr**

The purpose of this first didactic course is to prepare the Advanced Family Psychiatric/Mental Health Nurse Practitioner students to assess, diagnose, and manage selected health care needs of adults and children. Emphasis is placed on synthesis and application of nursing and related theories and scientific knowledge to the development of differential/nursing diagnoses as a basis for health promotion and management.

Co-requisite: CMN 551

Pre-requisite: NU 545 Minimum Grade of C and NU 518 Minimum Grade of C

**CMN 551 HPDP Fam Psych-Mental Hlth NP 2 cr**

This didactic course prepares the Family Psychiatric/Mental Health Nurse Practitioner student to identify and implement appropriate and culturally sensitive health promotion and disease prevention strategies across the lifespan of individuals and families in primary care settings. Emphasis is placed on health promotion/disease prevention with strategic planning at the primary, secondary, and tertiary levels.

Co-requisite: CMN 548

**CMN 552 Family Psych NP I 3 cr**

This didactic course prepares the Advanced Family Psychiatric-Mental Health Nurse Practitioner student to assess, diagnose, and manage selected health care needs of culturally diverse populations across the life span. The focus is on advanced practice nursing with individuals and families in a variety of health care settings. Emphasis is placed on wellness and the pathophysiology and epidemiology underlying acute and chronic psychiatric/mental health problems.

Co-requisite: CMN 553

Pre-requisite: CMN 548 Minimum Grade of C and NU 578 Minimum Grade of C

**CMN 553 Family Psych-Mn Hth NP Prac I 4 cr**

The purpose of this practicum course is to provide opportunities for Advanced Family Psychiatric-Mental Health Nurse Practitioner students to apply concepts in primary and acute care settings with adults and families experiencing psychiatric/mental health concerns. The emphasis is on mental health nursing across the lifespan.

Co-requisite: CMN 552

**CMN 554 Family Psych NP II 3 cr**

The purpose of this course is to provide the Advanced Family Psychiatric-Mental Health Nurse Practitioner student an in-depth study of psychiatric/mental health care management of adults and their families within the framework of advanced nursing. The focus is on selected acute and chronic complex psychiatric/mental health care problems. Emphasis is on the interaction among health care providers in a culturally diverse environment.

Co-requisite: CMN 555

Pre-requisite: CMN 552 Minimum Grade of C

**CMN 555 Fam Psy Mn Hlth NP Prac II 2 cr**

The purpose of this course is to provide opportunity for the Advanced Family Psychiatric-Mental Health Nurse Practitioner student to practice within advanced nursing framework. The focus is on the role of the advanced practice nurse in the health care management of adults with psychiatric/mental health concerns. Emphasis is on collaboration with other health care providers in a culturally diverse environment.

Co-requisite: CMN 554

**CMN 556 Adv Fam Psy-Mn Hlth NP Prac IV 3 cr**

The purpose of this culminating course is to provide a preceptor and faculty facilitated experience in the Advanced Family Psychiatric-Mental Health Nurse Practitioner role. The focus is on the application and synthesis of knowledge and skills acquired in all previous courses.

Co-requisite: CMN 557

Pre-requisite: CMN 554 Minimum Grade of C and NU 610 Minimum Grade of C or NU 607 Minimum Grade of C or NU 608 Minimum Grade of C or NU 613 Minimum Grade of C

**CMN 557 Adv Fam Psych-Mentl Hlth NP IV 3 cr**

The purpose of this course is to provide a forum for the evaluation of issues and trends encountered in Advanced Family Psychiatric-Mental Health Nurse Practitioner health care. Emphasis is on critical analysis and management of issues by the Psychiatric-Mental Health Nurse Practitioner in an interdisciplinary health care delivery system.

Co-requisite: CMN 556

Pre-requisite: NU 607 Minimum Grade of C and NU 608 Minimum Grade of C and NU 610 Minimum Grade of C and NU 613 Minimum Grade of C

**CMN 568 Intro to Family NP 3 cr**

The purpose of this first didactic course is to prepare Advanced Family Nurse Practitioner students to assess, diagnose, and manage selected health care needs of adults and children. Emphasis is placed on synthesis and application of nursing and related theories and scientific knowledge to the development of differential/nursing diagnoses as a basis for health promotion and management.

Co-requisite: CMN 571

Pre-requisite: NU 545 Minimum Grade of C and NU 518 Minimum Grade of C

**CMN 571 HPDP in Family NP 2 cr**

The purpose of this didactic course is to prepare the Advanced Family Nurse Practitioner student to identify and implement appropriate and culturally competent health promotion and disease prevention strategies across the lifespan. The focus is on the advanced practice nursing of individuals and families in primary care settings. Emphasis is placed on health promotion/disease prevention with strategic planning at the primary, secondary, and tertiary levels of prevention. Prevention, early diagnosis, prompt treatment, and in-depth patient education with dysmetabolic syndrome and diabetes will be emphasized. Effective strategies for life-style behavior change will also be evaluated.

Co-requisite: CMN 568

**CMN 572 Family NP I 3 cr**

This didactic course prepares the Advanced Family Nurse Practitioner student to assess, diagnose, and manage selected health care needs of culturally diverse populations across the lifespan. The focus is on the advanced practice nursing of individuals and families in primary care settings. Emphasis is placed on wellness and the pathophysiology and epidemiology underlying acute and chronic health problems.

Co-requisite: CMN 573

Pre-requisite: CMN 568 Minimum Grade of C and NU 578 Minimum Grade of C

**CMN 573 Family NP Pract I 4 cr**

This practicum course provides opportunities for the Advanced Family Nurse Practitioner to apply concepts in select clinical settings. Focus is on individuals and families in primary care settings. The emphasis is on culturally competent delivery of health care, diagnostic reasoning and decision making/critical thinking.

Co-requisite: CMN 572

**CMN 574 Family NP II 3 cr**

This course provides an in-depth study of the health care management of children, adults, and families within the framework of advanced nursing. Emphasis is on the interaction among health care providers in a culturally diverse environment. The focus is on selected acute and chronic complex health problems of children, adults, and families in primary health care settings.

Co-requisite: CMN 575

Pre-requisite: CMN 572 Minimum Grade of C

**CMN 575 Family NP Prac II 2 cr**

This practicum course provides an opportunity for the Advanced Family Nurse Practitioner student to practice within an advanced nursing framework. The focus is on the role of the advanced practice nurse in the health care management of children, adults, and families. Emphasis is on collaboration with other health care providers in a culturally diverse environment.

Co-requisite: CMN 574

**CMN 576 Advanced Family NP Prac IV 3 cr**

The purpose of this culminating clinical course is to provide a preceptor and faculty facilitated experience in the Advanced Family Nurse Practitioner role. The focus is on the application and synthesis of knowledge and skills acquired in all previous courses.

Co-requisite: CMN 577

Pre-requisite: NU 607 Minimum Grade of C and NU 608 Minimum Grade of C

**CMN 577 Advanced Family NP IV 3 cr**

The purpose of this course is to provide a forum for the evaluation of issues and trends encountered in health care. Emphasis is on critical analysis and management of these issues by the Advanced Family Nurse Practitioner student in an interdisciplinary health care system.

Co-requisite: CMN 576

Pre-requisite: NU 607 Minimum Grade of C and NU 608 Minimum Grade of C and NU 610 Minimum Grade of C and NU 613 Minimum Grade of C

**CMN 604 Family Psych MH NP PP&D 3 cr**

This course assists the Family Psych Mental Health Nurse Practitioner student to learn the processes embedded in developing a doctoral synthesis project. The course will address all aspects of project planning and development as a preliminary step to the Family Psych Mental Health Nurse Practitioner student's selection of a topic or phenomenon of interest for the project and will incorporate well-built questions, search strategies and outcomes, identification of resources needed, plan for evaluation and dissemination.

**CMN 617 Family Psych MH NP Res I 3 cr**

Theories of leadership, motivation, power, and change are used to influence change in health care organizations. This course will implement evidence-based clinical models and evaluate their effectiveness in health outcomes. The Family Psych Nurse Practitioner student will synthesize, critique, and apply evidence to support quality clinical or organizational practices. In this mentored and supervised experience, the Nurse Practitioner DNP student will work with the primary faculty advisor to complete projects and advance their selected practice area. The Nurse Practitioner student will have access to and authority for expanded scope of practice to master the DNP competences. Residency sites will depend upon the student's career trajectory and approval by collaborating faculty. During the residency semester, students must participate in scheduled scholarly seminars online. Clinical hours of direct practice/management is required.

Pre-requisite: CMN 604 Minimum Grade of C

**CMN 618 Family Psych MH NP Res II 3 cr**

Provides students the opportunity to fully express all DNP competencies. The student, guided by the faculty facilitator, will implement the scholarly doctoral system's change project.

Pre-requisite: CMN 617 Minimum Grade of C

**CMN 619 Family Psych MH NP Res III 3 cr**

Final course in residency series as student continues to implement and evaluate project plan. Provides student the opportunity to fully express all DNP competencies. The student, guided by the core faculty and advisor, completes quality improvement evidence-based system's change project.

Pre-requisite: CMN 618 Minimum Grade of C

**CMN 643 Pub Hlth Proj Plan & Developmt 3 cr**

This course assists the public health nursing administration DNP student to learn the processes embedded in developing a doctoral synthesis project. The course will address all aspects of project planning and development as a preliminary step to the public health students' selection of a topic or phenomenon of interest for the project and will incorporate well-built questions, search strategies and outcomes, identification of resources needed, plan for evaluation and dissemination.

**CMN 644 Public Health Residency I 3 TO 6 cr**

Theories of leadership, motivation, power, and change are used to influence change in health care organizations. This course will implement evidence-based clinical models and evaluate their effectiveness in health outcomes. The public health nursing administration student will synthesize, critique, and apply evidence to support quality clinical or organizational practices. In this mentored and supervised experience, the public health nursing administration DNP student will work with the primary faculty advisor to complete projects and advance their selected practice area. The public health nursing administration student will have access to and authority for expanded scope of practice to master the DNP competences. Residency sites will depend upon the public health nursing administration student's career trajectory and approval by collaborating faculty. During the residency semester, student must participate in scheduled scholarly seminars online. Clinical hours of direct practice/management is required.

Pre-requisite: CMN 643 Minimum Grade of C

**CMN 645 Public Health Residency II 3 TO 6 cr**

Provides public health nursing administration students the opportunity to fully express all DNP competencies. The public health nursing administration student, guided by the faculty facilitator, will implement the scholarly doctoral system's change project.

Pre-requisite: CMN 644 Minimum Grade of C

**CMN 646 Public Health Residency III 3 TO 6 cr**

Final course in residency series, the public health nursing administration student continues to implement and evaluate project plan. Provides public health nursing administration student the opportunity to fully express all DNP competencies. The public health nursing administration student, guided by the core faculty and advisor completes quality improvement evidence-based system's change project.

Pre-requisite: CMN 645 Minimum Grade of C

**CMN 680 Family NP PP&D 3 cr**

This course assists the family nurse practitioner student to learn the processes embedded in developing a doctoral synthesis project. The course will address all aspects of project planning and development as a preliminary step to the family nurse practitioner students' selection of a topic or phenomenon of interest for the project and will incorporate well-built questions, search strategies and outcomes, identification of resources needed, plan for evaluation and dissemination.

**CMN 681 Family NP Residency I 3 cr**

Theories of leadership, motivation, power, and change are used to influence change in health care organizations. This course will implement evidence-based clinical models and evaluate their effectiveness in health outcomes. The family nurse practitioner student will synthesize, critique, and apply evidence to support quality clinical or organizational practices. In this mentored and supervised experience, the family nurse practitioner student will work with the primary faculty advisor to complete projects and advance their selected practice area. The student will have access to and authority for expanded scope of practice to master the DNP competencies. Residency sites will depend upon the family nurse practitioner student's career trajectory and approval by collaborating faculty. During the residency semester, student must participate in scheduled scholarly seminars online. A total of 180 clinical hours of direct practice/management is required.

Pre-requisite: CMN 680 Minimum Grade of C

**CMN 682 Family NP Residency II 3 cr**

Provides family nurse practitioner students the opportunity to fully express all DNP competencies. The family nurse practitioner student, guided by the faculty facilitator, will implement the scholarly doctoral system's change project.

Pre-requisite: CMN 681 Minimum Grade of C

**CMN 683 Family NP Residency III 3 cr**

Final course in residency series, the family nurse practitioner student continues to implement and evaluate project plan. This course provides the family nurse practitioner student the opportunity to fully express all DNP competencies. The family nurse practitioner student, guided by the core faculty and advisor completes quality improvement evidence-based system's change project.

Pre-requisite: CMN 682 Minimum Grade of C

**CMN 692 CMN DNP Project Progression 3 cr**

Students will register for this course to complete residency course work under supervision of faculty. Students must remain continuously enrolled until all residency requirements are completed.

Co-requisite: CMN 619

Pre-requisite: CMN 618 Minimum Grade of C or CMN 645 Minimum Grade of C or CMN 682 Minimum Grade of C

**CA 110L Public Speaking Lab 0 cr**

Public speaking labs associated with blended public speaking sections. CA 110 and CA 110L must be taken concurrently. Likewise, if a student drops CA 110, he/she must drop CA 110L at the same time. Together, CA 110 and CA 110L satisfy the general education public speaking requirement.

Co-requisite: CA 110

**CA 100 Intro to Communication 3 cr**

Course examines various approaches people take to communicating. Focuses on developing an awareness of how and why we communicate and why we do not always communicate effectively. Includes consideration of variables related to interpersonal, group, public, and mass-communication contexts. Fee.

**CA 101 Intro to Communication Media 3 cr**

Course examines the functioning of communication media in contemporary society including the political, economic and social environment. The structure and functions of newspapers, magazines, film, recording, radio, television, advertising and public relations industries are examined. The impact of the media on individuals and institutions is explored. Fee.

**CA 110 Public Speaking 3 cr**

A beginning study of the principles of speech communication as they relate to speaker-audience communication. The student is provided an opportunity to develop the art of audience and subject analysis, research, critical thinking, organization, language, and delivery of speeches. This course includes a video component. Fee

**CA 200 Survey of Comm Theory 3 cr**

Introductory survey of theoretical orientations in the field of human communication. Focuses on alternative explanations regarding elements of the communication process, models of communication, the communication act, and the communication relationship. Fee.

Pre-requisite: ACT English 27( or SAT Critical Reading 550 or University - EH101 Exempt P or EH 101 Minimum Grade of C or EH 110 Minimum Grade of D or EH 190 Minimum Grade of D or USA 010 Minimum Grade of S) and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**CA 210 Argumentation 3 cr**

Examines the role of argumentation in a democratic society and aims to develop critical thinking and reasoned advocacy. Course makes functional a knowledge of tests of evidence and the modes of logical reasoning. Students participate in various forms of argumentation and debating. Fee.

Pre-requisite: EH 101 Minimum Grade of C and EH 102 Minimum Grade of C

## Communication (CA)

- CA 211 Interpersonal Comm** 3 cr  
A study of communication behavior in the interpersonal setting. Focuses on development of knowledge, trust, understanding, supportiveness, etc., in a relationship, and their collective impact on the communication exchange. Fee.
- CA 220 Writing Comm Media - W** 3 cr  
Intensive study of writing for various media and audiences. Specific attention is given to improvement of writing skills, including grammar, punctuation, spelling, word use, sentence composition, Associated Press style, and organization of material, as well as the different formats for the different media. Media styles studied include print, broadcast, on-line journalism, and public relations, which also includes a study of evaluating, documenting, and prioritizing facts in the writing of news stories and media releases for public relations. Computer fee.  
Pre-requisite: ACT English 27( or SAT Critical Reading 550 or University - EH101 Exempt P or EH 101 Minimum Grade of C or EH 110 Minimum Grade of D or EH 190 Minimum Grade of D or USA 010 Minimum Grade of S) and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)
- CA 222 Rhetoric, Culture, and Society** 3 cr  
Course examines rhetoric or the art of persuasion, as it relates to popular culture. Students will apply rhetorical theory to such topics as music, film, and advertising.
- CA 224 Intro to Strategic Comm** 3 cr  
Introduction to Strategic Communication focuses on theories, concepts and applications of the advertising and public relations fields. It provides an overview of theories, practices, ethics, campaigns, and the role of strategic communication in the process of marketing products, ideas, and people. The course involves the evaluation of communication ideas used to build brands, create and sustain positive relationships, and solve problems to advance the interests of brands and organizations.  
Pre-requisite: CA 101 Minimum Grade of D and CA 110 Minimum Grade of D and EH 101 Minimum Grade of D and EH 102 Minimum Grade of D
- CA 230 Comm in Organization** 3 cr  
Application of communication principles and techniques to those aspects of one's life in an organization that have been shown to be the most difficult and troublesome parts of the communication milieu in the world of work. Includes interviewing, conference participation, leadership decisions, conflict management, and organizational change as communication phenomena. Fee.
- CA 240 Digital Cinema Prod Basics** 3 cr  
This course will teach the basics of directing, composition, lighting, audio and editing in the digital realm. Techniques of working with actors and the technical and aesthetic considerations of moving-picture photography, audio design and storytelling through editing will be covered by lecture, example, and practical exercise. Technology Fee.
- CA 241 Intro TV Studio Production** 3 cr  
Theory and practice of television production. Concentrates on exploring the uses of television in varied contexts, including corporate, community, and broadcasting applications. Fee.
- CA 244 Radio Broadcasting** 3 cr  
A survey of radio broadcast operations. Examines terrestrial, Internet, and satellite radio. Emphasis on audience analysis, programming, promotions, production, performance, and regulatory standards. Fee.
- CA 250 Radio and TV Performance** 3 cr  
Course focuses on the unique aspects of radio and television as communication media. Different styles of delivery for various media projects will be studied - broadcast news, advertising, and entertainment. Course also focuses on restraints and requirements of the individual medium on the practice of broadcast delivery. Fee.  
Pre-requisite: CA 110 Minimum Grade of D
- CA 260 Digital Writing and Production** 3 cr  
This course considers the nature of the digital environment as it relates to communication. Topics include writing in the online environment, effective use of images and multimedia, and basic web design. Computer fee.
- CA 270 Sports Journalism** 3 cr  
This is a traditional lecture and writing course that will provide students with an overview of sports journalism and hone writing, reporting and editing skills. Students will learn how to write a game story, advance/follow-up story, sports column and feature story during the semester. As in the journalism industry, students will adhere to strict deadlines. Computer Fee.  
Pre-requisite: (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)
- CA 271 Visual & Message Communication** 3 cr  
An introduction to visual principles as the basis of graphic design communication and elements and issues of visual language. The focus is on the formal elements of visual communication theories including basic design principles, composition, color, texture, and shape in the form of applied visual problem-solving exercises. Students are introduced to Adobe Photoshop and InDesign. Computer Fee.  
Pre-requisite: CA 101 Minimum Grade of D and (EH 101 Minimum Grade of D or EH 110 Minimum Grade of D or EH 190 Minimum Grade of D or USA 010 Minimum Grade of D) and (EH 102 Minimum Grade of D or EH 105 Minimum Grade of D)
- CA 275 Decision Making - Small Groups** 3 cr  
Theory and practice in leading and participating in small group decision making. Special focus on group problem solving and the management of conflict in small group decision-making meetings. Fee.

- CA 281 Editing and Layout** 3 cr  
Principles and practices of selection and preparation of written and pictorial materials for newspapers, magazines, and related media. Layout and design, production planning, and related topics. Computer fee.  
Pre-requisite: CA 220 Minimum Grade of C
- CA 283 Chinese Film** 3 cr  
This course will introduce students to major topics in Chinese history, covering both ancient periods, such as the Three Kingdoms period, and twentieth-century events such as the war with Japan and the Cultural Revolution. Post-Tiananmen Chinese society will also be stressed. Students will explore these themes through Chinese film and literature, and will thus become familiar with major directors, including Zhang Yimou and Jia Zhangke and writers such as Yu Hua.
- CA 284 Japanese Film** 3 cr  
This course will introduce students to major themes in recent Japanese history, including samurai culture and other issues pertaining to social class, Westernization, the postwar family, sixties radicalism, and recent popular culture. Students will explore these themes through Japanese film and literature, and will thus become familiar with major directors, including Akira Kurosawa, Yasujiro Ozu and Juzo Itami, and novelists such as Junichiro Tanizaki and Yukio Mishima.
- CA 288 History of the Mass Media** 3 cr  
The role of journalism in American society from the Revolution to the present. This course is equivalent on HY 288. Fee.
- CA 290 Special Topics -** 1 TO 3 cr  
A variable-topics course treating communication concepts and topics relevant to the disciplines. May be repeated once when course content changes for a total of six credit hours. Fee.
- CA 300 Fnds of Comm Research** 3 cr  
Introduction to research foundations in the field of communication. Includes historical, critical, descriptive, and experimental methods. Computer fee.
- CA 301 Skepticism in Media-Philosophy** 3 cr  
This course examines some of the most fundamental questions about human knowledge, belief and rationality and compares the treatment of such issues in philosophical discussions and contemporary media, especially film. Identical with PHL 301. Credit cannot be received for both CA 301 and PHL 301.  
Pre-requisite: EH 102 Minimum Grade of D or EH 103 Minimum Grade of D
- CA 310 Persuasion** 3 cr  
Basic theories and techniques of persuasion and their application to typical communication situations and problems in today's society. Fee.
- CA 315 Gender and Communication** 3 cr  
Survey of research and theory concerning the differences in communication between men and women and the effects and functions of communication between men and women. Fee.
- CA 320 Broadcast Scriptwriting - W** 3 cr  
Study and practice in the techniques of writing scripts for radio and television. Special scripting projects. Fee.  
Pre-requisite: EH 101 Minimum Grade of C and EH 102 Minimum Grade of C
- CA 321 Media Planning** 3 cr  
Students develop an understanding of planning traditional and digital media as a part of an integrated brand communication strategy. The course concentrates specifically on how media work together strategically to shape consumers' brand experiences across media platforms. Fee.  
Pre-requisite: CA 220 Minimum Grade of C and CA 224 Minimum Grade of C
- CA 322 Creative Strategy - W** 3 cr  
Creative Strategy focuses on the theoretical foundations of creative strategic thinking in advertising and visual communication. The course concentrates on writing effective copy for traditional and digital media as part of a strategic brand communication campaign. Computer Fee.  
Pre-requisite: CA 224 Minimum Grade of C and EH 102 Minimum Grade of D
- CA 323 Sports PR** 3 cr  
Study of the role of public relations in sports, particularly as it relates to strategic communication. Discussion topics include the sports organization - media relationship, organizational media (traditional and digital), the legal and ethical dimensions of sport, and crisis communication. Fee.  
Pre-requisite: CA 300 Minimum Grade of C and CA 324 Minimum Grade of C
- CA 324 Strategic Writing - W** 3 cr  
Strategic Writing focuses on understanding writing styles and formats of different communication media for maximum message impact. This involves crafting written messages for specific target audiences, selecting appropriate media and the adaptation of writing style and tone. Emphasis is placed on strategic, concise and effective writing. Computer Fee.  
Pre-requisite: CA 220 Minimum Grade of C and CA 224 Minimum Grade of C and CA 260 Minimum Grade of D
- CA 325 Applied Comm Workshop** 3 cr  
A workshop stressing practical applications of the principles and theories of communication disciplines to those settings and problems in the world of work that are of special interest to the students enrolled. Fee.

- CA 330 Intercultural Communication-W** 3 cr  
CA 330 is the study of the theory and practice of intercultural communication. This course's goal is to focus on global dialogues within critical organizational incidents. This course has three objectives: to explain the culture-based situational conflict model; to integrate theory and practice in the discussion of organizational conflict; and to provide an excellent opportunity for writing within the organizational communication content areas.
- CA 340 Video Field Production** 3 cr  
The focus of this course is on production techniques, processes and skills. Analysis of television production as a communication process, program formats, production equipment and facilities, production and unit management and the role of the director. Fee.  
Pre-requisite: CA 101 Minimum Grade of D
- CA 341 Intermediate TV Studio Prod** 3 cr  
This course will give students practical grounding in the concepts and technology associated with the production of studio-based news and information programs. Technology Fee.  
Pre-requisite: CA 241 Minimum Grade of D
- CA 343 Film History** 3 cr  
An examination of the development of motion pictures from 1893 to the present. Films representing major periods, movements, and styles will be examined. Fee.
- CA 344 Film and TV Genres** 3 cr  
A study of the formation and evolution of film and television genres. Selected genres will be studied in terms of their structure and cultural history. Fee.
- CA 350 Broadcast News** 3 cr  
Course includes both writing in the broadcast media and exploring broadcast news operations. Assignments include writing broadcast news stories and evaluating broadcast news operations. Lectures cover the characteristics of broadcast news, news styles, news policy, and ethics and responsibility in broadcast news. Fee  
Pre-requisite: (CA 220 Minimum Grade of C or CA 280 Minimum Grade of D)
- CA 352 Media Literacy Information Age** 3 cr  
Study of how to be a good consumer of mass media messages. Topics include how media messages are affected by media production techniques, media technology, professional values and the media's political-economic structure. Fee.  
Pre-requisite: CA 100 Minimum Grade of D or CA 101 Minimum Grade of D
- CA 356 Digital Cinema Management** 3 cr  
A survey of the legal, budgeting, revenue stream and distribution issues associated with film and television production. Topics include preproduction and production management, script breakdown, scheduling, and above and below the line talent. Computer Fee.
- CA 357 Basic Film Production** 3 cr  
This course will teach the basics of planning, scripting, shooting and editing short films in the 16mm format. Technology Fee.  
Pre-requisite: CA 240 Minimum Grade of D and CA 340 Minimum Grade of D
- CA 358 Digit Comp, Animation & Graph** 3 cr  
This course will introduce the basics of digital special-effects, two-dimensional computer animation and two- and three-dimensional video graphics. Technology Fee.  
Pre-requisite: CA 240 Minimum Grade of D and CA 340 Minimum Grade of D
- CA 360 Comm and the Internet** 3 cr  
Intensive study and application of rhetorical and communication theories to understanding problems that arise as the Internet and the World Wide Web begin to render fixed media-based communication obsolete. Implications for advertising, journalism, organizational record keeping and management, interpersonal communication, training, entertainment, etc. Computer fee
- CA 366 Visual Info Electron Com Media** 3 cr  
Rhetorical issues in the design of Internet and World Wide Web materials. Focus on how motion, color, and other visual elements compete for audience attention; how rhetorical theory, learning theory, and communication theory inform the myriad decisions involved in visual presentation. This course will address these rhetorical issues from the creator's and user's view point. Computer fee
- CA 370 Interm Reporting-Writing-W** 3 cr  
Study of intermediate skills needed for reporting, evaluating, and writing news stories, with particular attention given to the reporting of public affairs issues. Vanguard practicum. Fee  
Pre-requisite: (CA 220 Minimum Grade of C or CA 280 Minimum Grade of D)
- CA 371 Branding & Visual Messages** 3 cr  
The focus of this course examines the understanding of how to build, measure and manage a brand from visual conception. Emphasis is on the visual aspects of brand management from the creative power of visual branding through research and visual strategy development and theories. Advanced areas of digital and/or print media are used in creative development and execution of persuasive and effective messages. Computer Fee.  
Pre-requisite: CA 271 Minimum Grade of D

**CA 381 Strategic Publication Design 3 cr**

Course focuses on the approaches of visual communication to strategically reach target audiences and meet an organization's mission, brand and communication specific goals. This involves the use of modern industry software tools to apply the concepts and techniques of basic design principles, color, typography, layout and graphics in the planning and development of publications and design pieces. Computer Fee.

Pre-requisite: CA 224 Minimum Grade of C and CA 321 Minimum Grade of D and CA 324 Minimum Grade of D

**CA 382 Photojournalism 3 cr**

The study of basic photography and the principles of still photography journalism, with particular emphasis on camera use, photo processing, visual aesthetics, and journalistic story-telling. Computer fee.

**CA 383 Digital Photography 3 cr**

Through this course students will develop a general understanding of the ability of photographic images to communicate concepts, ideas and emotion through creative photography. It will be a hands-on course, in which students will use digital cameras to produce photographs that achieve the desired message. Computer Fee.

**CA 384 Account Management 3 cr**

Students learn the account service function in an advertising agency. They develop an understanding of the account manager's role by focusing on the inter-relationships between the account manager, creative, media planners, and other agency specialists. Computer fee.

Pre-requisite: (CA 224 Minimum Grade of C and CA 321 Minimum Grade of D) or CA 322 Minimum Grade of D

**CA 387 Magazine & Feature Writing-W 3 cr**

A writing and reporting course focusing on advanced skills, including alternative structures for news stories. Designed to give students a broad overview of the magazine industry and its current trends with emphasis on newspaper and magazine feature writing. Fee.

Pre-requisite: (CA 220 Minimum Grade of C or CA 280 Minimum Grade of D) and EH 101 Minimum Grade of C and EH 102 Minimum Grade of C

**CA 390 Special Topics - 1 TO 3 cr**

An advanced variable-topic course treating communication concepts and topics relevant to the discipline. May be repeated twice for up to six hours credit. Fee.

**CA 394 Dir St - 1 TO 3 cr**

Directed individual study of literature in an area of need and interest to the student. May be repeated for a maximum of six hours credit. Fee.

**CA 410 Advanced Persuasion 3 cr**

An advanced examination of an application of persuasive techniques in communication situations and contexts (e.g. field, laboratory, interpersonal, small group, nonverbal, mass communication). Fee.

**CA 411 Relational Communication 3 cr**

An examination of issues, theories, research and skills that apply to managing and nurturing close relationships. Emphasis is given to applying course concepts to promote relational growth and manage interpersonal conflict through interaction in relationships. Fee.

**CA 422 Rhetorical Theory 3 cr**

A broad survey of the Western rhetorical tradition designed to give students a working knowledge of rhetoric and its historical and contemporary influence on communicative events and perspectives. Fee.

**CA 424 Rhetorical Criticism - W 3 cr**

This course is designed to introduce students to the process of rhetorical analysis. Through criticism of communication artifacts, students learn to identify key elements of the rhetorical process and to develop critical thinking, writing, and viewing skills. The course prepares students to interpret, understand, analyze, and critique communication in diverse contexts including speeches, advertisements, interpersonal conversations, films, and works of art to name a few. Culminating experience for communication studies students. Fee.

Pre-requisite: ACT English 27( or SAT Critical Reading 550 or University - EH101 Exempt P or (EH 101 Minimum Grade of C or EH 110 Minimum Grade of D or EH 190 Minimum Grade of D or USA 010 Minimum Grade of S) ) and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**CA 425 Issues in Rhetoric 3 cr**

Close examination of a single contemporary rhetorical phenomenon. Topics will rotate based upon disciplinary relevance and student needs. May be repeated once for credit when content varies for a maximum of six credits.

**CA 430 Adv Organizational Communicatn 3 cr**

Study and application of organizational and communication theory of assessment of organizational and communication needs. Critical analysis of intervention programs and strategies. Fee.

Pre-requisite: CA 230 Minimum Grade of D

**CA 435 Comm Training-Dev Programs - W 3 cr**

Review and analysis of communication training and development programs designed to solve communication problems in groups and organizations. Students will develop and present a training or development program. Computer fee

**CA 440 Adv Video Field Production 3 cr**

Theory and practice of television production. Concentrates on exploring and understanding the concepts and technology involved in advanced video production for a variety of applications including commercial, corporate, and community outlets. Culminating experience for digital cinema & television students. Fee.

Pre-requisite: CA 340 Minimum Grade of D

- CA 441 Adv TV Studio Production** 3 cr  
Advanced theory and practice of television production. Concentrates on exploring the advanced uses of television in varied contexts, including corporate, community, and broadcasting applications. Fee  
Pre-requisite: CA 341 Minimum Grade of D
- CA 445 Ethics-Social Respons Comm** 3 cr  
Study of social responsibility and ethics in communication. Acquaints student with ethical standards and expectations society has for communicators. Capstone Course. Fee.  
Pre-requisite: (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)
- CA 449 Mass Media Social Effects** 3 cr  
Examination of the interaction between mass communication and American society. Current research literature in the field will be analyzed and methods of improving the system will be discussed. Fee.  
Pre-requisite: CA 101 Minimum Grade of D
- CA 450 Adv Broadcast News** 3 cr  
This is an advanced course in broadcast news reporting and production. Students will have hands-on practice in a newsroom situation. Fee.  
Co-requisite: CA 451  
Pre-requisite: CA 350 Minimum Grade of C
- CA 451 Producing the News** 3 cr  
This course gives students experience in producing newscasts for the media. Students will learn the techniques for assembling, timing, writing, and executing complete newscasts.  
Co-requisite: CA 450  
Pre-requisite: CA 350 Minimum Grade of C
- CA 452 The News Documentary** 3 cr  
This course gives students experience in producing short documentaries for the media. Students will produce their own documentary with the intent of entering the finished product in student competitions. Culminating experience for broadcast journalism students. Fee.  
Pre-requisite: CA 450 Minimum Grade of C
- CA 453 Political Comm - Proc-Effects** 3 cr  
Provides students with a broad overview of political communication from both historical and contemporary perspectives so students may understand how the subject has evolved over time to become a unique field of theoretical and research interest. Special attention is paid to campaigns and elections, agenda-setting research, and media power. The major focus is on the United States. Fee.
- CA 454 TV News Production** 3 cr  
This course is designed to give upper level Broadcast Journalism students hands-on experience creating a weekly television news program. Students will gain additional experience in news production and TV news programming. Students will report, produce and announce the news on the Jag-TV station.  
Pre-requisite: CA 350 Minimum Grade of C and CA 450 Minimum Grade of C and CA 451 Minimum Grade of C
- CA 455 Law of Communication** 3 cr  
Study of the broad application of principles of law to American Communication, including study of free speech, freedom of information, mass media law and regulation including libel, copyright, and right of privacy. Fee.
- CA 460 Comm. Technology Systems** 3 cr  
An examination of the new communication technology systems with an emphasis on how they reconfigure patterns of communication organizations, production, storage, and dissemination. The role of communication technology systems today and tomorrow, and implications for organizational, local, national, and international contexts will be studied. Computer fee.
- CA 470 Audience Dynamics** 3 cr  
CA 470 explores how audience dynamics (attitudes, feelings, beliefs, experiences, values, needs, and behavior) influence message development in public relations and advertising campaigns. Fee.  
Pre-requisite: CA 224 Minimum Grade of C
- CA 471 Prof & Creative Portfolio** 3 cr  
This course focuses on how to conceptualize and develop a professional and creative portfolio by creating a campaign spanning digital mass communication. Students examine the advertising creative industry from the perspectives of the media designer, freelancer, and entrepreneur while centering on the tools, techniques, principles, methods, strategies and practical skills needed to build an inspired portfolio. Computer Fee.  
Pre-requisite: CA 371 Minimum Grade of D
- CA 472 Enterprise Reporting** 3 cr  
Advanced study of news reporting and presentation techniques including investigative reporting. Students concentrating in print will produce a professional-quality print project. Culminating experience for print journalism students who take this course. Computer fee.  
Pre-requisite: (CA 370 Minimum Grade of D or CA 380 Minimum Grade of D)
- CA 474 Consumer Sales Promotion** 3 cr  
This course explores the role, function, planning and implementation of sales promotion in the brand communication process. Topics include contests, coupons, price discounts, sampling, and sweepstakes as well as the legal regulation of sales promotions. Computer Fee.  
Pre-requisite: CA 384 Minimum Grade of D

- CA 475 Comm-Group Processes** 3 cr  
The nature of small group processes. Leadership, communication, and decision making in small groups. Fee.
- CA 481 Editorial - Column Writing - W** 3 cr  
An examination of the editorial and other opinion and persuasive communications used by the print and electronic media. Computer fee.  
Pre-requisite: (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C) and (CA 220 Minimum Grade of C or CA 280 Minimum Grade of D)
- CA 482 Multi-Media Story Telling** 3 cr  
This course will teach the basics of creating a professional-quality journalism story for the Web using multimedia techniques. We also explore how multimedia and interactivity are changing the communication experience for communication practitioners as well as for their audiences. Culminating experience for print journalism students who take this course. Technology Fee.  
Pre-requisite: CA 260 Minimum Grade of D and CA 350 Minimum Grade of D and CA 382 Minimum Grade of D
- CA 485 Cases in Strategic Comm** 3 cr  
Students study how strategic communication campaigns in the advertising and public relations fields have developed opportunities, strengthen relationships and solved problems through research, planning, communication, and evaluation. Using the case study approach, cases focus on strategic management, planning, decision-making and policy formation of the integration of strategies and tactics. Fee.  
Pre-requisite: CA 300 Minimum Grade of D and CA 324 Minimum Grade of D
- CA 486 Strategic Campaigns** 3 cr  
Students apply strategies and techniques in executing a professional strategic communication campaign for a corporate, nonprofit, association and/or government client. This involves research, audience analysis, objectives, tactics, planning, messaging, media strategies, communication, creative development, budgeting and evaluation. Fee.  
Pre-requisite: CA 321 Minimum Grade of D and CA 381 Minimum Grade of D and CA 485 Minimum Grade of D
- CA 487 Tideline Agency** 3 cr  
This course allows students to execute strategic communication plans and creative materials for multimedia advertising and public relations campaigns for select clients in an agency setting. Students will learn and apply basic concepts involved in a working ad agency startup. Technology fee.  
Pre-requisite: CA 321 Minimum Grade of D and CA 381 Minimum Grade of D and CA 485 Minimum Grade of D
- CA 490 Special Topics -** 1 TO 3 cr  
An advanced variable-topic course treating communication concepts and topics relevant to the discipline. May be repeated twice for up to six hours credit. Fee.
- CA 492 Seminar -** 1 TO 3 cr  
An investigation of advanced topics and concepts of communication. Topics will rotate based upon disciplinary relevance and student need. May be repeated once for credit when content varies for a maximum of six credit hours. Fee.
- CA 494 Directed Studies -** 1 TO 3 cr  
Investigation of questions of special interest in communication. May be repeated to a maximum of six semester hours, provided no repetition of subject matter occurs. Students are required to file a description of their goals and objectives for their study. This description is to be specific so that it can serve in place of a syllabus for this course. Fee.
- CA 496 Prof Studies - Internship** 1 TO 3 cr  
On-the-job experience in a selected communication area related to potential career selection. Supervision by communication advisor and off-campus agency required. The Internship Program may be repeated for up to six credits. Requires prior approval of internship coordinator and student's advisor. Fee.
- CA 499 Senior Honors Project - H** 3 TO 6 cr  
Under the advice and guidance of a faculty mentor, honors students will identify and carry out a research project, relevant to the field of Communication study, that will lead to a formal presentation at the annual Honors Student Colloquium. The senior project will be judged and graded by three faculty chaired by the honors mentor. This course is required for Honors recognition and may be repeated for up to six credit hours. Fee.
- CA 500 Found Graduate Study Comm** 3 cr  
This three-hour course provides an introduction to graduate study in the University of South Alabama Communication Department and an introduction to academic writing. This is a web-enhanced course. We will meet throughout the semester face-to-face in seminar format and in an informal "Meet and Greet" for graduate students and faculty.
- CA 501 Comm Research Methods I** 3 cr  
An investigation of research used in the study of communication; overview and introduction to qualitative and quantitative methodologies used in basic and applied communication research settings; in depth study of a variety of qualitative methodologies; study of the use and practical applications of triangulation research methods; study of the management and purchase of research services. Fee.  
Pre-requisite: CA 500 Minimum Grade of B
- CA 502 Communication Theory** 3 cr  
A survey of the theoretical perspectives that guide the study of communication. Competing and complementary epistemological frameworks will be compared. Fee.  
Pre-requisite: CA 500 Minimum Grade of B

- CA 503 Comm Research Methods II** 3 cr  
An advanced investigation of research methodologies used in the study of communication with in depth study of a variety of quantitative methodologies used in basic and applied communication research settings; study of statistical applications; practical interpretations of computer- assisted data analysis. Fee.  
Pre-requisite: CA 500 Minimum Grade of B
- CA 510 Persuasion in Professional Com** 3 cr  
Advanced analysis and development of persuasive messages and argumentative strategies. Ethical responsibilities of the message sender will also be addressed. Fee.  
Pre-requisite: CA 500
- CA 511 Theor Found in Interper Comm** 3 cr  
Review of the interpersonal communication research literature with respect to the process of mutual adaptation and negotiation. The social and psychological processes constraining and organizing interpersonal communication will be studied. Topics include verbal and nonverbal codes, message production and interpretation, conversation management, relationship definition, and interpersonal communication competence. Fee.  
Pre-requisite: CA 500
- CA 522 Rhetorical Strategy Prof Comm** 3 cr  
A broad survey of the Western rhetorical tradition designed to give students a working knowledge of rhetoric and its historical and contemporary influence on communicative events and perspectives. Fee.  
Pre-requisite: CA 500 Minimum Grade of B
- CA 524 Rhetorical Criticism** 3 cr  
This course is designed to introduce students to the process of rhetorical analysis. Through criticism of communication artifacts, students learn to identify key elements of the rhetorical process and to develop critical thinking, writing, and viewing skills. This course prepares students to interpret, understand, analyze, and critique communication in diverse contexts including speeches, advertisements, interpersonal conversations, films, and works of art to name a few. Fee.  
Pre-requisite: CA 500
- CA 525 Issues in Rhetoric** 3 cr  
Close examination of a single contemporary rhetorical phenomenon. Topics will rotate based upon disciplinary relevance and student needs. May be repeated once for credit when content varies for a maximum of six credits. Fee.  
Pre-requisite: CA 500
- CA 530 Analysis of Comm in Orgs.** 3 cr  
Analysis of interpersonal, dyadic, group, and organization-wide communication events that occur in organizational settings. Attention will be directed to the network of messages that occur in organizations and the organizational change that occurs when a message system is disrupted or changed. Organizational communication research methodologies will be introduced. Fee.  
Pre-requisite: CA 500
- CA 535 Comm. Training & Develop Prog.** 3 cr  
Review and analysis of communication training and development programs designed to solve communication problems in groups and organizations. Students will develop and present a training or development program. Fee.  
Pre-requisite: CA 500
- CA 542 Moving Image Structure** 3 cr  
An analysis of moving-image form and process makers who supervise, produce, and/or evaluate electronic and/or film media for organizations. Theories of narrative and of moving-image syntax provide principles for structuring media content and managing the production process. Fee.  
Pre-requisite: CA 500 Minimum Grade of B
- CA 545 Communication Ethics** 3 cr  
Advanced analysis and interaction between organizations and the social institutions of American society. Study of the literature and communication ethics and social responsibility. Fee.  
Pre-requisite: CA 500
- CA 549 Media Effects** 3 cr  
A study of the role of corporate and public communication in the American social structure, including mass media extensions and impact upon institutions. Consideration of historical, legal, social, and economic issues. Fee.  
Pre-requisite: CA 500 Minimum Grade of B
- CA 555 Corp. and Public Comm. Law** 3 cr  
A survey of the law as it deals with public communication. The course provides a working knowledge of First Amendment theory, copyright, trademark, advertising, contracts, access and administrative laws as they relate to the public relations environment. Fee.  
Pre-requisite: CA 500
- CA 560 Digital Communication** 3 cr  
An examination of the new communication technology systems with an emphasis on how they reconfigure patterns of communication organizations, production, storage, and dissemination. The role of communication technology systems today and tomorrow, and implications for organizational, local, national, and international contexts will be studied. Computer fee.  
Pre-requisite: CA 500 Minimum Grade of B

**CA 561 Teaching & Professionalism 3 cr**

This course will explore the practice of teaching and learning. In this course, the primary goal is to help students to make the transition from student to future colleague, thus there will also be a heavy emphasis on professionalization in the communication studies discipline.

Pre-requisite: CA 500 Minimum Grade of C

**CA 570 Audience Dynamics 3 cr**

CA 570 explores how audience dynamics (attitudes, feelings, beliefs, experiences, values, needs, and behavior) influence message development in public relations and advertising campaigns. Fee.

Pre-requisite: CA 500 Minimum Grade of B

**CA 575 Investigation of Group Comm. 3 cr**

An in-depth analysis of group communication theories. Topics to be covered include decision making, conflict, conformity, leadership, and observation methods. Fee.

Pre-requisite: CA 500 Minimum Grade of B

**CA 576 Historical Perspectives of SC 3 cr**

An in-depth study of the field of strategic communication focusing specifically on the cultural history of advertising and public relations, as well as the contemporary issues, problems, and challenges facing these industries.

Pre-requisite: CA 500 Minimum Grade of C

**CA 585 Strat Comm Crisis Mgmt 3 cr**

CA 585 is designed to provide graduate students with a working knowledge of public relations crisis management. Course material focuses on actions to take and actions to avoid in handling a crisis situation from a public relations perspective, and how to work with management, employees, affected publics and the media. Fee.

Pre-requisite: CA 500 Minimum Grade of B

**CA 590 Sp Top in Comm - 1 TO 3 cr**

A detailed examination of selected topics in communication theory. Topic announced prior to registration. Course may be repeated once when subject matter varies. Fee.

Pre-requisite: CA 500 Minimum Grade of B

**CA 592 Seminar in Comm Theory 1 TO 3 cr**

Departmental seminar investigating a selected field of communication theory through in-depth evaluation of its accompanying body of literature. Topic announced prior to registration. Course may be repeated once when subject matter varies. Fee.

Pre-requisite: CA 500

**CA 594 Dir St in Communication - 1 TO 3 cr**

Independent research in field, laboratory, or library under the direction of a member of the graduate faculty.

**CA 595 Project in Communication 1 TO 3 cr**

Work on a significant communication problem within the student's area of specialization. Project will involve analysis of the problem, development of significant communication theory applications, and administration of the solution suggested by the analysis. Project will be designed in consultation with the major advisor and approved by the student's project committee. A maximum of three hours of CA 595 may be applied to the student's degree.

**CA 599 Thesis 1 TO 3 cr**

A thesis involves original research of a communication-related issue. Any methodology recognized as legitimate in the communication academic field can be used and should be appropriate for research question(s) asked. A thesis includes statement of research questions or hypotheses, an introduction, a literature review, a methodology section, a results section, a discussion section, and a conclusion. This may vary to some extent when using a qualitative methodology. The student must prepare a thesis proposal and have it accepted by his or her committee and the graduate coordinator of the College of Arts and Sciences. The thesis must be orally defended in front of the student's committee and achieve from the committee members, the graduate coordinator of the College of Arts and Sciences, and the dean of the Graduate School. Up to three hours of CA 599 may be applied to the student's degree.

## Communication Sciences-Disordr (CSD)

**CSD 600 Doctoral Colloquium 1 cr**

This seminar is designed to provide a forum for presentation and discussion of faculty and doctoral student research projects. Topics may also include: teaching and learning styles and grant writing. Must be repeated until candidacy is achieved.

**CSD 650 Research Methods in CSD 3 cr**

Current methods and strategies used in research of communication processes.

**CSD 651 Speech and Hearing Sci & Inst 3 cr**

Advanced review of the process of speech production, acoustic phonetics, coarticulation, and speech perception with emphasis on laboratory research methods.

**CSD 662 Studies in Speech Science 3 cr**

Basic and advanced principles of the acoustics and physiology of speech production.

**CSD 663 Studies in Hearing Science 3 cr**

Advanced study of psychological and physiological acoustics.

**CSD 664 Studies in Language Science 3 cr**

Intensive study of the theoretical foundations underlying syntax, semantics, pragmatics, phonology, psycholinguistics, neurolinguistics, sociolinguistics, and applied pragmatics.

**CSD 665 Studies in Commun Neuroscience 3 cr**

Advanced study of neurosciences as they relate to processes and pathologies of human communication, including functional neuroanatomy and clinical neurology. Interdisciplinary research paradigms will also be discussed.

**CSD 672 Laboratory in Speech Science 1 cr**

Laboratory experiences in speech science.

**CSD 673 Laboratory in Hearing Science 1 cr**

Laboratory experiences in hearing science.

**CSD 674 Laboratory in Language Science 1 cr**

Laboratory experiences in language science.

**CSD 675 Lab in Communic Neuroscience 1 cr**

Laboratory experiences in communication neuroscience.

**CSD 682 Seminar in Speech Science 3 cr**

Intensive review of current research in speech production. May include normal and disordered processes. Topics may include acoustic phonetics, physiological phonetics, prosody, production and perception, fluency and voice. May be repeated.

**CSD 683 Seminar in Hearing Science 3 cr**

Intensive literature review of current knowledge and research in hearing and hearing disorders. Topics may include cochlear mechanics, complex signal processing, electrophysiological measures, development of hearing, hearing in the elderly, and hearing in other species. May be repeated.

**CSD 684 Seminar in Language Science 3 cr**

Intensive literature review of current methods, problems, and strategies in language research. Topics may include normal language acquisition, language-learning disorders, clinical aphasiology, and neurolinguistics. May be repeated.

**CSD 694 Directed Study - 1 TO 3 cr**

Independent study under the direction of a graduate faculty member. May be repeated. Requires special permission.

**CSD 695 Directed Research 1 TO 3 cr**

Research under the direction of a graduate faculty member. May be repeated. Requires special permission.

**CSD 696 Profess Pract - Administration 2 cr**

Supervised professional experiences in administration under the guidance of faculty mentors. May be repeated.

**CSD 697 Profess Pract-Clin Supervision 2 cr**

Supervised professional experiences in clinical teaching under the guidance of faculty mentors. May be repeated.

**CSD 698 Profess Practicum - Teaching 1 TO 2 cr**

Supervised professional experiences in academic teaching under the guidance of faculty mentors. May be repeated.

**CSD 799 Dissertation Research 1 TO 9 cr**

Independent research under the direction of a graduate faculty member. May be repeated. Requires special permission.

## Computer Science (CSC)

**CSC 108 Intro to Computer Science 3 cr**

An introduction to the major areas of computer science, such as computing systems, the binary number system, data representation, hardware, programming languages, operating systems, applications, and communications. Historical, societal, ethical, and current issues associated with computer science are discussed as students explore academic, research, and career opportunities in the field of computer science.

**CSC 120 Prob Solv and Prog Concepts 4 cr**

An introduction to the design of algorithms and their implementation in a high-level programming language. Topics include: problem solving strategies, programming concepts, programming environment, control structures, methods, arrays, searching, sorting, object-oriented programming, and file input/output. Pre-requisite: (MA 113 Minimum Grade of C or MA 172 Minimum Grade of C) or (MA 115 Minimum Grade of C or MA 121 Minimum Grade of C) or (MA 125 Minimum Grade of C or MA 132 Minimum Grade of C) or ACT Math 27 or MyMathTest 090

**CSC 121 Prob Solv and Prog Concepts II 4 cr**

Continuation of CSC 120. Topics include: object-oriented programming concepts, abstract data types, graphical user interfaces and event-driven programming, exception handling, text and binary file I/O, and an overview of dynamic data structures.

Pre-requisite: CSC 120 Minimum Grade of C or CIS 120 Minimum Grade of C

**CSC 190 CSC Special Topics - 1 cr**

Selected topics in computer science. Prerequisite: Permission of the CSC coordinator.

**CSC 228 Digital Logic Computer Arch 3 cr**

Topics include: Boolean algebra, minimization techniques, combinatorial and sequential circuit analysis, memory organization, microprocessor concepts, and CPU architecture.

Pre-requisite: CSC 120 Minimum Grade of C

- CSC 230 Data Structures** 3 cr  
 Extension of elementary data structures as covered in CSC 121, techniques to organize and access collections of data, definition, implementation, and use of Classes and Abstract Data Types (ADT). Topics include: recursion, search trees, algorithmic complexity, advancing searching and sorting algorithms, and graphs and their application to problems. Pre-requisite: (CIS 211 Minimum Grade of C or CSC 121 Minimum Grade of C) and MA 267 Minimum Grade of C
- CSC 231 Intro Data Structures Algs** 4 cr  
 The course will cover techniques to organize and access collections of data, definition, implementation, and use of Classes and Abstract Data Types(ADT). Topics include: stacks, queues, heaps, search trees, recursion, algorithmic complexity, advance searching and sorting algorithms, and graphs and their application to problems. Pre-requisite: CSC 120 Minimum Grade of C or CIS 210 Minimum Grade of C
- CSC 311 Networking and Communications** 3 cr  
 An introduction to computer networks. Topics include: data transmission, network architectures, file compression algorithms, communication devices and protocols, network routing and flow algorithms. Pre-requisite: CSC 231 Minimum Grade of C or CSC 230 Minimum Grade of C
- CSC 320 Computer Org-Architect** 3 cr  
 An introduction to computer organization using a top down approach from system component to the register level, internal representation of data, general assembly and linking concepts, addressing modes, and introduction to a specific processor, its architecture and operating system. Pre-requisite: CSC 228 Minimum Grade of C and CSC 231 Minimum Grade of C
- CSC 322 Operating Systems** 3 cr  
 This course covers the development of operating systems that control computing systems. Topics include: file systems, process management, scheduling, memory management (real and virtual), security, and concurrency. Case studies of operating systems are examined. Pre-requisite: CSC 231 Minimum Grade of C
- CSC 324 Database Concepts** 3 cr  
 Introduction to database design and implementation. Aspects of data modeling, database design theory, storage, indexing, and database application development. Entity-relationship model, relational data model, schema refinement, normal forms, file organizations, index structures, and embedded SQL application development. Pre-requisite: CSC 231 Minimum Grade of C
- CSC 331 Software Engineering Prin - W** 3 cr  
 Models, techniques, and tools used in project management. Topics include: software development process, task scheduling, estimation and progress measurement. Coordination of development teams. Standards, testing plans, configuration management, metrics and use of CASE tools, system delivery and maintenance strategies. Pre-requisite: ( (CSC 231 Minimum Grade of C or CSC 230 Minimum Grade of C or CIS 230 Minimum Grade of C) ) and CA 275 Minimum Grade of C
- CSC 332 Adv Data Structures and Algs** 3 cr  
 This course teaches techniques for the design and analysis of efficient algorithms, emphasizing methods useful in practice. Topics to be covered include: mathematical foundations; analytic, empirical, and qualitative evaluation techniques; hash tables; graph algorithms; balanced trees; priority queues; dynamic programming; and divide-and-conquer. Pre-requisite: CSC 231 and MA 267
- CSC 333 Prog Language Theory** 3 cr  
 Formal examination of programming languages. Formal Language concepts including syntax and basic grammars are studied. Language features such as data types and structures, control structures, and data flow are examined. The run-time environment and the process of interpretation/ compilation are covered. Interpreter and compilation techniques are introduced. Pre-requisite: CSC 231 Minimum Grade of C or CSC 230 Minimum Grade of C
- CSC 399 Conc and Distributed Comp** 3 cr  
 This course focuses on security issues in concurrent and distributed systems. Security features in the current advent of cloud computing are vital. Example topics include secure multi-threading, agent-based security, security policy composition, secure compartmentalization and more. Pre-requisite: CSC 311 Minimum Grade of C and CSC 322 Minimum Grade of C
- CSC 410 Compiler Design-Construction** 3 cr  
 Lexical analysis, syntactic analysis, intermediate code generation, object code generation, optimization, memory use, generators for scanners and parsers. Pre-requisite: CSC 332 Minimum Grade of C and CSC 333 Minimum Grade of C
- CSC 411 Comm - Network Analysis** 3 cr  
 Data communications and computer networks. An in-depth treatment of network architectures and protocols for both WANS and LANS. Topics include: network routing and flow algorithms, internet working, and distributed systems. Pre-requisite: CSC 311 Minimum Grade of C and (CSC 322 Minimum Grade of C or CIS 322 Minimum Grade of C)

- CSC 412 Real-Time Software Systems** 3 cr  
Design and implementation of software for real-time computer systems. Survey of typical real-time systems; techniques for code-conversion, error checking, and transmission monitoring.  
Pre-requisite: CSC 311 Minimum Grade of C and CSC 322 Minimum Grade of C and CSC 332 Minimum Grade of C
- CSC 413 Computer Graphics** 3 cr  
An in-depth study of hardware and software techniques used in computer graphics. Study of display and entry devices, including refresh, storage, and raster scan topics. Software techniques will include display files, windowing, clipping, two and three-dimensional transformations, and hidden-surface removal.  
Pre-requisite: (CSC 231 Minimum Grade of C) and (MA 237 Minimum Grade of C or MA 227 Minimum Grade of C)
- CSC 414 Modeling and Simulation** 3 cr  
Analytic and simulation models developed using deterministic and stochastic techniques. Topics include: event-driven simulations, queuing theory, Markov processes, and dynamical systems. "Real World" project required.  
Pre-requisite: (CSC 230 Minimum Grade of C or CIS 230 Minimum Grade of C) and (MA 126 Minimum Grade of C or MA 233 Minimum Grade of C) and (ST 310 Minimum Grade of C or ST 275 Minimum Grade of C) or ST 315 Minimum Grade of C or ST 320 Minimum Grade of C
- CSC 415 Numerical Analysis** 3 cr  
Mathematical preliminaries, solving linear systems numerical solution of ordinary and partial differential equations.  
Pre-requisite: (CSC 230 Minimum Grade of C or CIS 230 Minimum Grade of C) and (MA 126 Minimum Grade of C or MA 233 Minimum Grade of C)
- CSC 416 AI Theory and Programming** 3 cr  
Introduction to basic concepts, implementation techniques, and philosophies of artificial intelligence and intelligent systems. Introduction to expert systems, fuzzy logic systems, neural networks, and techniques for artificial intelligence programming. The fundamentals of an AI programming language (LISP or PROLOG) will be presented. The language will then be used to solve problems in typical AI applications.  
Pre-requisite: CSC 332 Minimum Grade of C or CSC 230 Minimum Grade of C or CIS 230 Minimum Grade of C
- CSC 417 Computer Game Development** 3 cr  
Introduction to computer game development, including a variety of related topics. The course will be driven by research/technical paper discussions, student presentations and projects. The direction of the course will be guided to some extent by student interest.  
Pre-requisite: CSC 331 Minimum Grade of C or EE 368 Minimum Grade of C
- CSC 418 Adv Game & Simulation Dev** 3 cr  
This course will cover advance topics related to the development of game and simulation software. Topics include game physics, collision techniques, game mechanics, level design, artificial intelligence, and security. Students will design and implement a game or simulation program that includes elements of artificial intelligence.  
Pre-requisite: CSC 417 Minimum Grade of C and CSC 413 Minimum Grade of C
- CSC 428 Introduction to Bioinformatics** 3 cr  
Students in this course will study algorithms pertaining to bioinformatics (e.g. sequence alignment, biological database search, and phylogeny reconstruction); gain hands-on experience using bioinformatics tools; and understand the interaction of computer science and modern biology within the context of data-driven knowledge discovery.  
Pre-requisite: CSC 230 Minimum Grade of C
- CSC 432 Perf Eval of Algorithms** 3 cr  
Classification and analysis of algorithms including recursive, divide and conquer, greedy, etc. Data structures and algorithms design and performance. Run time and main storage complexity analysis. Performance evaluation measurements will be discussed and popular benchmarking techniques reviewed. P, NP, and NP complete complexities will be discussed.  
Pre-requisite: CSC 230 Minimum Grade of C and MA 126 Minimum Grade of C
- CSC 434 Form Lang - Automata Theory** 3 cr  
Mathematical preliminaries, languages, context-free grammars, parsing, normal forms, finite automata, regular languages, pushdown automata, Turing machines.  
Pre-requisite: (CSC 333 Minimum Grade of C or CSC 340 Minimum Grade of C)
- CSC 440 Secure Software Engineering** 3 cr  
The objective of this course is to enhance the security of software by introducing sound security principles that should be incorporated into the software development process. Students will learn a risk management framework and best practices for software security including code reviews, architectural risk analysis, penetration testing, risk-based security test, abuse cases, security requirements, and security operations. Students will also learn common flaws that lead to exploitation and be able to identify and mitigate such errors in practice. Out of class labs and exercises reinforce concepts presented in class.  
Pre-requisite: CSC 331 Minimum Grade of C
- CSC 450 Surreptitious Software** 3 cr  
Students in this course will learn about algorithms for software protection and learn how to use tools for program transformation. Specific topics include obfuscation, watermarking, tamperproofing, birthmarking, and hardware protection. Programming projects will be required in several different languages and course activities will involve preparing student-led lectures, working on programming projects, and writing reports.  
Pre-requisite: CSC 440 Minimum Grade of C

- CSC 457 Data Warehousing** 3 cr  
This course focuses on the design, development and usage of data warehouses. Course content includes dimensional modeling, ETL processes, physical design, and analytical processing. New research areas related to data warehousing technology will also be discussed.  
Pre-requisite: CIS 324 Minimum Grade of C
- CSC 485 Cyber-Physical Security** 3 cr  
This course focuses on the Security of Cyber-Physical Systems (CPS) and Internet of Things (IoT) that go beyond topics commonly considered in Computer and Network Security. This course aims to prepare participants for the cutting edge research undergoing in both areas. The successful participation in this course will require reading number of research papers, presenting learned material, active participation in in-class discussions, and successful accomplishment of a small research project.  
Pre-requisite: CSC 311 Minimum Grade of C and CSC 322 Minimum Grade of C
- CSC 490 Sp Top -** 3 cr  
Advanced selected topics in computer science. Prerequisite: Permission of the CSC Coordinator.
- CSC 510 Compiler Design-Construction** 3 cr  
Lexical analysis, syntactic analysis, intermediate code generation, object code generation, memory use, generators for scanners and parsers.  
Pre-requisite: Computer Science Graduate 030
- CSC 511 Comm-Network Analysis** 3 cr  
Data communications and computer networks. An in-depth treatment of network architectures and protocols for both WANs and LANs. Topics include: network routing and flow algorithms, internet working, and distributed systems.  
Pre-requisite: Computer Science Graduate 030
- CSC 512 Real -Time Software Systems** 3 cr  
Design and implementation of software for real-time computer systems. Survey of typical real time systems; techniques for code conversion, error checking, and transmission monitoring.  
Pre-requisite: Computer Science Graduate 030
- CSC 513 Computer Graphics** 3 cr  
An in-depth study of hardware and software techniques used in computer graphics. Study of display and entry devices, including refresh, storage, and raster scan topics. Software techniques will include display files, windowing, clipping, two and three-dimensional transformation, and hidden-surface removal.  
Pre-requisite: Computer Science Graduate 030
- CSC 514 Modeling and Simulation** 3 cr  
Analytic and simulation models developed using deterministic and stochastic techniques. Topics include: event-driven simulations, queueing theory, Markov processes, and dynamical systems. "Real World" project required.  
Pre-requisite: Computer Science Graduate 030
- CSC 515 Numerical Analysis** 3 cr  
Mathematical preliminaries, solving linear systems, numerical solution of ordinary and partial differential equations.  
Pre-requisite: Computer Science Graduate 030
- CSC 516 AI Theory and Programming** 3 cr  
Introduction to basic concepts, implementation techniques, and philosophies of artificial intelligence and intelligent systems. Introduction to expert systems, fuzzy logic systems, neural networks, and techniques for artificial intelligence programming. The fundamentals of an AI programming language (LISP or PROLOG) will be presented. The language will then be used to solve problems in typical AI applications. Prerequisite: Graduate Professional Component Standing.  
Pre-requisite: Computer Science Graduate 030
- CSC 517 Computer Game Development** 3 cr  
Introduction to computer game development, including a variety of related topics. The course will be driven by research/technical paper discussions, student presentations, and projects. The direction of the course will be guided to some extent by student interest.  
Pre-requisite: Computer Science Graduate 030
- CSC 520 Computer Architecture** 3 cr  
Instruction set design, pipelining, instruction-level parallelism, memory hierarchy design, and multiprocessors.  
Pre-requisite: Computer Science Graduate 030
- CSC 522 Performance Eval of Algorithms** 3 cr  
Mathematical foundations; analytic, empirical, and qualitative evaluation techniques; dynamic programming, greedy algorithms, graph algorithms; and selected advanced topics.  
Pre-requisite: Computer Science Graduate 030
- CSC 524 Computer Language Design** 3 cr  
A study of programming language design and specification, including the compiling process, parsing, BNF grammars, and models of semantics. Differences between interpreters, assemblers, and compilers will be studied.  
Pre-requisite: Computer Science Graduate 030
- CSC 525 Complexity Theory** 3 cr  
Mathematical preliminaries, languages, finite automata, Turing machines, decidability, recursive function theory, complexity, tractability and NP-complete problems.  
Pre-requisite: Computer Science Graduate 030
- CSC 526 Data Mining** 3 cr  
This course provides an in-depth study of data mining. Course content includes data preparation, feature selection, pattern mining, classification, clustering, and sequence mining. New research areas in data mining will also be discussed. Laboratory assignments will provide students with opportunities to interact with and develop data mining technologies.  
Pre-requisite: Computer Science Graduate 030

**CSC 527 Software Engineering Princ** 3 cr

Advanced concepts of software engineering will be discussed. Program testing techniques including: structured design and walk throughs, proving program correctness and verifiability, and system coding standardization and integration will be covered in depth. Software team formulation and management techniques will be discussed. Pre-requisite: Computer Science Graduate 030

**CSC 528 Introduction to Bioinformatics** 3 cr

Bioinformatics is a highly interdisciplinary course between computer science and biology. It focuses on the analysis of proteins, genes, and genomes using computing technologies such as computer algorithms and computer databases. Students in this course will learn algorithms and databases pertaining to bioinformatics (e.g., sequence alignment, suffix tree and its biological/biomedical applications, genome alignment, biological/biomedical database search, and phylogeny reconstruction); gain knowledge and hands-on experience of bioinformatics tools; understand the interaction between computer science (in particular, semantic technologies) and modern biology within the context of data-driven knowledge discovery.

**CSC 532 Distributed Systems** 3 cr

This course will further enhance the students understanding of the details of how an operating system functions. It will focus on the advanced concepts associated with distributed systems. The student will learn the underlying concepts of such systems and the algorithms needed to provide the required synchronization and communication. Pre-requisite: Computer Science Graduate 030

**CSC 533 Art Intel-Heuristic Prog** 3 cr

Methods of heuristic programming, the production of intelligent algorithms, and simulation of human cognitive processes will be studied. AI languages, such as LISP and PROLOG, will be discussed. Attention placed on the relationship between man-made machines (robots) and biological organisms with natural intelligence. Expert Systems and neural network research will be studied. Pre-requisite: Computer Science Graduate 030

**CSC 550 Surreptitious Software** 3 cr

Students in this course will learn about Algorithms for software protection and learn how to use tools for program transformation. Specific topics include obfuscation, watermarking, tamperproofing, birthmarking and hardware protection. Programming projects will be required in several different languages and course activities will involve preparing student-led lectures, working on programming projects, and writing reports.

**CSC 557 Data Warehousing** 3 cr

This course focuses on the design, development and usage of data warehouses. Course content includes dimensional modeling, ETL processes, physical design, and analytical processing. New research areas related to data warehousing technology will also be discussed.

**CSC 580 Data Security** 3 cr

The objective of this course is to introduce the inherent strengths and limitations of cryptography in data security applications, focusing on the basic principles of message privacy, key negotiation, and key management. The course covers various aspects of symmetric and asymmetric ciphers and provides a broad coverage of the core areas for engineering cryptographic systems. Students will be expected to implement and analyze simple cryptographic schemes and read supporting articles and papers for presentation. Prerequisite: CIS Graduate Professional Component.

**CSC 582 Network Security** 3 cr

The objective of this course is to provide students with the knowledge and skills to begin supporting network security within an organization. Students will gain an understanding of fundamental network security concepts and mechanisms, be able to identify security threats and vulnerabilities, and help respond to and recover from security incidents. The course will provide an understanding of how to design and build secure network algorithms and environments while gaining an in-depth knowledge of protocol security, intrusion detection, and principles of cyber defense. Pre-requisite: CSC 580 Minimum Grade of C

**CSC 585 Cyber-Physical Security** 3 cr

This course focuses on the Security of Cyber-Physical Systems (CPS) and Internet of Things (IoT) that go beyond topics commonly considered in Computer and Network Security. This course aims to prepare participants for the cutting edge research undergoing in both areas. The successful participation in this course will require reading number of research papers, presenting learned material, active participation in in-class discussions, and successful accomplishment of a small research project.

**CSC 590 CSC Sp Top -** 3 cr

Advanced selected topics in computer science. Prerequisite: Permission of the CSC coordinator. Pre-requisite: Computer Science Graduate 030

**CSC 595 CS Project Proposal Develop** 1 TO 3 cr

Development of the project proposal for the Computer Science specialization master's project. Prerequisite: Graduate Professional Component and Permission of the Director of Graduate Studies. Pre-requisite: CIS 518 Minimum Grade of S and Computer Science Graduate 030

**CSC 598 Computer Science Project** 1 TO 3 cr

This course may be repeated for a maximum of six (6) credits. A CIS project committee will provide direction during the project. Prerequisites: Approval of project proposal by student's project committee and permission of the Director of CIS Graduate Studies. Pre-requisite: CSC 595 Minimum Grade of B

**CSC 612 Cybersecurity 3 cr**

This course focuses on developing expertise and preparation for independent research in Cybersecurity through an in-depth review of the Cybersecurity literature. The student will be conversant in broad issues and trends in Cybersecurity as defined by skill sets and occupations.

**CSC 626 Advanced Big Data 3 cr**

This course focuses on developing expertise and preparation for independent research in big data through an in-depth review of the big data and data science literature. The student will be conversant in broad issues and trends in big data as defined by current tools and technologies.

## Computer And Inform Sciences (CIS)

**CIS 150L Intro to Comp Applications Lab 0 cr**

Laboratory course for CIS 150, Introduction to Computer Applications.

**CIS 250L Adv Comp Applications Lab 0 cr**

Laboratory course for CIS 250, Advanced Computer Applications.

Pre-requisite: CIS Proficiency Exam P or CIS 150 Minimum Grade of C

**CIS 010 Computer Proficiency Exam 0 cr**

The purpose of this course is to administer the Computer Proficiency Exam (CPE) for enrolled students. The CPE consists of multiple choice and performance-based questions for general computer, internet, WWW, e-mail, and office application concepts. Performance-based questions require a series of actions in a simulated environment to demonstrate specific skills being assessed. No outside materials or assistance from the applications' Help files are allowed.

**CIS 101 Freshman Seminar CIS 2 cr**

A course for first-time students that assists with maximizing the student's potential to achieve academic success and to adjust responsibly to the individual and interpersonal challenges presented by college life for a major in the School of CIS. Taught in small groups, the course provides an introduction to the nature of higher education and a general orientation to the functions and resources of the University and the School of CIS. Extensive reading and writing assignments relevant to the student's first year experience are required.

**CIS 110 Intro to Comp-Info Sciences 3 cr**

An introduction to information technology using a programming language to study applications in text searching, in real-time 3-D animation, and in sound production. A discussion of the social, ethical, economic, and philosophical implications of computing.

**CIS 115 Beginning Programming 4 cr**

A first course in programming using a visual, event-driven programming language. Coverage includes algorithmic problem solving, fundamentals of programming, procedures, decisions, repetition, and arrays.

Pre-requisite: MyMathTest 080 or ACT Math 23 or (MA 112 Minimum Grade of C or MA 171 Minimum Grade of C) or MA 267 Minimum Grade of C or (MA 125 Minimum Grade of C or MA 132 Minimum Grade of C)

**CIS 150 Intro to Computer Applications 3 cr**

This course is designed to provide a broad based introduction to the use of computers and productivity software technologies. Topics to be covered include: use of a current Operating System and basic file management; the fundamentals of word processing, spreadsheet and graphics-based presentation software; and basic image management related to documents and reports. Other topics covered include information assurance and computing safety as related to PC/Internet usage.

**CIS 155 Educational & Social Computing 3 cr**

This course provides a hands-on approach that focuses on the use of current and emerging computing technologies.

Topics include: Use of the University adopted Learning Management System (LMS), Google Apps, Google Docs, safe computing practices, and current trends in social networking.

**CIS 190 CIS Special Topics - 1 TO 3 cr**

Selected topics in computer and information sciences. Requires permission of Specialization Coordinator.

**CIS 210 Intro to C++ Programming 3 cr**

Introduction and fundamentals of C++ programming, input-output operations, variables, data types, arithmetic expressions, control statements, looping, functions, arrays, pointers, strings, structures, and abstract data types.

Pre-requisite: MA 125 Minimum Grade of C

**CIS 211 Advanced C++ Programming 1 cr**

Advanced concepts in C++ programming, constructors, destructors, classes and operation overloading.

Pre-requisite: (CIS 121 Minimum Grade of C or CIS 210 Minimum Grade of C)

**CIS 227 Numerical Computation I 3 cr**

Floating point numbers, representation, and errors; software tools for scientific computing; elementary problems in scientific computing.

Pre-requisite: MA 126 Minimum Grade of C or MA 233 Minimum Grade of C

**CIS 235 Programming Language Seminar 3 cr**

Fundamentals of syntax and style for a relevant, or current programming language. Includes application development in that language. Recommended: Knowledge of a programming language.

- CIS 250 Advanced Comp Applications** 3 cr  
This course is designed to provide continuing, advanced coverage of productivity software technologies. Topics to be covered in depth include: fundamental and advanced features of spreadsheet and database management software. Other topics covered include information assurance and computing safety as related to PC/Internet usage.  
Pre-requisite: CIS 150 Minimum Grade of C or CIS Proficiency Exam P or CIS 010 Minimum Grade of S
- CIS 300 Information Tech in Society** 1 cr  
A discussion of personal, local, national, and global impact of information technology on ethical, legal, and social issues. Requires Junior standing in the School of Computing.
- CIS 321 Data Comm and Networking** 3 cr  
An introduction to data communications, computer networking and network operating systems. Topics include: basic concepts of data transmission, network architectures, communications devices, and communication protocols.  
Pre-requisite: ISC 245 Minimum Grade of C or ITE 271 Minimum Grade of C or CIS 120 Minimum Grade of C or CSC 120 Minimum Grade of C or CIS 120 Minimum Grade of C
- CIS 324 Database Design-Dev-Mgt** 3 cr  
Analysis, design, and development of desktop database systems. Coverage of normalization concepts, DBMS models, E-R/Semantic modeling, and query processing.  
Pre-requisite: ( (MA 112 Minimum Grade of C or MA 171 Minimum Grade of C) or (MA 120 Minimum Grade of C or MA 287 Minimum Grade of C) or MA 267 Minimum Grade of C or (MA 125 Minimum Grade of C or MA 132 Minimum Grade of C) or ACT Math 23 ) or MyMathTest 080 and (ISC 245 Minimum Grade of C or ITE 271 Minimum Grade of C) or (CSC 121 Minimum Grade of N or CIS 121 Minimum Grade of C)
- CIS 401 Accelerated Programming** 3 cr  
This course presents programming concepts in an accelerated manner. Coverage includes ADT's, Classes and Class Libraries, and simple data structures such as linked lists, stacks, queues. Laboratory assignments will be done in a high level, object-oriented language. This course does not count towards a graduate degree in CIS. Requires prior programming experience and permission of Coordinator.
- CIS 402 Accelerated OS-Comp Arch** 3 cr  
This course presents computer architecture and operating systems concepts in an accelerated manner. Coverage includes machine and assembly languages, functioning of a simple processor, machine level data flow, microprogramming, I/O, interrupts and processing drivers, memory management, dynamic process scheduling, and multi-tasking. This course does not count toward a graduate degree in CIS. Requires prior programming experience desired and permission of Coordinator.
- CIS 403 Accelerated Data-File Structs** 3 cr  
This course applies advanced programming concepts and techniques to data structures such as linear and linked list trees, records, files, and database. Sequential and random access file processing methods; searching and sorting methods. Laboratory assignments will be done in a high-level, object-oriented language. This course does not count toward a graduate degree in CIS.  
Pre-requisite: CIS 121 Minimum Grade of B or CIS 123 Minimum Grade of B or CIS 142 Minimum Grade of B or CIS 401 Minimum Grade of B or CIS 501 Minimum Grade of B
- CIS 439 Windows Programming** 3 cr  
This course continues and expands the study of programming begun in either ITE 285 or CIS 121. Concepts previously learned are extended to application programming in the windows (GUI) environments. Students will make use of the OLE, DDE, API features of windows in programming projects. Students will write and use their own DLL's in producing user interfaces and applications projects.  
Pre-requisite: CIS 230 Minimum Grade of C or CIS 263 Minimum Grade of C or ITE 285 Minimum Grade of C or ITE 451 Minimum Grade of C or Computer Science Graduate 030
- CIS 490 CIS Sp Top -** 3 cr  
Advanced selected topics in computer and information sciences. Requires permission of the specialization coordinator.  
Pre-requisite: Computer Sci Prof Component 30
- CIS 494 Directed Study -** 1 TO 3 cr  
May be taken for a maximum of six credits, only three of which may be applied to the CIS major or minor. Requires permission of the specialization coordinator.
- CIS 496 CIS Internship** 0 TO 3 cr  
CIS internship program is designed to give advanced students practical experience in the computer industry. Students will work on sponsored projects with faculty advisors. Credit may apply to degree with approval of the dean. Requires GPA 2.75 or higher and permission of the Dean.

**CIS 497 Senior Capstone Experience-W 3 cr**

A comprehensive team project will be completed and documented. Writing assignments will reinforce the importance of life-long learning, leadership skills, and the ethical issues of computing as well as appropriate resume and job application cover letter creation. Oral and written reports will be required. This course is to be taken the final semester of the student's degree program. Requires application for graduation filed the semester before registering for the course. Completion of the following courses according to major: Computer Science-CSC 333 and CSC 340; Information Systems-ISC 360; Information Technology-ITE 370.

Co-requisite: CIS 498

Pre-requisite: (EH 372 Minimum Grade of C or EH 373 Minimum Grade of C) and (CSC 333 Minimum Grade of C and CSC 340 Minimum Grade of C) or ISC 360 Minimum Grade of C or ITE 370 Minimum Grade of C

**CIS 498 CIS Senior Seminar 0 cr**

A series of mini-seminars designed to prepare graduating seniors for transition to professional careers in computing or graduate study and to assess student learning outcomes in the curriculum. Mini-seminars would include, but would not be limited to: resume development, interviewing tips and techniques, career planning, professionalism and ethics in the workplace, and advanced graduate study and professional development. Each student will be required to complete one or more senior exit exams and a senior exit survey. Prerequisite: Computer Science: CSC 331; Information Systems: ISC 360; Information Technology: ITE 370.

Co-requisite: CIS 497

Pre-requisite: CIS 497 Minimum Grade of C and (CSC 331 Minimum Grade of C or ISC 360 Minimum Grade of C or ITE 370 Minimum Grade of C)

**CIS 499 CIS Senior Honors Project - H 3 TO 6 cr**

Under the advice and guidance of a faculty mentor, honors students will identify and carry out a research project, relevant to the field of computing, that will lead to a formal presentation at the annual Honors Student Colloquium. The senior honors project will be judged and graded by three faculty chaired by the honors mentor. This course is required for Honors recognition and may be repeated for up to 6 credit hours. Requires completion of an approved project prospectus and permission of the appropriate Coordinator.

Pre-requisite: Computer Sci Prof Component 30

**CIS 518 CIS Research Methodologies 3 cr**

A review of computer and information science literature and research topics. Techniques for defining research goals will be described. Students will be expected to identify a research area and conduct a complete review of the literature.

Pre-requisite: Computer Science Graduate 030

**CIS 530 Information Assurance/IT Audit 3 cr**

This course covers the understanding and managing of risks and threats to information and information systems. This includes protecting and defending information and information systems by ensuring through authorization and other means concepts such as accessibility, secrecy, reliability, and authentication.

Pre-requisite: Computer Science Graduate 030

**CIS 535 Digital Forensic Analysis 3 cr**

This course provides students with advanced tools, techniques, and methodologies for accumulating, securing, analyzing, managing, and reporting evidence related to a forensics examination. The professional communication and presentation of the results of forensic investigations will be emphasized.

Pre-requisite: Computer Science Graduate 030

**CIS 538 OS Concepts and Security 3 cr**

This course examines the concepts of operating systems such as memory and virtual memory management, as well as processor, process, device, and file management. Topics include the management and organization of network operating systems and operating system security and ethics. Students will manage, configure, and secure operating systems such as Windows, Unix, and Linux in laboratory environments.

Pre-requisite: Computer Science Graduate 030

**CIS 539 Windows Programming 3 cr**

The practice and principles of developing interactive desktop computer applications. Aspects to be covered will include graphical user interface; use of sophisticated widget, container, and utility libraries; event-driven programming; two-dimensional graphics; in-memory database; and deployment.

Pre-requisite: Computer Science Graduate 30

**CIS 540 Network Security Management 3 cr**

This course examines network and web security issues including: risks and threats, system access points, hardware and software defense methods, and organizational security policies. The course will cover the analysis of systems for vulnerabilities, the implementation of security procedures, the monitoring of systems for security breaches, and the recovery or restoration of breached systems.

Pre-requisite: Computer Science Graduate 030

**CIS 590 CIS Sp Top - 3 cr**

Advanced selected topics in computer and information sciences. Requires permission of the CSC Coordinator

Pre-requisite: Computer Science Graduate 030

**CIS 594 Directed Studies - 1 TO 3 cr**

May be taken for a maximum of three credits to count toward the degree. Requires permission of the Director of Graduate Studies.

Pre-requisite: Computer Science Graduate 030

**CIS 595 CIS Research Development 1 TO 3 cr**

Development of the research proposal for master's thesis. Graduate Professional Component. Requires permission of the Director of Graduate Studies.

Pre-requisite: CIS 518 Minimum Grade of S and Computer Science Graduate 030

**CIS 596 CIS Graduate Internship 0 TO 3 cr**

CIS graduate internship program is designed to give graduate students practical experience in the computer industry. Students will work on sponsored projects with faculty advisors. Up to three hours may be counted toward the degree. Requires permission of the Director of Graduate Studies.

**CIS 597 CIS Graduate Seminar 1 cr**

This course prepares graduate assistants in the School of CIS to provide support and assistance to faculty for instruction in School of CIS classes. Topical coverage includes but is not limited to: graduate assistant expectations and responsibilities, protection of student educational information (FERPA), practical skills in assisting in computing instruction, graduate assistant best practices, and tips from faculty and experienced graduate assistants. This course does not count towards a graduate degree in CIS. Requires permission of the Director of CIS Graduate Studies.

**CIS 598 CIS Project 1 TO 3 cr**

Approved investigation of original problems under direction of a faculty member. This course may be repeated for a maximum of three hours of credit towards the degree. Requires permission of the Director of Graduate Studies. Pre-requisite: Computer Science Graduate 030

**CIS 599 CIS Thesis 1 TO 9 cr**

This course may be repeated for a maximum of six credits. A thesis committee will provide direction during the thesis. Requires approval of the thesis project by graduate faculty and the Director of Graduate Studies.

Pre-requisite: CIS 595 Minimum Grade of B and Computer Science Graduate 030

**CIS 694 Directed Study - 3 cr**

This course focuses on the development of the doctoral prospectus leading to the the defense of a dissertation.

**CIS 799 Dissertation 3 cr**

This course focuses on the development of the dissertation.

## Counselor Education (CED)

**CED 560 Diagnosis/Treatment Planning 3 cr**

The Diagnostic and Statistical Manual of Mental Disorders (DSM) is used to develop a basic understanding of mental disorders. Students learn to utilize the DSM classification system to identify counseling techniques and develop counseling plans.

**CED 561 Marriage and Family Counseling 3 cr**

The theories, principles, and techniques of counseling couples and families are examined. Other topics include ethical and multicultural issues, assessment, and current research in marriage and family counseling.

**CED 562 Addictions Counseling 3 cr**

This course provides an overview of research and theory in regards to the etiology, assessment, diagnosis and treatment of addictive disorders, e.g. alcoholism, drug addiction, gambling, etc. The course will review theoretical and evidence-based models of counseling for addictive disorders as well as considerations for treating addictive disorders among various special populations and with culturally diverse clients.

**CED 563 Divorce Mediation 3 cr**

This course will introduce students to the techniques of divorce mediation. Legal, ethical and psychological issues in the divorce mediation process will be examined with special emphasis on the neutral role of the mediator explored.

**CED 564 Gerontological Counseling 3 cr**

Emphasis is on a basic knowledge of the theories, principles and techniques of counseling elderly individuals, couples and their families. Includes such topics as assessment, ethical and cultural issues, model programs, and current research in gerontological counseling.

**CED 565 Found of Prof School Couns 3 cr**

Provides an overview of the history, philosophical foundations, and professional duty of professional school counseling. Review of historical and contextual forces that shaped the evolution of professional school counselors' roles and functions within schools. Special emphasis will be placed on current trends and best practices as identified by ASCA and current literature.

**CED 566 Multicultural Counseling 3 cr**

Includes a study of historical and current theories and issues in multicultural counseling, provides an understanding of societal trends and changes, and demonstrates strategies/techniques for cross-cultural counseling techniques through class exercises, case studies, and demonstrations. Reflective experiences are used to allow for the development of cultural self-knowledge.

**CED 567 Couples Counseling 3 cr**

This course will provide an overview of various theoretical approaches and related research findings for couples counseling. The course will also provide an overview of current theory and research in human sexuality, including sexual development, sexual well-being/wellness, sexual orientation and sexual dysfunction and disorders. The course will apply particular focus to sexuality issues as they are an aspect of individual and couples counseling work.

- CED 568 Comm Mental Health Counseling 3 cr**  
This course examines community mental health counseling and includes a survey of its organizational, fiscal, and legal dimensions; of community needs assessment, program delivery, advocacy, funding, and intervention; of the principles of consultation, education and outreach; of client and community characteristics; and of the various practice settings and roles.
- CED 569 Child Counseling 3 cr**  
This course provides an overview of current theoretical perspective and evidence-based intervention paradigms regarding psychological, behavioral, cultural and social context/environmental problems commonly occurring during childhood and adolescence. A focus will be upon knowledge of basic counseling skills for use with children and adolescents as well as learning to conceptualize childhood problems at various levels of social ecology: individual, cultural, academic, familial, community and societal.
- CED 571 Foundations of CMHC 3 cr**  
This course is an introduction to the historical and philosophical foundation of Clinical Mental Health Counseling as well as overview of contemporary clinical practice issues within this counseling specialty.
- CED 572 Princ and Theories of Couns 3 cr**  
Includes a study of various theories, principles, and techniques in counseling. Opportunity is provided for the implementation of counseling techniques through the study of case studies and transcripts.
- CED 573 Ed Occup Info Sys - Mats - Res 3 cr**  
The study of educational, vocational, psychological, and individual resources needed to make employment decisions. Emphasis is on the collection and evaluation of information, procedures and strategies for researching employment opportunities, and the management of information services.
- CED 574 Group Couns Theory and Process 3 cr**  
Includes both the theory and practice of group counseling, counseling with clients of diverse backgrounds, and selecting group work suitable to multicultural needs. Emphasis is on the developmental level and background of clients with which the counselor expects to work.
- CED 575 Intro to Community Rehab 3 cr**  
Introduces the student to a broad field of community rehabilitation. Included is the history, philosophy, present activities and future trends in rehabilitation. A multidisciplinary approach to the study of the "whole person" is emphasized and direct contact with community social service agencies is an integral part of the course.
- CED 576 Supv Practicum in Couns 3 cr**  
This course requires the student to demonstrate the appropriate use of a variety of counseling skills and techniques. Audio and video tapes of individual counseling sessions are critiqued in class by the instructor. Requires special permission of the instructor.  
Pre-requisite: (CED 571 Minimum Grade of B or CED 565 Minimum Grade of B) and CED 586 Minimum Grade of B and CED 572 Minimum Grade of B and CED 574 Minimum Grade of B and CED 566 Minimum Grade of B and CED 584 Minimum Grade of B
- CED 578 Supv Pract-Group Counseling 3 cr**  
Supervised practice is provided in group counseling and other group work experience appropriate for a counselor. Practicum experience is offered in the setting in which the student plans to work.
- CED 579 Soc and Psych Asp of Disabil 3 cr**  
The theory, research, and practices in related disciplines which contribute to an understanding of human disability. Field work and case study serve as integrating activities.
- CED 580 Student Personnel Services 3 cr**  
Included is a survey of historical developments and current practices in student personnel services in post-high school educational institutions. The organization, administration, and functions of the various services are stressed.
- CED 581 Rehab Case Management 3 cr**  
This course provides for critical analysis of representative rehabilitation case studies. Case records are used as a basis for developing an understanding of the clients with handicaps and their problems, the rehabilitation case work process, diagnosis, eligibility requirements, and the provision of services.
- CED 582 Data-Driven School Counseling 3 cr**  
Provides an overview of how school counselors can access, interpret, and use achievement data, demographic data, school process data, and perception data to inform school counseling programmatic decisions. Assessment of systemic data, using data to guide program development, formative and summative evaluation methods, and strategies for dissemination of data are reviewed.
- CED 583 Indiv and Group Testing Lab 3 cr**  
Supervised experience in the selection, administration, and scoring of educational and psychological tests, and the interpretation and reporting of test results.  
Pre-requisite: EPY 555 Minimum Grade of B
- CED 584 Sem Ethical and Legal Issues 3 cr**  
Ethical standards of the profession and current legal issues will be examined in the context of case studies and current literature. Critical analysis by each student of legal and ethical issues faced by counselors and psychometrists will be stressed.

**CED 585 Medical Aspects of Rehab 3 cr**

Common symptomology, treatment, and medical management techniques of rehabilitation and physical medicine are emphasized. Other topics include assessment of client's functional limitations, interpretation of medical information, and planning for the client's rehabilitation.

**CED 586 Counseling Skills and Process 3 cr**

Emphasis is placed on the counseling procedures involved in developing and maintaining the therapeutic relationship. Students are required to model the basic skills of counseling using videotaped incidents and observations for feedback on skill development.

**CED 588 Career Devel, Assess, & Interv 3 cr**

Emphasis is placed on a basic knowledge of the theories, principles, and techniques of career counseling used for a wide range of ages. Other topics include model career development programs, assessment, population and age diversity, individual characteristics, placement and current research.

**CED 590 Special Topics - 3 cr**

Guided supervision in the completion of learning tasks in counselor education such as program design and revision study of a significant topic, theory, model and supervision of selected learning activities to acquire specific counseling and testing skills.

**CED 591 Advocacy, Collab. & Consult. 3 cr**

This course will provide an overview of advocacy, collaboration and consultation models and essential skills for professional school counselors and clinical mental health counselors. The role that each of these skills play in the professional identity of the school and mental health counselor and strategies for using these skills to promote systemic change and equitable social systems will be examined.

**CED 592 Crisis & Trauma Counseling 3 cr**

Students will gain knowledge of research-informed theoretical models of etiology and development of problems such as suicidality and other forms of mental health crisis, as well as grief, trauma, and disaster-related mental health symptoms. Students will also gain knowledge of evidence-based models of counseling and intervention in these areas such as comprehensive risk assessment strategies, psychological first aid and systems of mental health crisis management.

**CED 594 Dir St and Research 1 TO 3 cr**

Students explore through directed study problems and issues of special interest or significance in Counselor Education. Not more than three semester hours of any departmental 594 courses can be accepted toward a degree program.

**CED 595 Internship - School Counseling 1 TO 9 cr**

The internship is a supervised learning experience in a work setting similar to that in which a school counselor eventually will be employed. The internship provides the student with an opportunity to apply the theories and concepts learned during the graduate program. Not more than 12 hours may be taken. Prerequisite: Special permission of the instructor and a grade of B or above in CED 586 and CED 576. Pre-requisite: PRAXIS-School Guid/Counseling 520( or PRAXIS- Prof School Counselor 151 or PRAXIS- Prof School Counselor 151 ) and CED 576 Minimum Grade of B and CED 586 Minimum Grade of B and CED 584 Minimum Grade of B

**CED 596 Internship-School Psychometry 1 TO 9 cr**

The internship is a supervised learning experience in a work setting similar to that in which a school psychometrist eventually will be employed. The internship provides the student with an opportunity to apply the theories and concepts learned during the graduate program. Not more than 12 hours may be taken. Requires special permission of the instructor. Pre-requisite: EPY 556 Minimum Grade of B and CED 584 Minimum Grade of B and EPY 558 Minimum Grade of B and CED 583 Minimum Grade of B

**CED 597 Internship in CMHC 1 TO 9 cr**

The internship is a supervised learning experience in a work setting similar to that in which a community counselor eventually will be employed. The internship provides the student with an opportunity to apply the theories and concepts learned during the graduate program. Not more than 12 hours may be taken. Requires special permission of the instructor. Pre-requisite: CED 576 Minimum Grade of B and CED 584 Minimum Grade of B and CED 586 Minimum Grade of B

**CED 598 Internship-Rehab Counseling 1 TO 9 cr**

The internship is a supervised learning experience in a work setting similar to that in which a rehabilitation counselor eventually will be employed. The internship provides the student with an opportunity to apply the theories and concepts learned during the graduate program. Not more than 12 hours may be taken. Requires special permission of the instructor. Pre-requisite: CED 576 Minimum Grade of B and CED 584 Minimum Grade of B and CED 586 Minimum Grade of B

**CED 599 Thesis 1 TO 9 cr**

A student selects a project, study or investigation which is related to an area of specialization in Counselor Education. The project forms a basis for the thesis. A thesis committee will provide direction during the writing of the thesis.

**CED 672 Adv Couns Theory and Practice 3 cr**

An advanced study of counseling theories and strategies as they apply to practical situations and special populations. Pre-requisite: CED 572 Minimum Grade of B

**CED 674 Adv Theory and Pract Grp Couns 3 cr**

This course provides the student with advanced skills and knowledge designed to facilitate working with groups. The course emphasizes group theory, research, and participation in group dynamics.  
Pre-requisite: CED 574 Minimum Grade of B

**CED 676 Advanced Practicum-Counseling 3 cr**

Supervised field experience in appropriate settings. Required weekly seminar. Requires special permission of the instructor.

**CED 678 Negotiation Training 3 cr**

This course focuses on the development of negotiation, conflict resolution, and communication skills needed to be effective in resolving a variety of training-related problems. Students will have an opportunity to research and practice in the negotiation process by applying communication and conflict resolution techniques in simulated and real situations.

**CED 690 Sp Top - 3 cr**

Guided supervision in the completion of learning tasks in counselor education such as program design and revision, study of a significant topic, theory, model, and supervision of selected learning activities to acquire specific counseling and testing skills.

**CED 694 Dir St and Research 1 TO 3 cr**

Students explore through directed study problems and issues of special interest or significance in Counselor Education. Not more than three semester hours of any departmental 694 courses can be accepted toward a degree program.

**CED 699 Research Project 3 cr**

A supervised field project, or investigation in the Counselor Specialist Program, serving as the culminating experience in the program. Applying concepts and skills learned during the sixth-year program, the student will conduct an investigation and prepare a field project report in standard form.  
Pre-requisite: CED 576 Minimum Grade of B

## Criminal Justice (CJ)

**CJ 205 Intro to Criminal Justice 3 cr**

A review of the system for the delivery of Criminal Justice services in the U.S. and an analysis of operational practices at the major criminal justice decision stages. CJ majors must pass with a 'C' or better.

**CJ 223 Intro to Forensic Science 3 cr**

Survey of scientific crime detection methods; crime scene search, identification and preservation of evidence; uses of the laboratory for criminal investigation.

**CJ 310 Research Methods 3 cr**

Examines the concepts and techniques of systematic political analyses and research methodology. (Identical to PSC 310). CH and PSC majors must pass with a "C" or better.  
Pre-requisite: (CJ 205 Minimum Grade of C or PSC 205 Minimum Grade of C)

**CJ 320 Modern Police Functions 3 cr**

An advanced survey of law enforcement, concentrating on the police with emphasis on functions (law enforcement, order maintenance, and public service) and responsibilities, including organizational and managerial aspects of policing in American society. CJ majors must pass with a 'C' or better.  
Pre-requisite: (CJ 205 Minimum Grade of C or PSC 205 Minimum Grade of C)

**CJ 321 Introduction to Security 3 cr**

The historical, philosophical, and legal basis of security. The role of security in modern society. A survey of the administrative, personnel, and physical aspects of the security fields.  
Pre-requisite: (CJ 205 Minimum Grade of C or PSC 205 Minimum Grade of C)

**CJ 330 Judicial Process 3 cr**

The study of the American judicial process at the federal and state court levels. (Identical to PSC 330) CJ majors must pass with a 'C' or better.  
Pre-requisite: (CJ 205 Minimum Grade of C or PSC 205 Minimum Grade of C)

**CJ 331 Constitutional Law-W 3 cr**

Principles of constitutional powers and liberties will be examined through an analysis of decisions and opinions by the U.S. Supreme Court. (Identical to PSC 331).  
Pre-requisite: (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C) and (CJ 205 Minimum Grade of C or PSC 205 Minimum Grade of C)

**CJ 332 Criminal Law 3 cr**

A study of the origins and nature of the acts that constitute crime with a detailed examination of the elements of certain criminal offense.  
Pre-requisite: (CJ 205 Minimum Grade of C or PSC 205 Minimum Grade of C)

**CJ 336 Legal Theory 3 cr**

Explores theoretical issues and problems in the area of law, including theories about the nature of law, legal validity, the relation between morality and law, and our obligation to obey the law. Specific problems, such as legal moralism, are also examined. Cross-listed as PHL 336. Credit cannot be received for both CJ 336 and PHL 336.  
Pre-requisite: (CJ 205 Minimum Grade of C or PSC 205 Minimum Grade of C)

- CJ 337 Liability and Punishment 3 cr**  
Explores theoretical issues and problems in the areas of law (especially criminal law) concerning liability and punishment. Topics to be examined include diminished capacity, theories of punishment, and capital punishment. Cross-listed as PHL 337. Credit cannot be received for both CJ 337 and PHL 337.  
Pre-requisite: (CJ 205 Minimum Grade of C or PSC 205 Minimum Grade of C)
- CJ 340 Policies-Procedures of Correct 3 cr**  
An overview of the policies and procedures of major correctional systems and methods of treatment of offenders.  
Pre-requisite: (CJ 205 Minimum Grade of C or PSC 205 Minimum Grade of C)
- CJ 360 Introduction to the Offender 3 cr**  
Study of traditional and modern explanations of criminal offenses and of criminal offenders. CJ majors must pass with a 'C' or better.  
Pre-requisite: (CJ 205 Minimum Grade of C or PSC 205 Minimum Grade of C)
- CJ 370 Criminal Justice Policies 3 cr**  
An examination of theoretical explanations of criminal phenomena and an analysis of the impact of such theories on public policy decisions.  
Pre-requisite: (CJ 205 Minimum Grade of C or PSC 205 Minimum Grade of C)
- CJ 372 Gender and Criminal Justice 3 cr**  
This course utilizes gender as a conceptual construct in studying actors and the institutional processes in the criminal justice system. Women's roles as criminals, crime victims, and law enforcement officials will be examined.  
Pre-requisite: (CJ 205 Minimum Grade of C or PSC 205 Minimum Grade of C)
- CJ 390 Special Topics - 3 cr**  
Study of a significant topic, problem, or issue in criminal justice. May be repeated up to two times when the content varies. Only 6 credit hours may be applied to the criminal justice major.  
Pre-requisite: (CJ 205 Minimum Grade of C or PSC 205 Minimum Grade of C)
- CJ 403 Sexual Violence 3 cr**  
This course focuses on the perpetration and experience of sexual violence. Although focused primarily on this phenomenon within the United States, sexual violence as a broader global construct will also be discussed. This course will incorporate perspectives from several disciplines, including criminal justice, gender studies, sociology, and psychology.  
Pre-requisite: CJ 205 Minimum Grade of C or GS 101 Minimum Grade of C
- CJ 422 Criminal Investigations 3 cr**  
Explores criminal investigation procedures including theory of investigation, case presentation, interrogation, and special problems in criminal investigation.  
Pre-requisite: (CJ 205 Minimum Grade of C or PSC 205 Minimum Grade of C)
- CJ 430 Criminal Procedure - W 3 cr**  
An examination of constitutional criminal procedure concerning the laws of arrest, search, and seizure and their implications in the admissibility of evidence during the subsequent trial of the defendant.  
Pre-requisite: (CJ 205 Minimum Grade of C or PSC 205 Minimum Grade of C) and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)
- CJ 440 Community Based Corrections-W 3 cr**  
Examine alternatives to incarceration for offenders with emphasis on current research.  
Pre-requisite: (CJ 205 Minimum Grade of C or PSC 205 Minimum Grade of C) and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)
- CJ 450 Juvenile Just Admin-Policies 3 cr**  
A study of statutory law and criminal justice system practices and programs as they relate to the administration of juvenile justice.  
Pre-requisite: (CJ 205 Minimum Grade of C or PSC 205 Minimum Grade of C)
- CJ 471 Criminal Justice and Community 3 cr**  
A presentation of current research on a wide range of topics that impact on the relationship of police and the community.  
Pre-requisite: (CJ 205 Minimum Grade of C or PSC 205 Minimum Grade of C)
- CJ 472 Comparative Criminal Just Syst 3 cr**  
A review of cultural influences on penal codes, crime rates, crime control methods, and organizational structures of the delivery of criminal justice services in selected countries.  
Pre-requisite: (CJ 205 Minimum Grade of C or PSC 205 Minimum Grade of C)
- CJ 492 Capstone Seminar in CJ-W 3 cr**  
Required course for all criminal justice majors and serves as the comprehensive experience in political science. The course will be taught at the senior level and will focus on criminal justice issues at the national and international levels. In addition to the course requirements, including a major research paper, students must take the ETS field test in criminal justice and receive a satisfactory score. Criminal Justice majors must pass with a "C" or better. The course serves as a capstone course for criminal justice majors. Taught in the fall semester.  
Pre-requisite: EH 102 Minimum Grade of C and CJ 205 Minimum Grade of C

**CJ 494 Directed Studies - 1 TO 3 cr**

Under the guidance of a faculty member, the student will pursue directed research or readings on an approved topic in criminal justice. May be repeated for a maximum of 3 hours.

Pre-requisite: (CJ 205 Minimum Grade of C or PSC 205 Minimum Grade of C)

**CJ 496 Professional St - Internship 3 cr**

Relates the intern's classroom studies with occupational and professional experiences in an approved criminal justice agency. Written reports required. Open only to junior or senior criminal justice majors or minors. S/U grading only.

Pre-requisite: (CJ 205 Minimum Grade of C or PSC 205 Minimum Grade of C)

**CJ 499 Honors Thesis - H - W 3 TO 6 cr**

The research and writing of a major paper in the field of criminal justice. Prerequisite: USA Honors Program or permission of Department Chairman.

## Developmental Studies (DS)

**DS 082 Introductory Algebra 3 cr**

This course combines topics in pre- and elementary algebra including operations with whole numbers, fractions, percents, exponents, signed numbers, order of operations; ratio and proportion; functions; graphs of linear equations; solving and graphing systems of linear equations and inequalities; operations with polynomials and factoring polynomials. Requires 100 extra minutes per week of lab time each week. Pre-requisite: None.

## Drama (DRA)

**DRA 100 Theatre Wkshp Rehfs-Perform 1 cr**

Practical experience in acting. May be repeated three times for a maximum of four credit hours. Prerequisite: Permission of department chair. Fulfills the Fine Arts and Humanities requirement in general education.

**DRA 101 Theatre Wkshp Tech Production 1 cr**

Practical experience in backstage work. May be repeated three times for a maximum of four credit hours. Prerequisite: Permission of department chair. Fulfills the Fine Arts and Humanities requirement in general education.

**DRA 102 Theatre Wkshp Special Act 1 cr**

Practical experience in theatre areas other than acting or technical production. May be repeated three times for a maximum of four credit hours. Prerequisite: Permission of department chair. Fulfills the Fine Arts and Humanities requirement in general education.

**DRA 103 Theatre Symposium .5 cr**

A symposium required of all full time drama majors meeting weekly to share and discuss theatre activities. Four hours required for majors for graduation with adjustments made for transfer students. Prerequisites: Must be Drama Major

**DRA 104 Fundamentals of Dance I 3 cr**

Beginning level instruction in dance, including theory and terminology, with a primary focus on classical ballet. Designed to prepare the student dancer for performance.

**DRA 105 Fundamentals of Dance II 3 cr**

Beginning-level instruction in Dance, with a primary focus on jazz and modern. Through the study of technique, theory, and terminology, students will be introduced to the form from the viewpoint of audience member, performer, and choreographer.

**DRA 110 Introduction to Theatre 3 cr**

A basic survey of theatre practice. Fulfills the Fine Arts and Humanities requirement in general education.

**DRA 111 Introduction to Dance 3 cr**

A basic survey of dance as an art form. Through readings, lectures, viewing of live and filmed dance, and basic studio work, students will gain a better appreciation of the historical development and forms of the art.

**DRA 115 Acting for Non-Majors 3 cr**

An interactive course designed to introduce the non-major to the art and discipline of acting as both performer and observer. Through a sequence of exercises and practice, the student will be introduced to the actor's mode of thinking, creating, and working. Fulfills the Fine Arts and Humanities requirement in General Education.

**DRA 116 Opera & Musical Theatre Wkshp .5 cr**

A performing ensemble dedicated to training students in the fundamentals of stage craft, performance, and production through experience with music for the stage. Standards of opera, operetta, and American musical theatre are explored in scene exercises and fully staged productions on and off campus. Enrollment is open to all students through audition or permission of the instructor. Course is cross-listed with MUO 116. Credit cannot be received for both MUO 116 and DRA 116. May be repeated four times for a maximum of two credit hours. Fulfills the Fine Arts and Humanities requirement in General Education.

**DRA 120 Acting I 3 cr**

A workshop-lecture course introducing a basic process for acting on the stage in the style of modern realism. Restriction: Must be a Drama major or minor or a dance minor. This course fulfills the Fine Arts and Humanities requirement in General Education.

**DRA 130 Stagecraft 3 cr**

A lecture-laboratory course in the fundamentals of stagecraft. This course fulfills the Fine Arts and Humanities requirement in General Education.

- DRA 131 Fundamentals of Stage Lighting** 3 cr  
A lecture-laboratory course in the fundamentals of stage lighting. Prerequisite: This course fulfills the Fine Arts and Humanities requirement in General Education.  
Pre-requisite: DRA 133 Minimum Grade of C
- DRA 132 Costume Fundamentals** 3 cr  
A lecture-laboratory course in the fundamentals of costuming for the stage, including basic sewing skills as they apply to theatrical costumes. This course fulfills the Fine Arts and Humanities requirement in General Education.
- DRA 133 Computer Graphics Theatre** 1 cr  
The fundamentals of computer drafting and graphic design for the stage.
- DRA 150 Text Analysis** 3 cr  
Reading and analyzing play scripts as blueprints for dramatic actions, sights, sounds, characters, and productions. This course fulfills the Fine Arts and Humanities requirement in General Education.
- DRA 204 Dance Techniques I** 3 cr  
A review and expansion of technique, vocabulary, and history of ballet, jazz, and theatrical dance.  
Pre-requisite: DRA 104 Minimum Grade of D or DRA 105 Minimum Grade of D
- DRA 205 Dance Techniques II** 3 cr  
An exploration of modern dance techniques, vocabulary, and history with ballet as their basis.  
Pre-requisite: DRA 204 Minimum Grade of D
- DRA 210 Makeup** 1 cr  
A study of the materials and techniques of theatrical makeup.
- DRA 220 Stage Movement** 3 cr  
Through exercises and scene study, student-actors explore movement for the stage. This course fulfills the Fine Arts and Humanities requirement in General Education.  
Pre-requisite: DRA 121 Minimum Grade of C
- DRA 221 Voice for Actors** 3 cr  
A workshop-lecture course in speaking voice and articulation for performance. This course fulfills the Fine Arts and Humanities requirement in General Education.  
Pre-requisite: DRA 121 Minimum Grade of C
- DRA 222 Acting II - Study in Realism** 3 cr  
Course is designed to teach theory and techniques in character development and analysis, used in Realistic theatre, through the use of scene studies.  
Pre-requisite: DRA 120 Minimum Grade of C and DRA 220 Minimum Grade of C and DRA 221 Minimum Grade of C
- DRA 230 Drawing & Drafting for Theatre** 2 cr  
Drawing and Drafting for the Theatre-An introductory course designed to develop basic skills in freehand drawing and mechanical drafting for theatre and the entertainment industry.
- DRA 233 Rendering for the Theatre** 1 cr  
This course focuses on the major painting mediums, styles, of illustration, and techniques utilized in the visual presentations of costume, scene and lighting design for the theatre. The student will develop artistic skills and techniques through studio work in drawing and painting projects for the theatre. One (1) hour (second of three one (1) hour courses designed to develop Theatre Design & Technology students portfolio skills).
- DRA 250 Theatre Management** 3 cr  
A basic course in the principles of accounting, purchasing, box office management, house management, and promotion. This course fulfills the Fine Arts and Humanities requirement in General Education.
- DRA 261 Creative Dramatics** 3 cr  
A practical course concerned with improvisational acting with children. Of special interest to students in Education and Leisure Services.
- DRA 290 Special Topics -** 1 TO 3 cr  
Theatre and drama topics not covered in regular curriculum. May be repeated when subject varies for a total of 9 hours.
- DRA 300 Adv Wksp Rehearsal and Perform** 1 cr  
Advanced practical experience in acting. May be repeated for a maximum of 4 hours. Prerequisites: Junior status and Permission of Instructor.
- DRA 301 Adv Wksp Technical Production** 1 cr  
Advanced practical experience in backstage work. May be repeated for a total of 4 hours. Prerequisites: Junior status and permission of Instructor.
- DRA 302 Adv Wksp Spec Activities** 1 cr  
Advanced practical experience in theatre areas other than acting or technical production. May be repeated three times for a total of four hours. Prerequisites: Junior status and permission of department chair.
- DRA 310 Playwriting** 3 cr  
Studies in character, plot development, and the one-act play form. Prerequisite: Permission of Instructor.
- DRA 315 History of Musical Theatre** 3 cr  
A comprehensive overview of the origins and evolution of American Music Theatre to present time. The course also includes both general and specific information toward appropriate performance choices. Cross-listed with MUL 315. Credit cannot be received for both DRA 315 and MUL 315.  
Pre-requisite: EH 101 Minimum Grade of C and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)
- DRA 320 Studies in Acting Styles -** 3 cr  
Variable-content course featuring acting styles found in different theatrical genres as well as for camera. May be repeated twice when the topic varies for a total of 9 hours.  
Pre-requisite: DRA 222 Minimum Grade of C

- DRA 322 Adv. Voice and Movement 3 cr**  
An in-depth continuation of voice and movement training for the actor, with a focus on extending range and expressivity in the voice and body. Emphasis will be placed on understanding and transforming the actor's vocal and physical instrument. DRA 120, 220, and 221, or permission of department chair.  
Pre-requisite: DRA 120 Minimum Grade of C and DRA 220 Minimum Grade of C and DRA 221 Minimum Grade of C
- DRA 330 Scene Design 3 cr**  
The fundamentals of scene design for the stage.  
Prerequisite: Limited to undergraduate status.  
Pre-requisite: DRA 133 Minimum Grade of C
- DRA 331 Lighting Design 3 cr**  
The course focuses on the fundamentals of lighting design for the Stage.  
Pre-requisite: DRA 131 Minimum Grade of C
- DRA 333 Design Portfolio 1 cr**  
An upper-level course meant to help graduating students focus on designing and developing an aesthetically pleasing portfolio for either graduate school interviews or professional theatre interviews. Development of a digital portfolio and a web page will also be included.
- DRA 334 Costume Design 3 cr**  
A class in basic design theory,, concentrating on design concept, characterization and research. Some instruction in figure drawing and rendering. Artistic and Technical concerns as they apply to Costume Design will be addressed through lectures, discussions, and critiques. The course will focus on the first half of the design process: research, direction and rendering of ideas. Special concentration will focus on character analysis and their physical manifestations. In-class critiques will help the student to identify and utilize the characteristics of good design.
- DRA 340 Directing I 3 cr**  
The fundamental techniques involved in directing a stage play: analysis, casting, and blocking.  
Pre-requisite: DRA 120 Minimum Grade of C or DRA 150 Minimum Grade of C
- DRA 350 Theatre History I - W 3 cr**  
A comprehensive study of the important developments in theatre art from its beginnings to 1642, including a computer component.  
Pre-requisite: DRA 120 Minimum Grade of D and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)
- DRA 351 Theatre History II - W 3 cr**  
A continuation of DRA 350 from the Restoration to the present.  
Pre-requisite: (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)
- DRA 352 Period Styles For The Theatre 3 cr**  
Historical study of dress in relation to costuming for the Stage. For Tech-Design students and Actors.
- DRA 410 3-Dimensional Makeup and Masks 3 cr**  
A class in basic face casting, theatrical masks and slush mold latex appliances for the Stage.  
Pre-requisite: DRA 210 Minimum Grade of C
- DRA 416 Opera & Musical Theatre Wkshop .5 cr**  
A performing ensemble dedicated to training students in the fundamentals of stage craft, performance, and production through experience with music for the stage. Standards of opera, operetta, and American musical theatre are explored in scene exercises and fully-staged productions on and off campus. Enrollment is open to all students through audition or permission of the instructor. Course is cross-listed with MUO 416. Credit cannot be received for both MUO 416 and DRA 416. May be repeated four times for a maximum of two credit hours. Fulfills the Fine Arts and Humanities requirement in General Education.
- DRA 433 Studies in Advanced Design - 3 cr**  
Advanced studies in either Scene Design, Costume Design. or Lighting Design for the Stage. May be repeated once if the topic varies for a total of six credits.  
Pre-requisite: DRA 330 Minimum Grade of C or DRA 431 Minimum Grade of C or DRA 432 Minimum Grade of C
- DRA 435 Design Practicum - Main Stage 3 cr**  
A class geared to giving the student practical application design theory, continued development of render/modeling skill, and actualization of design  
Pre-requisite: DRA 330 Minimum Grade of C or DRA 331 Minimum Grade of C or DRA 332 Minimum Grade of C
- DRA 460 Theatre for Youth 3 cr**  
The reading and production techniques of plays for children and teenagers.
- DRA 480 Senior Capstone 3 cr**  
"A culminating experience for all theatre majors, this course will provide instruction in professional theatre business practices aimed at graduating students about to leave the university for early career opportunities, as well as afford the student the opportunity to prepare and present a major research project that builds upon and synthesizes the knowledge and skills acquired during their theatre studies. A presentation of the research project will be presented to the entire department, and adjudicated by the full-time theatre faculty."  
Pre-requisite: DRA 340 Minimum Grade of C
- DRA 490 Special Topics - 1 TO 3 cr**  
Various topics of special interest to students of drama. Restrictions. Limited to undergraduate status. Prerequisite: Permission of department chair. May be repeated once for a maximum of six credit hours when topic varies.

**DRA 494 Directed Studies - 1 TO 3 cr**

Independent study under faculty supervision, involving research readings, or artistic projects. Restrictions: Limited to undergraduate status. Prerequisites: Permission of department chair. May be repeated seven times for a maximum of eight credit hours.

**DRA 496 Theatre Internship 6 cr**

Practical experience in stock, repertory, or touring theatre.

## Earth Sciences (ES)

**ES 492 Honors Earth Sciences Sem - H 3 TO 4 cr**

Multidisciplinary (Geography, Geology, Meteorology) topics not covered in current Department of Earth Sciences courses. Topic announced prior to registration. Prerequisites: acceptance into the University Honors Program, the Earth Sciences Departmental Honors Program, or by permission of the Chair of Earth Sciences. (Completion of this course is required for the Earth Sciences Departmental Honors students)

**ES 497 Senior Thesis Prospectus - H 2 cr**

With the guidance and advice of a Senior Thesis Committee, students will identify a suitable research project in Earth Sciences (Geography, Geology, Meteorology) and develop a thesis prospectus to conduct this research during their senior year. The Senior Thesis prospectus will be evaluated by the committee which must pass it before thesis research can formally begin. Prerequisites: establishment of a senior thesis committee; acceptance into the Departmental Honors Program.

**ES 499 Senior Honors Thesis - H - W 3 cr**

With the guidance and advice of a Senior Thesis Committee, students will carry out an in-depth research project in Earth Sciences (Geography, Geology, Meteorology) according to an accepted Thesis Prospectus during their senior year. This course will be repeated for up to six (6) credits. Prerequisites: Geography, Geology, Meteorology major, senior status; acceptance into the Departmental or University Honors Program. Pre-requisite: ES 497 Minimum Grade of C or HON 301 Minimum Grade of C and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

## Economics (ECO)

**ECO 215 Prin of Microeconomics 3 cr**

Functions of the price system in a market economy; role of households and business firms in mobilizing resources to meet human needs. The functional and personal distribution and use of income. Relevant problems are discussed.

**ECO 216 Prin of Macroeconomics 3 cr**

Economics as a science; its nature and functions. Analysis of the American economy from the macroeconomic viewpoint, stressing full employment, monetary and fiscal policy, national income accounting, and their application to current problems and issues.

**ECO 300 Introduction to Economics 3 cr**

Intensive study of micro-and macroeconomic principles with emphasis on application to current economic issues and problems of interest to public school teachers and students.

**ECO 315 Intermediate Microeconomics 3 cr**

Operation of the price system, with special reference to a market economy and to related public policies and business issues; analysis of the distribution of income; theories of consumer behavior, the firm, resource allocation, and product distribution. Pre-requisite: ECO 215 Minimum Grade of D or ECO 300 Minimum Grade of D

**ECO 316 Intermediate Macroeconomics 3 cr**

The nature and control of forces in a developed economy which determine levels of employment, income and use of resources, and rate and direction of economic growth. Pre-requisite: ECO 214 Minimum Grade of D or ECO 216 Minimum Grade of D or ECO 300 Minimum Grade of D

**ECO 318 Prin of Managerial Economics 3 cr**

Study of economic principles and methods in analyzing problems faced by management of a business or other type of organization; application of economic concepts to finding solutions of such problems that advance the best interest of such organizations. Pre-requisite: ECO 215 Minimum Grade of D or ECO 300 Minimum Grade of D

**ECO 322 Economics of Industrial Org 3 cr**

An analysis of the effect of modern industrial structure on competitive behavior and performance, in the light of contemporary price theory and the theory of workable competition; a critical evaluation of the legislative content, judicial interpretation, and economic effects of antitrust laws, current problems and proposed remedies. Pre-requisite: ECO 215 Minimum Grade of D or ECO 300 Minimum Grade of D

**ECO 323 Public Finance 3 cr**

The nature, purposes, and economic effects of various types of taxes in a federal government. Problems of tax administration, budgeting, and expenditure of tax revenues. Review of current problems. Pre-requisite: ECO 215 Minimum Grade of D or ECO 300 Minimum Grade of D

**ECO 330 Current Global Economic Issues 3 cr**

Application of the standard economic theory to markets to analyze major issues confronting U.S. consumers and businesses in the global economy. Topics include comparative advantage, commercial policy and protectionism, currency markets and foreign exchange rates, economic integration and free trade areas, international trade accounting, and financial aspects of international trade.

Pre-requisite: ECO 215 Minimum Grade of D or ECO 300 Minimum Grade of D

**ECO 343 Labor Economics 3 cr**

United States population analyzed by age, sex, and other characteristics; study of the labor force and its composition; unemployment and underemployment. Education as an investment in productive resources. Economics of leisure, health, housing, recreation, and other areas of human-resource development.

Pre-requisite: ECO 215 Minimum Grade of D or ECO 300 Minimum Grade of D

**ECO 363 International Economics 3 cr**

Modern international trade theory; the balance of payments and the adjustments processes; the evolution of international economic institutions; critical analysis of current international economic policies - trade, monetary, and regional economics organizations.

Pre-requisite: ECO 214 Minimum Grade of D or (ECO 212 Minimum Grade of D or ECO 215 Minimum Grade of D) or ECO 216 Minimum Grade of D or ECO 300 Minimum Grade of D

**ECO 371 Economic Development 3 cr**

Economic development theory with stress on the roles of technology, management, international financing, technical assistance organizations, and international private investment. Factors that control and influence the developmental and growth process either positively or negatively. Prerequisites: ECO 215 or ECO 300 for non-business and non-economics majors.

Pre-requisite: ECO 215 Minimum Grade of C or ECO 300 Minimum Grade of C

**ECO 372 Economics of Urban Development 3 cr**

This course addresses contemporary issues of urban and metropolitan areas. The course focuses on understanding the main economic forces leading to the existence of cities and regional agglomeration. Students will also use neoclassical economic theory to critically analyze economic efficiency and the spatial structure of markets. The course includes a wide range of topics such as urban growth, business clusters, poverty, crime, urban transportation, positive and negative externalities in urban areas, land use theory, housing, and the role of local governments.

Pre-requisite: ECO 215 Minimum Grade of D or ECO 300 Minimum Grade of D

**ECO 383 Economic History of the US 3 cr**

The evolution of the modern United States economic system. The parts played by exploitation of natural resources, investment from abroad, financial institutions, and technology in arriving at the present economic situation. Critical analysis of development just before, during, and after World War II, and of current economic problems.

Pre-requisite: (ECO 215 Minimum Grade of D or ECO 212 Minimum Grade of D) and (ECO 214 Minimum Grade of D or ECO 211 Minimum Grade of D or ECO 216 Minimum Grade of D) or ECO 300 Minimum Grade of D

**ECO 390 Environmental Economics 3 cr**

This course introduces students to the economic and environmental implications of natural resource management. The course covers conceptual and methodological topics, including sustainability, which will be applied to contemporary issues i.e. depletion of renewable resources, land and water scarcity, and climate change. Specific topics include the economics of energy, fisheries, forestry, food and pollution.

Pre-requisite: ECO 215 Minimum Grade of D or ECO 300 Minimum Grade of D

**ECO 451 Mathematical Economics 3 cr**

Application of business and economics concepts using economic models and equilibrium, matrix algebra, differentiation, comparative static analysis, optimization problems, and other selected techniques.

Pre-requisite: MA 120 Minimum Grade of D and ECO 215 Minimum Grade of D and ECO 216 Minimum Grade of D or ECO 300 Minimum Grade of D

**ECO 453 Intro to Econometrics 3 cr**

Study of regression analysis and its application to business, economics, and other social-science problems; emphasis on model building, research writing, and econometric forecasting. Students are required to write a term paper on econometric applications under direct supervision of the instructor.

Pre-requisite: (BUS 245 Minimum Grade of D or ST 210 Minimum Grade of D) and (ECO 215 Minimum Grade of D or ECO 216 Minimum Grade of D)

**ECO 490 Sp Top - 3 cr**

Designed to provide senior students an opportunity to study selected topics of particular interest. A student may count no more than six hours of Special Topics in the concentration. Prerequisite: Approval of Department Chair.

**ECO 491 History of Economic Thought -W 3 cr**

Economic ideas from the Greeks to present with intensive study of the classical, neoclassical, and contemporary schools of economic thought.

Pre-requisite: (ECO 215 Minimum Grade of D or ECO 212 Minimum Grade of D) or ECO 300 Minimum Grade of D

**ECO 494 Dir St in Economics 3 cr**

Reading and research on selected economic topics under guidance of the departmental faculty. Junior and senior standing, a cumulative GPA of 2.5 or better, and approval of the department chair following the evaluation of a written proposal.

**ECO 496 Economics Internship 3 cr**

The internship program is designed to give students practical experience in their field of study. Students complete directed projects under the supervision of Department Chair. No more than three hours of internship credit may be counted toward a degree in the Mitchell College of Business. Prerequisites: Junior or Senior standing, declared major in finance, overall GPA of at least 2.5, and Internship Agreement signed by department Chair.

**ECO 498 Economics Internship II 3 cr**

The internship experience is designed to give students practical experience in their field of study. Students complete directed learning experiences under the supervision of the Department Chair. Prerequisites: Junior or Senior Standing, declared major in economics, overall GPA of at least 2.5 and internship agreement signed by the Department Chair.  
Pre-requisite: ECO 496 Minimum Grade of P

**ECO 506 Economic Theory 3 cr**

An introduction to economic theory, including the basic theory of the market (supply and demand); elasticity; introduction to market structure; trade theory; international trade and balance of payments; national income accounting; money and the banking system; macroeconomic theories, and macroeconomic stabilization policy.

**ECO 590 Sp Top - 3 cr**

Designed to provide graduate students an opportunity to study selected topics. (A student may count no more than three hours of Special Topics in the MBA degree program.) Prerequisite: Approval of Department Chair.

**ECO 594 Independent Study in Economics 3 cr**

Readings and research on selected topics. Conferences and formal research report required. Approval of Department Chair.

## Education-K-6 And 6-12 Teacher (EDU)

**EDU 430L K-6 Internship Lab 3 TO 9 cr**

Observation and supervised teaching in elementary or early childhood settings with the opportunity for study and discussion of problems and issues encountered.

**EDU 100 Role of the Teacher 2 cr**

This course provides a broad overview of education, schools, and teaching as well as an orientation to the K-6 Teacher Education Program.

**EDU 290 Special Topics 1 TO 3 cr**

Guided study of selected educational tasks (e.g. curriculum revision, classroom materials development, models of learning and teaching) and teaching problems and practices for improving student achievement. Not more than six hours may be earned in Special Topics courses.

**EDU 300 Classroom Management 1 1 cr**

An introductory course in classroom management with emphasis upon effective instructional practices that inhibit student behaviors incompatible with learning. The focus is upon PEPE and how it provides the framework for effective teaching practices through the use of rules and procedures. Co-requisite: EDU 303, EDU 312, EDU 313, EDU 331, EDU 336

Pre-requisite: EDU 330 Minimum Grade of C

**EDU 301 Arts in the Elementary School 3 cr**

Knowledge and skills appropriate to the elementary school art program. Techniques in media for teaching art in the various grades.

**EDU 302 Classroom Management 2 1 cr**

An introductory course in classroom management with emphasis upon effective instructional practices that inhibit student behaviors incompatible with learning. The focus is upon PEPE and how it provides the framework for effective teaching practices through the use of rules and procedures. Co-requisite: EDU 311, EDU 335, EDU 337, EDU 345, EDU 362

Pre-requisite: EDU 300 Minimum Grade of C and EDU 303 Minimum Grade of C and EDU 313 Minimum Grade of C and EDU 336 Minimum Grade of C and EDU 312 Minimum Grade of C and EDU 331 Minimum Grade of C

**EDU 303 Field Experience SPE 1 TO 3 cr**

An in-field opportunity for early field-based practicum in a variety of placements.

Co-requisite: EDU 300, EDU 312, EDU 313, EDU 331, EDU 336

Pre-requisite: EDU 330 Minimum Grade of C

**EDU 311 Partnerships in SPE 3 cr**

Emphasis is on the special problems found in the home, community, and school of the exceptional child, the teacher, the family, and community resource agencies. Ways for the teacher to form teamships to work collaboratively with all human resources involved in the child's life are explored and ethical and moral standards examined.

Co-requisite: EDU 302, EDU 335, EDU 337, EDU 345, EDU 362

Pre-requisite: EDU 300 Minimum Grade of C and EDU 303 Minimum Grade of C and EDU 313 Minimum Grade of C and EDU 336 Minimum Grade of C and EDU 331 Minimum Grade of C and EDU 312 Minimum Grade of C

**EDU 312 Intell and Physical Disabilit 3 cr**

A study of the intellectual and physical disability which usually require substantial curriculum adaptations or ecological accommodation. Historical perspectives, etiology, definitions, classification, treatment, social aspects and interdisciplinary team work will be explored.

Co-requisite: EDU 300, EDU 303, EDU 313, EDU 331, EDU 336

Pre-requisite: EDU 330 Minimum Grade of C

**EDU 313 Learning & Behav Disorders 3 cr**

An examination of the definitions, characteristics, and prevalence of children with learning and/or behavioral disabilities. Emphasis is placed on the causes of problems in motor, perceptual, social, academic, affective and behavioral development. Students will be introduced to current service delivery models and the programming options for individuals with learning and behavioral disabilities.

Co-requisite: EDU 300, EDU 303, EDU 312, EDU 331, EDU 336

Pre-requisite: EDU 330 Minimum Grade of C

**EDU 321 Field Experience in SpeEd Sett 1 cr**

A series of in-field opportunities in Special Education. A variety of appropriate placements will be employed depending on each student's interest and needs. May be repeated for credit.

Co-requisite: EDU 400

**EDU 322 Field Experience in SpeEd Sett 1 cr**

A series of in-field opportunities in Special Education. A variety of appropriate placements will be employed depending on each student's interest and needs. Students are placed in settings related to the student's major areas of study and co-requisites in progress. May be repeated for credit.

Co-requisite: EDU 354

**EDU 330 Foundations Read Instruct - W 3 cr**

A course to orient the study to fundamentals in the teaching of reading and provides practice in basic skills. This course has a required field experience.

**EDU 331 Teaching Reading 3 cr**

A course focusing on methodology, materials, and techniques for developing systematic instruction and diagnosis appropriate for early childhood and elementary children. This course has a required field experience.

Co-requisite: EDU 300, EDU 303, EDU 312, EDU 313, EDU 336

Pre-requisite: EDU 330 Minimum Grade of C

**EDU 332 Teaching Language Arts 3 cr**

A course presenting methods of promoting meaningful language and literacy skills in early childhood and elementary school programs. This course has a required field experience.

**EDU 335 Teaching Mathematics - W 3 cr**

A course which deals with effective methods of teaching mathematics to elementary school students. Emphasis will be on developing an understanding of numbers, teaching basic operations, and using teaching aids and materials to meet the various needs of elementary age children. This course has a required field experience.

Co-requisite: EDU 302, EDU 311, EDU 337, EDU 345, EDU 362

Pre-requisite: EDU 300 Minimum Grade of C and EDU 303 Minimum Grade of C and EDU 313 Minimum Grade of C and EDU 336 Minimum Grade of C and EDU 312 Minimum Grade of C and EDU 331 Minimum Grade of C and EDU 346 Minimum Grade of C

**EDU 336 Teaching Social Studies 3 cr**

A course using problem solving and independent investigation as means as teaching the relationship of humans to their environment. Objectives, content and procedures are discussed. This course has a required field experience.

Co-requisite: EDU 300, EDU 303, EDU 312, EDU 313, EDU 331

Pre-requisite: EDU 330 Minimum Grade of C

**EDU 337 Teaching Science 3 cr**

A course using discovery, inquiry and problem-solving approaches as a means of teaching science. Relationships of science to entire early childhood and elementary curriculum is discussed. This course has a required field experience.

Co-requisite: EDU 302, EDU 311, EDU 335, EDU 345, EDU 362

Pre-requisite: EDU 300 Minimum Grade of C and EDU 303 Minimum Grade of C and EDU 313 Minimum Grade of C and EDU 336 Minimum Grade of C and EDU 312 Minimum Grade of C and EDU 331 Minimum Grade of C

**EDU 340 Fundamentals of Teaching - W 3 cr**

This course provides an introduction to effective instructional practices in the secondary classroom. The focus is on planning for and delivering instruction which promotes successful classroom management. This course has a required field experience.

Pre-requisite: EDM 310 Minimum Grade of C and EDU 400 Minimum Grade of C and EPY 351 Minimum Grade of C

**EDU 341 Middle Level Education - W 3 cr**

Philosophy, concepts, and issues of middle level education including the developmental stage of young adolescence, appropriate and responsive curricular, and meeting the physical, emotional, psychosocial, and cognitive needs of diverse learners.

Co-requisite: EDU 342, EDU 363, EDU 451

Pre-requisite: EDU 340 Minimum Grade of C and EDU 453 Minimum Grade of C or EDU 454 Minimum Grade of C or EDU 456 Minimum Grade of C or EDU 457 Minimum Grade of C

**EDU 342 Secondary Field Experience 1 TO 3 cr**

Supervised practice in teaching curriculum areas in middle and high school classroom settings during the semester in which block courses are taken.

Co-requisite: EDU 341, EDU 363, EDU 451

Pre-requisite: EDU 340 Minimum Grade of C and EDU 453 Minimum Grade of C or EDU 454 Minimum Grade of C or EDU 456 Minimum Grade of C or EDU 457 Minimum Grade of C

**EDU 345 Field Experience 1 TO 3 cr**

Supervised practice in teaching curriculum areas in the elementary or early childhood classroom setting during the semester in which sequence courses are taken.

Co-requisite: EDU 302, EDU 311, EDU 335, EDU 337, EDU 362

Pre-requisite: EDU 300 Minimum Grade of C and EDU 303 Minimum Grade of C and EDU 312 Minimum Grade of C and EDU 313 Minimum Grade of C and EDU 331 Minimum Grade of C and EDU 336 Minimum Grade of C

**EDU 346 K-6 Education 3 cr**

This course will introduce the roles of the teacher in working with children in the elementary grades.

**EDU 348 P-3 Education 3 cr**

This course will introduce the roles of the teacher in working with children during the early childhood years (preschool through 3rd grade)

**EDU 352 Literature for Adolescents 3 cr**

This course will introduce the roles of the teacher in working with children from pre-kindergarten through the primary grades. History, management, and parent education techniques are presented.

**EDU 354 Serving Students Severe Disabilities 3 cr**

Curriculum and methods for individuals who exhibit significant challenges in the areas of cognitive, motor, self care, communicative, and/or social behaviors. Emphasis is on physical management, class/individual scheduling, adapted aids and equipment, task analysis, and functional life skills.

**EDU 362 Behavior Management of Exceptional Child 3 cr**

Presentation of the principles and applications of behavioral modification, data collection procedures, and single-subject research designs as related to exceptional children and youth in special education environments.

Co-requisite: EDU 302, EDU 311, EDU 335, EDU 337, EDU 345

Pre-requisite: EDU 300 Minimum Grade of C and EDU 303 Minimum Grade of C and EDU 313 Minimum Grade of C and EDU 336 Minimum Grade of C and EDU 312 Minimum Grade of C and EDU 331 Minimum Grade of C

**EDU 363 Teaching Adaptive Curriculum Through Behavior/Classroom 3 cr**

An examination of regular and special education K-12 curricula, materials, and procedures. Specific emphasis will be placed on the selection, modification, and adaptation of curricula, materials, and procedures to meet the needs of individuals with learning and behavioral disabilities.

Pre-requisite: EDU 340 Minimum Grade of C

**EDU 372 Behavior Management of Exceptional Child 3 cr**

Presentation of the principles and applications of behavior analysis, data collection procedures, and single subject research designs as related to exceptional children and youth.

**EDU 373 Teaching Reading to Students with Disabilities 3 cr**

Introduces the student to the curriculum, teaching the methodologies and instructional activities and materials associated with effective and appropriate developmental and functional reading instruction for students with disabilities.

**EDU 398 P-3 Field Experience 3 cr**

Observation and supervised teaching in an early childhood classroom setting prior to Internship

Pre-requisite: EDU 348 Minimum Grade of C

**EDU 400 Education of Exceptional Children and Youth 3 cr**

Introduction to the field of exceptional children and youth, involving the study of various areas of exceptionality.

**EDU 410 Formal and Informal Assessment 3 cr**

Assesses developmental levels, academic and non-academic performance of exceptional individuals through the administration and interpretation of criterion-referenced instruments, and informal measures. Evaluation of classroom teaching and special education programs is also emphasized.

**EDU 429 Opening School Lab Experience 0 TO 1 cr**

Professional laboratory experiences of observation and participation for a two-week period at the opening of school. (May be taken twice.) Prerequisite: senior standing.

**EDU 430 K-6 Internship 3 TO 9 cr**

Observation and supervised teaching in elementary or early childhood settings with the opportunity for study and discussion of problems and issues encountered.

Co-requisite: EDU 495

Pre-requisite: EDU 301 Minimum Grade of C and EDU 302 Minimum Grade of C and EDU 311 Minimum Grade of C and EDU 312 Minimum Grade of C and EDU 331 Minimum Grade of C and EDU 335 Minimum Grade of C and EDU 337 Minimum Grade of C and EDU 345 Minimum Grade of C and PRAXIS-Teaching Reading CB 155( or PRAXIS-Teaching Reading 155 ) and PRAXIS-Prin of Learn/Teach K-6 145( or PRAXIS-Prin of Learn/Teach K-6 145 ) and PRAXIS-Read/Lang Arts Subtest 154( and PRAXIS-Mathematics Subtest 143 and PRAXIS-Social Studies Subtest 142 and PRAXIS-Science Subtest 144 ) or PRAXIS-Elem Ed-Read/Lang Arts 165( and PRAXIS-Elem Ed-Math Sub 157 and PRAXIS-Elem Ed-Soc Stu- Sub 142 and PRAXIS-Elem Ed-Science- Sub 144 ) or PRAXIS-Elem Ed Cont Knowledge 137( or PRAXIS-Elem Ed Cont Knowledge 137 )

**EDU 432 Impact Typ & Atyp Dev on Edu 3 cr**

An examination of typical child development and developmental characteristics of infants, toddlers, and young children with disabilities from the prenatal period through age eight. Characteristics of disabling conditions and their impact upon development are also discussed.

**EDU 433 Issues Edu Young Child w/Dis 3 cr**

This course prepares students to work with infants, toddlers, and young children with disabilities and their families. Topics covered include specific teaching and intervention techniques, special education laws and regulations, and service delivery models.

**EDU 451 Content Area Literacy 3 cr**

Methods and materials in the teaching of reading. Development of effective study and skills at the secondary level is stressed.

**EDU 453 Teaching Language Subjects 3 cr**

Assists the student in organizing materials and in developing methods of teaching language subjects in secondary schools

Co-requisite: EDU 341, EDU 342

Pre-requisite: EDU 340 Minimum Grade of C

**EDU 454 Teaching Mathematics 3 cr**

Assists the student in organizing materials and in developing methods of teaching mathematics in secondary schools.

Co-requisite: EDU 341, EDU 342

Pre-requisite: EDU 340 Minimum Grade of C

**EDU 456 Teaching Science 3 cr**

Assists the student in organizing materials and in developing methods of teaching science in secondary schools

Co-requisite: EDU 341, EDU 342

Pre-requisite: EDU 340 Minimum Grade of C

**EDU 457 Teaching Social Studies 3 cr**

Assists the student in organizing materials and in developing methods of teaching social studies in secondary schools

Co-requisite: EDU 341, EDU 342

Pre-requisite: EDU 340 Minimum Grade of C

**EDU 465 Student Teaching Secondary Sch 3 cr**

Observation and supervised teaching with opportunity for study and discussion of problems and issues encountered in the N-12 program. Students will be placed with a person holding a valid teaching certificate in the appropriate field.

Prerequisite: Appropriate methods course.

Pre-requisite: EDU 341 Minimum Grade of C

**EDU 466 Internship-Language Arts 3 TO 9 cr**

Observation and supervised teaching with opportunity for study and discussion of problems and issues encountered in the 6-12 program. Students will be placed with a person holding a Masters degree and a valid teaching certificate in the appropriate field.

Pre-requisite: EDU 341 Minimum Grade of C and EDU 453 Minimum Grade of B and PRAXIS-Eng Lang, Lit and Comp 151( or PRAXIS-Eng Lang Lit-Cont Knowl 151 or PRAXIS-Eng Lang Arts-Cont Know 147 )

**EDU 467 Internship - Social Studies 3 TO 9 cr**

Observation and supervised teaching with opportunity for study and discussion of problems and issues encountered in the N-12 program. Students will be placed with a person holding a valid teaching certificate in the appropriate field.

Pre-requisite: EDU 341 Minimum Grade of C and EDU 457 Minimum Grade of B and PRAXIS-Soc St Cont Knowledge 153 or PRAXIS-Soc Stud Cont Knowledge 153

**EDU 468 Internship - Science 3 TO 9 cr**

Observation and supervised teaching with opportunity for study and discussion of problems and issues encountered in the 6-12 program. Students will be placed with a person holding a Masters degree and a valid teaching certificate in the appropriate field.

Pre-requisite: EDU 341 Minimum Grade of C and EDU 456 Minimum Grade of B and PRAXIS-Gen Sci Cont Knowledge 147( or PRAXIS-Gen Science Cont Knowl 147 or PRAXIS-Chem Cont Knowledge 150 or PRAXIS-Chemistry Cont Knowl 150 or PRAXIS-Physics Cont Knowledge 138 or PRAXIS-Physics Cont Knowledge 138 or PRAXIS-Biology Cont Knowledge 143 or PRAXIS-Biology Cont Knowledge 143 )

**EDU 469 Internship - Math 3 TO 9 cr**

Observation and supervised teaching with opportunity for study and discussion of problems and issues encountered in the 6-12 program. Students will be placed with a person holding a Masters degree and a valid teaching certificate in the appropriate field.

Pre-requisite: EDU 341 Minimum Grade of C and EDU 454 Minimum Grade of B and PRAXIS-Math Cont Knowledge 126( or PRAXIS-Math Cont Knowledge 126 or PRAXIS-Math Cont Knowledge 145 )

**EDU 490 Special Topics - 3 cr**

Guided study of selected educational tasks (e.g. curriculum revision, classroom materials development, models of learning and teaching) and teaching problems and practices for improving student achievement. Not more than six hours may be earned in Special Topics courses.

**EDU 494 Directed Study and Research 1 TO 3 cr**

No more than six hours can be accepted for a Bachelor's Degree and Class B Certificate.

**EDU 495 K-6 Internship SPE 3 TO 9 cr**

Observation and supervised K-6 classroom teaching experience providing the opportunity to synthesize all previous instruction. This culminating activity provides opportunity for study and discussion of problems and issues encountered in the practicum situation.

Co-requisite: EDU 430

Pre-requisite: EDU 301 Minimum Grade of C and EDU 302 Minimum Grade of C and EDU 311 Minimum Grade of C and EDU 312 Minimum Grade of C and EDU 331 Minimum Grade of C and EDU 335 Minimum Grade of C and EDU 337 Minimum Grade of C and EDU 345 Minimum Grade of C and PRAXIS-Teaching Reading CB 155( or PRAXIS-Teaching Reading 155 ) and PRAXIS-Prin of Learn/Teach K-6 145( or PRAXIS-Prin of Learn/Teach K-6 145 ) and PRAXIS-Read/Lang Arts Subtest 154( and PRAXIS-Mathematics Subtest 143 and PRAXIS-Social Studies Subtest 142 and PRAXIS-Science Subtest 144 ) or PRAXIS-Elem Ed-Read/Lang Arts 165( and PRAXIS- Elem Ed-Math Sub 157 and PRAXIS- Elem Ed-Soc Stu- Sub 142 and PRAXIS- Elem Ed-Science- Sub 144 ) or PRAXIS- Elem Ed Cont Knowledge 137( or PRAXIS- Elem Ed Cont Knowledge 137 )

**EDU 496 Internship 6-12 9 cr**

Observation and supervised classroom teaching experience providing the opportunity to synthesize all previous instruction. This culminating activity provides opportunity for study and discussion of problems and issues encountered in the practicum situation.

Pre-requisite: EDU 372 Minimum Grade of C and EDU 363 Minimum Grade of C

**EDU 497 P-3 Internship 3 TO 9 cr**

Observation and supervised classroom teaching experience providing the opportunity to synthesize all previous instruction. This culminating activity provides opportunity for study and discussion of problems and issues encountered in the practicum situation.

Pre-requisite: EDU 302 Minimum Grade of C and EDU 311 Minimum Grade of C and EDU 312 Minimum Grade of C and EDU 331 Minimum Grade of C and EDU 335 Minimum Grade of C and EDU 337 Minimum Grade of C and EDU 345 Minimum Grade of C and EDU 430 Minimum Grade of C and EDU 495 Minimum Grade of C and PRAXIS- Elem Ed Cont Knowledge 137 or PRAXIS- Elem Ed Cont Knowledge 137 or PRAXIS-Early Child Cont Knowl 163 or PRAXIS- Early Child Cont Knowl 163 and PRAXIS-Prin of Learn/ Teach K-6 145 or PRAXIS-Prin of Learn/Teach K-6 145

**EDU 498 P-3 Internship 1 TO 3 cr**

Observation and supervised teaching experience providing the opportunity to synthesize all previous instruction. This culminating activity provides opportunity for study and discussion of problems and issues encountered in the practicum situation.

Pre-requisite: EDU 348 Minimum Grade of C and EDU 398 Minimum Grade of C

**EDU 499 Senior Honors Project - H 3 TO 6 cr**

Under the advice and guidance of a faculty mentor, honors students will identify and carry out a research project, relevant to the field of elementary/early childhood study, that will lead to a formal presentation at the annual Honors Student Colloquium. The senior project will be judged and graded by three faculty chaired by the honors mentor.

This course is required for Honors recognition and may be repeated for up to six hours. Prerequisite: Participant in honors program and junior level status.

**EDU 567 Multicultural Exp in Schools 3 cr**

In an increasingly diverse society, teachers must be able to work with students with form a variety of backgrounds, some quite different from teachers' own cultural backgrounds. This course responds to the growing need for better training for teachers in how to work with a diverse population, increase academic achievement, and prepare students from a global workplace.

**EDU 640 Instructional Development 3 cr**

Preparation of a modular program of instruction which incorporates all elements of the instructional-design process.

**EDU 650 Instructional Techniques 3 cr****EDU 692 Research Proj Seminar 3 cr**

Survey of both current and classic research in education. Students will identify a research problem of significance in their area of specialization and develop a strategy or research design to solve this problem.

Pre-requisite: IDE 510 Minimum Grade of B

## Educational Foundations (EDF)

**EDF 207 Law and Politics in Educ 3 cr**

Examines the legal and political considerations that affect education in America. Emphasis will be placed on the practical applications of these legal and political considerations to the operation of schools.

**EDF 211 Clinical and Lab Experience 0 cr**

Provides relevant clinical and laboratory experiences directly related to the several academic disciplines that constitute the social foundations of education. Must be taken with EDF 315. Requires a special fee.

Co-requisite: EDF 315

**EDF 290 Sp Top - 1 TO 3 cr**

Varies in content in one disciplinary area of educational foundations (e.g., history of education or anthropology of education) or in an interdisciplinary area (e.g., multicultural education). May be repeated for credit when course content varies.

**EDF 300 Gender & International Devel 3 cr**

This course introduces concepts in gender, international development and global education through an examination and critique gender issues in developing nations and international efforts to address these concerns from the 1970's to the present with particular emphasis on the context of women. Includes formal and nonformal education of women, cultural differences (reproduction, marriage, male/female hierarchies) affecting life opportunities, rural vs. urban issues, politics, social class influences, international movements, and organizations and efforts to empower girls and women to advance their lives within the context of gendered social roles. Analysis of issues through various lenses including the Gender Equality Continuum. Students will interact directly with individuals in the field via videoconferencing and other modes of electronic communication. Assessment will center on a guided project and experience specific to individual student interests.

**EDF 310 International Develop & Educ 3 cr**

A study of international development and education in global and gender contexts that includes an examination of policy, structure, sociological issues (gender, religion, social class), and formal, adult and nonformal education. Major agency providers in the field and employment opportunities in the public and private sectors will be reviewed. Students will interact with individuals in the field through videoconferencing, face-to-face dialogues and other electronic interactions. Assessment will center on a guided project and experience specific to individual student interests. This course helps prepare students for a summer study abroad service learning experience in a developing country.

**EDF 315 Education in Diverse Society 3 cr**

Focused on the effects of diversity on teaching and learning this course is a study of the social context of schooling from historical, philosophical, sociological, political, and comparative perspectives.

**EDF 320 Compar & Intl. Gender & Fam 3 cr**

The content will focus on comparative and international gender and family issues regarding non-formal adult health education and services. The student will do readings in this content area and compare human rights related to gender and family roles, woman's health issues and family planning services across the nations, how these relate to life opportunities for women and men. Programs providing related services and education will be analyzed. Students will dialogue with individual working in the field to gain a deeper understanding of contemporary real-world endeavors. Assessment will center on a guided project and experience specific to individual student interests and includes a service learning component at a local agency or an agency serving a developing country.

**EDF 325 Global Gender Perpec in Ed 3 cr**

An examination of gender and race, class, religion, language and ethnicity in formal and nonformal education in US and global contexts that develops cultural competencies and prepares students with an interest in international development/education careers. Students will interact directly with professionals in the field from various cultural backgrounds via videoconferencing and other modes of electronic communication. Assessment will center on weekly applications of course topics to real world situations and guided project or service learning specific to individual student interests.

**EDF 330 Amer Ed Comp Global Framework 3 cr**

An overview of education in its three aspects: formal, non-formal and informal. It will include the history, philosophy, sociology, policy and structure of the American education in comparison with other countries' systems. A regional approach will include northern Africa, the Indian Sub-continent, Asia, Pacific Islands and Australia, Central America and the Caribbean, South America, Canada and Europe. Assessment will center on weekly applications of course topics to real world situations and a guided project or service learning experience specific to individual student interests.

**EDF 335 Intern. Devel & Global Ed 3 cr**

A study of current problems and issues in non-formal, informal and all levels of formal education. Includes poverty, inequality and human rights and related structures, policies and programs. Includes poverty, inequality and human rights and related structures, policies and programs. Major issue areas include health, gender, rural development, agriculture, civil society, economics, sustainability, politics and reform. Content may vary according to currently important issues. Assessment will center on weekly applications of course topics to real world situations and a guided project or service learning experience specific to individual student interests.

**EDF 490 Sp Top - 1 TO 3 cr**

Varies in content in one disciplinary area of educational foundations (e.g., history of education or anthropology of education) or in an interdisciplinary area (e.g., multicultural education). May be repeated for credit when course content varies.

**EDF 494 Dir St - 1 TO 3 cr**

Directed study. Prerequisite: Permission of Department. (No more than two directed studies can be counted toward the Bachelor's Degree and Class B Certificate.)

**EDF 501 Cult Found of Education 3 cr**

A presentation and investigation of basic concepts, issues, and principles of American education within a social scientific framework; particular emphasis is on multicultural concerns and strategies.

**EDF 515 Multicultural Education 3 cr**

In a multicultural society, teachers must be able to work with students from a variety of backgrounds-some quite differently from the teachers' own. Four cultural factors are the focus of this course: social class, race, gender, and ethnicity. Teachers sensitive to these factors can prepare students to survive and function in the dominant culture without sacrificing pride in the students' own cultures.

**EDF 590 Sp Top - 1 TO 3 cr**

Course may vary in content or may be supervised study in one disciplinary area of educational foundations (e.g., history of education or anthropology of education) or in an interdisciplinary area (e.g., multicultural education). May be repeated for credit when course content varies.

**EDF 594 Dir St and Research 1 TO 3 cr**

Students explore problems and issues of special interest or significance in educational foundations. Not more than three semester hours of any departmental 594 courses can be accepted toward a degree program.

**EDF 610 History of American Educ 3 cr**

Designed to give the student an historical perspective on important issues in American education. Among these issues are the influence of class, race, gender, ethnicity, and exceptionality on educational attainment; the control of public education; the debate over public schools versus private schools; the status and work of teachers; and the role of education in social change. The student will relate the past to the present in analyzing these issues.

**EDF 615 Sem in Ed Policy Studies 3 cr**

This course offers advanced graduate students the opportunity to examine educational policy and policy-making from sociocultural, political, historical, philosophical, and comparative and international perspectives. After analyzing a common core of issues, students will investigate a topic of their choice using research skills from the educational foundations disciplines.

**EDF 620 Compar-Internat Educ 3 cr**

Comparative and International Education will examine different world cultures and nations and their educational systems. The course will explore the various outcomes of education (achievement, status, employment, living conditions) and will examine the world crisis in education. In all, a study of education from a world-wide perspective will help illuminate the educational purposes, programs, and achievements of schools in the United States.

**EDF 690 Sp Top - 1 TO 3 cr**

Course may vary in content or may be supervised study in one disciplinary area of educational foundations (e.g., history of education or anthropology of education) or in an interdisciplinary area (e.g., multicultural education). May be repeated for credit when course content varies.

**EDF 694 Dir St and Research 1 TO 3 cr**

Exploration of problems and issues of special interest or significance for advanced students. No more than three semester hours of any departmental 694 courses can be accepted toward a degree.

## Educational Leadership (EDL)

**EDL 595A Internship A 1 cr**

The internship is a supervised learning experience in several work settings which simulates the reality of Education Leadership work situations. The internship provides an opportunity to apply the theories and concepts learned during the student's graduate program. Students are expected to complete no less than 50 hours for each semester hour earned.

Co-requisite: EDL 513

**EDL 595B Internship B 1 cr**

The internship is a supervised learning experience in several work settings which simulates the reality of Educational Leadership work situations. The internship provides an opportunity to apply the theories and concepts learned during the student's graduate program. Students are expected to complete no less than 50 hours for each semester hour earned.

Co-requisite: EDL 517

**EDL 595C Internship C 1 cr**

The internship is a supervised learning experience in several work settings which simulates the reality of Educational Leadership work situations. The internship provides an opportunity to apply the theories and concepts learned during the student's graduate program. Students are expected to complete no less than 50 hours for each semester hour earned.

Co-requisite: EDL 525

- EDL 595D Internship D** 1 cr  
The internship is a supervised learning experience in several work settings which simulates the reality of Educational Leadership work situations. The internship provides an opportunity to apply the theories and concepts learned during the student's graduate program. Students are expected to complete no less than 50 hours for each semester hour earned.  
Co-requisite: EDL 550
- EDL 595E Internship E** 1 cr  
The internship is a supervised learning experience in several work settings which simulates the reality of Educational Leadership work situations. The internship provides an opportunity to apply the theories and concepts learned during the student's graduate program. Students are expected to complete no less than 50 hours for each semester hour earned.  
Co-requisite: EDL 557
- EDL 595F Internship F - Related Topics** 1 cr  
The internship is a supervised learning experience in several work settings which simulates the reality of Educational Leadership work situations. The internship provides an opportunity to apply the theories and concepts learned during the student's graduate program. Students are expected to complete no less than 50 hours for each semester hour earned.
- EDL 699A Research Project** 1 TO 3 cr  
A supervised field project, study, or investigation in Educational Leadership. The student will conduct an investigation and apply concepts and skills learned during the sixth-year program.  
Pre-requisite: IDE 692 Minimum Grade of B or EDU 692 Minimum Grade of B
- EDL 699B Research Project** 1 TO 3 cr  
A supervised field project, study, or investigation in Educational Leadership. The student will conduct an investigation and apply concepts and skills learned during the sixth-year program.  
Pre-requisite: IDE 692 Minimum Grade of B or EDU 692 Minimum Grade of B
- EDL 699C Research Project** 1 TO 3 cr  
A supervised field project, study, or investigation in Educational Leadership. The student will conduct an investigation and apply concepts and skills learned during the sixth-year program.  
Pre-requisite: IDE 692 Minimum Grade of B or EDU 692 Minimum Grade of B
- EDL 798A Research Project** 1 TO 3 cr  
A supervised field project, study, or investigation in Educational Leadership. The student will conduct an investigation and apply concepts and skills learned during the sixth-year program.  
Pre-requisite: IDE 792 Minimum Grade of B
- EDL 798B Research Project** 1 TO 3 cr  
A supervised field project, study, or investigation in Educational Leadership. The student will conduct an investigation and apply concepts and skills learned during the sixth-year program.  
Pre-requisite: IDE 792 Minimum Grade of B
- EDL 798C Research Project** 1 TO 3 cr  
A supervised field project, study, or investigation in Educational Leadership. The student will conduct an investigation and apply concepts and skills learned during the sixth-year program.  
Pre-requisite: IDE 792 Minimum Grade of B
- EDL 410 Leadership Development** 1 cr  
This course is for undergraduates who are, or aspire to be, leaders. Faculty from throughout the University will direct weekly class sessions. Requires permission of the Dean of Students.
- EDL 501 Theories Instructional Leadership** 3 cr  
The need for instructional leaders to understand and be able to operate within the larger context of community effect on opportunities for all students is addressed. Cooperation among schools, the district, parents, and the larger community as essential to the success of instructional leaders and students and ethical practices are emphasized.
- EDL 502 Data-Driven Instructional Leadership** 3 cr  
This course stresses the engagement of the school community in developing and maintaining a shared vision; planning effectively; using critical thinking and problem-solving techniques; collecting, analyzing, and interpreting data; allocation of resources; and evaluation of results for the purpose of continuous school improvement.
- EDL 503 Supervision & Prof Development** 3 cr  
This course addresses how the instructional leader recruits, selects, organizes, evaluates, and mentors faculty and staff to accomplish school and system goals.
- EDL 504 Ethical & Legal Dimensions of School Leadership** 3 cr  
Students completing this course will demonstrate understanding of the legal system of schools. Students will be able to relate constitutional, federal, state, and local requirements as they concern students, employees, teachers, and instructional program administration. The student will demonstrate an understanding of the concepts of honesty, integrity, and fairness.
- EDL 505 Business Management of Learning Organizations** 3 cr  
This course explores leadership skills related to group dynamics, problem identification, accountability, diversity, economic levels, and their relationship to financing schools. Internal and external public relations and political factors which impact the funding of school will also be presented.

- EDL 506 Teaching and Learning Leaders 3 cr**  
 Student will acquire the knowledge to ensure that decisions about curricular, instructional strategies, assessment and professional development are based on sound research, best practices, and other contextual information needed to align the curricula with student needs.
- EDL 510 Adult and Continuing Educ 3 cr**  
 Presents the historical development of adult and continuing education in western society, various philosophical approaches, and a survey of the importance of these credit and non-credit activities.
- EDL 512 Community Development 3 cr**  
 Presents the field of community development, including basic terminology, concepts, methods and literature. Purposes are to present conceptual foundations of community development, provide some experiences in practical application, and lay foundations for further study and practice in the field.
- EDL 513 Instr Lead and Curr Dev 3 cr**  
 Students in this course will learn to participate in the process of instructional improvement, adaptation to the needs of children and local communities, and instructional leadership within schools. The course will include staff development, instructional evaluation and assessment, school effectiveness concepts, government requirements, cultural diversity, curriculum development, problem solving, small group leadership, conflict management, empowerment, professional ethics, and other interpersonal skills applied to instructional development situations. Co-requisite: EDL 595A
- EDL 517 Education Law 3 cr**  
 Students completing this course will demonstrate understanding of the legal system of schools. Students will be able to relate to constitutional, federal, state, and local requirements as they concern students, employees, teachers, and instructional program administration. Students will understand statutory rights of certified and non-certified personnel in Alabama, including due process, tenure, transfer, suspension, and termination, and will be able to investigate legal matters affecting the administration of schools. Co-requisite: EDL 595B
- EDL 525 School Finance 3 cr**  
 This course explores leadership skills related to group dynamics, problem identification, accountability, diversity, economic levels, and their relationship to financing schools. Internal and external public relations and political factors which impact the funding of school will also be discussed. Fiscal management, including the Alabama Local School Accounting and Reporting system, will be analyzed. Co-requisite: EDL 595C
- EDL 530 School Dist Leadership 3 cr**  
 This course describes the unique forces that shape the role and functions of the school superintendent. The management of conflict is explored as well as the management of all aspects of this school system. The concept of the administrative team is also explored and examined.
- EDL 545 Secondary School Leadership 3 cr**  
 Provides understandings and skills in the leadership and management of secondary schools. Emphases are placed upon the administrator's role in staff and student personnel administration, program development, and building operations.
- EDL 546 Elem School Leadership 3 cr**  
 Provides an understanding of the organizational and various other characteristics of a good elementary school with emphasis on leadership.
- EDL 549 Practicum in Educ Supv 3 cr**  
 The practicum is a supervised learning experience in several settings which simulates the work situations of educational supervision. An opportunity is provided to apply the theories and concepts learned during the student's graduate program.
- EDL 550 Prin of School Lead 3 cr**  
 This course provides understanding and skills in the leadership and management of schools, including elements of effective classroom management, monitoring student services, and school and community relations. Management skills associated with school facilities, transportation, and student records will be studied.
- EDL 557 Supervisory Leadership 3 cr**  
 Students completing this course will learn to work with teachers in improving classroom instruction. Students will demonstrate the ability to collect classroom information, including assessment and evaluative data; coordinate student service needs; direct teachers using leadership, motivational techniques, professional ethics, and school management; and use techniques such as personnel selection, stress management, conflict management, scheduling, and research in adapting instruction to the changing needs of the community. Co-requisite: EDL 595E
- EDL 561 Dev of Postsecondary Education 3 cr**  
 This course provides an overview of the organization, development and characteristics of postsecondary education.
- EDL 562 Student in Higher Education 3 cr**  
 This course focuses on the demographics and characteristics of the American college student today. Development theories applicable to the diverse population of students (e.g., race, ethnicity, age, gender, sexual orientation, disability) are introduced and examined.

- EDL 573 Educational Gerontology** 3 cr  
Will introduce the students to the organization and administration of programs of instruction of and about older persons, instruction of general or specific audiences about aging, and instruction of professionals working with or on the behalf of older persons.
- EDL 575 Org and Plan Postsec Educ** 3 cr  
Designed as an introduction to and an analysis of organizational and administrative features of postsecondary education.
- EDL 578 Law and Postsecondary Educ** 3 cr  
Explores court decisions and federal and state laws relating to governance, student rights, and tort liability in postsecondary education.
- EDL 590 Sp Top -** 1 TO 3 cr  
Guided supervision in the identification and completion of educational tasks, such as program design, program revision, self study for accreditation visitation, supervision in the organization, and application of selected learning activities to acquire and enhance leadership skills.
- EDL 594 Dir St and Research** 1 TO 3 cr  
Exploration of problems and issues of special interest or significance in Educational Leadership. Not more than three semester hours of any departmental 594 courses can be accepted toward a degree.
- EDL 595 Internship** 1 TO 6 cr  
The internship is a supervised learning experience in several work settings which simulates the reality of Educational Leadership work situations. The internship provides an opportunity to apply the theories and concepts learned during the student's graduate program. Students are expected to complete no less than 50 hours for each semester hour earned.
- EDL 598 Residency -** 1 TO 6 cr  
The internship is designed to place candidates in the cooperating school during critical times of instructional planning. The residency allows interns to experience leadership in as many of the Alabama Leadership Standard indicators as possible. Candidates shall prepare and maintain a comprehensive portfolio which indicates the level of experiences and knowledge gained in instructional leadership during the intern experiences.
- EDL 603 Curr Prob and Iss Ed Adm** 3 cr  
Explores problems and issues at the federal, state, and local levels facing the administration and supervision of American educational institutions. Particular emphasis is on decision making affecting education.
- EDL 607 Lead Schs/Multicultural Soc** 3 cr  
Students will examine the role of educational leaders in schools with diverse student populations and study strategies to address race, class and gender inequities that exist in schools.
- EDL 611 Human Relations Skills** 3 cr  
Designed to assess and improve the student's level of competency in communication and group leadership skills, knowledge of socio-cultural influences and differences, and understanding of the developmental characteristics of human beings.
- EDL 621 Sem Prog Curriculum Dev** 3 cr  
Designed to assess and improve the student's level of competency in program development skills, instructional strategies, systems analysis, and change innovation.
- EDL 631 Sem Ed Management Skills** 3 cr  
Designed to assess and improve the student's knowledge of decision-making styles, problem-solving processes, leadership skills, implementation of organizational change, and physical environments which promote productivity. Additionally, when appropriate to the candidate's expected leadership position, current knowledge of law, finance, plant management, and professional negotiations will be stressed.
- EDL 689 Problem Analysis Project** 3 cr  
A supervised field project, study, or investigation in Educational Leadership will be completed. The student will conduct an investigation and apply concepts and skills learning during the sixth-year program.
- EDL 690 Sp Top -** 1 TO 3 cr  
May be a content-varying course or may be guided supervision in the identification and completion of educational tasks as well as supervision in the organization and application of selected learning activities to acquire and enhance leadership skills. May be repeated for credit when course content varies.
- EDL 694 Dir St and Research** 1 TO 3 cr  
Students explore problems and issues of special interest or significance to advanced students. Not more than three semester hours of any department 694 courses can be accepted toward a degree.
- EDL 695 Mentoring Leadership** 3 cr  
This course is a learning experience in mentoring relationships. The course provides an opportunity to apply the theories and concepts learned during the student's advanced graduate studies. The student will learn mentoring skills and serve as a mentor for students interested in educational administration or new to the field of administration.
- EDL 699 Research Project** 1 TO 3 cr  
A supervised field project, study, or investigation in Educational Leadership. The student will conduct an investigation and apply concepts and skills learned during the sixth-year program.  
Pre-requisite: IDE 692 Minimum Grade of B or EDU 692 Minimum Grade of B

**EDL 701 Adv Organizational Theory 3 cr**

An in-depth exploration of organizing in educational settings. Organizational theories and models are examined, as is their application to educational settings, particularly when challenges or changes are introduced.

**EDL 702 School Finance 3 cr**

General study of finance at local, state, and federal basis. Include principles of taxation, the concepts of equity and adequacy, acceptable practices in securing and administering school funds, and acceptable accounting and business procedures. Explores the unique characteristics of the Alabama Tax structure, its history, and impact on the funding of education.

**EDL 703 Adv School Leadership 3 cr**

This course explores research-based practices of effective leadership in P-12 education settings. The role of mission and vision in the leadership of an organization, decision-making models, and leadership styles will be explored.

**EDL 720 Global Education 3 cr**

This course focuses on similarities and differences in the ways various countries educate their citizens from early childhood to adult learners.

**EDL 732 Ethics and Law for Ed Leaders 3 cr**

An examination of ethical and legal issues present in educational settings, including primary, secondary, and postsecondary education.

**EDL 799 Research/Dissertation 1 TO 12 cr**

Directed dissertation research in the field of educational leadership. Faculty advisor approval required.

## Educational Media (EDM)

**EDM 595A Internship A 1 cr**

The internship is a supervised learning experience in a work setting similar to that in which a media specialist eventually will be employed.

Pre-requisite: EDM 581 Minimum Grade of B

**EDM 595B Internship B 1 cr**

The internship is a supervised learning experience in a work setting similar to that in which a media specialist eventually will be employed.

Pre-requisite: EDM 580 Minimum Grade of B

**EDM 595C Internship C 1 cr**

The internship is a supervised learning experience in a work setting similar to that in which a media specialist eventually will be employed.

Pre-requisite: EDM 583 Minimum Grade of B

**EDM 310 Microcomputing Systems 3 cr**

Basic understanding of current and emerging technologies for instructional purposes. Requires a special fee.

**EDM 312 Ed Tech - 3 cr**

Application of current educational technology in various instructional environments. Laboratory experience is given with selected software programs. May be repeated when technological application changes.

**EDM 385 Methods Instr Comm 3 cr**

Application of current concepts in communication and instructional system design to elementary and secondary teaching. Operation of basic mediaware and overview of literature related to media use are stressed.

**EDM 430 Workshop in Educ Media 1 TO 9 cr**

In-depth study of operational experience in current trends and techniques in educational media research.

**EDM 482 Prep Instr Materials 3 cr**

Basic elements in the planning preparation, and evaluation of teacher-produced instructional materials.

**EDM 490 Sp Top - 3 cr**

Investigation of contemporary topics of interest in Educational Media. Requires permission of the department.

**EDM 494 Dir St - 1 TO 3 cr**

Directed study in Educational Media. No more than two directed studies can count toward the Bachelor's degree. Required departmental approval.

**EDM 510 Microcomputing Systems in Ed 3 cr**

Application of current and emerging technologies that support and enhance instruction and can be used to improve student achievement.

**EDM 520 Research in Ed Tech 3 cr**

Introduction to history and theories of computer use in education.

**EDM 530 Workshop in Ed Media 1 TO 9 cr**

In-depth study and operational experience in current trends and techniques in educational media research.

**EDM 533 Curriculum Media for Children 3 cr**

This course explores media used for learning and enjoyment with children in preschool through grade eight. Other topics include: the professional roles and responsibilities of a collection developer, the influence of child development and curriculum on collection development, an overview of the marketplace, strategies to encourage teachers to use media center materials in teaching, and related research.

**EDM 552 Curr Media for Young Adults 3 cr**

This course initiates or extends a student's knowledge of how to identify, select, and use library media resources for students in grades 6 through 12. Other topics include: the role of a library media specialist in establishing and maintaining a collection of resources; steps that can be taken to encourage students and teachers to use the collection; related research; and ways professionals can keep abreast of the latest knowledge, practices, and resources.

- EDM 580 Information Literacy** 3 cr  
This course focuses on the role of the library media specialist in teaching students and instructional staff how to select, evaluate, and use information from print, non-print, and online sources. Emphasis is placed on information access, retrieval, and interpretation; advanced research techniques; copyright laws; and lessons and projects that utilize research information.
- EDM 581 Media Center Management** 3 cr  
This course covers the procedures and routines for effective media center management, including acquiring, organizing, classifying, cataloging, maintaining, and inventorying a relevant collection. Other topics include: selecting resources to support the total curriculum and budget, responding to the needs of a school's demographic population, assisting students and teachers in the application of information skills, and applying the fundamentals of library design to achieve an effective environment for learning and leisure use.
- EDM 582 Prod of Curriculum Media** 3 cr  
Provides instruction in the elements of planning, preparation and evaluation of professional circular materials for group and individual instruction.  
Pre-requisite: EDM 510 Minimum Grade of B or EDM 520 Minimum Grade of B
- EDM 583 Library Media Programs** 3 cr  
This course covers the professional responsibilities for planning, implementing, and evaluating a library media program that serves a school program. Emphasis is placed on curriculum, leadership, environment, teaching and learning styles, a planning model, collaboration, staff development, program administration and evaluation activities, and ways in which research can be used to help shape an effective program.
- EDM 584 Educational Technology Design** 1 TO 3 cr  
Design and evaluation of information technology hardware, software, and networked information resources that support classroom pedagogy, educational administrative services, and student learning.  
Pre-requisite: EDM 520 Minimum Grade of B and ISD 581 Minimum Grade of B
- EDM 585 Admin Educ Media Center** 3 cr  
General practices and procedures for establishing, organizing and operating the media center. Students submit plans for hypothetical or actual situations.
- EDM 590 Sp Top -** 3 cr  
Presents topics of contemporary interest in the area of Educational Media.
- EDM 591 Trends and Issues in Ed Tech** 3 cr  
Students will investigate current research as well as discuss emerging trends and developmental issues in the fields of educational media and instructional technology and their use as a pedagogical tool in P-12 schools.  
Pre-requisite: EDM 510 Minimum Grade of B or ISD 581 Minimum Grade of B
- EDM 594 Dir St and Research -** 1 TO 3 cr  
Students explore problems and issues of special interest or significance in Educational Media. Not more than three semester hours may be accepted toward degree programs.
- EDM 595 Internship -** 1 TO 9 cr  
The internship is a supervised learning experience in a work setting similar to that in which a media specialist eventually will be employed. Departmental approval is required.
- EDM 599 Thesis** 1 TO 9 cr  
A student selects a project, study or investigation related to the area of specialization in Educational Media. The project forms a basis for the thesis. A thesis committee provides direction during the investigation and during the writing of the thesis.
- EDM 610 Adv Prod Curric Media** 3 cr  
The planning, design and preparation of photographic and audio instructional materials will form the basis of comprehensive, sophisticated, software systems.
- EDM 685 Administering Ed Media Center** 3 cr  
Practices and procedures for administering the educational media center.
- EDM 689 Info Storage and Retrieval** 3 cr  
Examination and application of computer systems to school library media centers.
- EDM 690 Sp Top -** 3 cr  
Presents topics of contemporary interest in the area of Educational Media.
- EDM 696 Adv Ref and Selection Resource** 3 cr  
Bibliographic organization and reference use of professional resources in education, including governmental documents, publications of educational associations, professional journals and indices, research reports and computerized bibliographies.
- EDM 698 Advanced Cataloging** 3 cr  
Modern trends in cataloging with emphasis on standards for cataloging and educational media.
- EDM 699 Research Project** 3 cr  
Provides an opportunity to synthesize and apply the various program components in a selected instructional setting. May be repeated for a total of 6 semester hours.

## Educational Psychology (EPY)

- EPY 251 Human Growth and Development 3 cr**  
A study of the physical, mental, social and emotional development of young people from conception to late adolescence.
- EPY 315 The Adolescent in School 3 cr**  
Assists future educators to understand adolescent development and behavior of students in the middle and high schools. Issues and problems include the school's role in the social, emotional, and intellectual development of middle and secondary school students from diverse multicultural backgrounds; student-teacher and peer relationships; and the academic and vocational planning process.
- EPY 351 Human Growth & Development 3 cr**  
A study of the physical, mental, social and emotional development of young people from conception to late adolescence.
- EPY 355 Eval of Teaching-Learning 3 cr**  
The application of formative and summative evaluative concepts in building and interpreting tests in the educational setting.
- EPY 455 Eval of Teaching-Learning - W 3 cr**  
The application of formative and summative evaluative concepts in building and interpreting tests in the educational setting.
- EPY 490 Sp Top - 3 cr**  
Study of a significant topic, theory, model or problem in behavioral studies. May be repeated once for credit when content varies.
- EPY 494 Directed Study 1 TO 3 cr**  
Directed individual study and research. Consent of department chair is required. (No more than two directed studies can be counted toward the Bachelor's degree and Class B Certificate).
- EPY 502 Psy Prin Learning 3 cr**  
Psychology of learning as it pertains to education. Emphasis is on both the practical application of learning principles in educational and training classroom situations and theories of learning.
- EPY 521 Human Dev and Behavior 3 cr**  
A study of the crucial developmental principles of human development and behavior focusing on: developmental tasks over the life span; growth patterns of the diverse subcultures emphasizing attitudes, values, and learning styles; family, school, and community impact on people of all ages living and growing in a multicultural society.
- EPY 525 Assessment & Research in Educ 3 cr**  
This course is offered as part of the Alternative Masters Degree in Education. Upon completion of the course, students will be able to construct, evaluate, administer, and interpret classroom and school-related assessment. In addition, students will be prepared to be effective consumers of research reports, writings, and results in professional literature in their field.
- EPY 555 Tests-Measurement and Eval 3 cr**  
Understanding and interpreting the meaning of test scores. Technical qualities desired in a test. Techniques for obtaining information about clients and/or students. Using this information in counseling, consulting, and teaching. Cultural bias in tests. Problems of testing and obtaining information about clients and/or students with diverse backgrounds.
- EPY 556 Ed Testing - Wechsler Scales 3 cr**  
Includes basic theories of intelligence, basic concepts and principles of intelligence testing, extensive practice in administering, scoring and interpreting the Wechsler Adult Intelligence Scale, the Wechsler intelligence Scale for Children and the Wechsler Preschool and Primary Scales of Intelligence in a wide variety of educational settings. Pre-requisite: EPY 555 Minimum Grade of B
- EPY 557 Ind Intel Test -Stanford-Binet 3 cr**  
Includes basic theories of intelligence, basic concepts and principles of intelligence testing, extensive practice in administering, scoring and interpreting the Stanford-Binet Scale in a variety of educational settings. Competencies in consulting with professional personnel and with parents will be emphasized. Pre-requisite: EPY 555 Minimum Grade of B
- EPY 558 Ed Testing - Kaufman Scales 3 cr**  
The Kaufman Assessment Battery for Children and the Kaufman Adolescent and Adult Scale are the basic instruments used for extensive practice in administering, scoring, and interpretation of intelligence. The various theories of intelligence, especially those of Horn and Cattell, Luria, Sperry and Neisser are emphasized. Pre-requisite: EPY 555 Minimum Grade of B
- EPY 590 Sp Top - 3 cr**  
Guided supervision in the completion of learning tasks in educational psychology such as program design and revision, study of a significant topic, theory, model, and supervision of selected learning activities to acquire specific counseling and testing skills.
- EPY 594 Dir St and Research 1 TO 3 cr**  
Students explore through directed study of problems and issues of special interest or significance in Educational Psychology. Not more than three semester hours of any departmental 594 courses can be accepted toward a degree program.

**EPY 602 Advanced Theories of Learning 3 cr**

A study of the major psychological theories, models, research and principles that apply to the teaching and learning process. Special attention will be given to cognitivist approaches.

Pre-requisite: EPY 502 Minimum Grade of B

**EPY 610 Indiv Diff Among Learners 3 cr**

Examination of individual and developmental differences as related to learning, performance and behavior. Intelligence attitudes, cognitive and learning styles, anxiety, prior knowledge, and locus of control are among the topics discussed. Models and methods for using learner characteristics in instructional design, teaching practices, and research are considered.

**Electrical Engineering (EE)****EE 220 Circuit Analysis I 3 cr**

Resistive networks with independent and dependent sources: Ohm's law; Kirchhoff's law; nodal and loop analysis; network theorems; energy storage elements (capacitors and inductors); operational amplifiers; steady state AC analysis; and introduction to PSpice. Fee.

Pre-requisite: (MA 125 Minimum Grade of D or MA 132 Minimum Grade of D)

**EE 223 Network Analysis 3 cr**

Transient analysis of RLC circuits; Three-phase systems; power-factor correction in three-phase power systems; magnetically coupled networks; Operational amplifiers; network frequency response functions and resonance; Fourier series.

Pre-requisite: EE 220 Minimum Grade of C and MA 227 Minimum Grade of D and MA 238 Minimum Grade of D

**EE 227 Circuits and Devices Lab 1 cr**

Introduction to electrical laboratory equipment and instrumentation; analog and digital meters, oscilloscopes, bridges, power supplies, function generators. Measurement of voltage, current and power in DC networks and in single-phase and three-phase AC networks. Verification of Kirchoff's laws. Measurement of resistance, capacitance, and inductance. Corequisite: EE 223 and credit for or concurrent registration in EH102. Fee.

Pre-requisite: EE 223 Minimum Grade of D and (EH 102 Minimum Grade of D or EH 105 Minimum Grade of D)

**EE 263 Digital Logic Design 3 cr**

Number systems, introduction to basic logic circuits, analysis and design of combinational and sequential logic circuits, HDL based logic circuit simulation and design. Fee.

Pre-requisite: CIS 210 Minimum Grade of C and EE 220 Minimum Grade of C

**EE 264 Microprocessor Sys-Interfacing 3 cr**

Small computer organization, assembly and machine level programming, microprocessor architectures and instruction sets, microprocessor and microcontroller system design, and microprocessor based peripheral interfacing.

Pre-requisite: EE 263 Minimum Grade of D or CSC 228 Minimum Grade of D or CSC 228 Minimum Grade of D

**EE 268 Digital Logic Design Lab 1 cr**

A series of digital logic circuit experiments and simulations using TTL/CMOS integrated circuits designed to reinforce the material presented in EE 263. Design projects include standard SSI and MSI digital circuit based simulation and experiments. Fee.

Pre-requisite: EE 263 Minimum Grade of D and EE 227 Minimum Grade of D or CSC 228 Minimum Grade of D or CSC 228 Minimum Grade of D

**EE 302 Computer Methods in EE - CpE 1 cr**

Introduction to the use of computer softwares such as MATHCAD/ MATLAB and PSpice/ ELECTRONIC WORKBENCH for the analysis of engineering related problems and the solution of electric/ electronic circuits.

Pre-requisite: EE 223 Minimum Grade of C and EE 263 Minimum Grade of C

**EE 321 Signals, Systems & Transforms 3 cr**

Modeling of analog and discrete-time signals and systems, time domain analysis, Fourier series, continuous and discrete time Fourier transforms and applications, sampling, z-transform, state variables, analysis of signals and systems and basic filter design, filter implementation using MatLab. Fee.

Pre-requisite: EE 223 Minimum Grade of D and MA 238 Minimum Grade of D

**EE 322 Prob, Rand Sigs & Stat Anlys 3 cr**

Discrete and continuous probability distributions; random variables; Bernoulli trials; hypothesis testing; confidence intervals; Anova multiple comparisons; Bayes' theorem; estimation; sampling; random processes and random signals in linear systems. Probability applications in computer and electrical engineering. Fee.

Pre-requisite: (MA 238 Minimum Grade of D or MA 338 Minimum Grade of D) and EE 321 Minimum Grade of D

**EE 328 Feedback Control Systems 3 cr**

Review of the Laplace Transform. Transfer functions; block diagrams; signal-flow graphs and Mason's Gain Formula. Introduction to the state-space representation. Stability of feedback control systems; Routh-Hurwitz criterion; root-locus technique and the Nyquist criterion. Bode plots; gain and phase margins. PI, PD and PID controller design.

Introduction to the use of Matlab for analysis and design. Pre-requisite: EE 321 Minimum Grade of D

- EE 331 Physical Electronics** 3 cr  
Introduction to quantum concepts; particles in one dimensional potential well; tunneling. Silicon band structure, electrons and holes. Drift and diffusion current density; band bending; Einstein diffusion coefficient; recombination/generation. The pn junction; step and linear junctions; depletion layer. I-V characteristics of a pn junction and steady-state carrier concentrations at junctions. Bipolar junction transistor fundamentals; pnp and npn types; common emitter configuration, biasing and gain. Fee. Pre-requisite: MA 238 Minimum Grade of D and PH 202 Minimum Grade of D and CH 131 Minimum Grade of C
- EE 334 Analog and Digital Electronics** 4 cr  
Diode circuits, bipolar junction transistor (BJT), and basic BJT amplifiers. Field-effect transistor (FET) and basic FET amplifiers. Amplifier frequency response. Operational amplifiers, NMOS, PMOS, and CMOS digital circuits. NMOS and CMOS Transmission gates. Bipolar digital circuits, timing diagrams, propagation delays, fan-in, and fan-out. Fee. Pre-requisite: EE 331 Minimum Grade of D
- EE 337 Electronics Lab** 1 cr  
Computer analysis and measurement of the characteristics and parameters of power supplies; operations amplifiers; voltage and power amplifiers; oscillators and active filters. Credit for or concurrent registration in EE 334. Pre-requisite: EE 334 Minimum Grade of D
- EE 354 Electromagnetics I** 3 cr  
Coulomb's law, electrostatic field, potential and gradient, electric flux and Gauss's Law and divergence. Metallic conductors, Poisson's and Laplace's equations, capacitance, dielectric materials. Electrostatic energy and forces. Steady electric currents, Ohm's Law, Kirchoff's Laws, charge conservation and the continuity equation, Joule's Law. Biot-Savart's law and the static magnetic field. Ampere's Law and curl. Vector magnetic potential and magnetic dipole. Magnetic materials, forces and torques. Faraday's Law, magnetic energy, and displacement current. Maxwell's equations. Plane waves in lossless and lossy media. Skin effect. Flow of electromagnetic power. Poynting's theorem. Simulations and demonstrations included for reinforcement of material. Fee. Pre-requisite: (MA 215 Minimum Grade of D or MA 237 Minimum Grade of D) and (MA 238 Minimum Grade of D or MA 338 Minimum Grade of D) and (PH 202 Minimum Grade of D or PH 217 Minimum Grade of D)
- EE 355 Electromagnetics II** 2 cr  
Lumped versus distributed circuits. Transient response of transmission lines with resistive and reactive loads. Reflection, transmission, attenuation and dispersion. Steady-state waves on transmission lines. Standing wave ratio, impedance matching, and power flow. Reflection and refraction of waves at planar boundaries. Snell's law, Brewster's law, polarization and total internal reflection. Reflection and refraction from lossy media. Guided waves. Parallel-plate and dielectric-slab waveguides. Hollow wave-guides, cavity resonators, microstrip waveguides, optical fibers. Interaction of fields with matter and particles. Antennas and radiation of electromagnetic energy. Simulations and demonstrations included for reinforcement of material. Fee. Pre-requisite: EE 354 Minimum Grade of D
- EE 356 Electromagnetics Laboratory** 1 cr  
Computer-aided and experimental field mapping; shielding techniques; field measurement of elementary radiating structures and waveguide circuits; terminal characteristics of klystrons and space wave propagation losses. Fee. Pre-requisite: EE 355 Minimum Grade of C
- EE 368 Microprocessor Sys Interf Lab** 1 cr  
This Laboratory is designed to reinforce the material covered in EE 264 and to provide practical hands-on experience with microprocessor software, hardware and interfacing. Topics include integration of microprocessor software, hardware and peripheral devices; assembly level programming and hardware interfaces for control and instrumentation. Pre-requisite: EE 268 Minimum Grade of D and EE 264 Minimum Grade of D
- EE 372 Introduction to Communications** 3 cr  
Introduction to communication systems; analog, digital, deterministic and stochastic messages; modulation; redundancy coding. Signal energy and power; correlation; orthogonal signal set and Fourier series. Fourier transforms; signal transmission through linear systems; ideal and practical filters; signal distortion; Parseval's theorem; essential band-width and energy and power spectral density. Amplitude modulation: DSB, SSB, AM, QAM and VSB; phase and frequency modulation and the basic design of a FM transmitter. Sampling theorem; pulse code modulation and differential pulse code modulation. Pre-requisite: EE 322 Minimum Grade of D and EE 321 Minimum Grade of D
- EE 381 Electromech Energy Conversion** 3 cr  
Introduction to the principles of electromechanical energy conversion. Energy balance, force, and torque of electromagnetic systems; magnetic circuits and ferromagnetic losses; transformers and their connections three-phase induction motors; synchronous generators and motors; non-salient machines. Parallel operation of synchronous generators. Dynamics of electric machines. Fee. Pre-requisite: EE 354 Minimum Grade of D

- EE 385 Energy Conversion Lab** 1 cr  
Laboratory experiments based on: Faraday's Law and magnetic coupling; magnetic circuits; transformers (single and three phase) their connections and tests. Three phase induction motors-tests and performance characteristics; synchronous generators and motors. Machine data acquisition methods and processing using a computer. Fee. Pre-requisite: EE 381 Minimum Grade of D
- EE 401 Intro Elec and CpE Design - W** 1 cr  
Specification of design criteria. Written and oral presentations of design proposals. Coverage of professional and contemporary issues and students are required to become members of the IEEE or ACM and attend two technical meetings of IEEE/ACM. Fee. Pre-requisite: CA 110 Minimum Grade of D and EE 321 Minimum Grade of D and EE 334 Minimum Grade of D and EE 368 Minimum Grade of D
- EE 404 Elec and Comp Eng Designs-W** 3 cr  
Implementation of design project from the field of Electrical or Computer Engineering in the broadest sense and under the guidance of a project director from the electrical and computer engineering faculty. Written and oral presentations of project proposals, interim and final reports. Students are required to be current members of the IEEE/ACM and attend two technical meetings. Fee. Pre-requisite: EE 401 Minimum Grade of D
- EE 422 Adv Feedback Control Systems** 3 cr  
Sensors, encoders and DC motors in control systems. The performance and design of feedback control systems. System bandwidth; Nichol's Chart and the stability of control systems with time delays. State variable analysis and design. This course is dually listed with an equivalent graduate level course (EE522) and requires a minimum GPA of 2.75 or the instructor's permission for admission. Pre-requisite: EE 328 Minimum Grade of D
- EE 423 Modern Control Theory** 3 cr  
Simulation and modeling; introduction to linear systems theory; concepts of controllability and observability; specifications; structures and limitations; review of classical design methods; state feedback design methods; multivariable control; robust stability and sampled data implementation. Introduction to the use of MATLAB for design. This course is dually listed with an equivalent graduate-level course (EE 523) and requires a minimum G.P.A of 2.75 or the instructor's permission for admission. Pre-requisite: EE 328 Minimum Grade of D
- EE 424 Nonlinear Control Systems** 3 cr  
State space description; methods of linearization; isoclines; stability of nonlinear systems; Lyapunov's direct method; harmonic linearization; describing functions; dual input describing functions; Popov's method; circle criterion and computer aided analysis. This graduate-level course is dually listed with an equivalent course (EE524) and requires a minimum GPA of 2.75 or the instructor's permission for admission. Pre-requisite: EE 328 Minimum Grade of D
- EE 425 Prog Logic Controller Lab** 1 cr  
PLC overview; ladder logic; programming of timers and counters; programming control; data manipulation and math; instructions; sequencers and shift register instructions; data acquisition methods. Pre-requisite: EE 334 Minimum Grade of D
- EE 427 Digital Control Systems** 3 cr  
State space and transfer function description of discrete-time systems; solution of discrete state equation; discrete-time model of analog plants; frequency domain analysis; design of discrete state-feedback regulators; observers and tracking systems. This course is dually listed with an equivalent graduate-level course (EE 527) and requires a minimum G.P.A. of 2.75 or the instructors permission for admission. Pre-requisite: EE 328 Minimum Grade of D
- EE 430 Power Semiconductor Dev** 3 cr  
Characteristics of power devices; physics of transport phenomena; breakdown voltage; power rectifiers; bipolar transistors; power MOSFET; insulated-gate bipolar transistor and MOS-gated thyristors. Pre-requisite: EE 331 Minimum Grade of D
- EE 431 Adv Electronic Devices** 3 cr  
Semiconductor electronics; semiconductor diode circuit analysis; bipolar and field effect transistors; analog-to-digital and digital-to-analog circuits and active filters. This course is dually listed with and equivalent graduate-level course (EE 531) and requires a minimum GPA of 2.75 or the instructor's permission for admission. Pre-requisite: EE 334 Minimum Grade of D
- EE 432 Microelectronic Devices** 3 cr  
Introduction to semiconductor material properties; semiconductor diodes; structure and operation; diode circuit applications; bipolar transistor; structure and operation; junction field effect transistors (JFETs); metal oxide field effect transistors (MOSFETs) fabrication technology and construction of semiconductor devices; biasing and stability of amplifiers. This course is dually listed with an equivalent graduate-level course (EE 532) and requires a minimum GPA of 2.75 or the instructor's permission for admission. Fee. Pre-requisite: EE 334 Minimum Grade of D
- EE 438 Virtual Instrumentation** 3 cr  
Transducers; measurement techniques; measurement errors; digital signal processing; noise sources and reduction; introduction to LabVIEW software, data acquisition and processing using computer-controlled data acquisition hardware. Pre-requisite: EE 334 Minimum Grade of D

- EE 439 VSLI Technology-Fabrication 3 cr**  
Introduction to semiconductor devices; crystal growth and wafer preparation; chemical and physical vapor deposition; oxidation; diffusion; ion implantation; lithography; etching metallization, process integration of CMOS and bipolar technologies; diagnostic techniques and measurements; packaging; yield and reliability. This course is dually listed with an equivalent graduate-level course (EE 539) and requires a minimum G.P.A. of 2.75 or the instructor's permission for admission.  
Pre-requisite: EE 331 Minimum Grade of D
- EE 440 HDL Logic Synthesis 3 cr**  
Introduction to the syntax and elements of the basic VHDL language such as entities and architectures; creating combinational, synchronous logic and state machines using both structural and behavioral VHDL; using hierarchy in large designs; synthesizing and implementing designs. This course is dually listed with an equivalent graduate-level course (EE 540) and requires a minimum GPA of 2.75 or the instructor's permission for admission. Credit for both EE 440 and EE 443 not allowed toward a degree. Fee.  
Pre-requisite: EE 264 Minimum Grade of D and EE 268 Minimum Grade of D
- EE 441 Computer Networks 3 cr**  
Introduction to design and analysis of computer networks. Polling networks and ring networks. This course is dually listed with an equivalent graduate-level course (EE 541) and requires a minimum GPA of 2.75 or the instructor's permission for admission.  
Pre-requisite: EE 264 Minimum Grade of D and EE 268 Minimum Grade of D
- EE 443 HDL Logic Simulation 3 cr**  
Introduction to the syntax and elements of the basic Verilog language such as modules and ports; hierarchical modeling; gate-level modeling; dataflow modeling; switch-level modeling; tasks and functions; timing and delays; user-defined primitives; synthesizing and implementing designs. Emphasis is on the simulation and test-bench aspects. This course is dually listed with an equivalent graduate-level course (EE 543) and requires a minimum GPA of 2.75 or the instructor's permission for admission. Credit for both EE 440 and EE 443 not allowed toward a degree. Fee.  
Pre-requisite: EE 264 Minimum Grade of D and EE 268 Minimum Grade of D
- EE 444 Wireless Networks 3 cr**  
Introduction to modern wireless networks/systems, the cellular concept, frequency reuse, interference and system capacity improvement, trunking and grade of service, multiple access techniques, wireless/wireline interworking, and advanced networks (i.e. ad hoc networks). This course is dually listed with an equivalent graduate-level course (EE 544) and requires a minimum GPA of 2.75 or the instructor's permission for admission. Fee.  
Pre-requisite: EE 441 Minimum Grade of D
- EE 446 Embedded System Design Lab 1 cr**  
Design projects utilizing 16-bit and 32-bit microprocessor hardware and software; interfaces to memory and peripheral devices. Prior credit for or concurrent registration in EE447.  
Pre-requisite: EE 457 Minimum Grade of D
- EE 447 Programmable Logic Devices Lab 1 cr**  
Digital design projects utilizing simulation and synthesis CAD tools and targeting programmable logic devices.  
Pre-requisite: EE 264 Minimum Grade of D and EE 268 Minimum Grade of D
- EE 449 Control and Communications Lab 1 cr**  
Computer-aided modeling, design and performance analysis in time and frequency domain of analog and digital communication end-to-end systems, and automatic control systems.  
Pre-requisite: EE 328 Minimum Grade of D and EE 372 Minimum Grade of D
- EE 450 Fundamentals of Fourier Optics 3 cr**  
Two-dimensional Fourier analysis; linear systems; sampling theory; scalar diffraction theory. Fourier transform imaging properties of lenses; frequency analyses of diffraction-limited coherent and incoherent imaging systems; aberrations and resolution analysis; Vander Lugt filters and frequency domain analysis and synthesis; SAR and pattern recognition applications.  
Pre-requisite: EE 331 Minimum Grade of D and EE 355 Minimum Grade of D
- EE 452 Microwave Engineering 3 cr**  
Generation and transmission of high frequency electromagnetic energy; magnetrons, klystrons, masers, parametric amplifiers, traveling wave tubes and solid-state devices; waveguides and resonators. This course is dually listed with an equivalent graduate level course (EE 552) and requires a minimum GPA of 2.75 or the instructor's permission for admission. Fee.  
Pre-requisite: EE 355 Minimum Grade of D
- EE 453 Antenna Theory and Design 3 cr**  
Radiation fundamentals; linear antennas; loop antennas; aperture antennas; reflector antennas; antenna impedance and measurements; computer-aided design of antenna systems. This course is dually listed with an equivalent graduate-level course (EE 553).  
Pre-requisite: EE 355 Minimum Grade of D
- EE 454 Digital Computer Architecture 3 cr**  
Computer organization; instruction set design; ALU design; control unit design; I/O and interrupt designs; memory organization; DMA; microprogramming; introduction to multi-processors; performance analysis. This course is dually listed with an equivalent graduate level course (EE 554) and requires a minimum GPA of 2.75 or the instructor's permission for admission. Fee.  
Pre-requisite: EE 264 Minimum Grade of D and EE 268 Minimum Grade of D

**EE 455 Optoelectronics 3 cr**

Wave propagation in free-space and in wave guides; optical resonators; interaction of radiation and atomic systems; laser oscillation; solid-state lasers. He-Ne and Argon lasers, integrated optics including integration of emitters and detectors; optical interconnects; spatial light modulators; optoelectronic materials and devices; and applications of optoelectronics. This course is dually listed with an equivalent graduate-level course (EE 555) and requires a minimum GPA of 2.75 or the instructor's permission of admission. Fee.

Pre-requisite: EE 355 Minimum Grade of D

**EE 456 Fiber Optic Communication Sys 3 cr**

Review of optical principles, dielectric waveguides, signal propagation, degradations and attenuation of fibers. Fiber interconnection devices, active and passive components, optical transmitters and receivers, power budget, fiber optic communication systems. This course is dually listed with an equivalent graduate-level course (EE 556).

Pre-requisite: EE 355 Minimum Grade of D

**EE 457 Embedded System Design 3 cr**

Architecture and software of 16-bit and 32-bit microprocessor hardware and software; interface design to memory and peripheral devices; multiprocessing. This course is dually listed with an equivalent graduate level course (EE 557) and requires a minimum GPA of 2.75 or the instructor's permission for admission. Fee.

Pre-requisite: EE 264 Minimum Grade of D and EE 368 Minimum Grade of D

**EE 458 Radar Systems 3 cr**

Introduction to radar signal processing. Continuous wave and pulsed radars. Clutter and radio wave propagation. Moving target indicator, target surveillance and tracking radar systems. Side-looking, synthetic aperture, interferometric and other airborne radars. This course is dually listed with an equivalent graduate level course (EE 558) and requires a minimum GPA of 2.75 or the instructor's permission for admission. Fee.

Pre-requisite: EE 355 Minimum Grade of D

**EE 465 Digital Signal Processing 3 cr**

Review of discrete Fourier and Z-transforms; review of analog filter design; design of IIR and FIR digital filters. Fast Fourier transform (FFT) and applications; Hardware implementation and quantization effects. Advanced digital filter structures and design. DSP algorithm design and implementation. Analysis of finite word length effects of DSP applications. Extensive use of MatLab for analysis and design.

Pre-requisite: EE 321 Minimum Grade of C

**EE 468 Programmable Logic Controllers 3 cr**

Hardware and software principles of PLC devices, ladder logic, hardware components of PLC systems and controller configuration, basic PLC operation, program construction and manipulation, advanced operation and networking. Fee.

Pre-requisite: EE 264 Minimum Grade of D and EE 268 Minimum Grade of D

**EE 469 Signal Integrity 3 cr**

Design techniques for high-speed digital interfaces and circuit boards; signal integrity including crosstalk and ground bounce; electromagnetic aspects of high-speed digital design; frequency-domain analysis of power-system integrity; state-of-the-art buses and standards. This course is dually listed with an equivalent graduate-level course (EE 569) and requires a minimum GPA of 2.75 or the instructor's permission for admission. Fee.

Pre-requisite: EE 264 Minimum Grade of D and EE 268 Minimum Grade of D and EE 334 Minimum Grade of D

**EE 470 Synth Active-Passive Networks 3 cr**

Reliability of network functions (high-pass, band-pass, low-pass, band reject and equalizing filters); approximation techniques; sensitivity analysis; passive and active synthesis; positive and negative feedback and biquads. Computer techniques for the realization of standard filter forms (Butterworth, Chebyshev, Bessel, Sallen and Key, and other forms).

Pre-requisite: EE 321 Minimum Grade of D

**EE 471 Wireless Communication 3 cr**

Introduction to wireless communications propagation in mobile radio channels, large, small scale fading and multipath; diversity and diversity combining techniques and modulation techniques. This course is dually listed with an equivalent graduate level course (EE 571) and requires a minimum GPA of 2.75 or the instructor's permission for admission. Fee.

Pre-requisite: EE 372 Minimum Grade of D

**EE 473 Advanced Communication Systems 3 cr**

Digital line coding; pulse shaping; partial response signaling; scrambling; M-ary communication; digital carrier systems and digital multiplexing. Probability; random variables; quantization error in PCM; random processes; white noise and the behavior of analog systems in the presence of noise. Information theory; compact codes and error correcting codes. This course is dually listed with an equivalent graduate level course (EE 573) and requires a minimum GPA of 2.75 or the instructor's permission for admission. Fee.

Pre-requisite: EE 372 Minimum Grade of D

**EE 481 Electrical Machines 3 cr**

DC machines-motors and generators. Single-phase motors; unbalanced two-phase motors; servo-motors; commutator motors; stepper motors; synchros; shaded pole motors; reluctance and hysteresis motors and brushless DC motors. Dynamic circuit analysis of rotating machines.

Pre-requisite: EE 381 Minimum Grade of D

- EE 482 Switch Mode Power Conversion 3 cr**  
Design and analysis of switch mode power converters; design of magnetic components; stability considerations; input filter interactions; performance measurements and evaluations. This course is dually listed with an equivalent graduate-level course (EE 582) and requires a minimum GPA of 2.75 or the instructor's permission for admission. Pre-requisite: EE 334 Minimum Grade of D and EE 381 Minimum Grade of D
- EE 483 Power Systems I 3 cr**  
Principles of power system analysis. Synchronous machines, transformers and loads; transmission line parameters and analysis. Impedance/admittance matrix representation of power systems. Power flow analysis. Symmetrical fault studies and protective devices. Fee. Pre-requisite: EE 381 Minimum Grade of D and EE 385 Minimum Grade of D
- EE 484 Power Systems II 3 cr**  
Symmetrical components and sequence networks; computer studies of transmission lines; fault studies using a computer; state estimation of power system and power system stability, Economic analysis. Fee. Pre-requisite: EE 483 Minimum Grade of D
- EE 485 Power Distrib and Utilization 3 cr**  
Principles and characteristics of generating stations; transformers; conversion equipment; primary and secondary distribution systems; short-circuit calculations; selection of protective devices; system grounding and over current protection; voltage control; power factor control and correction; load and cost estimating. Pre-requisite: EE 483 Minimum Grade of D
- EE 486 Power Electronics 3 cr**  
Power semiconductor diodes and thyristors; commutation techniques; rectification circuits - uncontrolled and controlled; AC voltage controllers; DC chopper; pulse-width modulated inverters and resonant pulse inverters. This course is dually listed with an equivalent graduate level course (EE 586) and requires a minimum GPA of 2.75 or the instructor's permission for admission. Fee. Pre-requisite: EE 334 Minimum Grade of D and EE 381 Minimum Grade of D
- EE 487 Switch Mode Power Conversion 3 cr**  
Design and analysis of switch mode power converters; design of magnetic components; stability considerations; input filter interactions; performance measurements and evaluation. This course is dually listed with an equivalent graduate level course and requires a minimum GPA of 2.75 for admission. Pre-requisite: EE 334 Minimum Grade of D and EE 381 Minimum Grade of D
- EE 488 Illumination Engineering 3 cr**  
Photometric units and definitions; light sources and luminaires; interior lighting and artificial illumination design techniques; daylight lighting design; exterior lighting design and the theory of color. Optics and control of lighting. Prerequisite: Instructor's permission.
- EE 489 Renewable Energy 3 cr**  
Introduction to renewable energy sources. Fuel cells: classification, configuration and operation. Hydrogen: production, purification and storage. Photovoltaic cells: solar cells and operational characteristics. Wind turbines: operational characteristics. Energy from water sources: hydroelectric, wave and tidal energy. This course is dually listed with an equivalent graduate course and requires a minimum GPA 2.75 or the instructor's permission for admission. Pre-requisite: EE 381 Minimum Grade of D
- EE 490 Special Topics 1 TO 3 cr**  
Topics of current electrical and computer engineering interest. This course requires permission of the department chair and a minimum GPA of 2.75 for admission. (Prerequisites: PCS and Instructor's permission.)
- EE 494 Dir Independent Study 1 TO 3 cr**  
Directed study under the guidance of a faculty advisor, of a topic from the field of electrical and/or computer engineering, not offered in a regularly scheduled course. This course requires permission of the Department Chair and a minimum GPA of 2.75 for admission. Pre-requisite: PCS. Fee.
- EE 499 Honors Senior Project - H 1 TO 6 cr**  
Under the advice and guidance of a faculty mentor, honors student will identify and carry out a research project, relevant to the field of Electrical and Computer Engineering which will lead to a formal presentation at the annual Honors Student Colloquium. The senior project will be judged and graded by three faculty chaired by the honors mentor. Students are required to become members of IEEE/ACM and attend two technical meetings. This course is required for Honors recognition. A minimum of 4 credit hours is required, but students may enroll for a maximum of 6 credit hours over two semesters. Prerequisites: an approved project prospectus. Pre-requisite: EE 401 Minimum Grade of D
- EE 522 Adv Feedback Control Systems 3 cr**  
Sensors; encoders and D.C. motors in control systems. The performance and design of feedback control systems. System bandwidth; Nichol's Chart and the stability of control systems with time delays. State variable analysis and design. Use of MatLab for analysis and design. This course is dually listed with an equivalent 400-level Electrical/Computer Engineering course.

- EE 523 Modern Control Theory** 3 cr  
Simulation and modeling; introduction to linear system theory; concepts of controllability and observability; specifications, structures and limitations; review of classical design methods; state feedback design methods; multivariable control; robust stability and sampled data implementation. Introduction to the use of MATLAB for design. This course is dually listed with an equivalent 400-level course (EE 423).
- EE 524 Nonlinear Control Systems** 3 cr  
State space description; methods of linearization; isoclines; stability of nonlinear systems; Lyapunov's direct method; harmonic linearization; describing functions; dual input describing functions; Popov's method; circle criterion, computer aided analysis. This course is dually listed with an equivalent 400-level course (EE 424).  
Pre-requisite: EE 523
- EE 525 Optimal Control Systems** 3 cr  
Static optimization; method of Lagrange multipliers; adaptive controllers; dynamic optimization; calculus of variations; the principle of optimality and dynamic programming; Pontryagin's maximum principle; quadratic optimal control.  
Pre-requisite: EE 523
- EE 526 Introduction to Robotics** 3 cr  
Basic mathematics of robotic systems; coordinate transformations: forward and inverse kinematics; velocity kinematics; path planning and trajectory generation; numerical methods; mobile robots. Fee
- EE 527 Digital Control Systems** 3 cr  
State space and transfer function description of discrete time systems; solution of the discrete state equation; discrete-time model of analog plants; frequency domain analysis; designing of discrete state-feedback regulators; observers and tracking systems. This course is dually listed with an equivalent 400-level course (EE 427).
- EE 528 Advanced System Theory** 3 cr  
Review of linear spaces and operators; state variable description of time varying and time invariant linear systems. Controllability and observability of linear dynamical systems; state feedback and state estimators; stability of linear systems; arbitrary pole assignment for multivariable case.  
Pre-requisite: Instructor's permission.
- EE 530 Nanotechnology** 3 cr  
Nanotechnology fundamentals and principles; quantum wires and dots; single electron effects and coulomb blockade; nanomagnets and spintronics; spin based electronics (magnetic memories, magnetic field sensors); nanofabrication; nanoelectronics (QCQ); organic electronics (carbon fullerenes and nanotubes, polymers); advanced characterization techniques; applications especially those related to nanotechnology; MEMS and microsystems (sensors); QWIP technology and its associative nanoscience; photonic crystal; advances in nanostructured materials. Requires instructor's permission.
- EE 531 Advanced Electronic Devices** 3 cr  
Semiconductor electronics; semiconductor diode circuit analysis; bipolar and field effect transistors; analog-to-digital and digital-to-analog circuits and active filters. This course is dually listed with an equivalent 400-level course (EE 431).  
Prerequisite: Instructor's permission
- EE 532 Microelectronic Devices** 3 cr  
Introduction to semiconductor material properties; semiconductor diodes: structure and operation; diode circuit applications; semiconductor heterojunctions; metal-semiconductor junctions; bipolar transistor: structure and operation; junction field effect transistors (JFETs); metal oxide field effect transistors (MOSFETs); metal semiconductor field effect transistors (MESFETs); fabrication technology and construction of semiconductor devices; photodetectors; light-emitting diodes; laser diodes; solar cells; image sensors; spice based microelectronic circuit design. This course is dually listed with equivalent 400-level course (EE 432).
- EE 534 VLSI Design Systems** 3 cr  
Review of fabrication of microelectronic devices; introduction to MOS technology; basic physical and electrical properties of field effect transistors; CMOS fabrication; layout of CMOS integrated circuits; MOSFETS; concepts of VLSI chip design; physical design of CMOS integrated circuit.
- EE 535 Electronic Materials Prop-Appl** 3 cr  
Schrodinger's equation, potential wells and barriers; crystallographic geometry; Kronig-Penny model; energy bands in crystalline solids; density of states - Fermi statistics; intrinsic and extrinsic semiconductors; conductivity and Hall effects; interfaces; magnetic materials; superconducting materials; optical materials. Prerequisite: Instructor's permission.
- EE 536 Intro to Superconductivity** 3 cr  
Microscopic theory of superconductivity; BCS theory; superconduction tunneling phenomena; superconducting device; superconducting materials; High-Tc superconductors. Prerequisite: Instructor's permission.
- EE 537 Adv Plasma Process Elect Mat** 3 cr  
Analysis, design and application of DC, RF and microwave plasma in microelectronic material processing; sputtering; etching; deposition; surface modification; diagnostic and characterization techniques. Prerequisite: Instructor's permission.
- EE 538 Magnetic Recording Media** 3 cr  
Magnetostatic fields; magnetization processes; demagnetizing factors; magnetic circuits; hard disk / tape media; inductive and MR heads; magnetic data storage systems. Prerequisite: Instructor's permission.

- EE 539 VLSI Technology - Fabrication** 3 cr  
Introduction to semiconductor devices; crystal growth and wafer preparation; chemical and physical vapor deposition; oxidation; diffusion; ion implantation; lithography; etching; metallization; process integration of CMOS and bipolar technologies; diagnostic techniques and measurements; packaging; yield and reliability. This course is dually listed with an equivalent 400-level course (EE 439).
- EE 540 HDL Logic Synthesis** 3 cr  
Introduction to the syntax and elements of the basic VHDL language such as entities and architectures; creating combinational, synchronous logic and state machines using both structural and behavioral VHDL; using hierarchy in large designs; synthesizing and implementing designs. This course is dually listed with an equivalent undergraduate-level course (EE 440) and requires a minimum GPA of 2.75 or the instructor's permission for admission. Credit for both EE 540 and EE 543 not allowed toward a degree.
- EE 541 Computer Networks** 3 cr  
Introduction to design and analysis of computer networks. Polling networks and ring networks. Networking applications. This course is dually listed with an equivalent 400-level EE course.
- EE 542 Adv Top Digital Design - HDLs** 3 cr  
Current topics of interest in digital design. State-of-the-art software tools used in digital design. Advanced topics in HDLs.
- EE 543 HDL Logic Simulation** 3 cr  
Introduction to the syntax and elements of the basic Verilog language such as modules and ports; hierarchical modeling; gate-level modeling; dataflow modeling; behavioral modeling; switch-level modeling; tasks and functions; timing and delays; user-defined primitives; synthesizing and implementing designs. Emphasis is on the simulation and test-bench aspects. This course is dually listed with an equivalent undergraduate-level course (EE 443) and requires a minimum GPA of 2.75 or the instructor's permission. Credit for both EE 540 and EE 543 not allowed toward a degree.
- EE 544 Wireless Networks** 3 cr  
Introduction to modern wireless networks/systems, the cellular concept, frequency reuse, interference and system capacity improvement, trunking and grade of service, multiple access techniques, wireless/wireline interworking, and ad hoc networks). This course is dually listed with an equivalent 400-level course (EE 444) and requires a minimum GPA of 2.75.  
Pre-requisite: EE 541
- EE 545 Optical Network** 3 cr  
Digital transmission using fiber optics as point-to-point link. Wavelength-division-multiplexing concepts and components, LAN, WAN, and MAN, SONET/SDH, FDDI Networks, Broadcast-and-select WDM Networks, Wavelength-routed Networks, and Performance of WDM and EDFA systems. Prerequisite: Instructor's permission. Fee.  
Pre-requisite: EE 456 Minimum Grade of D
- EE 546 Neural Networks** 3 cr  
Introduction to neural networks and their application to electrical engineering. Concept learning and the general-to-specific ordering, decision tree learning, linear perceptrons, back propagation networks, recursive networks, radial basis networks, neural network-based control systems, unsupervised learned networks.
- EE 548 Computer-Network Security** 3 cr  
Cryptography; Symmetric and asymmetric encryption; authentication and identification schemes; MACs and Digital Signatures; applications of security.
- EE 552 Microwave Engineering** 3 cr  
Generation and transmission of high frequency electromagnetic energy-magnetrons, klystrons, maser, parametric amplifiers, traveling wave tubes and solid-state devices. This course is dually listed with an equivalent 400-level course (EE 452). Prerequisite: Instructor's permission.
- EE 553 Antenna Theory and Design** 3 cr  
Radiation fundamentals; linear antennas; loop antennas; aperture antennas; reflector antennas; antenna impedance and measurements; computer-aided design of antenna systems. This course is dually listed with an undergraduate level course (EE 453).
- EE 554 Digital Computer Architecture** 3 cr  
Computer organization; instruction set design; ALU design; control unit design; I/O and interrupt designs; memory organization; DMA; microprogramming; introduction to multi-processors; performance analysis. This course is dually listed with an undergraduate level course (EE 454).
- EE 555 Optoelectronics** 3 cr  
Wave propagation in free-space and in wave guides; optical resonators, interaction of radiation and atomic systems; laser oscillation; solid-state lasers. He-Ne and Argon ion lasers, integrated optics including integration of emitters and detectors; optical interconnects; spatial light modulators; optoelectronic materials and devices; and applications of optoelectronics. This course is dually listed with a 400-level course (EE 455).
- EE 556 Fiber Optic Communication Sys** 3 cr  
Review of optical principles, dielectric waveguides, signal propagation, degradations and attenuation of fibers. Fiber interconnection devices, active and passive components, optical transmitters and receivers, power budget, fiber optic communication systems. This course is dually listed with an equivalent undergraduate-level course (EE 456). Fee.

- EE 557 Adv. Embedded System Design** 3 cr  
Architecture and software of 16-bit and 32-bit microprocessor hardware and software; interface design to memory and peripheral devices; multiprocessing. This course is dually listed with an undergraduate level course (EE 457).
- EE 558 Radar Analysis** 3 cr  
Introduction to radar signal processing. Continuous wave and pulsed radars. Clutter and radio wave propagation. Moving target indicator, target surveillance and tracking radar systems. Side-looking, synthetic aperture, interferometric and other airborne radars. This course is dually listed with an equivalent 400-level (EE458).
- EE 559 Optical Info Process-Holograph** 3 cr  
Parallel optical information processing in Fourier transform systems; nonlinear optical image processing in a linear optical processing; optical image equidensity and pseudo-color using techniques; wave-front reconstruction; on-axis and off-axis holography, effects of film MTF and nonlinearities; holographic memory, display and non-destructive testing; and optical computing. Prerequisite: Instructor's permission.
- EE 560 Adv Computer Architecture** 3 cr  
Overview of software/hardware architectures of selected RISC/CISC microprocessors, advanced pipelining and instruction level parallelism, superscalar techniques, memory hierarchy design, cache coherency, introduction to multiprocessor systems and interconnection networks. Pre-requisite: EE 554 Minimum Grade of C
- EE 565 Adv Digital Signal Processing** 3 cr  
Review of discrete Fourier and z-transforms; review of analog filter design; canonical digital filter forms; design of IIR and FIR digital filters. Fast Fourier Transforms (FET) and their applications; hardware implementation and quantization effects. Advanced digital filter structures and design. DSP algorithm design and implementation. Analysis of finite wordlength effects of DSP applications. Extensive use of MatLab for analysis and design. This course is dually listed with an equivalent 400-level EE course (EE465).
- EE 566 Digital Image Processing** 3 cr  
Review of digital image fundamentals; different image transforms; image enhancement techniques; image restoration methods; detection of discontinuities and thresholding.
- EE 567 Biomedical Imaging** 3 cr  
Introduction to biomedical imaging, projection radiography, computer aided tomography, single photon emission computed tomography (SPECT), positron emission tomography (PET), magnetic resonance imaging (MRI and fMRI), ultrasound imaging, optical imaging techniques including confocal microscopy and optical coherence tomography (OCT). Fee.  
Pre-requisite: EE 566 Minimum Grade of D
- EE 568 Pattern Recognition** 3 cr  
Introduction to pattern recognition, statistical, syntactic and neural pattern recognition; Decision procedures; Parameter estimation and supervised learning; Non-parametric techniques; Feature extraction and nonlinear mapping; Fuzzy systems in pattern recognition; Methods of testing
- EE 569 Signal Integrity** 3 cr  
Design techniques for high-speed digital interfaces and circuit boards; signal integrity including crosstalk and ground bounce; electromagnetic aspects of high-speed digital design; frequency-domain analysis of power-system integrity; state-of-the-art buses and standards. This course is dually listed with an equivalent undergraduate-level course (EE 469).
- EE 571 Wireless Communications** 3 cr  
The cellular concept and system design fundamentals, propagation in mobile radio channels, large scale fading; small-scale fading and multi-path statistical distributions, distributions, diversity and diversity combining techniques. This course is dually listed with an equivalent undergraduate level course (EE 471) and requires instructor's permission for admission. Fee.  
Pre-requisite: EE 322 Minimum Grade of D and EE 372 Minimum Grade of D
- EE 573 Advanced Communication Systems** 3 cr  
Digital line coding; pulse shaping; partial response signaling; scrambling; M-ary communication; digital carrier systems and digital multiplexing. Probability; random processes; white noise and the behavior of analog systems in the presence of noise. Information theory; compact codes and error correcting codes. This course is dually listed with an equivalent 400-level course (EE 473).
- EE 574 Digital Communications** 3 cr  
Analysis and design of digital communication systems based on probability theory; signal space representation and optimum detection principles; Digital modulation techniques and their performance in additive white Gaussian noise.  
Pre-requisite: EE 573
- EE 575 Stochastic Processes** 3 cr  
Introduction to estimation theory. Markov chains - finite, countable, continuous time, optimal stopping; Martingales; renewal processes, reversible Markov chains, Brownian motion and stochastic integration.
- EE 576 Optical Communications** 3 cr  
Light sources, detectors, fiber components and optical systems for fiber communication; free-space inter-satellite optical networks for high-speed global communication; coding problems in optical fiber data transmission; three-dimensional optical data storage for database processing; propagation losses and fiber amplifiers; and optical free-space interconnections in future computers. Prerequisite: Instructor's permission.

- EE 577 Information Theory** 3 cr  
Self-information; entropy; mutual information and channel capacity; encoding; error detecting and correcting codes. Sampling theorem. Discrete and continuous channels. Band-limited channels.
- EE 578 Error Correction Codes** 3 cr  
This course is designed to introduce the students to error correcting codes, their construction and properties, encoding and decoding.
- EE 579 Wireless Sensor Networks** 3 cr  
Introduction to Wireless Sensor Networks; Network deployment; Network Topologies; Localization; Tracking; Time synchronization techniques; Wireless characteristics; Energy considerations; MAC layer protocol and sleep scheduling; Routing; Sleep-based topology control; Latest development in the field. Fee.  
Pre-requisite: EE 544 Minimum Grade of D
- EE 582 Switch-Mode Power Conversion** 3 cr  
Design and analysis of switch mode power converters- design of magnetic components; stability considerations; input filter interactions; performance, measurements and evaluation. This course is dually listed with an equivalent 400-level course (EE 482). Prerequisite: Instructor's permission.
- EE 585 Advanced Power Systems** 3 cr  
Special topics that are not covered in traditional power systems courses, such as: Optimization techniques, computer methods, unified fault (short circuit) analysis, protection and control of power systems. Prerequisite: Instructor's permission.
- EE 586 Power Electronics** 3 cr  
Power semiconductor diodes and thyristors; commutation techniques; rectification circuits - uncontrolled and controlled; AC voltage controllers; DC chopper; pulse-width modulated inverters and resonant pulse inverters. This course is dually listed with an equivalent undergraduate level course (EE 486).
- EE 588 Power Semiconductor Drives** 3 cr  
Rectifier control of DC motors; chopper control of DC drives; closed-loop control of DC drives; induction motor speed control and multiquadrant control; control of induction motors by AC controllers and frequency-controlled drives; slip power control of induction motors; synchronous motor drives - brushless DC and AC motor drives. Prerequisites: Instructor's permission.
- EE 589 Renewable Energy** 3 cr  
Introduction to renewable energy sources. Fuel cells: classification, configuration and operation. Hydrogen: production, purification and storage. Photovoltaic cells: solar cells and operational characteristics. Wind turbines: operational characteristics. Energy from water sources: hydroelectric, wave and tidal energy.
- EE 590 Special Topics -** 1 TO 3 cr  
Topics of current electrical engineering interest. Prerequisite: Instructor's permission.
- EE 592 Directed Independent Study** 1 TO 3 cr  
Directed study, under the guidance of a faculty advisor, of a topic from the field of Electrical and Computer Engineering not offered in a regularly scheduled course. Prerequisite: Instructor's permission.
- EE 594 Project in Electrical Engr** 1 TO 3 cr  
An investigation of an original problem in electrical engineering under the guidance of the student's major professor. Prerequisites: Approval of the project prospectus by the student's advisory committee, and consent of the Director of Engineering Graduate Studies.
- EE 599 Thesis** 1 TO 6 cr  
An investigation of an original problem in electrical and/or computer engineering under the guidance of the student's major professor. Prerequisite: Approval of the thesis prospectus by the student's Advisory Committee and the Graduate School and consent of the Director of Engineering Graduate Studies.
- ## Elementary-Early Childhood (EEC)
- EEC 430L Student Teaching - EEC** 0 cr  
Observation and supervised teaching in elementary or early childhood settings with the opportunity for study and discussion of problems and issues encountered. (Co-requisite: Lecture) Prerequisite: Permission of department. Co-requisite: EEC 430  
Pre-requisite: EEC 332 Minimum Grade of C and EEC 335 Minimum Grade of C and EEC 336 Minimum Grade of C and EEC 337 Minimum Grade of C and EEC 345 Minimum Grade of C and EEC 346 Minimum Grade of C and RED 330 Minimum Grade of C and RED 331 Minimum Grade of C and RED 333 Minimum Grade of C
- EEC 290 Special Topics -** 3 cr  
Guided study of selected educational tasks (e.g. curriculum revision, classroom materials development, models of learning and teaching) and teaching problems and practices for improving student achievement. Not more than 6 hours may be earned in Special Topics courses.
- EEC 300 Creating Envir for Lrng/Play** 3 cr  
A study of environments that promote learning through play in early childhood. Emphasis on materials, activities, equipment, and effective strategies that support and encourage young children's play, learning and creativity.

- EEC 332 Teaching Language Arts** 3 cr  
A course presenting methods of promoting meaningful language and literacy skills in early childhood and elementary school programs. This course has a required field experience.  
Co-requisite: EEC 346, RED 330, RED 333
- EEC 334 Lit for the Young Child** 3 cr  
A survey course dealing with methods of writing literary materials with children in preschool through the primary grades. It is designed to assist those who wish to become widely acquainted with books and related materials for today's young children.
- EEC 335 Teaching Mathematics - W** 3 cr  
A course which deals with effective methods of teaching mathematics to elementary school students. Emphasis will be on developing an understanding of numbers, teaching basic operations, and using teaching aids and materials to meet the various needs of elementary age children. This course has a required field experience.  
Co-requisite: EEC 336, EEC 337, RED 331  
Pre-requisite: ( (MA 181 Minimum Grade of D or MA 201 Minimum Grade of D) or (MA 202 Minimum Grade of D or MA 281 Minimum Grade of D) ) and EEC 346 Minimum Grade of C and RED 330 Minimum Grade of C and EEC 332 Minimum Grade of C
- EEC 336 Teaching Social Studies** 3 cr  
A course using problem solving and independent investigation as means of teaching the relationship of humans to their environment. Objectives, content and procedures are discussed. This course has a required field experience.  
Co-requisite: EEC 335, EEC 337, EEC 345, RED 331  
Pre-requisite: EEC 346 Minimum Grade of C and RED 330 Minimum Grade of C and RED 333 Minimum Grade of C and EEC 332 Minimum Grade of C
- EEC 337 Teaching Science** 3 cr  
A course using discovery, inquiry and problem-solving approaches as a means of teaching science. Relationships of science to entire early childhood and elementary curriculum is discussed. This course has a required field experience.  
Co-requisite: EEC 335, EEC 336, EEC 345, RED 331  
Pre-requisite: EEC 346 Minimum Grade of C and RED 330 Minimum Grade of C and RED 333 Minimum Grade of C and EEC 332 Minimum Grade of C
- EEC 345 Sequence Field Experience** 1 cr  
Supervised practice in teaching curriculum areas in the elementary or early childhood classroom setting during the semester in which sequence courses are taken.  
Co-requisite: EEC 335, EEC 336, EEC 337, RED 331  
Pre-requisite: EEC 346 Minimum Grade of C and RED 330 Minimum Grade of C and RED 333 Minimum Grade of C and EEC 332 Minimum Grade of C
- EEC 346 Early Child Prog(Birth-8)-W** 3 cr  
This course will introduce the roles of the adult in working with children from birth through age 8. History, management and parent education techniques are presented.
- EEC 348 Lang Dev in Early Childhood** 3 cr  
An introduction to speech and language development birth through primary grades and teaching practices that support language and literacy development. Includes discussion of cultural and developmental factors that influence language development methods appropriate for helping young children acquire language and literacy skills.
- EEC 429 Opening School Lab Exp** 0 TO 1 cr  
Professional laboratory experiences of observation and participation for a two-week period at the opening of school. (May be taken twice.) Prerequisite: senior standing.
- EEC 430 Student Teaching - EEC** 9 TO 12 cr  
Observation and supervised teaching in elementary or early childhood settings with the opportunity for study and discussion of problems and issues encountered. (Co-requisite: Lab) Prerequisite: Permission of department.  
Pre-requisite: EEC 332 Minimum Grade of C and EEC 335 Minimum Grade of C and EEC 336 Minimum Grade of C and EEC 337 Minimum Grade of C and EEC 345 Minimum Grade of C and EEC 346 Minimum Grade of C and RED 330 Minimum Grade of C and RED 331 Minimum Grade of C and RED 333 Minimum Grade of C
- EEC 490 Sp Top -** 3 cr  
Guided study of selected educational tasks (e.g. curriculum revision, classroom materials development, models of learning and teaching) and teaching problems and practices for improving student achievement.
- EEC 494 Directed Studies -** 1 TO 3 cr  
No more than 6 hours can be accepted for a Bachelor's Degree and Class B Certificate. Prerequisite: Permission of department chair.
- EEC 496 Internship-** 3 TO 9 cr  
The internship is a supervised learning experience in an approved setting similar to that in which the student will eventually be employed. The internship provides students with an opportunity to apply theories and concepts learned during the undergraduate program. Requires candidacy and approval of department chair.
- EEC 499 Senior Honors Project - H** 3 TO 6 cr  
Under the advice and guidance of a faculty mentor, honors students will identify and carry out a research project, relevant to the field of elementary/early childhood study, that will lead to a formal presentation at the annual Honors Student Colloquium. The senior project will be judged and graded by three faculty chaired by the honors mentor. This course is required for Honors recognition and may be repeated for up to 6 credit hours. Prerequisite: Participant in honors program and junior level status.

- EEC 522 Elementary School Curriculum 3 cr**  
The study of curriculum with an emphasis on concepts, procedures and models particular to curriculum in the elementary school. Curriculum study includes the context of and a process of planning, developing, implementing, and evaluating the elementary school curriculum.
- EEC 523 Instr Plan Elem School 3 cr**  
Presents an overview of factors and procedures involved in planning, developing and evaluating the elementary school instructional process.
- EEC 532 Lit and Lang Dev in Elem Sch 3 cr**  
Designed to explore the multi-dimensional theory of language development and to provide techniques and practices for development of language ability. Through correlating these related areas, the student should grow in understanding dynamics and change in language structure and development. Opportunities for oral and written communication are emphasized.
- EEC 535 Trends in Teaching Mathematics 3 cr**  
This course emphasizes new methods of presenting mathematical content to elementary school students. Various materials will be developed to promote thinking and discovery of mathematical concepts. Opportunities are provided for developing multi-level materials appropriate to the varied abilities and interest levels in elementary school.
- EEC 536 Issues-Innov Tch Soc Studies 3 cr**  
Current issues and innovations in early childhood and elementary school social studies teaching and learning are reviewed.
- EEC 537 Teaching Science 3 cr**  
Current trends and issues in early childhood and elementary school science teaching and learning are reviewed.
- EEC 548 Early Childhood Practicum 1 TO 9 cr**  
Experiences in a field-setting working with children birth through age 8 under the supervision of qualified personnel.
- EEC 550 Trends in Parent Education 3 cr**  
A study of current trends in parent education designed to promote better homeschool communication and cooperation.
- EEC 551 Seminar Elem Education 3 cr**  
A seminar of topics, programs and research in the field of elementary education. This course provides a forum for discussion of contemporary educational issues and practicum experiences in the teaching field in which the quality of performance in teaching is evaluated.
- EEC 552 Comm Svcs Families-Children 3 cr**  
Study of agencies which provide services, types of services provided, and means of obtaining needed services.
- EEC 553 Org Patterns and Curr in ECE 3 cr**  
A review of organizational and curricular patterns utilized in the classroom setting for the education of young children. A study of educators and their theories concerning learning styles and developmental patterns in relation to the school setting and curriculum.
- EEC 554 Lang Dev in Early Child Ed 3 cr**  
Study of the language development of young children with an emphasis on provision of classroom environment to promote growth of language.
- EEC 555 Org-Adm In Early Childhood Ed 3 cr**  
Managing the multiple responsibilities of administrative heads of educational programs for young children.
- EEC 556 Research in Early Childhood Ed 3 cr**  
A review of research in the field of early childhood education.
- EEC 557 Elementary Practicum 1 TO 9 cr**  
Experiences in a field setting working with children in grades K-6 under the supervision of qualified personnel.
- EEC 558 Teaching Spelling and Writing 3 cr**  
Analysis of methods of teaching spelling and the mechanics of writing, included review of pertinent research in the skill areas as well as emphasis on the relationship of spelling to the development of skills in word recognition.
- EEC 560 Workshop Elem-Early Child Ed 3 cr**  
A topical workshop in which participants have experiences in creating, designing, constructing and using instructional materials and activities. No more than 6 hours can be applied toward a degree program.
- EEC 562 Classroom Logis - Facilitation 3 cr**  
To increase teacher's competencies to facilitate learning by providing a classroom atmosphere conducive to self-discipline, participation and worthwhile learning activities.
- EEC 575 Diag Lrng Difficulties in Math 3 cr**  
Analysis of diagnostic techniques for identifying children's learning difficulties in mathematics.  
Pre-requisite: EEC 535 Minimum Grade of B
- EEC 577 Children's Lit for Gifted 3 cr**  
An exploration of research related to reading behavior of gifted and high-ability children with emphasis on examining criteria for selecting and utilizing literature to promote cognitive, emotional, and social development.
- EEC 590 Sp Top - 1 TO 3 cr**  
Guided supervision in the identification and completion of educational tasks, such as curriculum revision, course and/or program design, self-study for accreditation visitation, student achievement evaluation, aesthetic experiences, consumer and career education. No more than 6 hours can be applied toward a graduate degree.

**EEC 592 Research Seminar** 3 cr  
Structured to assist graduate students in designing and implementing appropriate research for professional growth and writing of a thesis.

**EEC 594 Dir St and Research** 1 TO 3 cr  
Students explore through directed individual study research problems and issues of special interest or significance in elementary or early childhood education. No more than 3 hours of any departmental 594 courses can be applied toward a degree program. Prerequisite: Permission of department chair

**EEC 595 Internship** 3 TO 9 cr  
The internship is a supervised learning experience in a work setting similar to that in which the educator will eventually be employed. The internship provides the student an opportunity to apply the theories and concepts learned during the graduate program of study. Prerequisite: Permission of department chair.  
Pre-requisite: PRAXIS-Teaching Reading CB 155( or PRAXIS-Teaching Reading 155 ) and PRAXIS-Prin of Learn/Teach K-6 145( or PRAXIS-Prin of Learn/Teach K-6 145 ) and PRAXIS-Read/Lang Arts Subtest 154( and PRAXIS-Mathematics Subtest 143 and PRAXIS-Social Studies Subtest 142 and PRAXIS-Science Subtest 144 ) or PRAXIS-Elem Ed-Read/Lang Arts 165( and PRAXIS-Elem Ed-Math Sub 157 and PRAXIS-Elem Ed-Soc Stu- Sub 142 and PRAXIS-Elem Ed-Science- Sub 144 ) or PRAXIS-Elem Ed Cont Knowledge 137( or PRAXIS-Elem Ed Cont Knowledge 137 )

**EEC 598 Internship Early Childhood Edu** 3 TO 9 cr  
The internship is a supervised learning experience in a work setting similar to that in which the educator will eventually be employed. The internship provides the student an opportunity to apply the theories and concepts learned during the graduate program of study. Prerequisite: Permission of department chair.  
Pre-requisite: PRAXIS-Early Child Edu 150 and PRAXIS-Teaching Reading 155 or PRAXIS-Teaching Reading CB 155 and PRAXIS-Prin of Learn/Teach K-6 145

**EEC 599 Thesis** 1 TO 9 cr  
A student selects a project, study, or investigation related to his area of specialization in early childhood or elementary education. The project forms a basis for the thesis. A thesis committee will provide direction during the investigation for and writing of the thesis.

**EEC 601 Advanced Seminar -** 3 cr  
In depth study of various curriculum areas through research reports, problem analysis and individual evaluation of promising practices and topical issues. Each seminar participant will concentrate on a curriculum area: e.g., arithmetic, career awareness, communication, consumer education, humanities, natural sciences, social sciences, early reading and psycholinguistics.

**EEC 610 Diag and Prescriptive Teaching** 3 cr  
Designed to assist teachers and school leaders in understanding the skills and techniques necessary for diagnosing and prescribing for learners in different types of teaching-learning settings.

**EEC 622 Seminar in Curr-Inst Problems** 3 cr  
Critical study of curriculum and instructional problems in the elementary school. Research reviews and program design problems are emphasized.

**EEC 635 Seminar in Mathematics Ed** 3 cr  
A study of current topics related to teaching mathematics in early childhood and elementary years.

**EEC 690 Sp Top -** 3 cr  
Guided supervision in the identification and completion of educational tasks, such as curriculum revision, course and/or program design, self-study for accreditation visitation, student achievement evaluation. No more than 6 hours can be applied toward a graduate degree. Prerequisite: Permission of department chair.

**EEC 694 Dir St and Research -** 1 TO 3 cr  
Students explore through directed study problems and issues of special interest or significance in early childhood or elementary education. No more than 3 hours of any departmental 694 courses can be applied toward a degree program. Prerequisite: Permission of department chair.

**EEC 695 Internship** 3 TO 9 cr  
The internship is a supervised learning experience in a work setting similar to that in which an educator will eventually be employed. The internship provides the student with an opportunity to apply the theories and concepts learned during the graduate program.

**EEC 699 Research Project** 1 TO 3 cr  
The research project, as the culminating experience in the Instructional Specialist Program, provides an opportunity for the candidate to synthesize and apply the various program components in a selected instructional setting. Suitable agreements are reached with the appropriate school systems by the candidate. May be taken more than one semester. Prerequisite: Permission of department chair. Pre-requisite: EEC 601 Minimum Grade of B and EEC 610 Minimum Grade of B and EEC 622 Minimum Grade of B and IDE 692 Minimum Grade of B or EDU 692 Minimum Grade of B or EDU 692 Minimum Grade of B

## Emergency Medical Services (EMS)

**EMS 100 Cardiopulmonary Resuscitation 1 cr**

Cardiopulmonary Resuscitation (CPR) emphasizes the scope and magnitude of cardiovascular disease causes of sudden death, and the effects of prudent heart living as a tool to reduce risk factors associated with cardiovascular disease. The skills component identifies and measures competence in one-person CPR, two person adult CPR, infant and child CPR, and management of airway obstruction. Course completion cards are issued by the American Heart Association.

**EMS 104 First Aid/CPR 1 cr**

This American Heart Association course includes the basics of First Aid and Cardiopulmonary Resuscitation (CPR) for Adults, Children and Infants. Course content includes instruction on recognition and management of medical and trauma emergencies including environmental emergencies. The skills component includes competence in one-person adult, infant and child CPR, and management of airway obstruction as well as skills associated with trauma and medical emergencies. Course completion cards are issued by the American Heart Association.

**EMS 110 Emergency Medical Responder 3 cr**

A skills approach in helping the student to intervene in any medical or traumatic emergency situation before emergency personnel arrive. Emphasis is placed on care of the airway, CPR, control of bleeding, splinting and bandaging, and overall management. Clinical rotations include emergency department and ambulance. American Heart Association Healthcare Provider CPR certification will be awarded. Successful completion of this course permits the student to sit for the National Registry exam for Emergency Medical Responder. Upon successful completion of the National Registry exam the student may apply for a license with the Alabama Department of Public Health as an Emergency Medical Responder.

**EMS 112 EMT Emergency Care 6 cr**

Includes all required modules of the 2009 National EMS Educational Standard Curriculum. Topics include pathophysiology, patient assessment, airway management, hemorrhage control, management of fractures, care of individuals with special needs, emergency childbirth, care of infants and children, medical emergencies, environmental emergencies, transportation of the sick and injured, operations and radio communications. Prerequisite: AHA BLS for Health Care Providers.  
Co-requisite: EMS 113, EMS 115

**EMS 113 EMT Skills Lab 1 cr**

Emergency Medical Technician Skills practicum, Designed to allow EMT students extensive practice of required psychomotor skills.  
Co-requisite: EMS 112, EMS 115

**EMS 115 EMT Clinical Internship 1 cr**

Pre-hospital care and transportation of the sick and injured using principles of basic life support, correlated with emergency department experience. Time distributed between emergency department and ambulance.  
Co-requisite: EMS 112, EMS 113

**EMS 140 Advanced EMT 6 cr**

This course includes theoretical concepts and competencies outlined in the National EMS Education Standards for Advanced EMT's. Major topical areas include EMS operations, airway management, assessment and management of the medical and trauma patient, pharmacology for the A-EMT, public health and life span development, among others.  
Pre-requisite: (EMS 210 Minimum Grade of B or EMT 210 Minimum Grade of B) and (EMS 200 Minimum Grade of B or EMT 310 Minimum Grade of B) or ( (BMD 114 Minimum Grade of C or BLY 151 Minimum Grade of C or CLS 114 Minimum Grade of C) and (BMD 115 Minimum Grade of C or BLY 152 Minimum Grade of C or CLS 115 Minimum Grade of C) ) and (EMS 141 Minimum Grade of S or EMT 361 Minimum Grade of S) and (EMS 143 Minimum Grade of S or EMT 371 Minimum Grade of S)

**EMS 141 Advanced EMT Skills Lab 1 cr**

This course is designed to integrate previously learned theory on advanced pre-hospital assessment, treatment and documentation of the medical and traumatic emergency patient. The course includes psychomotor skills and competencies outlined in the DOT's National EMS Education Standards for Advanced EMTs.  
Pre-requisite: (EMS 210 Minimum Grade of B or EMT 210 Minimum Grade of B) and (EMS 200 Minimum Grade of B or EMT 310 Minimum Grade of B) and (EMS 140 Minimum Grade of B or EMT 321 Minimum Grade of B) and (EMS 143 Minimum Grade of S or EMT 371 Minimum Grade of S)

**EMS 143 Advanced EMT Internship 2 cr**

Supervised clinical and field experiences emphasizing patient care in the hospital and out-of-hospital environments. Time distributed between hospital emergency departments, fire rescue departments, and ambulance services, among others.  
Pre-requisite: (EMS 210 Minimum Grade of B or EMT 210 Minimum Grade of B) and (EMS 200 Minimum Grade of B or EMT 310 Minimum Grade of B) and (EMS 140 Minimum Grade of B or EMT 321 Minimum Grade of B) and (EMS 141 Minimum Grade of S or EMT 361 Minimum Grade of S)

**EMS 200 Human Systems/Pathophysiology 3 cr**

An overview of the human body systems and disease processes. Emphasis is placed on the functions of human systems and subsystems relative to pathophysiology. Includes concepts of pathophysiology included in the National Standard Curriculum for the Paramedic and the requirements set forth by the Alabama Department of Public Health.

**EMS 210 Medical Terminology 3 cr**

Medical vocabulary including prefixes, suffixes and their etymological derivation. Proper pronunciation stressed as well as logic, grammar, and spelling. Course includes an overview of human anatomy and physiology.

**EMS 212 Paramedic Foundations 3 cr**

This course introduces issues related to the practice of pre-hospital advanced life support as a career, with a focus on issues common to all health care professions. Content areas include: paramedic roles and responsibilities, well-being of the paramedic, illness and injury prevention, medical-legal-ethical issues, therapeutic communication, pharmacology and advance airway management. Upon course completion, student will have met the objectives as outlined in the National Standard Curriculum for the Paramedic.

Pre-requisite: (EMS 210 Minimum Grade of B or EMT 210 Minimum Grade of B) and (EMS 140 Minimum Grade of B or EMT 321 Minimum Grade of B) and (EMS 141 Minimum Grade of S or EMT 361 Minimum Grade of S) and (EMS 143 Minimum Grade of S or EMT 371 Minimum Grade of S) and (EMS 200 Minimum Grade of B or EMT 310 Minimum Grade of B) or (BMD 114 Minimum Grade of C or BLY 151 Minimum Grade of C or CLS 114 Minimum Grade of C) and (BMD 115 Minimum Grade of C or BLY 152 Minimum Grade of C or CLS 115 Minimum Grade of C) and (EMS 214 Minimum Grade of B or EMT 340 Minimum Grade of B) and (EMS 216 Minimum Grade of B or EMT 350 Minimum Grade of B) and (EMS 217 Minimum Grade of S or EMT 465 Minimum Grade of S)

**EMS 214 Introduction to EMS Cardiology 3 cr**

Rhythm interpretation in Lead II EKG. Rapid recognition, defibrillation and/or therapeutic management of potentially lethal rhythms and myocardial infarction. Objectives include twelve lead placement and basic rhythm recognition.

Pre-requisite: (EMS 210 Minimum Grade of B or EMT 210 Minimum Grade of B) and (EMS 140 Minimum Grade of B or EMT 321 Minimum Grade of B) and (EMS 141 Minimum Grade of S or EMT 361 Minimum Grade of S) and (EMS 143 Minimum Grade of S or EMT 371 Minimum Grade of S) and (EMS 200 Minimum Grade of B or EMT 310 Minimum Grade of B) or ( (BMD 114 Minimum Grade of C or BLY 151 Minimum Grade of C or CLS 114 Minimum Grade of C) and (BMD 115 Minimum Grade of C or BLY 152 Minimum Grade of C or CLS 115 Minimum Grade of C) ) and EMS 212 Minimum Grade of C and (EMS 216 Minimum Grade of B or EMT 350 Minimum Grade of B) and (EMS 217 Minimum Grade of S or EMT 465 Minimum Grade of S)

**EMS 216 Patient Assess/Mgt & EMS Oper 3 cr**

Includes history taking, physical examination, clinical decision making, communications, documentation, assessment-based management of medical and trauma patients, ambulance operations, incident command rescue, Hazmat and crime scene awareness.

Pre-requisite: (EMS 210 Minimum Grade of B or EMT 210 Minimum Grade of B) and (EMS 140 Minimum Grade of B or EMT 321 Minimum Grade of B) and (EMS 141 Minimum Grade of S or EMT 361 Minimum Grade of S) and (EMS 143 Minimum Grade of S or EMT 371 Minimum Grade of S) and (EMS 200 Minimum Grade of B or EMT 310 Minimum Grade of B) or ( (BMD 114 Minimum Grade of C or BLY 151 Minimum Grade of C or CLS 114 Minimum Grade of C) and (BMD 115 Minimum Grade of C or BLY 152 Minimum Grade of C or CLS 115 Minimum Grade of C) ) and EMS 212 Minimum Grade of B and (EMS 214 Minimum Grade of B or EMT 340 Minimum Grade of B) and (EMS 217 Minimum Grade of S or EMT 465 Minimum Grade of S)

**EMS 217 Paramedic Clinical I 3 cr**

Supervised clinical experiences emphasizing patient care in the hospital and outpatient clinical settings as outlined in the National Standard Curriculum for the Paramedic.

Pre-requisite: (EMS 210 Minimum Grade of B or EMT 210 Minimum Grade of B) and (EMS 140 Minimum Grade of B or EMT 321 Minimum Grade of B) and (EMS 141 Minimum Grade of S or EMT 361 Minimum Grade of S) and (EMS 143 Minimum Grade of S or EMT 371 Minimum Grade of S) and (EMS 200 Minimum Grade of B or EMT 310 Minimum Grade of B) or ( (BMD 114 Minimum Grade of B or BLY 151 Minimum Grade of B or CLS 114 Minimum Grade of B) and BMD 115 Minimum Grade of B or BLY 152 Minimum Grade of B or CLS 115 Minimum Grade of B) ) and EMS 212 Minimum Grade of B and (EMS 214 Minimum Grade of B or EMT 340 Minimum Grade of B) and (EMS 216 Minimum Grade of B or EMT 350 Minimum Grade of B)

**EMS 240 EMS Resp. Special Populations 3 cr**

This course relates pathophysiology and assessment findings to the formation of field impressions and treatment plans specific to special populations. Subject matter will include gynecology, obstetrics, abuse and assault, neonatology, pediatrics, special needs and the geriatric community. Upon course completion, students will have met the objectives for special populations as outlined in the National Standard Curriculum for the Paramedic.

Pre-requisite: EMS 212 Minimum Grade of B and (EMS 214 Minimum Grade of B or EMT 340 Minimum Grade of B) and (EMS 216 Minimum Grade of B or EMT 350 Minimum Grade of B) and (EMS 217 Minimum Grade of S or EMT 465 Minimum Grade of S) and (EMS 242 Minimum Grade of B or EMT 355 Minimum Grade of B) and (EMS 244 Minimum Grade of B or EMT 425 Minimum Grade of B) and (EMS 245 Minimum Grade of S or EMT 455 Minimum Grade of S) and (EMS 247 Minimum Grade of S or EMT 466 Minimum Grade of S)

**EMS 242 Paramedic Emergency Care I 3 cr**

Includes pathophysiology, assessment and management of patients suffering from pulmonary and cardiovascular diseases. Additional modules may be added in accordance to standards and guidelines in the National Standard Curriculum for the Paramedic and the American Heart Association. Student will receive an ACLS provider certification upon successful completion.

Pre-requisite: EMS 212 Minimum Grade of B and (EMS 214 Minimum Grade of B or EMT 340 Minimum Grade of B) and (EMS 216 Minimum Grade of B or EMT 350 Minimum Grade of B) and (EMS 217 Minimum Grade of S or EMT 465 Minimum Grade of S) and (EMS 240 Minimum Grade of B or EMT 375 Minimum Grade of B) and (EMS 244 Minimum Grade of B or EMT 425 Minimum Grade of B) and (EMS 245 Minimum Grade of S or EMT 455 Minimum Grade of S) and (EMS 247 Minimum Grade of S or EMT 466 Minimum Grade of S)

**EMS 244 Paramedic Emergency Care II 3 cr**

Includes pathophysiology, assessment and management of patients suffering from medical emergencies not included in EMS 240 and EMS 242 in accordance to the National Standard Curriculum for the Paramedic.

Pre-requisite: EMS 212 Minimum Grade of B and (EMS 214 Minimum Grade of B or EMT 340 Minimum Grade of B) and (EMS 216 Minimum Grade of B or EMT 350 Minimum Grade of B) and (EMS 217 Minimum Grade of S or EMT 465 Minimum Grade of S) and (EMS 240 Minimum Grade of B or EMT 375 Minimum Grade of B) and (EMS 242 Minimum Grade of B or EMT 355 Minimum Grade of B) and (EMS 245 Minimum Grade of S or EMT 455 Minimum Grade of S) and (EMS 247 Minimum Grade of S or EMT 466 Minimum Grade of S)

**EMS 245 Paramedic Skills Lab 1 cr**

Advanced out-of-hospital practicum. Designed to integrate all previously learned theory, management concepts and behavioral objectives as outlined in the National Standard Curriculum for the Paramedic.

Pre-requisite: EMS 212 Minimum Grade of B and (EMS 214 Minimum Grade of B or EMT 340 Minimum Grade of B) and (EMS 216 Minimum Grade of B or EMT 350 Minimum Grade of B) and (EMS 217 Minimum Grade of S or EMT 465 Minimum Grade of S) and (EMS 240 Minimum Grade of B or EMT 375 Minimum Grade of B) and (EMS 242 Minimum Grade of B or EMT 355 Minimum Grade of B) and (EMS 244 Minimum Grade of B or EMT 425 Minimum Grade of B)

**EMS 247 Paramedic Clinical II 2 cr**

Supervised clinical experiences emphasizing patient care in the hospital and outpatient clinical settings as outlined in the National Standard Curriculum for the Paramedic.

Pre-requisite: EMS 212 Minimum Grade of B and (EMS 214 Minimum Grade of B or EMT 340 Minimum Grade of B) and (EMS 216 Minimum Grade of B or EMT 350 Minimum Grade of B) and (EMS 217 Minimum Grade of S or EMT 465 Minimum Grade of S) and (EMS 240 Minimum Grade of B or EMT 375 Minimum Grade of B) and (EMS 242 Minimum Grade of B or EMT 355 Minimum Grade of B) and (EMS 244 Minimum Grade of B or EMT 425 Minimum Grade of B) and (EMS 245 Minimum Grade of S or EMT 455 Minimum Grade of S)

**EMS 270 PALS 3 cr**

Course based on American Heart Association's Emergency Cardiovascular Care program. Includes assessment and management of pediatric cardiovascular and respiratory emergencies. Upon successful completion, the student will receive PALS provider certification. Recommended for health care providers and health care provider students.

**EMS 280 Advanced Cardiac Life Support 3 cr**

Course based on American Heart Association's Emergency Cardiovascular Care program. Includes in-depth review of all cases required for a full ACLS course. Recommended for health care providers and health care provider students. Upon successful completion, the student will receive ACLS certification.

**EMS 295 Paramedic Field Internship 6 cr**

Supervised field experiences with an out-of-hospital advanced life support service emphasizing patient care and team leadership skills as outlined in the National Standard Curriculum for the Paramedic.

Pre-requisite: (EMS 240 Minimum Grade of B or EMT 375 Minimum Grade of B) and (EMS 242 Minimum Grade of B or EMT 355 Minimum Grade of B) and (EMS 244 Minimum Grade of B or EMT 425 Minimum Grade of B) and (EMS 245 Minimum Grade of S or EMT 455 Minimum Grade of S) and (EMS 247 Minimum Grade of S or EMT 466 Minimum Grade of S) and (EMS 297 Minimum Grade of S or EMT 495 Minimum Grade of S)

**EMS 296 Special Topics in EMS 1 TO 3 cr**

Selected topics in Emergency Medical Services and Emergency Response Training. Topics will vary according to needs and interest of students. Course may be repeated for credit when content varies.

- EMS 297 Paramedic Comp Review/Exams 1 cr**  
Culmination of paramedic education. Includes practical skills lab designed to prepare the student for state licensure exams. A final practical and written exam will be administered as a final evaluation of student progress. Pre-requisite: (EMS 240 Minimum Grade of B or EMT 375 Minimum Grade of B) and (EMS 242 Minimum Grade of B or EMT 355 Minimum Grade of B) and (EMS 244 Minimum Grade of B or EMT 425 Minimum Grade of B) and (EMS 245 Minimum Grade of S or EMT 455 Minimum Grade of S) and (EMS 247 Minimum Grade of S or EMT 466 Minimum Grade of S) and (EMS 295 Minimum Grade of S or EMT 475 Minimum Grade of S)
- EMS 298 Directed Studies in EMS 1 TO 3 cr**  
Selected topics in Emergency Medical Services and Emergency Response Training. Topics will vary according to needs and interest of students. Course may be repeated for credit when content varies.
- EMS 310 Intro to EMS Systems 3 cr**  
This course provides students with an introduction to Emergency Medical Services (EMS) Systems. Theoretical concepts and issues will be discussed and examined in order to provide students with a conceptual basis for understanding and analyzing EMS systems and organizations. Particular emphasis will be placed on system components, system integration and the roles and responsibilities of management and leadership in EMS organizations.
- EMS 315 EMS Administration 3 cr**  
This course provides a general overview of management and administration functions required of EMS managers today including planning, directing, budgeting, staffing and evaluation. Particular emphasis will be placed on issues relating to human resources, EMS operations, and organizational planning.
- EMS 320 EMS Law and Legal Issues-W 3 cr**  
This course will provide a general overview of the origins of law in the United States with particular emphasis on health laws and regulations affecting pre-hospital providers. Topics include issues relating to malpractice, litigation, consent and refusal of medical treatment, advanced directives, patient confidentiality, and expert witness preparation, among others.
- EMS 325 Instructional Methods in EMS 3 cr**  
This course presents theoretical and practical foundations necessary for entry level EMS instructors and coordinators. Topics include instructor roles and responsibilities, learning theory, lesson plan development, test writing and validation, and program evaluation. Additional emphasis will be placed on instructional techniques for the adult learner.
- EMS 340 Disaster Mgt & Event Planning 3 cr**  
Considerations of the theoretical and practical foundations necessary to manage incidents involving multiple casualties and multiple agencies as well as the planning and management of other large scale events. Topics include disaster planning, incident command, WMD, response issues, and scene control, among others.
- EMS 350 Critical Care Paramedic 3 cr**  
This course provides paramedics with advanced skills and knowledge in critical care medicine. Students successfully completing this course and its subsequent internship (EMS 375) will be eligible to sit for national certification as a Critical Care Paramedic.
- EMS 375 Crit Care Paramedic Internship 3 cr**  
An advanced clinical internship course for licensed paramedics who have successfully completed EMS 350. Internship is conducted in an approved critical care setting or facility. Successful completion of this course allows the student to sit for national certification examination as a Critical Care Paramedic.
- EMS 401 Seminar in HP 3 cr**  
This course is designed to provide students with an overview of different health professions and their scope of practice and also to provide information about health administration.
- EMS 410 Concepts of Prof Paramedic 6 cr**  
This bridge course is designed for licensed (or nationally certified) paramedics who are admitted to the Department's Paramedic to BS in EMS Track. This course provides critical updates and information related to paramedic practice and enhances the student's overall patient assessment and critical thinking skills. Focus of the course is on selected theories and concepts integrated throughout the curriculum. Additional emphasis will be on the professional roles of paramedics. Prerequisite: Paramedic to BSEMS Track.
- EMS 440 Health Insurance/Managed Care 3 cr**  
This course provides an overview of the basic concepts and principles in the health insurance and managed care environments. Particular emphasis will be placed on issues relating to the costs, quality and access to emergency medical services. Topics include Medicare and Medicaid reimbursement, Managed Care contracting and EMS Quality Management, among others.
- EMS 445 EMS Research - W 3 cr**  
An introduction to basic research methods and basic statistical procedures used in Emergency Medical Services research. Students will use this information in order to assist them with reading, interpreting and evaluating articles in the pre-hospital healthcare literature.

**EMS 460 Issues and Trends in EMS 3 cr**

Explores issues and trends at the federal, state and local levels facing EMS leaders and EMS organizations. Particular emphasis is on new and proposed programs, policies and practices which affect pre-hospital healthcare providers.

**EMS 475 EMS Internship 3 cr**

Structured field experience providing the student to work in an EMS administration, management or educational environment; observation of leadership processes within an EMS organization; application of EMS leadership theory and techniques.

**EMS 494 Directed Studies 1 TO 3 cr**

Student completes an individual project in a specific EMS area under the guidance and supervision of an EMS faculty member.

**EMS 495 EMS Comp/Review Exam 1 cr**

The comprehensive examination is the capstone of the Emergency Medical Services degree program. A written examination based on the program objectives of the EMS degree program will be administered as a final evaluation of the student's progress.

## Emergency Medical Training (EMT)

**EMT 255 Hazardous Environment Managmnt 3 cr**

Theory behind management of hazardous environment emergencies with some application of theory in a practical setting. Instruction on chemical and physical nature of hazardous materials relative to control of emergency situations involving chemical spills.

**EMT 315 EMS Pharmacology I 3 cr**

Introduction to pharmacology for the EMS professional. Includes drug classification, dosage calculations, routes and methods of administration, and IV access.

**EMT 335 Essentials of Paramedicine 3 cr**

Preparatory course for ALS EMS students. Includes airway management, EMS Systems, therapeutic communications, responsibilities, injury prevention, and legal issues.

**EMT 345 EMS Pharmacology II 3 cr**

Advanced course with emphasis on specific drugs within classifications, drug names, actions, indications, contraindications, side effects, precautions, dosages, clinical applications and listings of prescriptions and over-the-counter medications.

**EMT 365 Advanced Trauma Management 3 cr**

Includes trauma systems, mechanism of injury, management of hemorrhage, shock, burns, soft tissue, head and facial, spinal, thoracic, abdominal and musculoskeletal trauma.

**EMT 440 EMS Op and Sp Considerations 3 cr**

Includes special circumstances regarding geriatric patient, abuse and assault, patients with special challenges, acute interventions for the chronic care patient, ambulance operations, incident command, rescue, hazmat, and crime scene awareness.

**EMT 490 Special Topics - 1 TO 3 cr**

Selected topics in Emergency Medical Services and Emergency Response Training. Topics will vary according to needs and interests of students. Course may be repeated for credit when content varies.

**EMT 494 Directed Studies - 1 TO 3 cr**

Directed study, under the guidance of a faculty advisor, of a topic in the fields of Emergency Medical Services or Emergency Response Training. Requires the permission of department chair.

## Engineering (EG)

**EG 101 Intro to Engineering & Design 2 cr**

A course for first time engineering students that assists with maximizing the student's potential to achieve academic success and to adjust responsibly to the individual and interpersonal challenges presented by college life. Introduction to engineering fundamentals through reading, homework assignments, laboratory investigations, guest lecturers and group discussions on the engineering profession.

Pre-requisite: (MA 113 Minimum Grade of D or MA 172 Minimum Grade of D) or (MA 125 Minimum Grade of C or MA 132 Minimum Grade of D)

**EG 201 Intro to Engr & Prob Solving 2 cr**

A course for first-time transfer students that helps maximize the student's potential to achieve academic success and to address the transition from community college to four-year college. Introduction to engineering fundamentals and problem solving techniques through reading, homework assignments, laboratory investigations, guest lecturers and group discussions on the engineering profession.

Pre-requisite: MA 126 Minimum Grade of C

**EG 220 Electrical Circuits 3 cr**

Basic SI units. Resistive (R) networks with independent and dependent sources. Ohm's and Kirchhoff's laws. Network theorems -superposition, source transformation Theverin's and Norton's. Inductors (L) and capacitors (C) as energy storage elements in RLC circuits. Cinusoids and phasors and their applications in RLC circuits. RMS values of voltages and currents. Average power and power factor in AC circuits.

Pre-requisite: MA 125 Minimum Grade of C and PH 202 Minimum Grade of C

**EG 231 Intro to Ethics and Economics 3 cr**

Introduction to ethics and the use of codes of ethics in developing an ethical profession. Application of engineering economic principles to engineering problems.  
Pre-requisite: MA 126 Minimum Grade of D

**EG 270 Engineering Thermodynamics 3 cr**

First and second law of thermodynamics with applications.  
Pre-requisite: MA 126 Minimum Grade of C and PH 201 Minimum Grade of C

**EG 283 Statics 3 cr**

Vector algebra, forces, moments, couples, equilibrium of rigid bodies, beams, trusses, frames, area and mass moments of inertia, and friction.

Pre-requisite: (MA 126 Minimum Grade of D or MA 233 Minimum Grade of D) and (PH 201 Minimum Grade of D or PH 216 Minimum Grade of D)

**EG 284 Dynamics 3 cr**

Kinematics and kinetics of particles and rigid bodies. Work/energy and momentum methods.

Pre-requisite: EG 283 Minimum Grade of D and (MA 126 Minimum Grade of D or MA 233 Minimum Grade of D)

**EG 290 Sp Top - 1 TO 5 cr**

Subjects of special interest in engineering. Requires permission of instructor.

**EG 315 Mechanics of Materials 3 cr**

An introduction to the mechanics of deformable bodies. Analysis of stress and strain. Emphasis on axial, torsional and bending loads. Deflections, deformations, and column stability.

Pre-requisite: EG 283 Minimum Grade of D and (MA 227 Minimum Grade of D or MA 234 Minimum Grade of D) and (PH 201 Minimum Grade of D or PH 216 Minimum Grade of D)

**EG 360 Fluid Mechanics 3 cr**

Study of the properties of fluids including fluid statics, kinematics; integral and differential equations of mass, momentum and energy conservation principles; dimensional analysis; flow in ducts; boundary layer flows; and compressible flow.

Pre-requisite: MA 238 Minimum Grade of D and EG 284 Minimum Grade of D

**EG 480 Prin of Eng Mgmt and Ldrshp 3 cr**

An examination of skills, abilities, personality, attitudes, values, interests and behaviors to increase self-awareness of management and leadership competencies. Students will also examine the concept of Professional Improvement Process that integrates strategy, human resources and accountability.

**EG 490 Special Topics in Engineering 1 TO 3 cr**

This course covers topics of current interest in Engineering.

**EG 494 DIS In Engineering 1 TO 3 cr**

Directed study, under the guidance of a faculty advisor of a topic from the field of Engineering not offered in a regularly scheduled course.

**EG 501 Research Integrity and Seminar 1 cr**

This course is designed to expose Engineering graduate students who are about to undertake an MS thesis project to a series of seminars and a variety of issues concerning research integrity and inform them of current policies related to research activities and thesis development. This is a pass/fail course.

**EG 590 Sp Top - 1 TO 3 cr**

Subjects of special interest in engineering for engineering graduate students. Requires permission of instructor.

**EG 620 Biomedical Engineering I 4 cr**

Fundamental concepts of medical instrumentation, biomedical imaging and biological systems modeling as used in biomedical engineering. Course is cross-listed with IDL 620. Fee.

**EG 621 Biomedical Engineering II 4 cr**

Fundamental concepts of transport phenomena, cellular and tissue mechanics, and materials as used in biomedical engineering. Course is cross-listed with IDL 621. Fee.

## English (EH)

**EH 101 English Composition I 3 cr**

Prepares students for diverse types of college writing. Covers the writing process, general criteria used to evaluate writing, collaborative writing, and rhetoric, especially audience analysis. Some sections require an ACT Reading score of 19 or higher or an SAT Critical Reading score of 26 or higher. Grading is "A", "B", "C", and "U". Core Course.

Pre-requisite: ACT English 18 or READING TEST SCORE 26 or SAT Critical Reading 441 or (ESL 015 Minimum Grade of C or IELTS Reading 5.5 or IBT TOEFL Reading 20 ) and IBT TOEFL Writing 20( or IELTS Writing 5.5 or ESL 016 Minimum Grade of C)

**EH 102 English Composition II 3 cr**

EH 102 prepares students for college writing by focusing on argumentation, research, and the critical thinking required to argue effectively. Students must earn a C or higher in EH 102 to fulfill the University writing requirement for composition. Core course.

Pre-requisite: ACT English 27 or SAT Critical Reading 550 or University - EH101 Exempt P or EH 101 Minimum Grade of C or EH 110 Minimum Grade of D or EH 190 Minimum Grade of D or USA 010 Minimum Grade of S

**EH 105 Honors Composition - H 3 cr**

This course emphasizes the types of writing that students will do in college and reflects goals of the Honors Program with advanced work in critical thinking and research.

Prerequisite: students must have been accepted in the Honors Program.

Pre-requisite: ACT English 27 or SAT Critical Reading 550 or University - EH101 Exempt P or EH 101 Minimum Grade of C or EH 110 Minimum Grade of D or EH 190 Minimum Grade of D or USA 010 Minimum Grade of S

**EH 207 Literature and Gender - 3 cr**

A variable-topics course to study gender issues in literary texts. Can only be taken for a maximum of 3 credits.

Pre-requisite: (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 215 Survey of British Lit I 3 cr**

This course introduces the student to the cultural heritage of the English-speaking peoples by studying representative works from Anglo-Saxon times to Blake. Core Course.

Pre-requisite: (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 216 Survey of British Lit II 3 cr**

This course introduces the student to the cultural heritage of the English-speaking peoples by studying representative works from Blake to the present. Core Course.

Pre-requisite: (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 225 Survey of American Lit I 3 cr**

This course traces the development of American literature from its beginning through 1865 by studying the works of representative writers. Core course.

Pre-requisite: ACT English 27( or SAT Critical Reading 550 or EH 101 Minimum Grade of C) and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 226 Survey of American Lit II 3 cr**

This course traces the development of American literature from 1865 to the present by studying the works of representative writers. Core Course.

Pre-requisite: ACT English 27( or SAT Critical Reading 550 or EH 101 Minimum Grade of C) and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 235 Survey of World Lit I 3 cr**

A survey of literature from the Ancient World, the Middle Ages, and the Renaissance, featuring selections in translation. Core Course.

Pre-requisite: ACT English 27( or SAT Critical Reading 550 or EH 101 Minimum Grade of C) and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 236 Survey of World Lit II 3 cr**

A survey of literature from Neoclassicism, Romanticism, Nineteenth-century Realism and Naturalism, and the Modern World, featuring selections in translation. Core course.

Pre-requisite: ACT English 27( or SAT Critical Reading 550 or EH 101 Minimum Grade of C) and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 290 Sp Top - 3 cr**

A variable-content course treating selected topics in literature and language. May be repeated once for a total of 6 credits when topic varies.

Pre-requisite: (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 300 Intro to Literary Study 3 cr**

This course offers an introduction to the study of literature with special emphasis on critical writing. Required for 400-level literature classes.

Pre-requisite: ACT English 27( or SAT Critical Reading 550 or EH 101 Minimum Grade of C) and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 310 Classical Mythology 3 cr**

Through the disciplines of English and Philosophy, this course will provide an introduction to myths and to the literature that recounts the myths, legends, and folktales of ancient Greece and Rome. Not only will this course offer a survey of Greek and Roman myth, but it will also look at how different writers treat the material and why their treatments vary. Cross-listed with PHL 310 and REL 310. Credit cannot be received for both EH 310 and either PHL 310 or REL 310.

Pre-requisite: ACT English 27( or SAT Critical Reading 550 or University - EH101 Exempt P or EH 101 Minimum Grade of C or EH 110 Minimum Grade of D or EH 190 Minimum Grade of D or USA 010 Minimum Grade of S) and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 314 Medieval Literature 3 cr**

This course will introduce students to major texts of medieval literature, including narrative poetry, drama, prose, and lyric poetry.

Pre-requisite: ACT English 27( or SAT Critical Reading 550 or EH 101 Minimum Grade of C) and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 315 Chaucer 3 cr**

This course will introduce students to Chaucer's major works in the original language; no prior knowledge of Middle English is required.

Pre-requisite: ACT English 27( or SAT Critical Reading 550 or EH 101 Minimum Grade of C) and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

- EH 321 Renaissance Literature** 3 cr  
Non-dramatic literature of the English Renaissance through 1600.  
Pre-requisite: ACT English 27( or SAT Critical Reading 550 or EH 101 Minimum Grade of C) and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)
- EH 322 Shakespeare - Com and Romance** 3 cr  
Study of Shakespeare's comedies and romances.  
Pre-requisite: (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)
- EH 323 Shakespeare Tragedies and Hist** 3 cr  
Study of Shakespeare's tragedies and histories.  
Pre-requisite: ACT English 27( or SAT Critical Reading 550 or EH 101 Minimum Grade of C) and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)
- EH 324 17th Century Literature** 3 cr  
Non-dramatic literature 1600-1660.  
Pre-requisite: ACT English 27( or SAT Critical Reading 550 or EH 101 Minimum Grade of C) and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)
- EH 331 American Novel to 1900** 3 cr  
American novel from its beginning to 1900.  
Pre-requisite: ACT English 27( or SAT Critical Reading 550 or EH 101 Minimum Grade of C) and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)
- EH 332 American Nonfiction Prose** 3 cr  
Major American nonfiction prose.  
Pre-requisite: ACT English 27( or SAT Critical Reading 550 or EH 101 Minimum Grade of C) and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)
- EH 334 American Poetry to 1900** 3 cr  
American poetry from its beginning to 1900.  
Pre-requisite: ACT English 27( or SAT Critical Reading 550 or EH 101 Minimum Grade of C) and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)
- EH 340 Restoration Early 18th Lit** 3 cr  
Literature of the period, including such authors as Behn, Dryden, Finch, Defoe, Pope, Montagu, Swift, and Fielding.  
Pre-requisite: ACT English 27( or SAT Critical Reading 550 or EH 101 Minimum Grade of C) and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)
- EH 342 Later 18th Century Lit - W** 3 cr  
Literature of the period, including such authors as Gray, Boswell, Johnson, Sheridan, Radcliffe, Wollstonecraft, Blake, and Austen.  
Pre-requisite: ACT English 27( or SAT Critical Reading 550 or EH 101 Minimum Grade of C) and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)
- EH 343 18th Century British Novel** 3 cr  
Eighteenth-Century British novel.  
Pre-requisite: ACT English 27( or SAT Critical Reading 550 or EH 101 Minimum Grade of C) and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)
- EH 348 19th C Contl Phil-Lit Theory** 3 cr  
An examination of selected themes and issues in 19th century Continental Philosophy and Literary Theory. Topics may include Idealism, Romanticism, Existentialism, Marxism, Freudianism. Identical with PHL 348 and LG 348. Credit cannot be received for both EH 348 and either PHL 348 or LG 348. (For LG credit, students will be required to complete some coursework in their language of concentration.)
- EH 349 20th C Contl Phil-Lit Theory** 3 cr  
An examination of selected themes and issues in 20th Century Continental Philosophy and Literary Theory. Topics may include Phenomenology, Existentialism, Hermeneutics, Structuralism, and Post-Structuralism. Identical with PHL 349 and LG 349. Credit cannot be received for both EH 349 and either PHL 349 or LG 349. (For LG credit, students will be required to complete some coursework in their language of concentration.)  
Pre-requisite: (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)
- EH 351 British Romanticism** 3 cr  
The poetry and prose of Romantic-era writers, including Wordsworth, Coleridge, Byron, Keats and Shelley.  
Pre-requisite: ACT English 27( or SAT Critical Reading 550 or EH 101 Minimum Grade of C) and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)
- EH 352 Victorian Poetry** 3 cr  
A study of poetry of the Victorian period.  
Pre-requisite: (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)
- EH 353 Victorian Prose** 3 cr  
A study of prose, emphasizing nonfiction, of the Victorian period.  
Pre-requisite: (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)
- EH 354 19th Century British Novel** 3 cr  
Novels of the Romantic and Victorian periods.  
Pre-requisite: (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)
- EH 357 Black Writers in America** 3 cr  
A survey of literature by African-American authors from the early colonial period to the present. Readings will include fiction, poetry, drama, autobiography, and polemical prose.  
Pre-requisite: (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

- EH 360 Anglo-Am Poetry since 1900** 3 cr  
A study of Anglo-American poets such as D.H. Lawrence, T.S. Eliot, Ezra Pound, Robert Graves, W.H. Auden, Dylan Thomas, Derek Walcott, Paul Muldoon, Eavan Boland, Seamus Heaney, Galway Kinnel, Adrienne Rich, Robert Penn Warren, John Crowe Ransom, Margaret Walker, Elizabeth Bishop, Gwendolyn Brooks, Gary Synder, Charles Olson, Allen Ginsberg, Anne Sexton, and Sylvia Plath. Pre-requisite: (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)
- EH 362 Am. Novel from 1900 to 1945** 3 cr  
A study of the American novel since 1945. Pre-requisite: (EH 101 Minimum Grade of C or EH 110 Minimum Grade of D or EH 190 Minimum Grade of D or USA 010 Minimum Grade of S) and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)
- EH 363 American Novel since 1945** 3 cr  
A study of the American novel since 1945. Pre-requisite: (EH 101 Minimum Grade of C or EH 190 Minimum Grade of D or USA 010 Minimum Grade of S) and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)
- EH 364 Brit. Novel from 1900 to 1945** 3 cr  
A study of the British novel from 1900 to 1945. Pre-requisite: (EH 101 Minimum Grade of C or EH 110 Minimum Grade of D or EH 190 Minimum Grade of D or USA 010 Minimum Grade of S) and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)
- EH 365 British Novel since 1945** 3 cr  
A study of the British novel since 1945. Pre-requisite: (EH 101 Minimum Grade of C or EH 110 Minimum Grade of D or EH 190 Minimum Grade of D or USA 010 Minimum Grade of S) and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)
- EH 366 Contemporary Fiction** 3 cr  
An introduction to literary fiction of the contemporary era. Pre-requisite: (EH 101 Minimum Grade of C or EH 110 Minimum Grade of D or EH 190 Minimum Grade of D or USA 010 Minimum Grade of S) and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)
- EH 369 Modern Short Story** 3 cr  
Representative modern short story writers. Pre-requisite: ACT English 27( or SAT Critical Reading 550 or EH 101 Minimum Grade of C) and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)
- EH 370 History of English Language** 3 cr  
A study of the development from Old English through Middle English to Modern English. Pre-requisite: ACT English 27( or SAT Critical Reading 550 or EH 101 Minimum Grade of C) and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)
- EH 371 Approaches to Eng Grammar - W** 3 cr  
A course designed primarily to help education majors translate between the languages of conventional grammar and the syntactical grammar relevant to the teaching of English at pre-college levels. Consideration will also be given to the rationales basic to the formation of different grammars and to methods of presenting grammatical material in a classroom situation. Non-education majors interested in a sophisticated approach to the study of grammar might also benefit from this course. Pre-requisite: ACT English 27( or SAT Critical Reading 550 or EH 101 Minimum Grade of C) and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)
- EH 372 Technical Writing - W** 3 cr  
The purpose of this course is to train students in the kinds of written reports required of practicing professionals, aiming to improve mastery of the whole process of report writing from conceptual stage through editing stage. Pre-requisite: ACT English 27( or SAT Critical Reading 550 or EH 101 Minimum Grade of C) and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)
- EH 373 Writing in Professions - W** 3 cr  
Practice in the kinds of writing done in such professions as speech pathology and audiology, nursing, teaching, criminal justice, and business. Assignments, which emphasize persuasive writing, may include position papers, correspondence, and reports. Pre-requisite: ACT English 27( or SAT Critical Reading 550 or EH 101 Minimum Grade of C) and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)
- EH 374 English Bible - Old Testament** 3 cr  
King James Version of the Bible studied with respect to literary forms, philosophical concepts, and problems of translation. Pre-requisite: ACT English 27( or SAT Critical Reading 550 or EH 101 Minimum Grade of C) and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)
- EH 375 Engl Bible Apocrypha New Test** 3 cr  
King James Version of the Bible studied with respect to literary forms, philosophical concepts, and problems of translation. Pre-requisite: ACT English 27( or SAT Critical Reading 550 or EH 101 Minimum Grade of C) and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)
- EH 379 Horror** 3 cr  
A study of the history and themes of horror from the early 19th century to the present, including representative texts, films, and scholarship. Pre-requisite: (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

- EH 380 Science Fiction 3 cr**  
Study of the history and themes of science fiction literature and film from the end of the nineteenth century to the present.  
Pre-requisite: ACT English 27( or SAT Critical Reading 550 or EH 101 Minimum Grade of C) and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)
- EH 390 Sp Top - 3 cr**  
A variable-content course addressing selected topics in literature and writing. May be repeated for a total of 6 credits when course content varies.  
Pre-requisite: (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)
- EH 391 Fiction Writing I 3 cr**  
Intensive practice in the writing of the short story. Constructive, critical discussions are conducted on each composition. Emphasis is upon creation of high quality fiction with possible view to publication. This course requires special permission.  
Pre-requisite: (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)
- EH 392 Fiction Writing II 3 cr**  
Intensive practice in the writing of the short story. Constructive, critical discussions are conducted on each composition. Emphasis is upon creation of high quality fiction with possible view to publication. This course requires special permission.  
Pre-requisite: (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C) and (EH 382 Minimum Grade of C or EH 391 Minimum Grade of C)
- EH 393 Creative Nonfiction I 3 cr**  
Intensive study of and practice in writing creative nonfiction - nonfiction that stresses personal voice and the use of literary elements. Concentrates on genres of creative nonfiction (personal or narrative essay, travel and nature writing, cultural criticism, memoir) with an emphasis on producing high-quality writing.  
Pre-requisite: ACT English 27( or SAT Critical Reading 550 or University - EH101 Exempt P or EH 101 Minimum Grade of C or EH 110 Minimum Grade of D or EH 190 Minimum Grade of D or USA 010 Minimum Grade of S) and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)
- EH 394 Creative Nonfiction II 3 cr**  
Intensive study of and practice in writing creative nonfiction - nonfiction that stresses personal voice and the use of literary elements. Concentrates on genres of creative nonfiction (personal or narrative essay, travel and nature writing, cultural criticism, memoir) with an emphasis on producing high-quality writing.  
Pre-requisite: ACT English 27( or SAT Critical Reading 550 or University - EH101 Exempt P or EH 101 Minimum Grade of C or EH 110 Minimum Grade of D or EH 190 Minimum Grade of D or USA 010 Minimum Grade of S) and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C) and EH 393 Minimum Grade of C
- EH 395 Poetry Writing I 3 cr**  
The English language as it may be used in embodying poetic knowledge. Readings in contemporary poetry, study of fixed and open verse forms and their metrics, and practice in producing poems and explications.  
Pre-requisite: (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)
- EH 396 Poetry Writing II 3 cr**  
The English language as it may be used in embodying poetic knowledge. Readings in contemporary poetry, study of fixed and open verse forms and their metrics, and practice in producing poems and explications.  
Pre-requisite: (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C) and (EH 385 Minimum Grade of C or EH 395 Minimum Grade of C)
- EH 401 Teaching Composition-W 3 cr**  
Study of theories of composition and their applications for teaching writing at the secondary school level.  
Pre-requisite: (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)
- EH 402 Rhetoric-Ancient and Modern-W 3 cr**  
Readings in rhetorical theory, ancient and modern, are applied in specific writing assignments which encourage students to adopt a point of view and address a specific audience.  
Pre-requisite: ACT English 27( or SAT Critical Reading 550 or EH 101 Minimum Grade of C) and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)
- EH 403 Art of the Essay - W 3 cr**  
Advanced expository writing. Discussion of British and American essays by such writers as Bacon, Addison, Swift, Arnold, Emerson, Chesterton, Lewis Thomas, and Didion, with applications in written assignments. Student writings are discussed in class or in conference.  
Pre-requisite: ACT English 27( or SAT Critical Reading 550 or EH 101 Minimum Grade of C) and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C) and EH 300 Minimum Grade of C
- EH 421 Literary Criticism to 1900-W 3 cr**  
Classical, Neo-Classical, Romantic, and Victorian literary theory. Identical to PHL 421. Credit cannot be received for both PHL 421 and EH 421.  
Pre-requisite: ACT English 27( or SAT Critical Reading 550 or EH 101 Minimum Grade of C) and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)
- EH 422 Lit Criticism Since 1900-W 3 cr**  
Modern and contemporary literary theory. Identical to PHL 422. Credit cannot be received for both EH 422 and PHL 422.  
Pre-requisite: ACT English 27( or SAT Critical Reading 550 or EH 101 Minimum Grade of C) and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

- EH 461 Tudor and Stuart Drama 3 cr**  
A historical and generic study of plays by authors including Kyd, Marlowe, Dekker, Jonson, Middleton, Beaumont, Fletcher, and Webster.  
Pre-requisite: ACT English 27( or SAT Critical Reading 550 or EH 101 Minimum Grade of C) and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C) and EH 300 Minimum Grade of C
- EH 462 Restor-18th Century Drama - W 3 cr**  
A historical and generic study of plays by authors such as Wycherley, Etheridge, Behn, Dryden, Otway, Congreve, Steele, Goldsmith, and Sheridan.  
Pre-requisite: ACT English 27( or SAT Critical Reading 550 or EH 101 Minimum Grade of C) and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)
- EH 463 Drama 1890 to Present 3 cr**  
Twentieth-century British, American, and Continental drama, with major emphasis on the plays of Ibsen, Chekhov, Shaw, Pirandello, O'Neill, and Beckett.  
Pre-requisite: ACT English 27( or SAT Critical Reading 550 or EH 101 Minimum Grade of C) and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C) and EH 300 Minimum Grade of C
- EH 465 Middle English Literature 3 cr**  
Major romances and dream-visions of the late Middle Ages such as Sir Gawain and the Green Knight, Troilus and Criseyde, Sire Orfeo, Pearl, and Parliament of Birds.  
Pre-requisite: ACT English 27( or SAT Critical Reading 550 or EH 101 Minimum Grade of C) and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)
- EH 467 Milton 3 cr**  
Milton's major poems, with emphasis on Paradise Lost.  
Pre-requisite: ACT English 27( or SAT Critical Reading 550 or EH 101 Minimum Grade of C) and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)
- EH 468 Contemporary Black Fiction 3 cr**  
A close reading of selected fiction published since World War II by such authors as James Baldwin, Ralph Ellison, Alice Walker, Toni Morrison, Ernest J. Gaines, Gloria Naylor, and Julius Lester.  
Pre-requisite: ACT English 27( or SAT Critical Reading 550 or EH 101 Minimum Grade of C) and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)
- EH 470 Medieval Lit 3 cr**  
A variable content course in specific topics from medieval literature. May be repeated once for credit when course content varies for up to six credit hours. Junior standing.  
Pre-requisite: ACT English 27( or SAT Critical Reading 550 or EH 101 Minimum Grade of C) and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)
- EH 471 Renaissance Lit 3 cr**  
A variable content course in specific topics from Renaissance literature. May be repeated once for credit when course content varies for up to six credit hours. Junior standing.  
Pre-requisite: ACT English 27( or SAT Critical Reading 550 or EH 101 Minimum Grade of C) and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)
- EH 472 Shakespeare 3 cr**  
A variable content course in specific topics on Shakespeare. May be repeated once for credit when course content varies for up to six credit hours. Junior standing.  
Pre-requisite: ACT English 27( or SAT Critical Reading 550 or EH 101 Minimum Grade of C) and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)
- EH 474 Restoration Lit 3 cr**  
A variable content course in specific topics in Restoration and 18th Century literature. May be repeated once for credit when course content varies for up to six credit hours. Junior standing.  
Pre-requisite: ACT English 27( or SAT Critical Reading 550 or EH 101 Minimum Grade of C) and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)
- EH 475 19th Century Lit 3 cr**  
A variable content course in specific topics from 19th Century literature. May be repeated once for credit when course content varies for up to six credit hours. Junior standing.  
Pre-requisite: SAT Critical Reading 550( or ACT English 27 or EH 101 Minimum Grade of C) and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)
- EH 476 Studies in 20th Century Lit 3 cr**  
A variable content course in specific topics from 20th-Century literature. May be repeated once for credit when course content varies for up to six credit hours.  
Pre-requisite: ACT English 27( or SAT Critical Reading 550 or EH 101 Minimum Grade of C) and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)
- EH 477 Genre 3 cr**  
A variable content course in specific topics from various genres. May be repeated once for credit when course content varies for up to six credit hours. Junior standing.  
Pre-requisite: SAT Critical Reading 550( or ACT English 27 or EH 101 Minimum Grade of C) and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)
- EH 478 Film 3 cr**  
A variable content course in specific topics from film studies. May be repeated once for credit when course content varies for up to six credit hours. Junior standing.  
Pre-requisite: ACT English 27( or SAT Critical Reading 550 or EH 101 Minimum Grade of C) and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

- EH 479 Mod/Postmodern Poetry 3 cr**  
A variable content course in specific topics from modern/postmodern poetry. May be repeated once for credit when course content varies for up to six credit hours. Junior standing.  
Pre-requisite: ACT English 27( or SAT Critical Reading 550 or EH 101 Minimum Grade of C) and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)
- EH 480 Gender and Lit 3 cr**  
A variable content course in specific topics dealing with gender and literature. May be repeated once for credit when course content varies for up to six credit hours. Junior standing.  
Pre-requisite: ACT English 27( or SAT Critical Reading 550 or EH 101 Minimum Grade of C) and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)
- EH 481 Comp and Rhetoric - W 3 cr**  
A variable content course in specific topics concerned with writing, rhetoric, or language studies. May be repeated once for credit when course content varies for up to six credit hours. Junior standing.  
Pre-requisite: ACT English 27( or SAT Critical Reading 550 or EH 101 Minimum Grade of C) and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)
- EH 482 Am Literature 3 cr**  
A variable content course in specific topics from American literature. May be repeated once for credit when course content varies for up to six credit hours. Junior standing.  
Pre-requisite: ACT English 27( or SAT Critical Reading 550 or EH 101 Minimum Grade of C) and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)
- EH 483 Advanced Fiction Writing I 3 cr**  
Advanced work in writing the story and the novel, for students of exceptional talent. This course requires special permission.  
Pre-requisite: (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C) and (EH 382 Minimum Grade of D or EH 391 Minimum Grade of D) and (EH 383 Minimum Grade of D or EH 392 Minimum Grade of D)
- EH 484 Advanced Fiction Writing II 3 cr**  
Advanced work in writing the story and the novel, for students of exceptional talent. This course requires special permission.  
Pre-requisite: (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C) and (EH 382 Minimum Grade of D or EH 391 Minimum Grade of D) and (EH 383 Minimum Grade of D or EH 392 Minimum Grade of D)
- EH 485 Advanced Poetry Writing I 3 cr**  
Advanced work in writing poetry; for students of exceptional talent. This course requires special permission.  
Pre-requisite: (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C) and (EH 385 Minimum Grade of D or EH 395 Minimum Grade of D) and (EH 386 Minimum Grade of D or EH 396 Minimum Grade of D)
- EH 486 Advanced Poetry Writing II 3 cr**  
Advanced work in writing poetry; for students of exceptional talent. This course requires special permission.  
Pre-requisite: (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C) and EH 485 Minimum Grade of C
- EH 487 Screen Writing I 3 cr**  
Guided workshops in writing a dramatic narrative screenplay.  
Pre-requisite: (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)
- EH 488 Screen Writing II 3 cr**  
Guided workshops in writing a dramatic narrative screenplay.  
Pre-requisite: (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C) and (EH 452 Minimum Grade of C or EH 487 Minimum Grade of C)
- EH 490 Special Topics - 1 TO 3 cr**  
Selected topics in writing in literary studies. May be repeated for a total of 9 credits when course content varies.  
Pre-requisite: ACT English 27( or SAT Critical Reading 550 or EH 101 Minimum Grade of C) and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)
- EH 492 Seminar - 3 cr**  
Specific topics in literature. Can be taken twice for a total of 6 credits when topics vary.  
Pre-requisite: ACT English 27( or SAT Critical Reading 550 or EH 101 Minimum Grade of C) and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)
- EH 494 Directed Studies - 1 TO 3 cr**  
Directed individual study. Requires permission of the directing professor and department chair. Course can be repeated for a total of 8 credits.  
Pre-requisite: ACT English 27( or SAT Critical Reading 550 or EH 101 Minimum Grade of C) and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C) and EH 300 Minimum Grade of C
- EH 496 Professional Studies - Intern 1 TO 3 cr**  
On the job experience which relates to the student's classroom work in the field of English; reports required. A maximum of 6 hours credit may be earned in internships. Students consult with the department chair regarding internship opportunities and specific required eligibility. English majors and minors who are Juniors and Seniors may enroll. Course may be repeated for a total of 6 hours.  
Prerequisites: Permission of the department chair and the supervising professor.  
Pre-requisite: ACT English 27( or SAT Critical Reading 550 or EH 101 Minimum Grade of C) and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C) and EH 300 Minimum Grade of C

- EH 497 Adv Creative Nonfiction I 3 cr**  
Advanced work in writing creative nonfiction, for students of exceptional talent. Emphasis on producing high-quality writing with an eye toward publication. These courses require special permission.  
Pre-requisite: ACT English 27( or SAT Critical Reading 550 or University - EH101 Exempt P or EH 101 Minimum Grade of C or EH 110 Minimum Grade of D or EH 190 Minimum Grade of D or USA 010 Minimum Grade of S) and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C) and EH 393 Minimum Grade of C and EH 394 Minimum Grade of C
- EH 498 Adv Creative Nonfiction II 3 cr**  
Advanced work in writing creative nonfiction, for students of exceptional talent. Emphasis on producing high-quality writing with an eye toward publication. These courses require special permission.  
Pre-requisite: ACT English 27( or SAT Critical Reading 550 or University - EH101 Exempt P or EH 101 Minimum Grade of C or EH 110 Minimum Grade of D or EH 190 Minimum Grade of D or USA 010 Minimum Grade of S) and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C) and EH 393 Minimum Grade of C and EH 394 Minimum Grade of C and EH 497 Minimum Grade of C
- EH 499 Senior Honors Project-H 3 TO 6 cr**  
With the guidance of a faculty mentor, Honors Students will identify and carry out an independent scholarly project in English. The outcome of the project will include a formal presentation and defense before the faculty and a written senior thesis. The Honors Senior Project will be evaluated and graded by three members of the faculty and chaired by the project faculty mentor. The student must complete a total of six hours of Honors Senior work, be accepted to the University Honors Program or the Department Honors Program, and have an approved project prospectus. University Honors Program participants must have completed HON 301.  
Pre-requisite: HON 301 Minimum Grade of D and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)
- EH 501 Introduction to Crit Theory 3 cr**  
Required of all M.A. students in the Literature Concentration in their first year of work. Surveys current literary theory from structuralism to the present. The purpose is to introduce the conceptual lexicons and reading strategies of advanced literary analysis. Topics treated include structuralism, deconstruction, psychoanalysis, hermeneutics, Marxism, feminism, and reception theory.  
Pre-requisite: EH 502 Minimum Grade of B
- EH 502 Graduate Writing for English 3 cr**  
A course preparing students for research and academic writing at the graduate level in English studies. Required of all MA students in their first year of work. Prerequisite: Admitted to Graduate Program
- EH 505 Teaching College Writing 3 cr**  
A study of contemporary theories in writing and rhetoric, with an emphasis on their application in a college level curriculum.  
Pre-requisite: EH 502 Minimum Grade of B
- EH 506 Comp Theory Rsrch Methodology 3 cr**  
Part I of this course traces the development of theoretical movements in composition over the past century: part II outlines qualitative and quantitative methodologies used in composition research.  
Pre-requisite: EH 502 Minimum Grade of B
- EH 507 Rhetoric and Postmodernity 3 cr**  
This is a course in rhetorical theory especially as this study intersects with postmodern theories of identity: feminist, postcolonial, sociolinguistics, queer theory, gender studies, deconstruction, and comparative studies.  
Pre-requisite: EH 502 Minimum Grade of C
- EH 508 Workplace Writ Theories & Apps 3 cr**  
Study of theories, practices, and histories of professional writing.  
Pre-requisite: EH 502 Minimum Grade of B
- EH 513 Studies in Chaucer 3 cr**  
A study of selections of Chaucer's Canterbury Tales and dream visions.  
Pre-requisite: EH 502 Minimum Grade of C
- EH 514 Renaissance Poetry 3 cr**  
Examination of non-dramatic Renaissance poetic development, including the sonnet.  
Pre-requisite: EH 502 Minimum Grade of B
- EH 516 Studies in Shakespeare I 3 cr**  
A study of Shakespeare's comedies and romances.  
Pre-requisite: EH 502 Minimum Grade of B
- EH 517 Studies in Shakespeare II 3 cr**  
A study of Shakespeare's histories and tragedies.  
Pre-requisite: EH 502 Minimum Grade of B
- EH 521 17th Century Poetry 3 cr**  
A historical and formal study of the poetry of the early seventeenth century, including the works of Donne, Jonson, Herbert, Vaughn, Herrick, Marvell, Wroth, Lanyer, and Philips. The course will emphasize the close reading of poems.  
Pre-requisite: EH 502 Minimum Grade of B
- EH 525 Restor-Early 18th Century Lit 3 cr**  
A study of literature in the period, including such authors as Dryden, Rochester, Behn, Congreve, Defoe, Pope, Swift, and Gay.  
Pre-requisite: EH 502 Minimum Grade of B

- EH 526 The 18th Century Novel** 3 cr  
A study of prose fiction narratives from the Restoration and eighteenth century by such authors as Behn, Defoe, Richardson, Fielding, Smollett, Stern, and Burney, with emphasis on the establishment of the novel as a respected genre.  
Pre-requisite: EH 502 Minimum Grade of B
- EH 527 The Age of Sensibility** 3 cr  
A study of several late eighteenth-century literary figures, such as Sterne, Johnson, Boswell, Goldsmith, Sheridan, Wollstonecraft, Radcliffe, and Blake.  
Pre-requisite: EH 502 Minimum Grade of B
- EH 532 Early Romantics** 3 cr  
A study of early Romantic poetry and prose, with emphasis on the poetry of William Wordsworth and S.T. Coleridge.  
Pre-requisite: EH 502 Minimum Grade of B
- EH 534 Late Romantics** 3 cr  
A study of late romantic poetry and prose, with emphasis on the poetry of Lord Byron, Percy Shelley, and John Keats.  
Pre-requisite: EH 502 Minimum Grade of B
- EH 536 Victorian and Edwardian Poetry** 3 cr  
A study of poetry of the Victorian and Edwardian periods.
- EH 538 Victorian and Edwardian Prose** 3 cr  
A study of novels and short fiction of the Victorian and Edwardian periods.  
Pre-requisite: EH 502 Minimum Grade of B
- EH 543 American Romanticism** 3 cr  
A study of writers of the American Romantic Movement, such as Irving, Emerson, Thoreau, Douglass, Whitman, and Dickinson, focusing primarily on nonfiction prose and poetry.  
Pre-requisite: EH 502 Minimum Grade of B
- EH 544 Antebellum American Fiction** 3 cr  
Examines the emergence and development of American fiction before the Civil War, focusing on the tale and the novel, and including such figures as Cooper, Hawthorne, Poe, Melville, and Stowe.  
Pre-requisite: EH 502 Minimum Grade of B
- EH 545 American Realism** 3 cr  
A study of writers of the American Realist Movement, such as Twain, James, Crane, Dreiser, Chopin, Cheitnutt, and Jewett.  
Pre-requisite: EH 502 Minimum Grade of B
- EH 547 Southern Renaissance** 3 cr  
A study of several representative figures from twentieth century Southern literature, such as Faulkner, Warren, Tate, Ransom, O'Conner, McCullers, Dickey, Hurston, Wright, and Percy.  
Pre-requisite: EH 502 Minimum Grade of B
- EH 562 20th Century Poetic Revolution** 3 cr  
A study of the key figures in the shaping of modern poetry - Yeats, Eliot, Pound, Stevens, and Frost.  
Pre-requisite: EH 502 Minimum Grade of B
- EH 570 Studies in Medieval Literature** 3 cr  
Theme-based study of Medieval texts; possible topics include late medieval chivalry, medieval sexualities, Arthurian tradition.  
Pre-requisite: EH 502 Minimum Grade of B
- EH 571 Modern British Fiction** 3 cr  
Examination of selected works of such authors as Conrad, D.H. Lawrence, Woolf, Forster, Joyce, Greene, and Lessing.  
Pre-requisite: EH 502 Minimum Grade of B
- EH 572 Modern American Fiction** 3 cr  
Examination of selected works of such authors as Anderson, Dickey, Faulkner, Fitzgerald, and Hemingway.  
Pre-requisite: EH 502 Minimum Grade of B
- EH 573 Contemporary Fiction** 3 cr  
Examines significant trends in contemporary literary fiction.  
Pre-requisite: EH 502 Minimum Grade of B
- EH 577 Studies in Genre -** 3 cr  
Seminar in specific topics from various genres. May be repeated once for credit when content varies.  
Pre-requisite: EH 502 Minimum Grade of B
- EH 583 Grad Fiction Writing Wksp I** 3 cr  
Special individual instruction in fiction writing. This course requires special permission.  
Pre-requisite: EH 502 Minimum Grade of B
- EH 584 Grad Fiction Writing Wksp II** 3 cr  
Special individual instruction in fiction writing. This course requires special permission.  
Pre-requisite: EH 502 Minimum Grade of B
- EH 585 Grad Poetry Writing Wksp I** 3 cr  
Special individual instruction in poetry writing. This course requires special permission.  
Pre-requisite: EH 502 Minimum Grade of B
- EH 586 Grad Poetry Writing Wksp II** 3 cr  
Special individual instruction in poetry writing. This course requires special permission.  
Pre-requisite: EH 502 Minimum Grade of B
- EH 590 Special Topics -** 3 cr  
A graduate seminar designed to allow close study of selected literary topics or figures. May be repeated twice for credit when the subject offerings are from different literary areas.  
Pre-requisite: EH 502 Minimum Grade of B
- EH 592 Seminar -** 3 cr  
A specific subject in American or British literature to be assigned prior to each semester. May be taken once for credit when the subject offerings are from different literary areas.  
Pre-requisite: EH 502 Minimum Grade of C

**EH 594 Dir St - 1 TO 8 cr**

Directed individual study on a topic not covered by an existing course. Prerequisite: Prior permission of the directing professor and the department chair. May be taken for a total of 8 credits.

Pre-requisite: EH 502 Minimum Grade of B

**EH 599 Thesis - 0 TO 6 cr**

One to six credits per semester with a maximum of six hours of credit. Pre-requisite: Admitted to the Graduate Program.

## English Language Teaching (ELT)

**ELT 325 Survey of ESL 3 cr**

A comprehensive survey of current research, methodology and materials in the field of English as a Second Language and historical, philosophical, political, legal, social and educational issues that have contributed to policy regarding public school services for language minority students.

**ELT 330 Methods and Materials for ESL 3 cr**

Techniques of teaching English as a second language will be introduced and applications explored. Acquaints students with methodology and materials, with instruction on the preparation of audio and visual teaching aids, lesson plans and the use of educational technology, behavioral objectives, state ESOL objectives and teaching strategies for English learners in the ESL or mainstream classroom. ELT 525 is a recommended pre-requisite or co-requisite course, but is not a requirement.

**ELT 345 Cross-Cultural Understanding 3 cr**

Investigates the roles of language and culture in education. Addresses the social processes involved in second language acquisition, including developmental influences, influences of home language and culture, culture variation, home vs. school cultural differences and working parents/family of ELL students.

**ELT 358 Cross-Cultural Understanding 3 cr**

This course provides knowledge of linguistics including English syntax, semantics, pragmatics, morphology, phonemics and phonology as applied to teaching English Language Learners. Students will review theories in first and second language acquisition. Students will apply linguistic theory, issues in sociolinguistics, psycholinguistics and neurolinguistics to teach English to ELLs, with emphasis on pronunciation, intonation and structural analysis of English and contrastive analysis of English and non-English linguistic systems.

**ELT 525 Found Tchg Eng as Sec Lang 3 cr**

A comprehensive survey of current research, methodology and materials in the field of English as a Second Language and historical, philosophical, legal, social, and educational issues that have contributed to policy regarding public school services for language minority populations.

**ELT 530 Methods and Materials Tch ESL 3 cr**

Techniques of teaching English as a second language will be introduced and applications explored. Acquaints students with methodology and materials, with instruction on the preparation of audio and visual teaching aids, lesson plans, and the use of educational technology, behavioral objectives, state ESOL objectives, and teaching strategies for the ELL student in the ESL or mainstream classroom. Course restricted to majors in ESOL education.

**ELT 545 Cross-Cultural Understand Tch 3 cr**

Investigates the roles of language and culture in education. Addresses the social processes involved in the second language acquisition, including developmental influences, influences of home language and culture, cultural variation, home vs. school cultural differences, and working with parents/family of ELL students.

**ELT 553 LA Assess Eval of ELL Students 3 cr**

Selection, administration, and interpretation of measurement instruments. Includes entry and placement procedures, language proficiency/achievement testing, linguistic and cultural aspects of intelligence testing, multiple intelligence assessment, ELL student assessment in the mainstream classroom, and application of testing to instruction. Course restricted to majors in ESOL education.

**ELT 558 Applied Ling for Teach of ELL 3 cr**

This course provides knowledge of linguistics including English syntax, semantics, pragmatics, morphology, phonemics, and phonology as applied to teaching English Language Learners. Students will review theories in first and second language acquisition. Students will apply linguistics theory, issues in sociolinguistics, psycholinguistics, and neurolinguistics, to teach English to ELLs with emphasis on pronunciation, intonation, and structural analysis of English and contrastive analysis of English and non-English linguistic systems. Course restricted to majors in ESOL education.

**ELT 590 Spec Top- 1 TO 3 cr**

Current topics of special concern to ESOL Educators. A different topic will be covered each time the course is offered. Not more than six semester hours may be applied toward a degree program.

**ELT 594 Directed Study and Research 1 TO 3 cr**

Students explore through directed study problems and issues of special interest or significance in ESOL Education. Not more than three semester hours may be applied toward a degree program.

**ELT 595 ESOL Internship 3 OR 6 cr**

Three hundred hours of supervised on-the-job experience in teaching English to speakers of other languages (ESOL) in P-12 settings. Interns are engaged in the full scope of teaching activities including planning, delivering lessons, evaluating students, and conducting managerial tasks related to teaching English as a Second Language. Teaching experience will be accompanied by scheduled observations and discussions to analyze and evaluate each student's internship experience. Course restricted to majors in ESOL education.

Pre-requisite: ELT 525 Minimum Grade of C and ELT 530 Minimum Grade of B and ELT 545 Minimum Grade of C and ELT 553 Minimum Grade of C and ELT 558 Minimum Grade of C

## English As A Second Language (ESL)

**ESL 004 Intermediate ESL Structure 3 cr**

An intermediate-level study of syntax and grammar.

**ESL 005 Intermediate ESL Read-Vocabul 3 cr**

Emphasis on developing reading speed, comprehension and vocabulary by reading a variety of intermediate-level texts.

**ESL 006 Intermediate ESL Composition 3 cr**

Concentration on sentence structure and development of the paragraph.

**ESL 008 Intermediate ESL Oral Skills 3 cr**

Concentration on listening, comprehension, and speaking fluency.

**ESL 014 Advanced ESL Structure 3 cr**

An in-depth study of syntax and grammar.

**ESL 015 Advanced ESL Read-Vocabulary 3 cr**

Emphasis on developing speed and comprehension in reading a variety of texts.

**ESL 016 Advanced ESL Composition 3 cr**

Designed to give a foundation in composition and to serve as a preparatory course for English 101. It consists of three areas of concentration: sentence structure, paragraph organization, and essay organization and development.

**ESL 017 English for Academic Study 3 cr**

Emphases are on oral presentations with Power Point, lecture comprehension, note-taking, and library research skills.

**ESL 018 Advanced ESL Oral Skills 3 cr**

Emphasis is placed on communication, both oral and aural, in a variety of situations. Designed to enhance fluency in listening and speaking.

**ESL 020 TOEFL Preparation 3 cr**

A preparatory class for the computer-based Test of English as a Foreign Language. Students practice with exercises and tests for the four sections of the TOEFL: Listening, Listening and Structure, Reading, and Writing.

**ESL 021 ESL American Short Story 3 cr**

Students are familiarized with great American authors and their works of fiction in written and dramatized forms. Listening skills are developed through video presentations, writing skills through book reports, reading skills through analysis of texts, and oral skills through oral reports.

**ESL 022 ESL U S Culture 3 cr**

Students concentrate on the difficulties inherent in cross-cultural encounters, adjustment strategies, and information about cultural adjustment.

**ESL 023 ESL Current Events 3 cr**

The course is designed to stimulate students' language development through discussion, debate and readings on topics of current international interest.

**ESL 024 ESL Basic Word Skills 3 cr**

Emphasis is on word building through a study of roots, prefixes, and suffixes. Academic and reading vocabulary is acquired. Dictionary skills are also emphasized.

**ESL 025 English on the Internet 3 cr**

Students improve a number of English skills by exploring the numerous ESL web sites for TOEFL preparation, pronunciation grammar, vocabulary acquisition, slang, humor and many other areas. Writing is practiced via email, and students create their own class web page.

**ESL 026 The English Verb 3 cr**

An intensive review of the English verb system, including tense, voice and aspect. Ample examples, plus written and oral exercises and activities, are designed to make students more secure in their usage.

**ESL 027 Practical Vocabulary-Idioms 3 cr**

Students rapidly extend their vocabulary through intensive study of high-frequency words arranged thematically, such as by profession or in everyday situations. Groups of special expressions linked to certain verbs, slang expressions, and idioms are also taught.

**ESL 028 Beginning English 3 cr**

An introduction to the language for people who know little or no English. The goal is to achieve a basic proficiency in understanding, speaking, reading and writing English.

**ESL 029 Business English 3 cr**

The focus is primarily on acquisition of English business vocabulary through an examination of American business procedures and practices. Students also practice composing resumes, memos, reports, business letters and other business writing.

**ESL 030 GRE Prep for Internationals 3 cr**

A preparatory class for the verbal and analytical writing sections of the GRE for non-native speakers of English seeking admission to a U.S. graduate school. The course includes vocabulary building, analytical reading skills, practice with exercises and tests, as well as online work in the ESL computer lab. The quantitative section of the GRE is not covered in this course.

## Environmental Toxicology (EXT)

**EXT 515 Environmental Toxicology 3 cr**

Introduction to the scientific and technical principles of toxicological processes in the context of the ecosystem. Students will understand both the types of major environmental toxicants and how to properly evaluate their toxicity and factors that influence toxicity. Students will recognize and coherently formulate risk assessment and by using the tools and techniques acquired, develop and communicate proposals for remedy.

**EXT 583 Entrepreneurship in Science 3 cr**

This course will blend a variety of subjects from technical writing to patent law to laboratory development in an effort to provide a solid base for scientists to understand the development of technology. The course will provide a mechanism for scientists to transition technology from bench top to commercialization by providing information regarding financial resources coupled with research and laboratory development.

**EXT 594 Directed Studies 1 TO 3 cr**

Students pursue a research project under the direction of a graduate faculty member. The course requires special permission from the program director, to make sure that the study is in line with the curriculum that the student is pursuing.

**EXT 599 Research Thesis 1 TO 6 cr**

Research project directed by a member of the graduate faculty. Prerequisite: Approval of research prospectus by the graduate committee.

## Finance (FIN)

**FIN 300 Personal Finance 3 cr**

General principles and techniques of finance as applied to personal business transactions and the management of personal funds. Finance majors may not count this course as a finance elective.

**FIN 305 Introduction to Finance 3 cr**

A survey course covering corporate financial management. Basic concepts such as interest rates, time value of money, cost of capital, and risk are discussed and applied to stock, bond, and long-term investment valuation. Guidelines are developed for corporate financial decision-making in such areas as working capital management and capital structure policy, but with emphasis on short-term financial management and financial planning. The impact of ethical considerations and global financial markets are discussed. This course is for non-business and non-economics majors only.

Pre-requisite: (ACC 212 Minimum Grade of D or BMS 212 Minimum Grade of D) and (ECO 212 Minimum Grade of D or ECO 215 Minimum Grade of D) and (BUS 245 Minimum Grade of D or BMS 245 Minimum Grade of D or BMS 250 Minimum Grade of D or ST 175 Minimum Grade of D or ST 210 Minimum Grade of D)

**FIN 315 Business Finance 3 cr**

A survey course covering corporate financial management. Basic concepts such as interest rates, time value of money, cost of capital, and risk are discussed and applied to stock, bond and long-term investment valuation. Guidelines are developed for corporate, financial decision making in the areas of capital structure policy, dividend policy, long-term financing, corporate control, and working capital management. The impact of ethical considerations and global financial markets are discussed.

Pre-requisite: (ECO 215 Minimum Grade of D and ACC 211 Minimum Grade of D and MA 120 Minimum Grade of D or MA 121 Minimum Grade of D or MA 125 Minimum Grade of D or MA 126 Minimum Grade of D or MA 131 Minimum Grade of D or MA 287 Minimum Grade of D) and (BUS 245 Minimum Grade of D or BMS 245 Minimum Grade of D or BMS 250 Minimum Grade of D or ST 175 Minimum Grade of D or ST 210 Minimum Grade of D)

**FIN 332 Multinational Finance 3 cr**

Analysis of financial management of multinational firms. Introduces the environment of international capital and foreign exchange markets and examines the effects of international business environment on risk, capital budgeting, working capital management, and capital structure decisions of the firm.

Pre-requisite: FIN 315 Minimum Grade of D or FIN 341 Minimum Grade of D

**FIN 343 Money Mkts and Fin Instit 3 cr**

An examination of the major financial institutions operating in our economy, and the environment in which they operate. In light of the changing environment of the financial institutions area, the changing roles of the various financial markets, major legislation, and the regulatory agencies are also studied in this course.

Pre-requisite: FIN 315 Minimum Grade of D or FIN 341 Minimum Grade of D

- FIN 344 Real Estate** 3 cr  
Introduction to the tools used to make intelligent decisions regarding real estate as a wealth-building asset. Topics include legal rights, valuation, financial analysis, contracts, and brokerage with practical applications. Emphasis is given to local supply and demand conditions and property location and their impact on typical consumer decisions.
- FIN 345 Principles of Insurance** 3 cr  
Examines risks facing the individual and business organizations and applications of public and private insurance to reduce or eliminate such risks. This is a survey course involving all classes of insurance.
- FIN 346 Alabama Real Estate Law & Reg** 1 cr  
Course required for students planning to take the Alabama Real Estate License Examination. Topics include current Alabama Real Estate License Law, Administrative Rules and regulations, Consumer Guides, State Court Cases and relevant readings in Real Estate Risk Management. Requires Consent of Instructor.  
Pre-requisite: FIN 344 Minimum Grade of D or MKT 345 Minimum Grade of D
- FIN 350 Fin Stmt Analysis & Corp Strat** 3 cr  
In-depth coverage of the principles and practices of effective analysis of the financial statements of firms for the purpose of understanding (1) the economic and financial characteristics and current conditions of the firm, (2) particular strategies the firm may select with which to compete, and (3) the accounting principles and procedures underlying the financial statements. The course integrates concepts from accounting, economics, finance and management.  
Pre-requisite: FIN 315 Minimum Grade of D or FIN 341 Minimum Grade of D
- FIN 370 Short-Term Financial Managemnt** 3 cr  
In-depth coverage of liquidity, management of working capital, corporate cash management, short term investment, financing and forecasting.  
Pre-requisite: FIN 315 Minimum Grade of D or FIN 341 Minimum Grade of D
- FIN 410 Intermediate Bus Finance** 3 cr  
In-depth coverage of financial planning and management including cost of capital, capital budgeting, valuation and other topics.  
Pre-requisite: (FIN 315 Minimum Grade of D or FIN 341 Minimum Grade of D) and (BUS 255 Minimum Grade of D or ST 275 Minimum Grade of D or BMS 250 Minimum Grade of D or BMS 255 Minimum Grade of D)
- FIN 411 Advanced Business Finance - W** 3 cr  
Actual and simulated cases in finance from business and industry; includes businesses of all sizes.  
Pre-requisite: FIN 350 Minimum Grade of D and FIN 410 Minimum Grade of D or FIN 441 Minimum Grade of D
- FIN 420 Investments** 3 cr  
Survey of the characteristics of investment alternatives and the investment environment, including market operations and regulations, sources and uses of information, and an introduction to capital market theory.  
Pre-requisite: (FIN 315 Minimum Grade of D or FIN 341 Minimum Grade of D) and (BUS 245 Minimum Grade of D or ST 175 Minimum Grade of D or ST 210 Minimum Grade of D or BMS 245 Minimum Grade of D or BMS 250 Minimum Grade of D)
- FIN 421 Sec Analy-Portfolio Mgt** 3 cr  
The development of the theory and practice of security analysis and portfolio management. Security analysis involves the fundamental determination of security values through economic, industry, and firm analysis. Portfolio management addresses asset selection and allocation for the construction and maintenance of portfolios that meet specific investment objectives in a risk-return context.  
Pre-requisite: FIN 420 Minimum Grade of D or FIN 441 Minimum Grade of D
- FIN 425 Student Managed Invest Fund I** 3 cr  
This is the first in a sequence of two courses whereby students manage a real portfolio of securities. The selected students research the prospective investments, generate reports, and make decisions to buy or sell the securities. Administrative responsibilities are assigned and analyst teams are formed. Students accepted into this course must enroll in FIN 426 (Student Managed Investment Fund II) the following term unless otherwise disqualified. Requires Department Chair permission.  
Pre-requisite: FIN 420 Minimum Grade of B
- FIN 426 Student Managed Invest Fund II** 3 cr  
This is the second in a sequence of two courses whereby students manage a real portfolio of securities. The selected students research the prospective investments, generate reports, and make decisions to buy or sell the securities. Administrative responsibilities are assigned and analyst teams are formed. Students build on and add depth to skills and knowledge acquired in FIN 425. Requires Department Chair permission.  
Pre-requisite: FIN 425 Minimum Grade of B
- FIN 430 Derivative Securities** 3 cr  
Covers principles of Options and Futures contracts and their economic functions. Options: basic strategies; combinations and spreads; pricing; and the various types of contracts. Futures: fundamentals of the market; contract specifications and their uses. Program trading and portfolio insurance.  
Pre-requisite: (FIN 315 Minimum Grade of D or FIN 341 Minimum Grade of D or BMS 341 Minimum Grade of D)

- FIN 444 Real Estate Valuation** 3 cr  
Emphasis is given to the valuation process and the analysis that leads to valid estimates of value. The cost, sales comparison, and income approaches to value are examined and illustrated within the Uniform Standards of Professional Appraisal Practice requirements. Preparation of typical valuation reports is covered.  
Pre-requisite: FIN 315 Minimum Grade of D or FIN 341 Minimum Grade of D and FIN 344 Minimum Grade of D or MKT 345 Minimum Grade of D and EH 101 Minimum Grade of C and EH 102 Minimum Grade of C
- FIN 445 Life and Disability Insurance** 3 cr  
Principles and practices of insurance used for family and income protection against premature death and disability; retirement and pension plans including group insurance and social security.  
Pre-requisite: FIN 315 Minimum Grade of D or FIN 341 Minimum Grade of D
- FIN 446 Real Estate Finance & Invest** 3 cr  
Analysis of income property debt and equity instruments, financing documents, financial analysis and risk scenarios of different property types, and relevant local, state, and federal laws and court cases.  
Pre-requisite: FIN 344 Minimum Grade of D or MKT 345 Minimum Grade of D and FIN 315 Minimum Grade of D or FIN 341 Minimum Grade of D
- FIN 448 Real Estate Law** 3 cr  
A detailed examination of the contracts, documents, and instruments used in a transaction on one or more of the real property rights, and relevant local, state, and federal laws and court cases.  
Pre-requisite: FIN 344 Minimum Grade of D or MKT 345 Minimum Grade of D
- FIN 470 Depository Institution Mgt I** 3 cr  
Analysis of depository institution management processes focusing on management of capital, assets, and liabilities with emphasis on the regulatory environment in which depository institutions operate.  
Pre-requisite: (FIN 315 Minimum Grade of D or FIN 341 Minimum Grade of D)
- FIN 471 Depository Institutions Mgt II** 3 cr  
In-depth analysis of consumer, real estate, commercial, and agricultural lending areas of depository institution.  
Pre-requisite: FIN 315 Minimum Grade of D or FIN 341 Minimum Grade of D
- FIN 490 Sp Top -** 3 cr  
Designed to provide senior students an opportunity to study selected topics of particular interest. A student may count no more than six hours of Special Topics in the concentration.  
Prerequisite: Approval of Department Chair.  
Pre-requisite: FIN 315 Minimum Grade of D or FIN 341 Minimum Grade of D
- FIN 492 Seminar - Finance** 3 cr  
Oral reports on readings of various aspects of business finance.  
Pre-requisite: FIN 315 Minimum Grade of D or FIN 341 Minimum Grade of D
- FIN 494 Dir St in Finance** 3 cr  
Primarily designed to give superior students an opportunity to study selected topics of particular interest. Grades are awarded on a satisfactory/unsatisfactory basis.  
Prerequisites: a cumulative GPA 2.5 and approval of Department Chair.  
Pre-requisite: (FIN 315 Minimum Grade of D or FIN 341 Minimum Grade of D) and FIN 343 Minimum Grade of D and FIN 410 Minimum Grade of D and FIN 350 Minimum Grade of D and (FIN 420 Minimum Grade of D or FIN 441 Minimum Grade of D)
- FIN 496 Finance Internship** 3 cr  
The internship program is designed to give students practical experience in their field of study. Students complete directed projects under the supervision of Department Chair. No more than three hours of internship may be counted toward a degree in the Mitchell College of Business. Prerequisites: Junior or Senior Standing, declared major in finance, overall GPA of at least 2.5, and Internship Agreement signed by department Chair.  
Pre-requisite: (FIN 315 Minimum Grade of D or FIN 341 Minimum Grade of D) and FIN 343 Minimum Grade of D
- FIN 497 Finance Internship II** 3 cr  
The internship program is designed to give students practical experience in their field of study. Students will complete directed learning experiences under the supervision of the Department Chair. Prerequisites: Junior or Senior standing, declared major in Finance, overall GPA of at least 2.5 and internship agreement signed by Department Chair.  
Pre-requisite: FIN 496 Minimum Grade of P
- FIN 508 Introduction to Corp Finance** 3 cr  
Coverage of fundamental finance concepts and techniques. Major topics include time value of money, risk, asset valuation including fixed income securities and stock, financial markets, term structure of interest rates, risk management (derivatives), and multinational financial management issues. Cases will be used as appropriate.
- FIN 590 Sp Top -** 3 cr  
Designed to provide graduate students an opportunity to study selected topics. (A student may count no more than 3 hours of Special Topics in the M.B.A. degree program).  
Prerequisites: Approval of Department Chair  
Pre-requisite: MBA Prerequisites P
- FIN 594 Independent Study in Finance** 3 cr  
Reading and research on selected topics. Conference and formal research report required. Prerequisites: Approval of Department Chair.  
Pre-requisite: MBA Prerequisites P

## Foreign Language Lesser Taught (LGS)

### LGS 101 Introductory Japanese I 3 cr

The first of a two-semester sequence in Introductory Japanese. The goal of the course is to introduce students to Japanese as it is spoken today. Emphasis on developing speaking and listening skills through intensive drills, exposure to basic structural patterns, and functional vocabulary. LGS 101 is a NASILP course. Fee. Core Course.

### LGS 102 Introductory Japanese II 3 cr

A continuation of Japanese 101. Fee. Core Course. Pre-requisite: LGS 101 Minimum Grade of C

### LGS 106 Introductory Arabic I 3 cr

The first of a two-semester sequence in Introductory Arabic. Its purpose is to introduce students to Arabic as it is spoken today. Emphasis on developing speaking and listening skills through intensive drills, exposure to basic structural patterns, and functional vocabulary. Study requires extensive use of audio-tapes. LGS 106 is a NASILP course. Fee. Core Course.

### LGS 107 Introductory Arabic II 3 cr

A continuation of Arabic I. Fee. Core Course. Pre-requisite: LGS 106 Minimum Grade of C

### LGS 110 Intro American Sign Language I 3 cr

The first of a two-semester sequence in introductory American Sign Language (ASL). The goal of the two semester course is to introduce students to ASL as it is used today. Emphasis is on developing skills in signing through intensive drills, exposure to basic ASL structural patterns and functional vocabulary. LGS 110 is a LTLs course. Fee.

### LGS 111 Intro American Sign Lang II 3 cr

The second of a two-semester sequence in introductory ASL. The goal of the two-semester course is to introduce students to ASL as it is used today. Emphasis is on developing skills in signing through intensive drills, exposure to basic ASL structural patterns and functional vocabulary. LGS 111 is a LTLs course. Fee. Pre-requisite: LGS 110 Minimum Grade of C

### LGS 121 Introductory Chinese I 3 cr

The first of a two-semester sequence in Introductory Mandarin Chinese. The goal of the two-semester course is to introduce students to Mandarin as it is spoken today. Emphasis is on developing speaking and listening skills through intensive drills, exposure to basic structural patterns and functional vocabulary. Fee. Core Course.

### LGS 122 Introductory Chinese II 3 cr

A continuation of Introductory Chinese I. Fee. Core Course. Pre-requisite: LGS 121 Minimum Grade of C

### LGS 131 Introductory Hindi I 3 cr

LGS 131 is the FIRST of a two semester sequence of Introductory Hindi. The course develops speaking and listening skills, as well as reading and writing skills through intensive drills, exposure to basic structural patterns, and functional vocabulary. Fee. Core Course.

### LGS 141 Introductory Greek I 3 cr

The first of a two-semester sequence in Introductory Modern Greek. The goal of the course is to introduce students to Greek as it is spoken today. Emphasis on developing speaking and listening skills through intensive drills, exposure to basic structural patterns, and functional vocabulary. LGS 141 is a NASILP course. Fee. Core Course.

### LGS 142 Introductory Greek II 3 cr

A continuation of Introductory Greek I. Fee. Core Course. Pre-requisite: LGS 141 Minimum Grade of C

### LGS 161 Introductory Italian I 3 cr

The first of a two-semester sequence in introductory Italian. Its purpose is to introduce students to Italian as it is spoken today. Emphasis on developing speaking and listening skills through intensive drills, exposure to basic structural patterns, and functional vocabulary. Study requires extensive use of audio-tapes. LGS 161 is a NASILP course. Fee. Core course.

### LGS 162 Introductory Italian II 3 cr

LGS 162 is the second of a two semester sequence of Introductory Italian I. As a continuation of Introductory Italian I, the course continues to develop speaking and listening skills, as well as reading and writing skills through intensive drills, exposure to basic structural patterns, and functional vocabulary. Fee. Core Course. Pre-requisite: LGS 161 Minimum Grade of C

### LGS 171 Introductory Korean I 3 cr

LGS 171 is the first of a two semester sequence of Introductory Korean. The course develops speaking and listening skills, as well as reading and writing skills through intensive drills, exposure to basic structural patterns, and functional vocabulary. Fee. Core Course.

### LGS 172 Introductory Korean II 3 cr

The second of a two-semester sequence in introductory Korean. The goal of the two-semester course is to introduce students to Korean as it is spoken today. Emphasis is on building upon skills learned in LGS 171 and developing speaking and listening skills through intensive drills, exposure to basic structural patterns and functional vocabulary. LGS 172 is an LTLs course. Fee. Core Course. Pre-requisite: LGS 171 Minimum Grade of C

**LGS 181 Introductory Portuguese I 3 cr**

LGS 181, Introductory Portuguese I (3 credit hours). The first of a two-semester sequence in introductory Portuguese. Its purpose is to introduce students to Portuguese as it is spoken today. Emphasis on developing speaking and listening skills through intensive drills, exposure to basic structural patterns, and functional vocabulary. Study requires extensive use of audio-tapes. LGS 181 is a NASILP course. Fee. Core Course.

**LGS 182 Introductory Portuguese II 3 cr**

LGS 182 is the second of a two semester sequence of Introductory Portuguese. As a continuation of Introductory Portuguese I the course continues to develop speaking and listening skills, as well as reading and writing skills through intensive drills, exposure to basic structural patterns, and functional vocabulary. Fee. Core Course.  
Pre-requisite: LGS 181 Minimum Grade of C

**LGS 190 Special Topics - 3 cr**

Topics to be determined by student need and interest. Course may be repeated when content varies for a maximum of six hours. LGS 190 is a NASILP course. Enrollment by special permission. Fee.

**LGS 201 Intermediate Japanese I 3 cr**

The first of a two-semester sequence. A continuation of the training necessary to build fluency in understanding and speaking Japanese. LGS 201 is a NASILP course. Fee. Core Course.  
Pre-requisite: (LGS 102 Minimum Grade of C or LGS 103 Minimum Grade of D)

**LGS 202 Intermediate Japanese II 3 cr**

A continuation of LGS 201. Fee. Core Course.  
Pre-requisite: LGS 201 Minimum Grade of C

**LGS 206 Intermediate Arabic I 3 cr**

The first of two-semester sequence in Intermediate Arabic. This is a continuation of Introductory Arabic II. It continues to develop speaking and listening skills as well as reading and writing skills through intensive drills, exposure to basic structural patterns, and functional vocabulary. Study requires extensive use of audio -tapes. Fee. Core course.  
Pre-requisite: (LGS 107 Minimum Grade of C or LGS 108 Minimum Grade of D)

**LGS 207 Intermediate Arabic II 3 cr**

A continuation of Intermediate Arabic I. Fee. Core Course.  
Pre-requisite: LGS 206 Minimum Grade of C

**LGS 210 Intermediate ASL I 3 cr**

The first of a two-semester sequence in intermediate ASL. This is a continuation of Introductory ASL II. It continues to develop signing and interpreting skills through intensive drills, exposure to the basic ASL structure patterns and functional vocabulary. LGS 210 is a LTL s course. Fee. Core Course  
Pre-requisite: LGS 111 Minimum Grade of C

**LGS 211 Intermediate ASL II 3 cr**

A continuation of Intermediate ASL I. LGS 211 is a LTLs course. Fee. Core Course  
Pre-requisite: LGS 210 Minimum Grade of C

**LGS 221 Intermediate Chinese I 3 cr**

The first of a two-semester sequence. A continuation of Introductory Chinese. It continues to develop speaking and listening skills, as well as reading and writing skills, through intensive drills, exposure to basic structural patterns, and functional vocabulary. Fee. Core Course.  
Pre-requisite: (LGS 122 Minimum Grade of C or LGS 123 Minimum Grade of D)

**LGS 222 Intermediate Chinese II 3 cr**

A continuation of Intermediate Chinese I. Fee. Core Course.  
Pre-requisite: LGS 221 Minimum Grade of C

**LGS 241 Intermediate Greek I 3 cr**

The first of a two-semester sequence in Intermediate Modern Greek. A continuation of Introductory Greek II. It continues to develop speaking and listening skills, as well as reading and writing skills, through intensive drills, exposure to basic structural patterns, and functional vocabulary. Fee. Core Course.  
Pre-requisite: (LGS 142 Minimum Grade of C or LGS 143 Minimum Grade of D)

**LGS 242 Intermediate Greek II 3 cr**

A continuation of Intermediate Greek I. Fee. Core Course.  
Pre-requisite: LGS 241 Minimum Grade of C

**LGS 261 Intermediate Italian I 3 cr**

The first of a two semester sequence of Intermediate Italian. As a continuation of Introductory Italian II, the course continues to develop speaking and listening skills as well as reading and writing skills, through intensive drills, exposure to basic structural patterns, and functional vocabulary. Fee. Core Course.  
Pre-requisite: LGS 162 Minimum Grade of C

**LGS 262 Intermediate Italian II 3 cr**

LGS 262 is the second of a two semester sequence of Intermediate Italian. As a continuation of Intermediate Italian I the course continues to develop speaking and listening skills, as well as reading and writing skills through intensive drills, exposure to basic structural patterns, and functional vocabulary. Fee. Core Course.  
Pre-requisite: LGS 261 Minimum Grade of C

**LGS 281 Intermediate Portuguese I 3 cr**

LGS 281 is the first of a two semester sequence of Intermediate Portuguese. As a continuation of Introductory Portuguese II the course continues to develop speaking and listening skills, as well as reading and writing skills through intensive drills, exposure to basic structural patterns, and functional vocabulary. Fee. Core Course.  
Pre-requisite: LGS 182 Minimum Grade of C

**LGS 282 Intermediate Portuguese II 3 cr**

LGS 282 is the second of a two semester sequence of Intermediate Portuguese. As a continuation of Intermediate Portuguese I the course continues to develop speaking and listening skills, as well as reading and writing skills through intensive drills, exposure to basic structural patterns, and functional vocabulary. Fee. Core Course.

Pre-requisite: LGS 281 Minimum Grade of C

**LGS 290 Special Topics - 3 cr**

Topics to be determined by student need and interest. Course may be repeated when content varies for a maximum of six hours. LGS 290 is a NASILP course. Enrollment by special permission. Fee.

Pre-requisite: LGS 111 Minimum Grade of C

**LGS 390 Sp Top - 3 cr**

Topics to be determined by student need and interest. Course may be repeated when content varies for a maximum of twelve hours. LGS 390 is a NASILP course. Prerequisite: Completion of two-year sequence in a NASILP approved language or equivalent. Fee.

## Foreign Languages And Lit (LG)

**LG 024 Foreign Lang Proficiency Test 0 cr**

Elementary level proficiency test administered to Arts and Sciences students who wish to demonstrate proficiency in a foreign language other than French, German, or Spanish.

**LG 101 Introductory Latin I 3 cr**

Introductory Latin I is the first half of a two-course sequence in Classical Latin. The goal of the courses is to achieve basic proficiency in understanding and reading Latin and to acquire a basic knowledge of Roman customs, history and culture.

**LG 102 Introductory Latin II 3 cr**

Introductory Latin II is the second half of a two-course sequence in Classical Latin. The goal of the courses is to achieve basic proficiency in understanding and reading Latin and to acquire a basic knowledge of Roman customs, history and culture.

Pre-requisite: LG 101 Minimum Grade of D

**LG 110 World Languages 3 cr**

The general aim of this introductory-level course is to ground students in a basic understanding of the social, political, economic and cultural realities of language around the globe, including the importance of mastering one or more languages other than one's native tongue. Students taking the course will profit from an understanding of language value in the global marketplace and will gain new insight into their own native language through a brief examination of the structures of several of the world's major languages. The course may feature guest presenters and will also discuss techniques of language acquisition.

**LG 111 Introductory French I 3 cr**

The first of a two-semester sequence in introductory French. The goal of the two-semester sequence is to achieve a basic proficiency in understanding, speaking, reading, and writing French, and to acquire basic knowledge of French-speaking cultures. Fee. Core Course.

**LG 112 Introductory French II 3 cr**

The second semester of the introductory course. Fee. Core Course.

Pre-requisite: LG 111 Minimum Grade of D

**LG 131 Introductory Spanish I 3 cr**

The first of a two-semester sequence in introductory Spanish. The goal of the two-semester course is to achieve a basic proficiency in communication in Spanish through the development of listening, speaking, reading, and writing skills. Fee. Core Course.

**LG 132 Introductory Spanish II 3 cr**

The second semester of the introductory course. Fee. Core course.

Pre-requisite: LG 131 Minimum Grade of D

**LG 141 Intro Classical Greek I 3 cr**

Introductory Classical Greek I is the first half of a two-course sequence in Classical Greek. The goal of the courses is to achieve basic proficiency in understanding and reading Greek and to acquire a basic knowledge of ancient Greek customs, history, and culture.

**LG 142 Intro Classical Greek II 3 cr**

Introductory Classical Greek II is the second half of a two-course sequence in Classical Greek.

Pre-requisite: LG 141 Minimum Grade of C

**LG 151 Introductory German I 3 cr**

The first of a two-semester sequence in introductory German. The goal of the two-semester course is to achieve a basic proficiency in understanding, speaking, reading, and writing German, and to acquire basic knowledge of German-speaking cultures. Fee. Core Course.

**LG 152 Introductory German II 3 cr**

The second semester of the introductory course. Fee. Core Course.

Pre-requisite: LG 151 Minimum Grade of D

**LG 171 Introductory Russian I 3 cr**

The first of a two-semester sequence in Introductory Russian. The goal of the two-semester course is to achieve a basic proficiency in understanding, speaking, reading, and writing Russian. Fee. Core Course.

**LG 172 Introductory Russian II 3 cr**

The second semester of the introductory course. Fee. Core course.

Pre-requisite: LG 171 Minimum Grade of D

**LG 173 Accelerated Intro Russian - H 6 cr**

A one-semester intensive first-year course for highly motivated students with prior instruction in a foreign language (either high school or college level) with a B average or better. This course covers material taught in LG 171 and 172 and satisfies the Arts and Sciences foreign language requirement. By permission of the instructor. Usually taught in the Spring semester. Fees.

**LG 190 Sp Top - 1 TO 3 cr**

Topics to be determined by student need and interest. Course may be repeated when content varies for a total of 12 credit hours.

**LG 201 Intermediate Latin I 3 cr**

The first of a two-semester sequence in intermediate Latin. The course is a continuation of the study necessary to achieve fluency in reading, understanding, and translating Classical Latin. A comprehensive review of grammar is accompanied with the presentation of material beyond the scope of Introductory Latin I and II. All texts for reading and translation are presented in the original classical texts, unabridged and complete. Emphasis on the development of the periods of classical Roman literature as well as pertinent events in Roman history and culture.

Pre-requisite: LG 102 Minimum Grade of C

**LG 202 Intermediate Latin II 3 cr**

The second of a two-semester sequence in intermediate Latin.

Pre-requisite: LG 201 Minimum Grade of C

**LG 205 Modern Lit in Translation 3 cr**

A varying-content course designed to introduce the student to selected major works of one language other than English. Works from English-speaking countries may occasionally be used for the purpose of cross-cultural comparison. The student may choose from a number of specific topics that will be designated prior to each semester. All readings and discussions are in English. May be repeated for credit when course content varies. Foreign Language majors wishing to have one or several of these courses count toward their major must seek prior approval from their advisor.

Pre-requisite: (EH 102 Minimum Grade of B or EH 105 Minimum Grade of B)

**LG 211 Intermediate French I 3 cr**

The first of a two-semester sequence in intermediate French. A continuation of the training necessary to achieve fluency in understanding, speaking, reading and writing French. A comprehensive grammar review is complemented by elaboration of grammatical topics and lexical development beyond the scope of Introductory French I and II. Readings of literary and cultural texts treating French-speaking areas of the world. Emphasis on fluency in conversation and cultural fluency through class discussion of both written and recorded texts from the Francophone world. Fee. Core Course.

Pre-requisite: (LG 112 Minimum Grade of C or LG 113 Minimum Grade of C)

**LG 212 Intermediate French II 3 cr**

The second semester of the intermediate sequence. Fee. Core Course.

Pre-requisite: LG 211 Minimum Grade of C

**LG 213 Accelerated Inter French - H 4 cr**

A one-semester intensive intermediate course for students who have successfully completed LG 113 (Accelerated Introductory French-Honors), or the equivalent. This course covers material taught in LG 211 and 212. Usually taught in the Spring semester. By permission of instructor. Fee.

Pre-requisite: LG 112 Minimum Grade of C or LG 113 Minimum Grade of C

**LG 231 Intermediate Spanish I 3 cr**

The first of a two-semester sequence in intermediate Spanish. A continuation of the training necessary to achieve fluency. Grammar review, class discussions, extensive oral and written work, short readings in literature and culture are included. Fee. Core Course.

Pre-requisite: (LG 132 Minimum Grade of C or LG 133 Minimum Grade of C or LG 134 Minimum Grade of C)

**LG 232 Intermediate Spanish II 3 cr**

The second semester of the intermediate sequence. Fee. Core Course.

Pre-requisite: LG 231 Minimum Grade of C

**LG 234 Inter Spanish Accel -H 6 cr**

A one-semester intensive intermediate course for students who have successfully completed LG 134 (Accelerated Introductory Spanish), or the equivalent. This course covers the material taught in LG 231 and 232. Core Course. By permission of the instructor. Fee.

Pre-requisite: (LG 132 Minimum Grade of C or LG 133 Minimum Grade of C or LG 134 Minimum Grade of C)

**LG 241 Interm Classical Greek I 3 cr**

The first of a two-semester sequence in intermediate Classical Greek. The course is a continuation of the study necessary to achieve fluency in reading, understanding and translating Classical Greek. A comprehensive review of grammar is accompanied with the presentation of material beyond the scope of Introductory Classical Greek I and II. All texts for reading and translation are presented in the original classical texts, unabridged and complete. Emphasis on the development of the periods of classical Greek literature as well as pertinent events in Greek history and culture.

Pre-requisite: LG 142 Minimum Grade of C

**LG 242 Interm Classical Greek II 3 cr**

The second of a two-semester sequence in intermediate Classical Greek.

Pre-requisite: LG 241 Minimum Grade of C

- LG 251 Intermediate German I** 3 cr  
The first of a two-semester sequence in Intermediate German. A continuation of the training necessary to achieve fluency in understanding, speaking, reading, and writing German. Reading of literary, cultural, and historical texts. Class discussions, reports in German, both oral and written, are required. Fee. Core Course.  
Pre-requisite: (LG 152 Minimum Grade of C or LG 153 Minimum Grade of C)
- LG 252 Intermediate German II** 3 cr  
The second semester of the intermediate sequence. Fee. Core Course.  
Pre-requisite: LG 251 Minimum Grade of C
- LG 271 Intermediate Russian I** 3 cr  
The first of a two-semester sequence in intermediate Russian. A continuation of the training necessary to achieve fluency and understanding in speaking, reading, and writing Russian. Reading of literary and cultural texts. Increased practice in Russian conversation. Fee. Core Course.  
Pre-requisite: (LG 172 Minimum Grade of C or LG 173 Minimum Grade of C)
- LG 272 Intermediate Russian II** 3 cr  
The second semester of intermediate Russian. Fee. Core Course.  
Pre-requisite: LG 271 Minimum Grade of C
- LG 273 Intensive Second Year Russian** 4 cr  
A one-semester intensive Second Year course for students who have successfully completed the LG 171 and 172 sequence or LG 173 (Intensive First Year Russian). This course covers material taught in LG 271 and 272. By permission of instructor. Fee.  
Pre-requisite: LG 171 Minimum Grade of C and LG 172 Minimum Grade of C or LG 173 Minimum Grade of C
- LG 283 Chinese HY in Film and Lit** 3 cr  
This course will introduce students to major topics in Chinese history, covering both ancient periods such as the Three Kingdoms period, and twentieth-century events such as the war with Japan and the Cultural Revolution. Post-Tiananmen Chinese society will also be stressed. Students will explore these themes through Chinese film and literature, and will thus become familiar with major directors, including Zhang Yimou and Jia Zhangke, and writers such as Yu Hua.
- LG 290 Sp Top -** 1 TO 3 cr  
Topics to be determined by student need and interest. Course may be repeated when content varies for a total of 12 hours.
- LG 305 Studies in Gender and Writing** 3 cr  
A varying-content course that provides an in-depth study of gender-related questions in a literary and cross-cultural context. Unless otherwise indicated, all readings and discussions are in English. May be repeated for credit for a total of nine hours when course content varies. Foreign Language majors wishing to have one or several of these courses count toward their major must seek prior approval from their advisor.  
Pre-requisite: (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)
- LG 311 Survey French Lit Culture I** 3 cr  
The first part of a two-semester course that deals with the major periods of French culture. Readings of representative works from the Middle Ages through the Eighteenth Century. In French.  
Pre-requisite: (LG 212 Minimum Grade of C or LG 213 Minimum Grade of C)
- LG 312 Survey French Lit Culture II** 3 cr  
The second part of a two-semester course that deals with the major periods of French culture. Readings of representative works from the Nineteenth and Twentieth Centuries. In French.  
Pre-requisite: (LG 212 Minimum Grade of C or LG 213 Minimum Grade of C)
- LG 314 Advanced French Conversation** 1 cr  
Intensive conversation with practice using various levels of the spoken language from slang to formal speech. Emphasis on the sounds and idioms of French. The course meets one hour per week with the instructor and one hour per week for a lab session, often with a native speaker. The content of this course will vary over four consecutive semesters. This course may be repeated for a maximum of four credits.  
Pre-requisite: LG 212 Minimum Grade of C or LG 213 Minimum Grade of C
- LG 326 Adv French Grammar-Conversatn** 3 cr  
Comprehensive review of French grammar coupled with weekly practice in conversation using various levels of the spoken language from slang to formal speech. Emphasis on vocabulary acquisition and mastering the more complex features of French grammar.  
Pre-requisite: (LG 212 Minimum Grade of C or LG 213 Minimum Grade of C)
- LG 327 Adv French Comp-Conversatn - W** 3 cr  
Intensive course in writing French coupled with oral presentations and activities designed to enhance the student's command of the language.  
Pre-requisite: LG 212 Minimum Grade of C or LG 213 Minimum Grade of C

- LG 333 Spanish Conversatn-Comp** 3 cr  
Extensive oral and written work through a variety of activities to review and reinforce acquired language skills, emphasizing vocabulary acquisition and fluency in the language.  
Pre-requisite: (LG 232 Minimum Grade of C or LG 234 Minimum Grade of C)
- LG 334 Adv Spanish Grammar-Comp - W** 3 cr  
Extensive study of major aspects of Spanish grammar with emphasis on increasing proficiency in the four language skills. Special emphasis is placed on descriptive and narrative writing.  
Pre-requisite: LG 232 Minimum Grade of C or LG 234 Minimum Grade of C
- LG 335 Commercial-Technical Spanish** 3 cr  
Advanced course in written and spoken business and technical Spanish. Emphasis on writing proficiency in various aspects of business, government, technical and general commercial writing. Development of related speaking skills for commerce. Note: This course cannot be counted toward fulfilling degree requirements for B.A. concentration in Spanish.  
Pre-requisite: LG 333 Minimum Grade of C or LG 334 Minimum Grade of C
- LG 336 Intro Textual Analys Hisp Lit** 3 cr  
Introductory course to literary analysis, literary and critical terminology, and genres as they appear in short works from both Spain and Latin America.  
Pre-requisite: LG 232 Minimum Grade of D or LG 234 Minimum Grade of D
- LG 337 Spanish for Medical Prof** 3 cr  
LG 337 is designed for the advanced language student interested in further developing his/her linguistic proficiency in Spanish while acquiring terminology useful to the health care professional. In addition, the course affords the student an opportunity to gain insight into the health care needs of the non-English speaking Hispanic population in the U.S., as well as to begin understanding in general terms its diverse cultural milieu. The course is highly interactive and is conducted in its entirety in the target language. Note: This course cannot be counted toward fulfilling degree requirements for B.A. concentration in Spanish.  
Pre-requisite: LG 333 Minimum Grade of B and LG 334 Minimum Grade of B
- LG 348 19th C Cntl Phi-Lit Theory** 3 cr  
An examination of selected themes and issues in 19th Century Continental Philosophy and Literary Theory. Topics may include Idealism, Romanticism, Existentialism, Marxism, Freudianism. Identical with PHL 348 and EH 348. Credit cannot be received for both LG 348 and either PHL 348 or EH 348. (For LG credit, students will be required to do some coursework in their language of concentration.)
- LG 349 20th C Cntl Phi-Lit Theory** 3 cr  
An examination of selected themes and issues in 20th Century Continental Philosophy and Literary Theory. Topics may include Phenomenology, Existentialism, Hermeneutics, Structuralism, and Post-Structuralism. Identical with PHL 349 and EH 349. Credit cannot be received for both LG 349 and either PHL 349 or EH 349. (For LG credit, students will be required to do some coursework in their language of concentration.)
- LG 361 German Lit thru Classicism** 3 cr  
Origin and development of German Civilization (literature, thought, the arts, and society in a historical context) during the period of unification and industrialization, including Romanticism, Realism, Naturalism, and early Modernism. Extensive reading, class discussion, and oral and written reports in the language are required.  
Pre-requisite: LG 252 Minimum Grade of C or LG 253 Minimum Grade of C
- LG 362 German Cult-Lit 19th Century** 3 cr  
Development of German civilization (literature, thought, the arts, and society in a historical context) during the period of unification and industrialization, including Romanticism, Realism, Naturalism, and early Modernism. Extensive readings, class discussions, and oral and written reports in the language are required.  
Pre-requisite: (LG 252 Minimum Grade of C or LG 253 Minimum Grade of C)
- LG 363 Modern-Contemp German Cult-Lit** 3 cr  
Development of German civilization (literature, thought, the arts, and society in a historical context) from the early twentieth century through the present. Extensive readings, class discussions, and oral and written reports in the language are required.  
Pre-requisite: (LG 252 Minimum Grade of C or LG 253 Minimum Grade of C)
- LG 364 Highlights German Cult-Lit** 3 cr  
A capstone course highlighting masterpieces of German literature and culture from a particular genre (e.g., the Novelle); a particular period or movement (e.g., Romanticism); an author or group of authors (e.g., Brecht); or a particular thematic focus. Extensive readings, class discussions, and oral and written reports in the language are required.  
Pre-requisite: LG 361 Minimum Grade of C or LG 362 Minimum Grade of C or LG 363 Minimum Grade of C
- LG 366 Adv German Grammar** 3 cr  
Designed for the student who wishes to teach or do advanced work. Comprehensive study of formal grammar and structured practice in oral and written expression.  
Pre-requisite: (LG 252 Minimum Grade of C or LG 253 Minimum Grade of C)

**LG 367 Adv German Conversation 1 cr**

Intensive conversation with practice in using various levels of the spoken language from slang to formal speech. Emphasis on the sounds and idioms of German. The course meets for one hour per week with the instructor and one hour per week for a lab session, often with a native speaker. The content of this course will vary over four consecutive semesters. This course may be repeated for a maximum of four credits.

Pre-requisite: (LG 252 Minimum Grade of C or LG 253 Minimum Grade of C)

**LG 368 Adv German Composition - W 3 cr**

Intensive course in writing German. Emphasis is on writing as a process, the communicative purposes of writing, and the development of critical reflection. Analysis of authentic texts and extensive practice in various genres of written German, including description, narrative, report, critical review, and interpretation.

Pre-requisite: (LG 252 Minimum Grade of C or LG 253 Minimum Grade of C)

**LG 372 Golden Age of Russian Lit - W 3 cr**

A survey course designed to familiarize the student with the essential works of 19th century Russian literature. Students read and discuss works by Pushkin, Lermontov, Gogol, Dostoevsky, Turgenev, Tolstoy, and Chekhov. In English. Russian majors are required to read excerpts of works in Russian and to complete a course project in Russian.

Pre-requisite: LG 272 Minimum Grade of C

**LG 373 Intensive Third Year Russian 4 cr**

A one-semester intensive Third Year course for students who have successfully completed the LG 271 and 272 sequence or LG 273 (Intensive Second Year Russian). This course is usually taught during the spring following LG 273, abroad during the summer or in the Fall following a semester abroad and acts as a bridge course. This course is meant to fill in any gaps in knowledge of Russian grammar before continuing to Advanced Grammar and Composition courses. Special attention is paid to nuances in Russian culture. By permission of instructor.

Pre-requisite: LG 271 Minimum Grade of C and LG 272 Minimum Grade of C or LG 273 Minimum Grade of C

**LG 374 Adv Russian Grammar 3 cr**

A course designed to give students active control of the more complex features of Russian grammar. Structured practice in oral and written expression.

Pre-requisite: LG 272 Minimum Grade of C

**LG 375 Adv Russian Conversation 2 cr**

Intensive conversation practice in using the various levels of modern spoken Russian. The course meets two hours per week. The content of this course will vary over eight consecutive semesters. This course may be repeated for a maximum of eight credits.

Pre-requisite: LG 272 Minimum Grade of D

**LG 376 Adv Russian Composition - W 3 cr**

This course provides extensive practice in writing Russian. Students read, discuss, and write about texts which reflect the controversial and topical issues of the day.

Pre-requisite: LG 272 Minimum Grade of C

**LG 380 Russian Poetry 3 cr**

Designed to enhance the student's overall command of spoken Russian through the study of Russia's rich poetic tradition. Russian poems and songs provide the basic materials for this course. Lectures, materials, and discussions in Russian.

Pre-requisite: LG 272 Minimum Grade of C

**LG 381 Russian Prose in Context 3 cr**

A course designed to enhance the student's ability to read, translate, and discuss Russian texts. Students read works from both 19th and 20th century fiction, which they analyze both thematically and stylistically. Class work and assignments are geared towards increasing the student's vocabulary and understanding of Russian stylistics. All texts, lectures, and discussions in Russian.

Pre-requisite: LG 272 Minimum Grade of C

**LG 384 Japanese Film 3 cr**

This course will introduce students to major themes in recent Japanese history, including samurai culture and other issues pertaining to social class, Westernization, the postwar family, sixties radicalism, and recent popular culture. Students will explore these themes through Japanese film and literature, and will thus become familiar with major directors, including Akira Kurosawa, Yasujiro Ozu and Juzo Itami, and novelists such as Junichiro Tanizaki and Yukio Mishima.

**LG 390 Special Topics - 1 TO 6 cr**

Topics to be determined by student need and interest.

Course may be repeated for a total of 12 hours.

Pre-requisite: (LG 212 Minimum Grade of C or LG 213 Minimum Grade of C) or (LG 232 Minimum Grade of C or LG 234 Minimum Grade of C) or (LG 252 Minimum Grade of C or LG 253 Minimum Grade of C) or LG 272 Minimum Grade of C

**LG 394 Dir St PreStudy Abrd - 1 cr**

Working under the direction of their faculty advisor, language majors will prepare for their required study abroad experience through an examination of selected country-specific readings as well as cross-cultural orientation materials. Prerequisite: completion of intermediate sequence in student's concentration or equivalent.

Pre-requisite: (LG 212 Minimum Grade of B or LG 213 Minimum Grade of B) or (LG 252 Minimum Grade of B or LG 253 Minimum Grade of B) or (LG 232 Minimum Grade of B or LG 234 Minimum Grade of B) or LG 271 Minimum Grade of B

- LG 400 Applied Linguistics** 3 cr  
 LG 400 is one of the required core classes for the Applied Linguistics minor. The course introduces linguistics concepts to the students and gives them the foundation needed for the higher level classes required as part of the minor. Required core course. Pre-requisite: LG/LGS 200-level sequence with a C or better and sophomore standing. Pre-requisite: LG 200 Minimum Grade of C or LGS 200 Minimum Grade of C
- LG 412 Readings Francophone Lit** 3 cr  
 Study of the literature of the Francophone world, including West and North Africa, the Caribbean, and Quebec, in their cultural and historical context. Pre-requisite: (LG 311 Minimum Grade of C or LG 323 Minimum Grade of C) or (LG 312 Minimum Grade of C or LG 325 Minimum Grade of C)
- LG 415 Readings in the French Novel** 3 cr  
 Study of the development of the novel in French from the romantic period through the contemporary novel. Pre-requisite: (LG 311 Minimum Grade of C or LG 323 Minimum Grade of C) or (LG 312 Minimum Grade of C or LG 325 Minimum Grade of C)
- LG 416 Identites Francaises** 3 cr  
 Study of how different minority groups have been represented and have represented themselves in Nineteenth and Twentieth Century French and Francophone literature, essays, and film. Pre-requisite: (LG 311 Minimum Grade of C or LG 323 Minimum Grade of C) or (LG 312 Minimum Grade of C or LG 325 Minimum Grade of C)
- LG 431 Hispanic Civilizations** 3 cr  
 In-depth study of various aspects of Hispanic civilization and its contribution to world culture; emphasis upon on geographical, historical, social, political and artistic forces. Extensive class discussion, oral and written reports in the language are required. Pre-requisite: LG 333 Minimum Grade of C or LG 334 Minimum Grade of C or LG 336 Minimum Grade of C
- LG 432 Rdgs in Spanish Literature** 3 cr  
 Representative readings reflecting major literary movements and cultural events in Spain. Extensive class discussion, oral and written reports are required. Pre-requisite: LG 333 Minimum Grade of C or LG 334 Minimum Grade of C or LG 336 Minimum Grade of C
- LG 433 Rdgs in Latin Amer Literature** 3 cr  
 Representative readings reflecting major literary movements and cultural events in Latin America. Extensive class discussions, oral and written reports are required. Pre-requisite: LG 333 Minimum Grade of C or LG 334 Minimum Grade of C or LG 336 Minimum Grade of C
- LG 451 The Aesthetic Lens** 3 cr  
 In this course we will examine the tectonic shifts in German culture and history from the founding of the Weimar Republic to the present through the lens of lyric poetry and film. For each major period-the Weimar Republic: National Socialism and Second World War; the postwar period; the rise and fall of the Berlin Wall; Reunification-we will study the major poetic voices and two films both on their own aesthetic merits and relative to the historical contexts within which they were produced. We will also analyze the relationship between these works of art and the historical context in which they were produced. This class will be conducted in German. Pre-requisite: LG 366 Minimum Grade of C and LG 367 Minimum Grade of C and LG 368 Minimum Grade of C
- LG 480 Senior Seminar - W** 3 cr  
 This course is designed to broaden and enhance the study-abroad experience and to serve as a capstone to the foreign-language major. Building on the study-abroad experience, students will (1) contextualize their experience through readings, (2) continue their experience by maintaining consistent contact with the target culture, and (3) communicate their experience and their enhanced understanding of topics such as culture shock, culture stereotypes, cultural metaphors, and cross cultural comparisons of behavior and mind-set. Classes will consist of lectures, discussions of readings, and a major research paper and public presentation of their research. Capstone Course. Prerequisite: completion of the Study Abroad requirement. Pre-requisite: EH 102 Minimum Grade of C and IS 391 Minimum Grade of S
- LG 490 Special Topics -** 1 TO 6 cr  
 Topics to be determined by student need and interest. Course may be repeated when content varies. A subtitle identifying the topic will be entered on the student's record.
- LG 492 Seminar -** 1 TO 3 cr  
 A course designed for advanced students to pursue a special topic in depth through readings, critical discussions, and delivery of a seminar paper. This course may be repeated for a maximum of 6 credits. Prerequisite: Normally limited to juniors and seniors.
- LG 494 Directed Studies-** 1 TO 3 cr  
 Directed study under the supervision of a member of the foreign language faculty. This course may be repeated for a maximum of 6 credits. Requires permission of department chair.
- LG 496 Internship - Foreign Languages** 1 TO 3 cr  
 Supervised professional work with mandatory reading list and written report. This course may be repeated for a maximum of six credits. Prerequisites: Permission of the Department Chair is required.

**LG 499 Honors Senior Project - H** 3 TO 6 cr  
Under the advice and guidance of a faculty mentor Honors Students will identify and carry out a research project, relevant to the field of foreign language study, that will lead to a formal presentation at the annual Honors Student Colloquium. The senior project will be judged and graded by three faculty chaired by the honors mentor.

**LG 590 Sp Top -** 1 TO 3 cr  
Topics to be determined by student need and interest. Content will vary. A subtitle identifying the topic will be entered on the student's record.

**LG 592 Seminar -** 1 TO 3 cr  
A course designed for graduate students to pursue a special topic in-depth with readings, critical discussion and delivery of a seminar paper.

**LG 594 Directed Studies-** 1 OR 3 cr  
Directed study under the supervision of a member of the Foreign Languages and Literatures faculty having Graduate Faculty status. This course may be repeated for a maximum of 15 credits. Prerequisite: Permission of department chair.

## Gender Studies (GS)

**GS 101 Intro to Gender Studies** 3 cr  
This course provides an interdisciplinary, multicultural overview of the concept of gender and gender roles in patriarchal society. This course examines the social construction of gender in our society and how that has shaped such areas as economics, politics, cultural/social values, and the impact upon women and men in historical and contemporary terms.

**GS 290 Special Topics -** 3 cr  
Study of selected topics with an area in gender studies. May be repeated for credit when content varies.

**GS 490 Gender Studies Special Topics-** 3 cr  
Advanced study of selected topics within an area in Gender Studies. May be repeated for credit when content varies for a total of six hours.

**GS 492 Gender Studies Seminar -** 3 cr  
Advanced study of selected topics in Gender Studies. May be repeated for credit when content varies for a total of six hours.

**GS 494 Directed Studies** 1 TO 3 cr  
Directed research under the guidance of a Gender Studies faculty member. Requires permission of instructor. Student is restricted to taking a maximum of six hours of Directed Studies.  
Pre-requisite: GS 101 Minimum Grade of D

**GS 496 Internship -** 3 TO 6 cr  
Practical learning through occupational or community work with an approved agency dealing with gender-related issues. Readings and final report supervised by gender studies faculty. Special Permission required.  
Pre-requisite: GS 101 Minimum Grade of D

## Geographic Info Technology (GIT)

**GIT 442 Remote Sensing II** 4 cr  
Analysis of remotely sensed digital data for detection and mapping of Earth resources. Minimum grade of "B" needed in course prerequisite. Fee.  
Pre-requisite: (GEO 332 Minimum Grade of B or GY 332 Minimum Grade of B)

**GIT 460 Intro to GIT** 4 cr  
Fundamentals of Geographic Information Systems technology, including software functionality (ArcGIS), data processing, cartography and spatial analysis. Fee.  
Pre-requisite: CIS 150 Minimum Grade of B or CIS Proficiency Exam P

**GIT 461 GIT Applications I-Environment** 4 cr  
Application of Geographic Information Systems to the studies of the natural environment. Fee.  
Pre-requisite: (GIT 460 Minimum Grade of C or GEO 460 Minimum Grade of C or GY 460 Minimum Grade of C)

**GIT 462 GIT Apps II-Business/Soc Sci** 4 cr  
Application of Geographic Information Systems to Business and the Social Sciences. Prerequisite: GIS 460, with a grade of "C" or better, or permission of instructor. Fee.  
Pre-requisite: (GIT 460 Minimum Grade of C or GEO 460 Minimum Grade of C or GY 460 Minimum Grade of C)

**GIT 490 Special Topics -** 2 TO 4 cr  
Geographic Information Technology topics not covered in current GIT courses. May be repeated when content varies for a maximum of 8 credit hours.  
Pre-requisite: GIT 460 Minimum Grade of C or GEO 460 Minimum Grade of C or GY 460 Minimum Grade of C

**GIT 494 Directed Studies -** 2 TO 4 cr  
Geographic Information Technology topics not covered in current GIT courses. May be repeated when content varies for a maximum of 8 credit hours.  
Pre-requisite: GIT 460 Minimum Grade of C or GEO 460 Minimum Grade of C or GY 460 Minimum Grade of C

**GIT 496 Internship in GIT** 1 TO 4 cr  
On-the-job learning through occupational or professional work with an approved firm or agency. Open to geography majors only. No more than 4 hours of internship credit is allowed.  
Pre-requisite: GIT 460 Minimum Grade of C or GEO 460 Minimum Grade of C or GY 460 Minimum Grade of C

**GIT 542 Remote Sensing II 4 cr**

Analysis of remotely sensed digital data for detection and mapping of Earth resources. Minimum grade of "B" needed in course prerequisite. Special project required. Fee.  
Pre-requisite: (GEO 332 Minimum Grade of B or GY 332 Minimum Grade of B)

**GIT 560 Intro to GIT 4 cr**

Fundamentals of Geographic Information Systems technology, including software functionality (ArcGIS), data processing, cartography and spatial analysis. Credit for GIT 460 and GIT 560 not allowed. Special project required. Fee.  
Pre-requisite: CIS 150 Minimum Grade of B or CIS Proficiency Exam P

**GIT 561 GIT Apps I-Environment - C 4 cr**

Application of Geographic Information Systems to the studies of the natural environment. Credit for GIT 461 and GIT 561 not allowed. Special project required. Fee.  
Pre-requisite: (GIT 460 Minimum Grade of C or GIT 560 Minimum Grade of C or GEO 460 Minimum Grade of C or GY 460 Minimum Grade of C or GEO 560 Minimum Grade of C)

**GIT 562 GIT Apps II-Business/Soc Sci 4 cr**

Application of Geographic Information Systems to business and the social science. Credit for GIT 462 and GIT 562 not allowed. Special project required. Fee.  
Pre-requisite: (GIT 460 Minimum Grade of C or GEO 460 Minimum Grade of C or GY 460 Minimum Grade of C or GIT 560 Minimum Grade of C or GEO 560 Minimum Grade of C)

**GIT 590 Special Topics - 2 TO 4 cr**

Geographic Information Technology topics not covered in current GIT courses. May be repeated when content varies for a maximum of 8 credit hours.  
Pre-requisite: GIT 460 Minimum Grade of C or GIT 560 Minimum Grade of C or GEO 460 Minimum Grade of C or GY 460 Minimum Grade of C or GEO 560 Minimum Grade of C

## Geography (GEO)

**GEO 101L Atmospheric Processes Lab 1 cr**

Laboratory exercises associated with GEO 101. GEO 101 must be taken concurrently. Together, GEO 101 and GEO 101L count as one laboratory science course, partially fulfilling general education requirements. Fee.  
Co-requisite: GEO 101

**GEO 102L Landscape Processes Lab 1 cr**

Laboratory exercises associated with GEO 102. GEO 102 must be taken concurrently. Together, GEO 102 and GEO 102L count as one laboratory science course, partially fulfilling general education requirements. Fee.  
Co-requisite: GEO 102

**GEO 101 Atmospheric Processes 3 cr**

Introduces students to the natural science branch of geography. Emphasizes Earth-Sun relationships, weather and climate. Core Course.  
Co-requisite: GEO 101L

**GEO 102 Landscape Processes 3 cr**

Introduces students to the natural science branch of geography. Emphasizes spatial patterns and processes related to natural landscape regions and landforms. Core Course.  
Co-requisite: GEO 102L

**GEO 114 Intro to Human Geography 3 cr**

This course introduces students to the social sciences branch of geography. Emphasis is placed on the location, spatial arrangement, and spatial interaction of the human environment which includes: population, culture, geopolitics, economic activity, and settlements. Core Course.

**GEO 115 World Regional Geography 3 cr**

A survey of the major regions of the world, excluding North America, and the interrelationship of environmental, cultural, economic, and political factors that characterize each. Core Course.

**GEO 201 Geography Orientation 1 cr**

This 1-credit hour course will cover topics that are important to geography students, such as: which geography courses to choose, the major sub-disciplines of geography, and career choices available for geography majors. You will meet the Geography faculty as they give brief overviews of the courses they teach and their research interests. Field trips, which will generally take place during the class time, are included in the course and will showcase examples of the research interests of faculty members. Core Course.

**GEO 301 Writing for the Sciences - W 3 cr**

This course is designed to introduce students to basic scientific writing skills. Participants will review the general principles of clear writing and will apply these principles to writing for a scientific audience. Particular emphasis will be placed on conveying the significance of research, outlining the aims, and discussing the results for scientific papers.  
Pre-requisite: EH 101 Minimum Grade of C or EH 102 Minimum Grade of C

**GEO 310 Environmental Earth Science 3 cr**

A spatial perspective on major global environmental problems. Topics include population pressure; loss of biodiversity; ozone depletion; global warming; water, energy, and mineral resources, food supplies, waste disposal, geologic hazards, and political/economic forces (identical to GY 310).  
Pre-requisite: (GY 101 Minimum Grade of D or GY 111 Minimum Grade of D) or GEO 101 Minimum Grade of D or GEO 102 Minimum Grade of D

- GEO 312 World Economic Geog** 3 cr  
Emphasis is placed on the location, spatial distribution, and spatial interaction of economic activities within a global context. Topics covered include population, natural resources, primary, secondary and tertiary activities, development and international trade and aid. Students will write technical reports using word processing and spreadsheet software.  
Pre-requisite: GEO 114 Minimum Grade of D and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)
- GEO 313 Geography of U.S. and Canada** 3 cr  
An analysis of the environmental, historical, cultural, and economic factors that create the spatial patterns, development processes and distinctiveness of Canada and the United States.
- GEO 314 Geography of Europe** 3 cr  
An analysis of the environmental, historical, social and economic factors that create the diversity of countries and their unique spatial characteristics on the subcontinent of Europe.
- GEO 315 Geography of Latin America** 3 cr  
A systematic survey of Latin America landscapes. Attention is directed to natural resources, human activities and regional differentiation.  
Pre-requisite: GEO 101 Minimum Grade of D or GEO 102 Minimum Grade of D or GEO 114 Minimum Grade of D or GEO 115 Minimum Grade of D
- GEO 317 Mountain Geography** 3 cr  
This course studies the mountainous regions of the world from a regional geography perspective. Course topics will include both physical and cultural aspects: their origins, historic attitudes towards mountains, the sacred mountains, their physical features, population and human occupation, climates, biota, and current threats to mountain environments. We will study the role of human activity in affecting mountain environments as well as the effect of mountains on people.  
Pre-requisite: EH 102 Minimum Grade of C
- GEO 320 Alabama Geography** 3 cr  
Spatial study of physical and human features in Alabama. Includes geomorphology, climate, vegetation, agriculture, development, population, and environmental issues within the state.  
Pre-requisite: (GEO 101 Minimum Grade of D or GEO 102 Minimum Grade of D or GEO 114 Minimum Grade of D or GEO 115 Minimum Grade of D) and (EH 102 Minimum Grade of D or EH 105 Minimum Grade of D)
- GEO 321 Nat'l Parks Conservation** 3 cr  
An analysis of the motives and processes for establishing national parks and nature reserves, the primary conservation and preservation issues they have and the influences of ecology, politics, and culture on their planning and management. U.S. national parks are emphasized.  
Pre-requisite: (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C) and (GEO 101 Minimum Grade of D or GEO 102 Minimum Grade of D or GEO 114 Minimum Grade of D or GEO 115 Minimum Grade of D)
- GEO 331 Computer Graphs and Maps** 4 cr  
Introductory review of the application of computers to the production of graphs and thematic maps for geographical analysis. Core course. Meets computer proficiency requirement for Geography majors. Fee.  
Pre-requisite: GEO 102 Minimum Grade of C and GEO 102L Minimum Grade of C
- GEO 332 Remote Sensing I** 4 cr  
Interpretation of maps, air photos and satellite images (identical to GY 332). Fee. Core course.  
Pre-requisite: GEO 102 Minimum Grade of C and GEO 102L Minimum Grade of C
- GEO 365 Urban Geography and Planning** 3 cr  
Concentrates upon the evolution and function of the urban spatial system, and upon the internal spatial structure of an urban area's residential, commercial, and industrial land use. This course also introduces basic concepts and strategies of urban and regional planning with a focus on the domestic realm.  
Pre-requisite: GEO 114 Minimum Grade of D or GEO 115 Minimum Grade of D
- GEO 370 International Tourism** 3 cr  
The study of the components of the Tourism industry, their spatial distribution, the environmental and cultural effects of Tourism, and the requisites and techniques for planning tourism development.  
Pre-requisite: (GEO 101 Minimum Grade of D or GEO 102 Minimum Grade of D or GEO 114 Minimum Grade of D or GEO 115 Minimum Grade of D)
- GEO 405 Natural Hazards and Disasters** 3 cr  
An overview of natural hazards and disasters from a scientific perspective that focuses on the occurrence and impact of environmental hazards, such as volcanoes, earthquakes, tsunamis, floods, mass movements, and coastal hazards. Mitigation techniques used to make the human environment more resilient against natural hazards are also covered. In addition, the viewpoint of hazard and emergency managers toward natural disasters will be studied.  
Pre-requisite: GEO 102 Minimum Grade of C or (GY 101 Minimum Grade of C or GY 111 Minimum Grade of C)

- GEO 410 Biogeography** 3 cr  
Analysis of spatial patterns of life on earth. Biogeography emphasizes the influence of the physical environment, paleogeography, and past and possible future climate change on the biomes and biogeographic realms.  
Pre-requisite: GEO 101 Minimum Grade of D
- GEO 411 Soils** 3 cr  
A review of soil formation, processes and properties (identical to GY 411).  
Pre-requisite: GEO 102 Minimum Grade of D
- GEO 412 Physiograph Regions N Amer-W** 3 cr  
The study of the major and minor natural regions of the North American continent, from Alaska to the Mexican border, including the Caribbean area. The course will focus on the different physically defined regions of North America, studying the homogenous variables that make each region distinct, including the topography, vegetation, soils, surface features, and past climates.  
Pre-requisite: (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C) and (GEO 102 Minimum Grade of C and GEO 102L Minimum Grade of C) or (GY 101 Minimum Grade of C or (GY 111 Minimum Grade of C and GY 111L Minimum Grade of C) )
- GEO 417 Health and Place** 3 cr  
This course illustrates how geographic concepts help us better understand health and well-being, through the exploration of theories, methodologies, and contributions of medical geography to the social and health sciences. Using spatial tools, such as mapping and Geographic Information Systems, this course will examine the geographical patterns of health and disease. This course encourages students to examine the theoretical and technological tools geography brings to topics related to health and provides them with a foundation for studying geographic differences in health and health services.  
Pre-requisite: EH 102 Minimum Grade of C
- GEO 435 Research Methods Geography** 3 cr  
This course serves as an introduction to geography as a research discipline. Emphasis is placed on geographic problem solving, data collection, data analysis, and reporting. Micro computer oriented statistical and mapping packages will be used to analyze geographic data.  
Prerequisites: Junior standing. Core course. Fee.  
Pre-requisite: (ST 210 Minimum Grade of D or ST 175 Minimum Grade of D)
- GEO 440 Coastal Zone Management** 2 cr  
A review of ecological features and of management policies for coastal communities with a description of relevant federal and state programs. Taught only at Dauphin Island Sea Lab.
- GEO 441 Coastal Climatology** 2 cr  
Study of the controlling factors and features of the world's climates, with particular attention to coastal areas, and application and interpretation of climate data. Taught only at Dauphin Island Sea Lab.
- GEO 443 Climatology - W** 3 cr  
Analysis of global climate as aggregate weather. Component elements, factors controlling distribution, resulting area patterns, and climatic classification are studied (identical to MET 443). Fee  
Pre-requisite: MET 140 Minimum Grade of C or GEO 101 Minimum Grade of C
- GEO 475 Field Work in Geography** 1 TO 6 cr  
Students will travel to pre-determined location to perform field work for a project that was pre-determined by the professor and student. Once in the field, students will gather data and learn about the landscape(s).  
Pre-requisite: EH 102 Minimum Grade of D
- GEO 485 Seminar in Geographic Thought** 3 cr  
This course serves as the capstone course for geography majors in which students integrate their knowledge of human and physical geography, as well as the geographic techniques, to investigate real-world problems with a spatial component. Students gain experience in working in small groups and in written and oral presentation of project results. Students will also lead discussions on key or pertinent research articles in geography. Taught Spring only.  
Pre-requisite: GEO 435 and GEO 331 and GEO 332
- GEO 490 Special Topics -** 2 TO 4 cr  
Geographic topics not covered in current geography courses. May be repeated when content varies for a maximum of 8 credit hours.
- GEO 492 Seminar -** 1 TO 3 cr  
Departmental seminar investigating a selected field of geography. May be repeated when content varies for a maximum of 3 credit hours.
- GEO 494 Directed Studies -** 1 TO 4 cr  
Independent research under the direction of a member of the geography faculty. No more than 8 hours of Directed Studies is allowed.
- GEO 496 Internship in Geography** 1 TO 4 cr  
On-the-job learning through occupational or professional work with an approved firm or agency. Open to geography majors only. No more than 4 hours of Internship credit is allowed.
- GEO 590 Sp Top -** 1 TO 6 cr  
An in-depth course for advanced students in geography. Topics and titles will be selected to examine the subject matter in an area of current interest to students and in an area of particular faculty expertise. Includes specialized topics not currently listed in the Bulletin course offerings.
- GEO 594 Grad Dir Study in Geography-** 1 TO 4 cr  
Independent research in Geography at the graduate level. May be used to learn new techniques or explore research questions of special interest under the direction of a member of the Geography graduate faculty.

## Geology (GY)

- GY 111L Physical Geology Lab** 1 cr  
Laboratory course for Physical Geology. Fee.  
Co-requisite: GY 111
- GY 112L Earth History Lab** 1 cr  
Laboratory course for Earth History.  
Co-requisite: GY 112  
Pre-requisite: GY 111 Minimum Grade of D and GY 111L Minimum Grade of D
- GY 111 Physical Geology** 3 cr  
Materials that make up the Earth as well as the properties and geological processes that operate in the Earth. Special topics include plate tectonics, mineral chemistry, the rock cycle, sedimentary processes, metamorphism and geological map reading. Core course.  
Co-requisite: GY 111L
- GY 112 Earth History** 3 cr  
The origin and history of the earth as seen in the rocks and their contained life record. Core Course.  
Co-requisite: GY 112L  
Pre-requisite: GY 111 Minimum Grade of D and GY 111L Minimum Grade of D
- GY 113 Honors Geoscience Field - H** 3 cr  
A two-week field course emphasizing the recognition and understanding of geologic processes in the field environment. The course is based in the Taos Ski Valley, New Mexico, with field trips ranging across northern New Mexico and southern Colorado during the interim session.  
Pre-requisite: ( (GY 101 Minimum Grade of D or (GY 111 Minimum Grade of D and GY 111L Minimum Grade of S) and (GY 103 Minimum Grade of D or (GY 112 Minimum Grade of D and GY 112L Minimum Grade of S) )
- GY 301 Geomorphology** 3 cr  
Principles of landform development as it relates to specific processes (fluvial erosion, glacial erosion, etc.), construction of topographic base maps with Alidade/Total Station, GPS navigation and surveying, and rock/mineral resource evaluation. Fee.  
Pre-requisite: (GY 101 Minimum Grade of D or GY 111 Minimum Grade of D)
- GY 302 Crystallography and Mineralogy** 4 cr  
Introduction to elementary crystallography, crystal chemistry, and atomic structure of minerals, as well as the identification, characterization and use of common rock-forming minerals and important ore minerals. Fee.  
Pre-requisite: (GY 101 Minimum Grade of D or (GY 111 Minimum Grade of D and GY 111L Minimum Grade of D) ) and (GY 103 Minimum Grade of D or (GY 112 Minimum Grade of D and GY 112L Minimum Grade of D) ) and (CH 131 Minimum Grade of D or CH 115 Minimum Grade of D)
- GY 303 Igneous & Meta Petrology** 4 cr  
The study of the formation and classification of igneous and metamorphic rocks. Fee.  
Pre-requisite: (GY 101 Minimum Grade of D or GY 111 Minimum Grade of D) and (GY 232 Minimum Grade of D or GY 302 Minimum Grade of D or GY 342 Minimum Grade of D)
- GY 304 Stratigraphy - W** 3 cr  
The development of the stratigraphic column; correlation and field procedures. Fee.  
Pre-requisite: (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C) and (GY 103 Minimum Grade of D or GY 112 Minimum Grade of D)
- GY 305 Geophysics** 4 cr  
Application of classical physics to the study of the Earth and the solution of problems in Earth sciences, including analysis of seismic refraction and reflection surveys, earthquakes, gravity and magnetic fields, and electrical geophysical surveys. Fee.  
Pre-requisite: GY 111 Minimum Grade of D and GY 301 Minimum Grade of D
- GY 310 Environmental Earth Science** 3 cr  
A spatial perspective on major global environmental problems. Topics include population pressure, loss of biodiversity, ozone depletion, global warming, water, energy and mineral resources, food supplies, waste disposal, geological hazards and political/economic forces (identical to GEO 310).  
Pre-requisite: GY 111 Minimum Grade of D or GEO 101 Minimum Grade of D or GEO 102 Minimum Grade of D
- GY 332 Remote Sensing I** 4 cr  
Interpretation of maps, air photos and satellite images (identical to GEO 332). Fee.  
Pre-requisite: GEO 102 Minimum Grade of C and GEO 102L Minimum Grade of C and GY 301 Minimum Grade of C
- GY 401 Paleontology** 3 cr  
Major invertebrate fossil groups, their identification, and their geologic distribution. Fee.  
Pre-requisite: (GY 103 Minimum Grade of D or (GY 112 Minimum Grade of D and GY 112L Minimum Grade of D) )
- GY 402 Sedimentary Petrology-W** 3 cr  
A study of sediments and sedimentary rocks and their classification, as well as sedimentary processes, petrography and diagenesis.  
Pre-requisite: (GY 101 Minimum Grade of D or GY 111 Minimum Grade of D) and (GY 103 Minimum Grade of D or GY 112 Minimum Grade of D) and (GY 304 Minimum Grade of D or GY 323 Minimum Grade of D or GY 345 Minimum Grade of D) and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

- GY 403 Structural Geology** 4 cr  
Study of the deformation of the internal Earth and the structures that result. Fee.  
Pre-requisite: (GY 101 Minimum Grade of D or GY 111 Minimum Grade of D) and (GY 301 Minimum Grade of D or GY 325 Minimum Grade of D) and (PH 112 Minimum Grade of D or PH 114 Minimum Grade of D) or (PH 201 Minimum Grade of D or PH 216 Minimum Grade of D)
- GY 411 Soils** 3 cr  
A review of soil formation, processes and properties (identical to GEO 411).  
Pre-requisite: (GEO 102 Minimum Grade of D and GEO 102L Minimum Grade of D and GY 301 Minimum Grade of D)
- GY 413 Coastal Geomorphology** 2 cr  
An introduction to coastal sediment processes and their applied coastal geomorphology with emphasis on waves, tides, sediments, and their interactions including the impacts of anthropogenic influences. Taught only at Dauphin Island Sea Lab.
- GY 420 Geostatistics** 3 cr  
Applied bivariate and multivariate statistics to problems in Geography, Geology, and Meteorology; parametric and non-parametric procedures in correlation, regression, analysis of variance, etc. Time series analysis, trend surface analysis, kriging and analysis of spatial (map) data. Identical to GEO 420. Fee.  
Pre-requisite: (GY 111 Minimum Grade of C and GY 112 Minimum Grade of C) and (MA 112 Minimum Grade of C or ST 210 Minimum Grade of C)
- GY 421 Applied Environ Geology - W** 3 cr  
A geological applications course designed to familiarize students with techniques used by environmental and engineering geologists in their studies of land use, land development and assessment of geological hazards. Material is illustrated with case studies from the Mobile area. Fee.  
Pre-requisite: (GY 101 Minimum Grade of D or GY 111 Minimum Grade of D) and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)
- GY 422 Sedimentary Geology** 3 cr  
A course examining sedimentation with emphasis on environments of deposition, sea-level and other controls on sedimentation in the rock record, and petroleum exploration. Credit for both GY 422 and GY 522 will not be allowed. Fee.  
Pre-requisite: (GY 101 Minimum Grade of D or GY 111 Minimum Grade of D) and (GY 103 Minimum Grade of D or GY 112 Minimum Grade of D)
- GY 425 Hydrology** 4 cr  
Principles of sources, occurrences, and movement of groundwater. Surface and subsurface investigations of groundwater and elementary groundwater hydrology and chemistry. Credit for both GY 425 and GY 525 will not be allowed. Fee.
- GY 426 Contaminant Hydrogeology** 3 cr  
Flow systems, mass transport in the vadose and saturated zones; advection and dispersion; transformation, retardation and attenuation of solutes; low temperature geochemical processes and kinetics of chemical reactions; contaminant modeling using finite difference-finite element methods. Credit for both GY 426 and GY 526 will not be allowed. Fee.  
Pre-requisite: (GY 425 Minimum Grade of D or GY 475 Minimum Grade of D)
- GY 431 Optical Mineralogy-Crystallogr** 4 cr  
Theory and use of the petrographic microscope in the recognition and identification of crystallographic and optical properties in non-opaque minerals. Fee.  
Pre-requisite: (GY 232 Minimum Grade of D or GY 302 Minimum Grade of D or GY 342 Minimum Grade of D)
- GY 433 X-Ray Analytical Methods** 4 cr  
Theory and use of x-ray diffraction systems as applied to crystallography, mineralogy, chemistry, and metallurgy. Fee.  
Pre-requisite: GY 302 Minimum Grade of D
- GY 446 Marine Geology** 4 cr  
A study of the geology of the ocean basins, with special emphasis on the continental shelves, their sediments, and sedimentary processes at work there.  
Pre-requisite: (GY 101 Minimum Grade of D or GY 111 Minimum Grade of D) and (GY 103 Minimum Grade of D or GY 112 Minimum Grade of D)
- GY 450 Thin-Section Techniques** 1 cr  
A laboratory based course illustrating techniques employed by geologists to prepare thin-sections from geological materials. Students will produce thin-sections and write up reports detailing the petrography of the samples examined. Fee.  
Pre-requisite: (GY 232 Minimum Grade of D or GY 302 Minimum Grade of D or GY 342 Minimum Grade of D) and (GY 233 Minimum Grade of D or GY 303 Minimum Grade of D or GY 343 Minimum Grade of D) and (GY 344 Minimum Grade of D or GY 402 Minimum Grade of D)
- GY 480 Field Geology** 6 cr  
A six-week, summer field course on the methods of geologic surveying, the nature and construction of geologic maps and cross-sections, measurements of stratigraphic sections and preparation of geologic reports. This course serves as a capstone class for geology majors.  
Pre-requisite: (GY 303 Minimum Grade of D and GY 403 Minimum Grade of D and GY 402 Minimum Grade of D and HS 170 Minimum Grade of P)
- GY 490 Special Topic -** 1 TO 4 cr  
Geological topics not covered in current geology courses. Prerequisite: Junior or Senior standing.
- GY 492 Seminar -** 1 TO 3 cr  
Departmental seminar investigating a selected field of geology (topic announced prior to registration). May be repeated when content varies for a maximum of 3 credits

**GY 494 Directed Study - 1 TO 4 cr**

Independent research in the field or laboratory under the direction of a member of the Geology faculty. Students must have an acceptable project approved before registering for this course. Prerequisite: Permission of the Chair, Junior or Senior standing. No more than 8 hours of directed study is allowed.

**GY 496 Internship in Geology 1 TO 3 cr**

On-the-job training through occupational or professional work through an approved geological organization. Only open to geology majors. Prerequisite: Permission of chair; Junior or Senior standing. No more than 3 hours of internship is allowed.

**GY 520 Geostatistics 4 cr**

Applied bivariate and multivariate statistics to problems in Geography, Geology, and Meteorology; parametric and non-parametric procedures in correlation, regression, analysis of variance, etc. Time series analysis, trend surface analysis, kriging and analysis of spatial (map) data. Identical to GEO/GY 420. Credit for both GY 420 and GY 520 will not be allowed.

Pre-requisite: (ST 175 Minimum Grade of B or ST 210 Minimum Grade of B) or (MA 125 Minimum Grade of C or MA 132 Minimum Grade of C)

**GY 531 Optical Mineralogy-Crystallogr 4 cr**

Theory and use of the petrographic microscope in the recognition and identification of crystallographic and optical properties in non-opaque minerals. Graduate credit will require an additional project specified by the instructor. Credit for both GY 431 and GY 531 will not be allowed. Fee. Pre-requisite: (GY 232 Minimum Grade of D or GY 302 Minimum Grade of D or GY 342 Minimum Grade of D)

**GY 533 X-Ray Analytical Methods 4 cr**

Theory and use of x-ray diffraction systems as applied to crystallography, mineralogy, chemistry, and metallurgy. Pre-requisite: (GY 231 Minimum Grade of D or GY 341 Minimum Grade of D)

**GY 544 Sedimentary Geology 3 cr**

A study examining sedimentation with emphasis on environments of deposition, sea-level and other controls on sedimentation in the rock record, and petroleum exploration. Credit for both GY 444 and GY 544 will not be allowed. Pre-requisite: MAS 603 Minimum Grade of C or GY 344 Minimum Grade of D

**GY 575 Hydrology 4 cr**

Principles of sources, occurrences, and movement of ground water. Surface and sub-surface investigations of ground water and elementary ground water hydrology and chemistry.

Pre-requisite: (GY 232 Minimum Grade of D or GY 342 Minimum Grade of D)

**GY 576 Contaminant Hydrogeology 4 cr**

Flow systems, mass transport in the vadose and saturated zones; advection and dispersion; transformation, retardation and attenuation of solutes; low temperature geochemical processes and kinetics of chemical reactions; contaminant modeling using finite difference-finite element methods. Credit for both GY 426 and GY 576 will not be allowed. Fee. Pre-requisite: GY 425 Minimum Grade of D or GY 475 Minimum Grade of D or GY 575 Minimum Grade of D

**GY 590 Sp Top - 1 TO 6 cr**

An in-depth course for advanced students in geology. Topics and titles will be selected to examine the subject matter in an area of current interest to students and in an area of particular faculty expertise. To include specializing topics not currently listed in Bulletin course offerings.

**GY 592 Seminar - 1 TO 6 cr**

Students and faculty meet weekly in an interactive discussion of current literature in geological sciences. The focus will be on 'state of the art' theories and methodologies as they occur in the primary literature. Student presentation is required to receive credit.

**GY 594 Directed Research 1 TO 6 cr**

Independent research under the direction of a member of the graduate faculty. May be used to learn new techniques or to explore research questions of special interest. A maximum of 6 hours may be earned for this course.

## Gerontology (GRN)

**GRN 272 Gender and Aging 3 cr**

This course examines the dynamics of gender and aging within society from an interdisciplinary perspective. Students will be introduced to controversies in gender over the life course. These include, but are not limited to, definitions and cultural boundaries, gender in childhood, gender and relationships, gender in education and the workplace, gender and sexuality, as well as gender in late life.

**GRN 290 Special Topics - 3 cr**

This designation is used for interdisciplinary courses on aging on a variety of subjects. This course does not replace any course in a single discipline. May be repeated as long as the topic changes, to maximum of six semester hours.

**GRN 435 Health Disparities Life Span 3 cr**

This course examines differences in health status across the life span. The course will focus heavily on racial/ethnic and socioeconomic disparities in health applying a social determinants' of health framework. Issues that will be considered include how income, education, neighborhood conditions, access to health care, and other community factors shape opportunities to be healthy. The course is cross-listed as SY 435 and GRN 435 and has been approved as an elective for the Undergraduate Certificate in Gerontology and the interdisciplinary minor in Gerontology. Pre-requisite: SY 109 Minimum Grade of D

**GRN 490 Special Topics - 3 cr**

This course is designated for upper division students and graduate students, particularly those pursuing studies for the Certificate of Gerontology. The course content focuses on interdisciplinary treatments on various topics on aging. This course does not replace any course in a single discipline. (Examples of special topics: Trends and Issues in Gerontology; Leadership and Advocacy in Gerontology; Housing and Lifestyle Changes over the Life Course). May be repeated as long as the topic changes, to maximum of six semester hours.

Pre-requisite: SY 372 Minimum Grade of D

**GRN 494 Directed Studies - 1 TO 3 cr**

Under the guidance of a faculty member, the student will pursue directed research on readings of an approved topic in Gerontology. May be repeated as long as the topic changes, to a maximum of six semester hours. Requires permission of Director of Gerontology.

Pre-requisite: SY 372 Minimum Grade of D

**GRN 496 Internship - Gerontology 3 OR 6 cr**

This course is to provide a practicum experience in gerontology in a setting selected by the student and approved by the Program Director. The course emphasis is on the experiential learning process and outcomes. The undergraduate student will apply theoretical concepts in specific areas of interest related to aging and intergenerational relations. Interns will meet as a group three times during the semester for orientation, professional development, and evaluation activities. The 3-hour internship requires 100 contact hours; the 6-hour internship requires 200 hours. Permission of Director of Gerontology is required. Fee.

Pre-requisite: SY 372 Minimum Grade of C

**GRN 535 Health Disparities Life Span 3 cr**

The main purpose of this seminar is to provide students with an understanding of how social factors contribute to racial/ethnic, socioeconomic and gender disparities in health and health care. We will examine how dyadic relationships such as interpersonal forms of discrimination, marriage, and social ties may contribute to health disparities. We will also examine the ways in which neighborhood and community context, as well as inequalities in socioeconomic status materially shape health and access to health care services. The course is cross-listed as GRN 435/535 and SY 435/535 and has been approved as an elective for the Undergraduate/Graduate Certificate in Gerontology and the interdisciplinary minor in Gerontology.

**GRN 594 Dir St in Gerontology - 1 TO 3 cr**

Under the guidance of a faculty member, the student will pursue directed research or readings of an approved topic in Gerontology. May be repeated as long as the topic changes, to maximum of six credit hours. Requires permission of the Director of Gerontology.

**GRN 596 Internship - Gerontology 3 OR 6 cr**

This course is to provide a practicum experience in gerontology in a setting selected by the student and approved by the Program Director. The course emphasis is on the experiential learning process and outcomes. The graduate student will apply theoretical concepts to leadership roles, conducting research and influencing social and health care policies related to aging and intergenerational relationships. Interns will meet as a group three times during the semester for orientation, professional development, and evaluation activities. The 3-hour internship requires 100 contact hours; the 6-hour internship requires 200 hours. Permission of Director of Gerontology is required. Fee.

Pre-requisite: SY 523 Minimum Grade of B

**GRN 597 GRN Teaching Apprenticeship 1 TO 3 cr**

Directed Studies/Apprenticeship that focuses on teaching Gerontology. The student will work directly with a member of the Gerontology graduate faculty to learn pedagogy, innovation in teaching, and course content that will equip the student for future teaching assignments. Many PhD programs offer both Teaching Assistantships and Research Assistantships. Gerontology students need to show evidence that they have had some teaching-related experience to compete strongly for the TA position. This course is also appropriate for students who anticipate careers in teaching within the field of Gerontology (aging or intergenerational studies). Arrangements must be made prior to registration. Permission of the Program Director is required.

Pre-requisite: SY 372 Minimum Grade of C

## Grad Interdisciplinary Studies (GIS)

**GIS 501 Responsible Conduct of Research 1 cr**

This course is designed to expose future professionals to a variety of topics concerning Responsible Conduct in Research including issues concerning Research Integrity as well as standards and policies affecting research and life in Academia. The weekly sessions include lectures, open discussions, and analyses of case studies.

**GIS 502 Technology Commercialization 2 cr**

This course will teach the National Science Foundation I-Corps curriculum of Lean Launch and Business Model canvas. It delivers best practices for innovative, team-based entrepreneurship in a semester-long format that provides real-world, hands-on learning experiences in how to successfully transfer knowledge into products and processes that benefit society. Significant time will be devoted outside the classroom to testing hypotheses on each part of the team's business hypothesis and potential customers and partners. Typically, graduates of this curriculum increase their chance of winning a grant from 17% to 60%, a greater than three-fold increase in the odds of success.

**HPE Graduate (HPE)****HPE 500 Admin of Hlth & Phys Ed & Sprt 3 cr**

A study of the principles, techniques, and methods used in management and supervision of health and physical education and sport in schools and colleges.

**HPE 503 Evaluation of Teach and Learn 3 cr**

Measurement and evaluation of student progress and teaching effectiveness in the psychomotor domain.

**HPE 505 Crit Read-Write Content Field 3 cr**

Discussion of critical issues and outstanding research in the fields of Health, Physical Education and Leisure Studies, with opportunities for class interaction and critical examination of ideas.

**HPE 506 Physical Education Curriculum 3 cr**

An overview of the physical education curriculum, its foundations, critical issues, and modern trends. It explores curriculum content areas of scheduling, administration, teaching methods, and various standards and procedures for evaluation.

**HPE 516 Physiology of Exercise 3 cr**

Advanced study of the theories, current research, and underlying principles of the physiological responses and adaptations of the human body to exercise and training.

**HPE 521 Motor Learning 3 cr**

Theories and applications of the foundations of learning motor skills are presented.

**HPE 530 Seminar in Health and Phys Ed 3 cr**

Professional growth through in-depth experiences in the presentation of problems and formal papers, with emphasis on guided discussions and research criticism.

**HPE 540 Admin Issues in Exercise Sci 3 cr**

This course examines the planning and administration of cardiopulmonary rehabilitation and preventive health promotion/fitness programs.

**HPE 550 Perceptual-Motor Dev Children 3 cr**

Designed to give the classroom teacher, special educator and physical educator a background in perceptual-motor development and training in infants and children.

**HPE 570 Stress Testing-Ex Prescription 3 cr**

The development of competencies necessary to administer graded exercise tests and prescribe appropriate exercise programs for various populations, based upon clinical observations and physiological data.

**HPE 571 Exer Mgt Chronic Disease/Disab 3 cr**

This course is designed to provide a problem-oriented approach to exercise testing and prescription/programming for special needs populations.

**HPE 572 Applic of Biomech Concepts 3 cr**

An examination of the relationship of fundamental anatomical and mechanical principles of human movement as applied to sport performance, fitness, and injury prevention through observation of common activities.

**HPE 574 Sport and Fitness Conditioning 3 cr**

Advanced study of the scientific theory, principles, methods, and techniques in the development, implementation, and evaluation of various strength and conditioning programs designed to enhance athletic performance. Instructor permission is required.

**HPE 579 Fitness Assessment-Exer Presc 3 cr**

Fitness Assessment and Exercise Prescription reviews the advanced principles of exercise testing and prescription for at risk and health adult populations including health appraisal, risk assessment, and interpretation of data. Assessment results are utilized in designing training programs and recommending lifestyle changes for enhancing health, fitness, and performance. The ACSM Exercise Guidelines are emphasized. This course is dually listed with an equivalent 400 level course (PE 479). Instructor permission is required.

**HPE 590 Sp Top - 3 cr**

A varying-content course treating various aspects of health, physical education, and leisure studies. May be repeated for credit when course content varies.

**HPE 594 Dir St and Research - 1 TO 3 cr**

Students explore, through directed study and research, problems and issues of special interest or significance in Health and Physical Education. Not more than three semester hours of any departmental 594 courses can be accepted toward a degree program.

**HPE 595 Internship in Health and PE 3 TO 6 cr**

A supervised learning experience in a health and physical education work setting. Provides the student with an opportunity to apply the theories and concepts learned during the graduate program. No more than six semester hours may be taken. HPELS advisor approval required.

**HPE 599 Thesis 1 TO 9 cr**

A student selects a project, study, or investigation in Health and Physical Education. Such project forms the basis for the thesis. A committee will give guidance during the investigation and the writing of the thesis.

**HPE 601 Biomech Found Human Movement 3 cr**

Teachers develop competence in applying basic laws of physics and cinematographic techniques to the analyses of human motion.

**HPE 602 Techniques of Supervision PE 3 cr**

Course is designed to familiarize the student with the principles, problems, and techniques involved in supervision.

**HPE 603 Adv Measurement-Eval in HPE 3 cr**

Measurement and evaluation in the areas of strength, body composition, flexibility, endurance, general motor capacity, perceptual motor-functions, and anthropometrics.

**HPE 694 Dir St and Research - 1 TO 3 cr**

Through directed study and research, problems and issues of special interest or significance in Health and Physical Education are explored. No more than three semester hours of any departmental 694 courses can be accepted toward a degree program.

**HPE 695 Internship 3 TO 9 cr**

A supervised field study investigation in a candidate's work setting. The student will conduct an investigation, apply concepts and skills learned during the sixth-year program.

**HPE 699 Research Project 3 cr**

A supervised research project or investigation in instructional development. The student will conduct an investigation, apply concepts and skills learned during the sixth-year program. May be taken more than one semester; total cannot exceed six semester hours.

## Health Informatics (HI)

**HI 300 Health Info Clinical Environme 3 cr**

This course provides an overview of concepts, terms, organization, and processes associated with patient care and clinical environments as they pertain to health informatics. The entire process of how a person accesses, moves within, and exits the system both as inpatient and outpatient to obtain care. Students will observe and report on a variety of clinical settings and healthcare specializations throughout the semester. This course is designed for students with no prior clinical experience.

**HI 410 Health Informatics 3 cr**

This course provides an overview of the concepts, terms, tools, and architectures associated with health informatics as applied to healthcare delivery. Topics include: electronic record systems, computerized physician order entry, health system standards, terminologies, workflow modeling, security and privacy of clinical data, clinical reporting, and the impact of information technology use on the quality and efficiency of health care delivery and outcomes.

**HI 450 Health Data Secur/Compliance 3 cr**

This course involves a thorough examination of the security and privacy requirements of the Health Insurance Portability and Accountability Act (HIPAA) and the implementation of these requirements in the clinical environment. Students will learn how to address security issues from system development all the way through post-implementation, how to evaluate systems for vulnerabilities, and how to identify protected health information and covered entities. Pre-requisite: ISC 300 Minimum Grade of C or HI 300 Minimum Grade of C and ISC 410 Minimum Grade of C or HI 410 Minimum Grade of C

**HI 455 Hlth Data Mgt & Decision Supp 3 cr**

This course focuses on the design and management of electronic medical record systems and clinical decision support systems. Course content related to electronic medical record systems includes architectural components, technical design issues, and management; and, content related to clinical decision support systems includes decision support roles, extracting useful information from data, and legal and regulatory restrictions. Laboratory assignments will provide students with opportunities to interact with these systems. Prerequisites: HI 300 or ISC 300 and HI 410 or ISC 410. Pre-requisite: ISC 300 Minimum Grade of C or HI 300 Minimum Grade of C and ISC 410 Minimum Grade of C or HI 410 Minimum Grade of C

**HI 550 Health Data Secur/Compliance 3 cr**

This course involves a thorough examination of the security and privacy requirements of the Health Insurance Portability and Accountability Act (HIPAA) and the implementation of these requirements in the clinical environment. Students will learn how to address security issues from system development all the way through post-implementation, how to evaluate systems for vulnerabilities, and how to identify protected health information and covered entities.

**HI 555 Hlth Data Mgt & Decision Supp 3 cr**

This course focuses on the design and management of electronic medical record systems and clinical decision support systems. Course content related to electronic medical record systems includes architectural components, technical design issues, and management; and, content related to clinical decision support systems includes decision support roles, extracting useful information from data, and legal and regulatory restrictions. Laboratory assignments will provide students with opportunities to interact with these systems.

## Health Sciences (HSC)

### **HSC 101 Interprofessional Freshman Sem 2 cr**

The purpose of this course is to introduce the unique requirements and opportunities of the Health Sciences Division to beginning students who have declared or are considering a Health Science major (Nursing, Medicine, Pharmacy, Allied Health Professions, etc.). The course focuses on the value of higher education as a base for a career in Health Sciences and develops an awareness of activities and support services available within the University to enhance student success. Academic rules, regulations and policies related to admission, progression, and graduation in the University and Colleges of Nursing, Medicine, and Allied Health Professions are discussed.

### **HSC 324 Death and Dying - W 2 cr**

Provides the student an opportunity to analyze theories, concepts, socio-ethical issues, and research related to dying and death. Focus is on assisting students to explore their feelings regarding death as well as developing self-awareness of the feelings of patients and families. Emphasis is on the acceptance of the process of mourning and death and applicable nursing interventions.

### **HSC 342 Administration of Medication 1 cr**

The purpose of this course is to prepare the student to accurately calculate medication dosages. Mathematical and metric apothecary concepts are stressed.

### **HSC 343 Clinical Pharmacology 3 cr**

The purpose of the course is to provide the student with the opportunity to acquire information related to the clinical application of drug therapy and the concepts relating to the mechanisms of drug actions, interactions and adverse reactions, including the immunologic-idiosyncratic-allergic responses. Emphasis is on the current evidence related to pharmacokinetics, dosage, methods of administration, and adverse effects of major classifications of drugs to inform nursing care. Prerequisites: Admission to Professional Component or special permission of instructor.

### **HSC 390 Special Topics - 1 TO 9 cr**

Selected topics in Health Sciences. Requires special permission. Variable title and 1 to 9 variable credit hours.

### **HSC 424 Issues in EOL & Palliative Cr 2 cr**

This course provides the student an opportunity to analyze theories, concepts, socio-ethical issues, and research related to end of life and palliative care. The focus is on assisting students to explore their perspectives regarding end of life and palliative care as well as developing self-awareness of the perspectives of patients and families across the socio-cultural spectrum. Emphasis is on the acceptance of the process of mourning and death as a part of life and applicable appropriate evidence-based health care interventions.

### **HSC 425 Issues in Health Nutrition 2 cr**

This elective course focuses on the impact of nutritional issues on health at the national/international level. The intent is to provide the Health Sciences Student with opportunity to develop comprehension of issues on a national or global scale and apply to professional health care practice with individuals and communities.

### **HSC 450 Ethical Care of Aging 3 cr**

Interdisciplinary course on a critical investigation of ethical issues affecting the elderly and on application of principles, concepts, theories, and decision models as a framework for ethical decision making.

### **HSC 457 Gerontological Concepts 3 cr**

Focuses on a multidisciplinary approach to meeting the diverse needs of the aging population. Physiological, psychological, and sociocultural aspects of aging are explored. Emphasis is on attitudes toward the elderly, health programs for older Americans, health policy, ethical/ legal issues, and the needs of family caregivers.

### **HSC 571 Managing Health Care Personnel 3 cr**

The purpose of this course is to analyze frameworks for managing health care personnel. The course focuses on exploration and application of human resource management. Emphasis within the course is placed on leadership, communication, relationship management diversity, legal and ethical principles, workforce planning and maintenance.

### **HSC 590 Special Topics 1 TO 6 cr**

Study of topics significant to the health professions. Content varies and may be repeated.

### **HSC 595 Evidence Based Lipid Practice 2 cr**

This course serves as a foundational course in the Clinical Lipidology Subspecialty program. The purpose of this didactic course is to prepare the Clinical Lipid Specialist student to evaluate CVD epidemiology, cardiometabolic risk, and evidence based lipid practice in those with selected health care needs across the lifespan.

### **HSC 596 Adv Vascular Biology 2 cr**

This course serves as a foundational course in the Clinical Lipidology Subspecialty program. The purpose of this didactic course is to prepare the Clinical Lipid Specialist student to evaluate lipoprotein metabolism and vascular biology in those with selected health care needs across the lifespan.

### **HSC 597 Adv Pharm Complex Dyslipiderni 2 cr**

This course serves as a foundational course in the Clinical Lipidology Subspecialty program. The purpose of this didactic course is to prepare the Clinical Lipid Specialist student to evaluate advanced pharmacologic options in treating those with selected health care needs across the lifespan.

**HSC 598 Diag/Mgt C-plex Dyslipidernia 2 cr**

This course serves as a final course in the Clinical Lipidology Subspecialty program. The purpose of this didactic course is to prepare the Clinical Lipid Specialist student to evaluate and manage complex dyslipidemia in those with selected health care needs across the lifespan.

**HSC 601 Intro to Introprofessional Ed 1 cr**

The purpose of this course is to introduce nursing students and occupational therapy students to the concepts of interprofessional education. Students will gain an understanding of their own role in healthcare as well as the scope of the role of another health profession. Students will learn how to function in an interprofessional team and carry this knowledge, skill, and value into their future practice, ultimately providing interprofessional patient care as part of a collaborative team that is focused on improving patient outcomes. Interprofessional teams are composed of members from different health professions who have specialized knowledge, skills, and abilities with the goal of providing patient-centered care in a collaborative manner. The team establishes a common goal and using their individual expertise, and works in concert to achieve patient-centered care. In this model, joint decision making is valued and each team member is empowered. Students will be introduced to core competencies in interprofessional care and utilize Fennel's Four Phase Model for understanding and treating multiple chronic conditions for adults, elders, and returning veterans.

Pre-requisite: AHN 591 Minimum Grade of C and AHN 559 Minimum Grade of C and AHN 581 Minimum Grade of C and AHN 588 Minimum Grade of C and AHN 589 Minimum Grade of C

**HSC 602 Team Building 1 cr**

This online course will allow students to examine the specific impact of cultural, ethical, and religious factors on ethical health-care decision-making and focuses on the relationships among the professions, joint relationships with patients, the quality of cross-professional exchanges, and interprofessional considerations in health care delivery and in formulating public health policies, programs, and services. The focus of the course is derived from the approach utilized in the Core Competencies for Interprofessional Collaborative Practice (2011). Structured content introduces the topic and will allow teams of students to practice problem solving and ethical decision-making within an interprofessional team.

Pre-requisite: HSC 601 Minimum Grade of C

**HSC 603 Assmnt Vulnerable Populations 1 cr**

This online interdisciplinary course will implement evidence based and collaborative models to assess the needs of vulnerable populations who have multiple physical needs such as those evidenced by adults, elders, and returning veterans with multiple chronic illnesses and/or acute injury. The student will synthesize, critique, and apply evidence to improve patient care outcomes. In this mentored and supervised experience, the student will work in groups with the faculty to complete an assessment of need in these populations.

Pre-requisite: HSC 602 Minimum Grade of C

**HSC 690 Special Topics- 1 TO 9 cr**

Study of health professional topics at the doctoral level. Credit hours will vary based on student need and depth of course subject matter. Content will vary and may be repeated up to 9 credits. Requires special permission.

**Health And Safety (HS)****HS 170 First Aid 1 cr**

The scope, needs, and limitations of first aid with laboratory training in the techniques and methods of injury care. Opportunity for American Red Cross first aid and CPR certification.

**HS 262 Personal Health 3 cr**

Current health issues as related to the individual with emphasis on sociological, psychological, and economic factors.

**HS 263 Nutrition and Hunger 3 cr**

An introduction to digestion, absorption, transportation, and utilization of nutrients. Other topics include: nutrition across the life span, population dynamics, and world hunger.

**HS 340 Health in the Sec Classroom 3 cr**

A study of instructional practice and application in the secondary health classroom. Pre-requisite: Admission to teacher candidacy required.

Co-requisite: HS 430

**HS 351 Safety Education 3 cr**

Traffic safety and safety at home, work, school, and play. Organization of safety education programs in the school and community. Methods and materials for teaching safety.

**HS 352 Traffic Safety Education 3 cr**

A survey of the highway transportation system and traffic problems designed to give the driver education teacher an opportunity to develop an understanding of the scope and background of the various agencies and systems involved in the management of vehicular traffic at the national, state, and local level.

**HS 353 Driver Education I 3 cr**

History, principles, problems and the inventory of skills in driver education.

- HS 361 School Comm Health-Impl Curric** 3 cr  
Contemporary school health and public health issues. Epidemiological concepts and methods. Governmental and volunteer health agencies. Curriculum development based on epidemiological data. Incorporates reading into the curriculum.
- HS 362 Drug Education** 3 cr  
A survey of substance abuse issues. Attention is given to specific drug classifications, use and abuse patterns, prevention, treatment, and future implications.
- HS 363 Individualized Sport Nutrition** 3 cr  
Basic nutritional principles are covered. Includes assessment of individual and/or group diets for sport. The course is designed around individualized programmed instruction.
- HS 365 HPE Curr/Methods-Elem Teachers** 3 cr  
The development and implementation of appropriate health and physical education curriculum for elementary teachers. Content knowledge and the application of methodological and assessment strategies are adapted for appropriate learning environments.
- HS 429 School Lab Experiences-Health** 0 TO 3 cr  
Professional laboratory observation and participation in health settings at local public schools. Prerequisite: Admission to teacher candidacy. Co-requisite: HS 460
- HS 430 School Lab Exp- Health II** 0 cr  
Professional Laboratory observation and participation in classroom health settings at a local public schools. Requires Admission to Teacher Candidacy. Co-requisite: HS 340
- HS 451 Driver Education II** 3 cr  
Methods and techniques, teaching aids, teaching resources and materials, and program and curriculum construction. Practical experience in teaching students to drive.
- HS 452 Simulation in Driver Education** 3 cr  
Simulation as an audio-visual instructional method and designed to complement and supplement other instructional techniques used in the driver education program to prepare individuals to function safely and effectively in today's traffic.
- HS 453 Range-Lab Prog in Driver Ed** 3 cr  
An examination of the aims, objectives, and role of laboratory programs in driver education. Directed laboratory experiences will be provided.
- HS 460 Methods in Health Ed - W** 3 cr  
Topic selection and teaching unit preparation. Presentation and classroom practice of teaching methodologies. Practical mini-teaching experiences in local schools. Field experiences required. HE (6-12) and PE (P-12) majors only. Prerequisite: Admission to teacher candidacy. Co-requisite: HS 429. Co-requisite: HS 429
- HS 462 Public Health** 3 cr  
A study of public health organizations and available community health resources, including the official and non-official health agencies at various levels. An examination of causative community factors in disease, community diagnosis of and programs to combat these conditions.
- HS 463 Human Sexuality: Health Ed Per** 3 cr  
An exploration of human sexuality with implications for health education.
- HS 473 Problems in Health Education** 3 cr  
Special problems are assigned to individuals and to groups of students.
- HS 490 Sp Top -** 3 cr  
A varying content course treating several aspects of Health Education. May be repeated for credit when course content varies.
- HS 494 Directed Studies -** 1 TO 3 cr  
Directed research. No more than two directed studies can be counted toward the bachelor's degree and Class B certification. HPELS advisor approval required.
- HS 510 Current Health Issues** 3 cr  
Identification, exploration, and definition of current health issues such as drug abuse, mental health, aging, death and dying, human sexuality, chronic and communicable diseases.
- HS 520 Methods in Health Education** 3 cr  
Development, selection, and implementation of classroom teaching strategies and classroom techniques in the Health Sciences area.
- HS 560 School Health Curriculum** 3 cr  
Designed to develop the prospective teacher's or the in-service teacher's competencies in curriculum planning and development applied to the health area.
- HS 562 Drug Use and Abuse** 3 cr  
A study of the drug spectrum including legal and illegal drug use and abuse. Discussion of education and preventive strategies.
- HS 563 Nutrition** 3 cr  
An in-depth study of educational concepts related to digestion, absorption, transportation and utilization of nutrients.
- HS 565 Community Health** 3 cr  
An introductory course in Community Health. Includes a survey of contemporary health problems of both communities and schools. A review of school and community health programs.
- HS 567 Aging and Health** 3 cr  
An overview of the normal aging process, including physical, psychological and social changes, myths, diseases, related community resources, and the team approach to meeting needs.

## Higher Education (HED)

- HED 501 Digital Leader** 3 cr  
This course will explore the role of digital media, including social media, in higher education administration.
- HED 503 Higher Ed Finance** 3 cr  
This course will examine national, state and local economic factors and their impact upon budgeting and financial management work of higher education administrators/ leaders.
- HED 603 Current Probs Higher Education** 3 cr  
Analysis of current issues affecting higher education.
- HED 611 Human Relations in Higher Edu** 3 cr
- HED 621 Program and Curriculum Develop** 3 cr  
Designed to assess and improve the student's level of competency in program development skills, instructional strategies, systems analysis, and change innovation.
- HED 631 Sem Higher Ed Mgt Skills** 3 cr  
Designed to assess and improve the student's knowledge of decision making styles, problem-solving processes, leadership skills, implementation of organizational change, and physical environments which promote productivity, all in the context of higher education.
- HED 701 Adv Org Theory for Higher Edu** 3 cr  
This course is designed to provide students with an in-depth exploration of organizational theories and models and organizational approaches in higher education. Topics covered include administrative structure and leadership, accountability and change.
- HED 702 Higher Ed Finance** 3 cr  
This course is designed to provide students with an overview of finance in higher education. The overview will include the financial benefits of higher education, access and affordability issues, state and federal funding, price-setting, tuition discounting, merit aid, sources of revenue and expenditures, cost-cutting measures, budgeting and college athletics.
- HED 703 Adv Leadership for Higher Ed** 3 cr  
This course is designed to provide students with an in-depth exploration of leadership theories and models. Students will create a personal knowledge base from which to create a plan to develop or revise a leadership perspective.
- HED 704 Current Issues in Higher Ed** 3 cr  
This course offers an in-depth analysis of current issues in and challenges to higher education.
- HED 732 Ethics and Law for Higher Ed** 3 cr  
An examination of ethical and legal issues present in higher education.

## History (HY)

- HY 101 HY of Western Civilization I** 3 cr  
History of humankind, emphasizing the development of the West to c. 1600 C.E. Core Course.
- HY 102 HY of Western Civilization II** 3 cr  
History of humankind, emphasizing the rise of the West, from c. 1600 C.E. Core Course. Note: History 101 and 102 are related courses but do not need to be taken in order.
- HY 103 HY of Asian Civilization I** 3 cr  
A survey of traditional cultures, values, ideas, and institutions of East, South, Southeast Asia to 1800.
- HY 104 HY of Asian Civilization II** 3 cr  
The responses of East, South, and Southeast Asia to the impact of Western challenges and their roles in the modern world. Economic and political structure; the emergence of China and Japan as major world political and economic powers.
- HY 135 US History to 1877** 3 cr  
An introductory course in United States history to 1877. Core Course
- HY 136 US History since 1877** 3 cr  
An introductory course in United States history since 1877. Core Course. Note: History 135 and 136 are related courses but do not need to be taken in order.
- HY 190 Special Topics -** 1 TO 3 cr  
Special topics and their development, illustrating historical concepts. May be repeated twice for credit when content varies.
- HY 215 Military Hist of US Civil War** 3 cr  
Examines the military aspects of the US Civil War, paying particular attention to strategy, tactics, technology, leadership, and minority participation.
- HY 228 Latin America** 3 cr  
An introductory survey of Latin American history from the time of European conquest to the present.
- HY 283 Chinese Film** 3 cr  
This course will introduce students to major topics in Chinese history, covering both ancient periods such as the Three Kingdoms period, and twentieth-century events such as the war with Japan and the Cultural Revolution. Post-Tiananmen Chinese society will also be stressed. Students will explore these themes through Chinese film and literature, and will thus become familiar with major directors, including Zhang Yimou and Jia Zhangke, and writers such as Yu Hua.

- HY 288 History of the Mass Media** 3 cr  
The role of journalism in American society from the Revolution to the present. This course is equivalent to CA 288. Fee.
- HY 290 Special Topics-** 3 cr
- HY 303 Warfare Society Modern World** 3 cr  
Examines the mutual interrelations between warfare and society in western civilization since the 14th century. Pre-requisite: HY 102 Minimum Grade of C
- HY 305 History of Military Thought-W** 3 cr  
An intellectual history of the place of armed conflict in society from the Renaissance to the Nuclear Age. Pre-requisite: (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)
- HY 310 Amer Environmental Hy-W** 3 cr  
A textual and discussion-based analysis of the role of the environment in America's history from the Pre-Columbian era through the present, this course considers the interactions between human society and its surroundings across North America. In particular, this course explores the ideas, activities, technologies and institutions that have influenced our national interaction with the natural world. Conversely, we consider the degree to which the environment has shaped our national institutions and identity. Pre-requisite: (EH 101 Minimum Grade of C or EH 110 Minimum Grade of D or EH 190 Minimum Grade of D or USA 010 Minimum Grade of S) and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)
- HY 312 America in the 1960s** 3 cr  
This course covers American history during the 1960 s. It will offer an overview of one of the most tumultuous periods in modern American history.
- HY 321 The Caribbean** 3 cr  
Explores the history of the island Caribbean from the onset of European rule to the present.
- HY 323 Central America** 3 cr  
Explores the history of Central America from Spanish conquest to the present.
- HY 325 Mexico** 3 cr  
Surveys the history of Mexico from Spanish conquest to the present day.
- HY 326 Brazil** 3 cr  
Surveys the history of Brazil from Portuguese conquest to the present.
- HY 331 History of England to 1603** 3 cr  
The history of England from the Roman occupation to the Age of the Tudors. Identical with REL 331. Credit cannot be received for both HY 331 and REL 331.
- HY 332 Great Britain 1603 to 1815** 3 cr  
Great Britain from the accession of James I to the defeat of Napoleon.
- HY 333 Great Britain Since 1815** 3 cr  
The British at home and abroad; Constitution and culture, identity and empire, since Waterloo.
- HY 334 Modern Ireland** 3 cr  
The history of Ireland from the early 1600's; themes include: domestic history, national identities, relations with England, the independence movement, and the Troubles.
- HY 335 History of Modern France** 3 cr  
France since the Revolution.
- HY 336 Germany since 1848** 3 cr  
Germany from the era of liberalism and nationalism to the present.
- HY 337 History of Eastern Europe** 3 cr  
History of Eastern Europe since 1914.
- HY 338 History of Russia** 3 cr  
History of Russia from Kievan Rus to Present.
- HY 343 Witchcraft-Magic Europe** 3 cr  
The history of beliefs and practices concerning witches, magic, and witch-hunting in Medieval and Early Modern Europe.
- HY 345 The First World War** 3 cr  
A history of the First World War, its background and its aftermath.
- HY 346 The Second World War** 3 cr  
A history of the Second World War, its background and its aftermath.
- HY 347 The Holocaust** 3 cr  
The history of the systematic mass murder of Europe's Jews and other groups by Nazi Germany during World War II. Cross-listed with REL 347. Credit cannot be received for both HY 347 and REL 347.
- HY 348 Hitler and Nazi Germany** 3 cr  
The rise of Adolf Hitler and the Nazi Party to power in Germany and the history of National Socialist Germany from 1933 to 1945.
- HY 351 Medieval Civil 950-1300** 3 cr  
The development of European civilization in the High Middle Ages.
- HY 352 Renaissance Europe 1300-1520** 3 cr  
The history of Europe during an age of great crisis and creativity.
- HY 353 Reformation Europe** 3 cr  
The role of religious change in the 16th and 17th centuries.

- HY 354 Ancient Regime Europe** 3 cr  
Social, economic, political, and cultural life of Old Regime Europe.
- HY 355 French Revolution** 3 cr  
Political, cultural and social revolution of the late eighteenth and early nineteenth centuries, emphasizing the French Revolution.
- HY 356 European Civ 1815-1918** 3 cr  
History of European Civilization from 1815-1918.
- HY 357 Europe Since 1945** 3 cr  
The history of Europe from the end of the Second World War to the present.
- HY 362 History of Africa since 1500** 3 cr  
A survey of the last five centuries of Africa's history moving from before European contact to the slave trade, colonial experience, and independence movements. Africans cultural patterns and its peoples' distinctive historical experience will be the focus of the course.
- HY 364 Islamic Civilization to 1453** 3 cr  
This course will cover the political, economic, social, and cultural history of Islamic Civilization from its beginnings in the Arabian Peninsula in the sixth century to the Ottoman conquest of Constantinople in 1453. Cross-listed with REL 364. Credit cannot be received for both HY 364 and REL 364.
- HY 365 Islamic Civilization 1453 - W** 3 cr  
This course will cover specific topics in the history of Islamic civilization. May be repeated for credit when content varies. Prerequisite: Junior or Senior status. Cross-listed with REL 365. Credit cannot be received for both HY 365 and REL 365.
- HY 366 Traditional China** 3 cr  
Historical development of China from prehistoric times to arrival of Western influences in the 1800s.
- HY 367 Modern China - W** 3 cr  
A study of Modern China from the arrival of Western influence in the 1800s to the present.  
Pre-requisite: (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)
- HY 368 Japan** 3 cr  
Japanese history from antiquity to the present and the emergence of Japan as major world political and economic power.
- HY 369 Modern Japan** 3 cr  
Japanese History from the late Tokugawa period to the present and the emergence of Japan as a major world political and economic power.
- HY 371 Soc History of Early America** 3 cr  
Patterns of frontier, agrarian, and urban society to 1865.
- HY 373 Religion in American History-W** 3 cr  
Examines the role of religion in United States history from the colonial era to the present. Identical with REL 373. Credit cannot be received for both HY 373 and REL 373. Pre-requisite: (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)
- HY 374 HY of American Culture - W** 3 cr  
Surveys American values, ideas, beliefs, and social institutions from c. 1770 to the mid-twentieth century. Pre-requisite: (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)
- HY 376 History of Alabama** 3 cr  
A survey of the state's history since the days of the native Americans, examining state and local issues against the broader backdrop of American history.
- HY 377 African American Experiences** 3 cr  
Examines the role of African Americans in United States history with an emphasis on social, political, economic, intellectual and cultural developments.
- HY 384 Japanese Film** 3 cr  
This course will introduce students to major themes in recent Japanese history, including samurai culture and other issues pertaining to social class, Westernization, the postwar family, sixties radicalism, and recent popular culture. Students will explore these themes through Japanese film and literature, and will thus become familiar with major directors, including Akira Kurosawa, Yasujiro Ozu and Juzo Itami, and novelists such as Junichiro Tanizaki and Yukio Mishima.
- HY 390 Special Topics -** 3 cr  
Special topics and their development, illustrating historical methodology. May be repeated twice for credit when content varies for a maximum of nine hours.
- HY 401 Coll in History-** 3 cr  
A course which discusses various issues in history. May be repeated when content varies for a total of six hours. Prerequisite: Junior or Senior standing.
- HY 405 War and Soc 20th Century** 3 cr  
A seminar which studies major themes in the interaction of warfare and society in the 20th century.
- HY 415 Studies in Military History** 3 cr  
This course will deal with different topics in Military History. May be repeated for twice for credit when content varies for a maximum of nine hours. Prerequisite: Junior or Senior standing.  
Pre-requisite: (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

- HY 429 Studies Latin Amer History-W** 3 cr  
A seminar devoted to the exploration of a specific topic in Latin American history. May be repeated twice when content varies for a maximum of nine hours. Prerequisite: Junior or Senior standing.  
Pre-requisite: (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)
- HY 431 Studies in U.S. History** 3 cr  
This course will deal with different topics in U.S. History. May be repeated twice for credit when content varies for a maximum of nine hours. Prerequisite: Junior or Senior standing
- HY 432 Colonial America** 3 cr  
Colonial period to the revolution.
- HY 433 The American Revolution** 3 cr  
This course emphasizes changes occurring in American society ca.1750-1800.
- HY 434 The Early Republic - W** 3 cr  
The early Republic from 1789 to 1840.  
Pre-requisite: (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)
- HY 435 Civil War and Reconstruction** 3 cr  
The United States from 1840-1877.
- HY 436 Modern US I 1877-1945 - W** 3 cr  
History of urban industrialization, war, peace, prosperity, and depression.  
Pre-requisite: (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)
- HY 437 Modern US II Since 1945 - W** 3 cr  
History of US in global perspective.  
Pre-requisite: (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)
- HY 441 Research Seminar-U.S. History** 3 cr  
Research in topics in U.S. History. Limited to 15 students.  
Prerequisites: History major, Junior or Senior standing, permission from the Department Chair.
- HY 442 Research Seminar European Hy** 3 cr  
Research in topics in European History. Limited to 15 students. Prerequisites: History major, Junior or Senior standing, permission from the Department Chair.
- HY 443 Research Seminar-World HY** 3 cr  
Research in topics in Asian, African or Latin American History, or in the History of Islamic Civilization. Limited to 15 students. Prerequisites: History major, Junior or Senior standing, permission from the Chair.
- HY 450 States, Nations, Nationalism-W** 3 cr  
Examines the rise of nationalism in modern Europe. This course is a 'W' course. Students cannot receive credit for both this course and HY 451.
- HY 454 The British Empire** 3 cr  
This course examines the rise, fall, and legacy of the British Empire.
- HY 455 History of Travel and Tourism** 3 cr  
This course examines the history of British and American travel and tourism from the eighteenth century to the present.
- HY 457 Studies in European History -** 3 cr  
This course will deal with different topics in European history. May be repeated twice for credit when content varies for a maximum of nine hours. Prerequisite: Junior or Senior standing.
- HY 461 Studies in Asian History -** 3 cr  
This course will deal with different topics in Asian history. May be repeated twice for credit when the content varies for a maximum of nine hours. Prerequisite: Junior or Senior standing.
- HY 465 Studies in HY of Islamic Civ -** 3 cr  
This course will cover specific topics in the history of Islamic civilization. May be repeated for credit when content varies. Prerequisite: Junior or Senior status. Cross-listed with REL 465. Credit cannot be received for both HY 465 and REL 465.
- HY 471 Atlantic World - W** 3 cr  
Examines the interactions among Europeans, Native American, and Africans in the Americas. This course is a "W" course.  
Pre-requisite: (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)
- HY 475 The History of Mobile** 3 cr  
The history of Mobile from its founding to its tercentenary.
- HY 477 The Old South** 3 cr  
This course examines the settlement and evolution of the American South from settlement of Jamestown to the Civil War. Of particular concern will be the degree to which the development of economic, social and political institutions in the South, especially the institution of slavery, increasingly isolated the region from the rest of the country.
- HY 478 The New South** 3 cr  
History of the South from Reconstruction to the 1920's.
- HY 479 The Modern South** 3 cr  
Social, economic, political, intellectual, and cultural history of U.S. South from the 1930's to the present.
- HY 482 Southern Autobiography** 3 cr  
Southern identity as revealed in 20th century autobiography and fiction. Students cannot receive credit for both this course and HY 480.

- HY 485 American Feminist Movements 3 cr**  
HY 485 examines the history of American feminist movements from the colonial period through the present. Students cannot receive credit for both this course and HY 390, American Feminist Movements.
- HY 488 American West - W 3 cr**  
This course examines manifest destiny, imperialism, "the frontier", and the place of Native Americans in the history of the American West.  
Pre-requisite: (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)
- HY 494 Directed Studies - 1 TO 3 cr**  
Directed Individual Study. Requires approval of department chair.
- HY 496 Public History 3 cr**  
This course will introduce students to the field of public history as an academic field and a possible career. Students cannot receive credit for both this course and HY 495.
- HY 498 Internship in History 3 TO 6 cr**  
Directed individual field research at the undergraduate level. Occupational and professional experiences under faculty direction in a defined field of interest, primarily for but not limited to archival, museum, library, or other public history projects. Written reports required. Special permission of departmental chair required. Maximum hours 6.
- HY 499 Senior Honors Paper - H 1 TO 6 cr**  
The researching and writing of a major historical paper. Requires permission of department chair.
- HY 501 Colloquium of History 3 cr**  
A course which discusses various issues in history. May be repeated when content varies. Students cannot receive credit for both this course and HY 401.
- HY 505 Warfare and Society 20th Cent 3 cr**  
A seminar which studies major themes in the interaction of warfare and society in the 20th century. Students cannot receive credit for both this course and HY 405.
- HY 515 Studies in Military History - 3 cr**  
This course will deal with different topics in military history. May be repeated for credit when content varies. Students cannot receive credit for both this course and HY 415.
- HY 529 Studies in Latin Am. History - 3 cr**  
A seminar devoted to the exploration of a specific topic in Latin American History. May be repeated for credit when content varies. Students cannot receive credit for both this course and HY 429.
- HY 530 American Historiography 3 cr**  
Examination of major American historians; study of techniques, styles, ideas, interpretations, and critical evaluations.
- HY 531 Studies in U.S. History - 3 cr**  
A seminar devoted to different topics in U.S. History. May be repeated for credit when content varies. Students cannot receive credit for both this course and HY 431.
- HY 532 Colonial America 3 cr**  
Colonial period to the Revolution.
- HY 533 American Revolution 3 cr**  
This course emphasizes changes occurring in American society ca. 1750-1800.
- HY 534 The Early Republic 3 cr**  
The early Republic from 1789-1849. Students cannot receive credit for both this course and HY 434.
- HY 535 Civil War and Reconstruction 3 cr**  
The United States from 1840-1877. Students cannot receive credit for both this course and HY 435.
- HY 536 Modern U.S. I 1877-1945 3 cr**  
History of urban industrialization, war, peace, prosperity, and depression. Students cannot receive credit for both this course and HY 436.
- HY 537 Modern U.S. II Since 1945 3 cr**  
History of U.S. in a global perspective. Students cannot receive credit for both this course and HY 437.
- HY 538 20th Century U.S. History 3 cr**  
This course emphasizes interpretations of twentieth-century United States history.
- HY 540 Modern European Historiography 3 cr**  
A study of the development of European historical literature and its theoretical and methodological bases.
- HY 541 Major European Thinkers 3 cr**  
Seminar devoted to the writings of leading European thinkers of the last five hundred years, including such figures as Luther, Rousseau, Darwin, Marx, Freud and de Beauvoir.
- HY 542 World Historiography 3 cr**  
Study of the development of World historical literature and its theoretical and methodological bases.
- HY 546 Research in Soviet Soc History 3 cr**  
A study of the relationship between political and social developments in Soviet Russia from 1917 to 1941.
- HY 550 States, Nations, Nationalism 3 cr**  
Examines the rise of nationalism in modern Europe. Students cannot receive credit for both this course and HY 451 or HY 450.
- HY 551 Medieval Europe 3 cr**  
Seminar that explores the history of Western Europe between 950 and 1500, with emphasis on changes in government, economy, society, religion, thought, war and diplomacy.

- HY 552 Renaissance Europe** 3 cr  
Seminar that explores intellectual and cultural developments in Western Europe between 1350 and 1600.
- HY 553 Religious Reform in Europe** 3 cr  
Seminar that considers religious reform movements within the Catholic Church before the beginning of Protestantism, the development of the major Protestant tendencies, and the continuing development of reform within the Catholic Church after the Protestant break.
- HY 554 The British Empire** 3 cr  
The history and legacy of the British Empire from the 17th century to the present.
- HY 555 History of Travel and Tourism** 3 cr  
The history of Travel and Tourism: The British and American Experience from the Eighteenth Century to the present.
- HY 557 Studies in European History -** 3 cr  
A seminar devoted to different topics in European History. May be repeated for credit when the content varies. Students cannot receive credit for both this course and HY 457.
- HY 559 Modern European History** 3 cr  
Problems in historical interpretation and method from 1740 to present. May be repeated when topic varies.
- HY 561 Studies in Asian History -** 3 cr  
A seminar devoted to different topics in Asian History. May be repeated for credit when the content varies. Students cannot receive credit for both this course and HY 461.
- HY 564 Classical/Medieval Islamic His** 3 cr  
Seminar that examines the Classical and Medieval history of Islamic civilization from the sixth to the thirteenth centuries, with a focus on the political and cultural changes experienced by the Muslim world in this period.
- HY 565 Studies in Islamic Civil. -** 3 cr  
A seminar devoted to different topics in the history of Islamic Civilization. May be repeated for credit when the content varies. Students cannot receive credit for both this course and HY 465.
- HY 570 American Biography** 3 cr  
A study of American biography, autobiography, and methodology.
- HY 571 Atlantic World** 3 cr  
This course examines the interactions among Europeans, Native Americans, and Africans in the Americas. Students cannot receive credit for both this course and HY 471.
- HY 573 19th Century American West** 3 cr  
Seminar that explores the history of the American West in the nineteenth century, focusing on Manifest Destiny, imperialism, Mormonism, the environment, and the place of Native Americans in U.S. society.
- HY 575 History of Mobile** 3 cr  
The History of Mobile from its founding to its Tercentenary. Students cannot receive credit for both this course and HY 475.
- HY 577 The Old South** 3 cr  
This course examines the settlement and evolution of the American South for settlement of Jamestown to the Civil War. Of particular concern will be the degree to which the development of economic, social and political institutions in the South, especially the institution of slavery, increasingly isolated the region from the rest of the country.
- HY 578 The New South** 3 cr  
History of the South from Reconstruction to the 1920's.
- HY 579 The Modern South** 3 cr  
Social, economic, political, intellectual, and cultural history of the U. S. South from 1920-1990.
- HY 580 Research in Southern History** 3 cr  
History of the southern United States, from the colonial era to the present. Students will write a research paper involving interpretation of primary documents.
- HY 581 Research in American History** 3 cr  
This is a variable content seminar course. Students will write a research paper involving interpretation of primary sources.
- HY 582 Southern Autobiography** 3 cr  
Southern identity as revealed in 20th century autobiography and fiction. Students cannot receive credit for both this course and HY 480 or HY 482.
- HY 585 American Feminist Movement** 3 cr  
This course examines the history of American feminist movements from the colonial period through the present. Students cannot receive credit for both this course and HY 390 (History of American Feminist Movements) or HY 485.
- HY 586 Research in European History** 3 cr  
This is a variable content seminar course. Students will write a research paper involving interpretation of primary sources.
- HY 590 Special Topics -** 3 cr  
A colloquium of selected subjects and readings to be arranged by the department. Limited to fifteen students. May be repeated seven times for credit when content varies for a total of 24 semester hours.
- HY 592 The Teaching of History** 3 cr  
The class is conceived as part seminar and part practicum. It is an introduction to the problems and principles of the teaching of history in secondary and higher education settings. It will combine instructor lecture, class presentations, and class discussions of assigned readings.

**HY 593 Exam and Thesis Introduction 1 cr**

This course seeks to provide M.A. students with a practical introduction to the research techniques and bibliographic knowledge that will facilitate the timely completion of a master's level program. Required of all incoming History M.A. students.

**HY 594 Directed Studies 1 TO 3 cr**

Directed individual study. May only be used in unusual cases to build on regular graduate course work. A maximum of nine credit hours of HY 594 may count toward degree requirements. Pre-requisites: Special permission of instructor required.

**HY 595 Archival Practice 3 cr**

Introduces graduate students to archival theory and practice.

**HY 596 Public History 3 cr**

This course will introduce students to the field of public history as an academic field and a possible career. Students cannot receive credit for both this course and HY 495 or HY 496.

**HY 597 Pro Studies-Dir Field Research 3 cr**

Directed individual field research. Occupational and professional experiences under faculty direction in a defined field of interest, including but not limited to archival, museum, library, or other public history projects. Written reports required. Special permission of departmental chair required.

**HY 598 Comp and Thesis Preparation 0 cr**

This zero credit hour course will provide continuous enrollment while engaged in comprehensive exam preparation or for thesis preparation beyond thesis hours.

**HY 599 Thesis 1 TO 3 cr**

Six hours required of student in the thesis track. May not be taken for credit toward a degree by students in the non-thesis track. Pre-requisites: Completion of nine hours of graduate level history, including one 500-level course in the field relevant to the thesis. Special permission of the department chair.

## Honors Interdiscipln Studies (HON)

**HON 101 Honors Introduction-Research-H 1 cr**

This course introduces freshman Research Scholars to the Honors Program, helps them plan their academic career, helps them identify and secure research opportunities, gets them started on their thesis project, and helps them adjust responsibly to the challenges presented by college life so as to maximize their potential for academic success. Reading, writing and project assignments relevant to the student's first year experience are required.

**HON 105 STEM Freshman Honors Seminar 2 cr**

This course is designed to introduce freshman in the University of South Alabama Honors Program who are majoring in sciences, engineering or math to strategies and programs that assist students in maximizing their potential for academic success and in adjusting responsibly to the challenges of college life. Reading, writing and computer application assignments relevant to the students' major are required.

**HON 111 Introduction to Honors-H 1 cr**

This course introduces freshmen Honor Students to the Honors Program, helps them plan their academic career, and helps them adjust responsibly to the individual and interpersonal challenges presented by college life so as to maximize their potential for academic success. Reading, writing and project assignments relevant to the student's first year experience are required.

**HON 201 Professional Skills Research-H 1 cr**

This course helps Research Scholars in Honors to establish their research careers by identifying and securing research opportunities, by advancing their thesis projects, by honing their presentation skills, and by exploring and applying to national and international scholarship opportunities. Reading, writing and project assignments relevant to the students' research and scholarship interests are required.

**HON 211 Professional Skills - H 1 cr****HON 290 Special Topics Honors 1 TO 3 cr**

Topics for USA Honors Students of an interdisciplinary or multidisciplinary nature. May be repeated when topic varies. Prerequisite: USA Honors Program

**HON 301 Intro Senior Honors Project-H 1 cr**

This course is designed to introduce juniors in the USA Honors Program to scholarly research and creative activities in diverse disciplines. The primary graded assignment of the course is the guided development of an approved Prospectus for the Senior Honors Project.

**HON 390 Special Topics Honors 1 TO 3 cr**

Advanced topics for USA Honors students of an interdisciplinary or multidisciplinary nature. May be repeated when topic varies. Prerequisite: USA Honors Program

## Hospitality/Tourism Management (HTM)

**HTM 200 Intro to Hosp & Tour Ind 3 cr**

This course provides students with a comprehensive introduction to the many entities that make up the hospitality industry, such as hotels, restaurants, clubs, cruise lines, and casino hotels. Students will learn about hospitality careers, the importance of service, and how hotels and restaurants are organized, as well as an overview of today's hot issues, including ethical challenges and management concerns.

**HTM 210 Food & Bev Serv Mngt 3 cr**

This course focuses on the tools necessary for managing food service operations in today's aggressive business environment. Students learn how to position, manage, and leverage a successful food service operation - commercial and non-commercial - in a variety of venues. Using a menu-driven approach, the course examines a variety of management tools, best practices, and techniques.

**HTM 212 Food Sanitation and Safety 3 cr**

In this course students are introduced to food safety principles and applications, the Hazard Analysis Critical Control Point System (HACCP), microbiology of food safety, infection control, and safety and environmental issues related to the foodservice and hospitality industry. Students completing the course are eligible to take the ServSafe exam offered by the National Restaurant Association.

**HTM 220 Mtgs., Inc., Conv., Events 3 cr**

This course will introduce students to multiple component of events management, including planning, marketing, ticketing, budgeting, operations, and evaluation. Students will engage in instruction, observation, and analysis in order to apply knowledge and theory to a specific event. The course will be delivered in a blended format.

**HTM 310 Global Leadership for HTM 3 cr**

This course examines principles of visionary global leadership in the hospitality industry by exploring leadership concepts, theories and fundamentals. Students begin to define their leadership paradigms, and identify leadership strategies that ameliorate personal and professional success.

Pre-requisite: HTM 200 Minimum Grade of D

**HTM 312 Hospitality Service Culture 3 cr**

This course explores the dimensions of successful service environments, comprised of various factors, including the values, beliefs, norms, rituals and practices, within hospitality organization. In this course, students will learn the value a customer-centric approach brings to an organization through the creation of a positive consumer experience. The course focuses on hospitality service culture and methods for implementation, management and improvements within the service delivery process by making customer care part of the organization's mission, vision, values and goals to garner a competitive advantage in the marketplace.

Pre-requisite: HTM 101 Minimum Grade of D

**HTM 315 Hospitality/Tourism Marketing 3 cr**

This course is designed to provide a broad overview of essential marketing, promotion, and sales principles currently applied in the tourism and hospitality industries. It provides an introduction to marketing theories, principles, and concepts, and an exploration of the role of marketing within a globalized hospitality organization. Students will identify marketing strategies, differentiate services marketing, explain the role of customer expectation, analyze market segments, evaluate target marketing, and demonstrate the ability to effectively communicate using audio visual materials. The focus is on achieving a competitive advantage in a global market. Students will also examine the trends, issues and problems influencing tourism and hospitality marketing in a dynamic intercultural environment.

**HTM 320 Destination Mgmt. & Marketing 3 cr**

The purpose of this course is to equip students with an understanding of the principles of destination management and marketing. Techniques for soliciting a variety of markets, planning presentations, and assessing economic impact of bookings, along with the role of convention bureaus as a catalyst to regional economic development will be important components of this course. The internal operations of a destination marketing organization, including stakeholder care, financial management, human resources management, and governance will also be explored.  
Pre-requisite: HTM 200 Minimum Grade of D

**HTM 330 Cruise Operations Management 3 cr**

The course provides an introduction to the cruise market and the reasons for its significant growth. The principles, practices, and philosophies of cruising, along with cruise line employee roles and responsibilities are examined. Strategies for management and marketing are explored.  
Pre-requisite: HTM 200 Minimum Grade of D

**HTM 350 Hospitality HR Management 3 cr**

This course is an introduction to hospitality management, including an overview of management in the hospitality industry and professional opportunities. The concepts and practices of hospitality management are examined and discussed. The scope and forms of hospitality organizations (e.g. food and lodging, resorts, tourism enterprises, conventions, events, attractions, etc.) are reviewed, as well as local and global trends within these organizations.

**HTM 396 HTM Career Planning 3 cr**

This course teaches students to perform a good-fit analysis by aligning career and employer choices with self-assessment, determine competencies gaps, and develop a strategic professional development plan. Three credit hours. Offered in web-enhanced and web-blended formats.  
Pre-requisite: HTM 200 Minimum Grade of D

**HTM 397 Study Abroad - Culinary 3 cr**

This course is designed to engage students in active learning related to international culture, cuisine, and culinary practice in settings outside the United States. Through participation in the course, students will explore the culture of the host country, cuisine as it is related to the culture, and common food preparation and service practices. Activities include readings, lectures, discussions, reflective journaling, tours, observations, and active engagement in food preparation and service.

Pre-requisite: IST 300 Minimum Grade of D

**HTM 398 Study Abroad - Intl Hosp Mgt 3 cr**

This course is designed to engage students in active learning related to international hospitality management in settings outside the United States. Through participation in the course, students will explore the culture, management practices, and service standards in the host country related to the hospitality industry. Activities include readings, lectures, discussions, reflective journaling, tours, and observations.

**HTM 400 Legal Issues in HTM 3 cr**

This course will provide a comprehensive study of the legal aspects of the hospitality industry with an emphasis on compliance and prevention of liabilities. The course is not intended to replace the legal services of an attorney, but rather provide an overview of common legal issues in the field of hospitality and tourism management. 3 credit hours. Blended or online.

Pre-requisite: HTM 200 Minimum Grade of D

**HTM 410 Sustainable and Eco-Tourism 4 cr**

Examine the interaction of ecotourism with social, natural and cultural environments as well as the impacts of ecotourism on the environment and global societies.

Pre-requisite: HTM 200 Minimum Grade of C

**HTM 435 Quality Service Management - W 3 cr**

This course is designed to prepare students to understand, challenge, and refine the principles of guest-services management in an organization. Theories and concepts of service will be explored with emphasis on identifying customer preferences and a systematic process for organizations to design service delivery systems and implement a successful quality service environment that consistently meets and exceeds customer expectations. This course is a designated writing intensive course (W) and all major writing assignments must be satisfactorily completed in order to receive credit for the course.

Prerequisites: EH 102 or EH 105, or placement; HTM 200 Introduction to Hospitality and Tourism Management.  
Pre-requisite: EH 102 Minimum Grade of C or EH 105 Minimum Grade of C and HTM 200 Minimum Grade of D

**HTM 440 Lodging Management 3 cr**

This course is an exploration of issues facing the hotel and lodging industry. The goal of the course is to prepare students for the hospitality industry with a specific focus on the hotel industry. It will introduce students to multiple components of lodging management, including: sales and marketing; front office, housekeeping, maintenance and accounting departments; food and beverage operations for full-and limited-service hotels; safety and securing; careers in the lodging industry. Students will engage in instruction, observation, and analysis in order to apply knowledge and theory to specific hospitality lodging situations. The course will be delivered in a blended format or online format.

**HTM 445 HTM Financial Reporting 3 cr**

This course is designed to provide hospitality and tourism students with a solid foundation of accounting concepts and methods of financial analysis that is required to be successful in the hospitality industry. The course provides students with a fundamental understanding of using numbers to operate various departments and analyze management reports and financial statements.

Pre-requisite: HTM 200 Minimum Grade of D

**HTM 450 Timeshare & Condominium Mgmt 3 cr**

This course will provide students with an in-depth study into the unique world of "non-traditional" lodging, the condominium resort and vacation ownership industry and other forms of non-traditional lodging. The course focuses on the hospitality aspects of the condominium resort, vacation ownership industry, and recreation and park lodging, and specifically on how non-traditional lodging operations differ from traditional lodging operations such as hotels, motels, and resorts.

Pre-requisite: HTM 200 Minimum Grade of D

**HTM 490 Special Topics 1 TO 4 cr**

This course is designed as an educational tool for college students to develop a theoretical understanding of the concept of servant leadership as it applies to the hospitality and tourism management industry, and to acquire and apply fundamental hospitality and tourism workplace competencies through "real-world" experiential learning activities that include "earning the right to lead" through engagement and visible leadership. Students will complete online learning modules related to theory and practice while also engaging in experiential learning activities in a hospitality organization.

Pre-requisite: HTM 200 Minimum Grade of D

**HTM 494 Directed Study in HTM 1 TO 4 cr**

Directed study on a topic of special interest or significance in the field of hospitality and tourism management. Course requirements can be met through research, reading, writing, or lab activities, as approved by the department chair and supervising instructor. May be taken for 1-4 credit hours. May be repeated, if content varies, for up to six hours of credit. Prerequisites: Junior or Senior standing and approval of department chair and supervising instructor.

**HTM 496 Internship I Capstone Exp - W 3 cr**

This pre-internship course examines the impact of business environments on personal and career effectiveness in the Hospitality field. Topics include effective business communication, ethical decision making, and leadership development.

Co-requisite: HTM 498

Pre-requisite: EH 102 Minimum Grade of C or EH 105 Minimum Grade of C and HTM 200 Minimum Grade of D

**HTM 498 Internship II 3 cr**

This Internship II course provides students an opportunity to receive supervised, relevant, and practical experience in work that is related to the objectives of the Hospitality and Tourism Management (HTM) program.

Co-requisite: HTM 496

Pre-requisite: EH 102 Minimum Grade of C or EH 105 Minimum Grade of C and HTM 200 Minimum Grade of D

## Information Systems (ISC)

**ISC 175 Prof Productivity Applications 3 cr**

This course provides a foundation in the use of office productivity computer applications as used by students and computing professionals throughout their careers. Topic coverage includes the use of graphical user interface, word processing, spreadsheet analysis, visual graphics-based presentation, and database management software. Students will be required to complete computer-based labs in these areas.

**ISC 190 IS Special Topics 1 cr**

Selected topics in information systems. Prerequisite: Permission of the ISC coordinator.

**ISC 245 Info Systems in Organizations 3 cr**

An overview of information systems topics from an organizational and managerial perspective. Topics include current information technology and systems, such as the Internet and its organizational impacts; the emergence of global economy and digital firms; and the ethical and social impacts of information systems, such as privacy, intellectual property rights, and liability. Issues and strategies regarding information systems planning, systems development, decision making, and using IT for competitive advantage are discussed. Throughout the course, students will investigate the strategic uses of information technology in current industry-specific situations.

**ISC 272 Systems Architecture 3 cr**

This course introduces students to Information Technology hardware and systems software concepts. Topics include: computer hardware, operating systems, system software, hardware and software integration, operating procedures, system performance, security/safety, and compatibility. Student labs and hands-on activities will include: Windows, Unix, and Linux systems, system utilities and software tools. Credit cannot be received for both ITE 272 and ISC 272.

Pre-requisite: CIS 115 Minimum Grade of C

**ISC 285 Intermediate Programming 3 cr**

A second course in visual, event-driven programming that builds on the CIS 115. Topics include arrays, sequential files, random access files, structured exception handling, use of LINQ, object-oriented programming, debugging, and additional controls and objects. Programming projects are required. Credit cannot be received for both ISC 285 and ITE 285.

Pre-requisite: CIS 115 Minimum Grade of C

**ISC 300 Health Informatics Clin Env 3 cr**

This course provides an overview of concepts, terms, organization, and processes associated with patient care and clinical environments as they pertain to health informatics. The entire process of how a person accesses, moves within, and exits the system both as an inpatient and outpatient to obtain care. Students will observe and report on a variety of clinical settings and healthcare specializations throughout the semester. This course is designed for students with no prior clinical experience.

**ISC 305 Info Systems-Technology 3 cr**

The analysis, design, and implementation of information systems. Analysis of the functional areas of business and integration of computer tools to satisfy information requirements. Current development in business computer systems, including surveys of current systems and the Internet. Computer classrooms are utilized to provide students with "hands on" experience.

Pre-requisite: CIS 250 Minimum Grade of C

**ISC 353 Info Sys Appl Development 3 cr**

This course provides an accelerated approach to programming in a high-level, object-oriented language, especially for information systems. Coverage includes algorithmic problem solving, fundamentals of programming, procedures, decisions, repetition, arrays, files, exception handling, and object-oriented programming. The format for this course is lecture/lab. The instructor will demonstrate in class, and students will learn by doing homework problems and programming assignments. This course does not count towards a graduate degree in CIS. Some prior programming experience is desired and permission of Coordinator.

Prerequisites: Math placement score of 65 or higher.

Pre-requisite: University test - Math 65 or DS 090 Minimum Grade of C or (MA 112 Minimum Grade of C or MA 171 Minimum Grade of C)

**ISC 360 Info Sys Analysis and Design-W 3 cr**

A thorough examination of the analysis and design of computer information systems from the systems analysts view. The course will use an established software development methodology. At each step in the software development life cycle, both the methodologies used and the documentation required will be examined.

Pre-requisite: ISC 245 Minimum Grade of C and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**ISC 361 Database for Info Systems 3 cr**

The course builds on relational database and programming concepts by exploring the analysis, design, and implementation of more complex database systems. Topics include advanced data modeling, advanced query design, and application development in a database programming environment.

Pre-requisite: CIS 324 Minimum Grade of C and (ISC 285 Minimum Grade of C or ITE 285 Minimum Grade of C)

**ISC 362 IS Object-Oriented Analy-Des 3 cr**

This course provides an introduction to an object-oriented analysis and design (OOAD) methodology as well as the tools and techniques for supplementing this methodology. The course will also cover the use of notational metalanguages such as Unified Modeling Language (UML) and OOAD computer-assisted software engineering (CASE) tools.

Pre-requisite: ISC 245 Minimum Grade of C

**ISC 410 Health Informatics 3 cr**

This course provides an overview of the concepts, terms, tools, and architectures associated with health informatics as applied to healthcare delivery. Topics include: electronic record systems, computerized physician order entry, health system standards, terminologies, workflow modeling, security and privacy of clinical data, clinical reporting, and the impact of information technology use on the quality and efficiency of health care delivery and outcomes.

**ISC 450 Health Sys Analysis and Design 3 cr**

This course provides an overview of the concepts, terms, tools, and architectures associated with health informatics as applied to healthcare delivery. Topics include: electronic record systems, computerized physician order entry, health system standards, terminologies, workflow modeling, security and privacy of clinical data, clinical reporting, and the impact of information technology use on the quality and efficiency of health care delivery and outcomes.

Pre-requisite: ISC 410 Minimum Grade of C

**ISC 455 Health Data Mgt Decision 3 cr**

This course focuses on the design and management of electronic medical record systems and clinical decision support systems. Course content related to electronic medical record systems includes architectural components, technical design issues, and management; and, content related to clinical decision support systems includes decision support roles, extracting useful information from data, and legal and regulatory restrictions. Laboratory assignments will provide students with opportunities to interact with these systems.

Pre-requisite: ISC 410 Minimum Grade of C

**ISC 459 IS Appl Design-Implementation 3 cr**

Analysis and design of information systems to support multiple locations via Intranet/Internet access. Additional and supporting topics, such as corporate privacy and security are also covered.

Pre-requisite: CIS 324 Minimum Grade of C

**ISC 462 IS Strategy and Policy 3 cr**

This course provides the top management, strategic perspective for aligning competitive strategy with information systems. Issues include the development and implementation of policies and plans to achieve organizational goals, including security policy.

Pre-requisite: CIS 324 Minimum Grade of C

**ISC 463 IS Database Admn and Security 3 cr**

An examination of the issues and activities associated with the administrator function for databases. This course will cover installation, implementation, user management, backup, and security.

Pre-requisite: CIS 324 Minimum Grade of C

**ISC 464 IS Security and Risk Mgmt 3 cr**

This course provides an introduction to the fundamental principles and topics of information systems security and risk management at the organizational level. This course views information security as a management issue that incorporates technical and management solutions. Topics include risk management, security policy, disaster planning, security law and ethics, and security education, training and awareness.

Pre-requisite: (MGT 300 Minimum Grade of C or BMS 322 Minimum Grade of C or MGT 322 Minimum Grade of C) and (CIS 321 Minimum Grade of C or CIS 221 Minimum Grade of C)

**ISC 467 Enterprise Information Systems 3 cr**

This course provides an introduction to enterprise information systems and to business process modeling. Key concepts and techniques for identifying, designing, and documenting business processes will be presented. The way information technology can be used to manage, transform business processes is discussed. Successful organizational change strategies will be reviewed.

Pre-requisite: (MGT 300 Minimum Grade of C or BMS 322 Minimum Grade of C or MGT 322 Minimum Grade of C) and CIS 324 Minimum Grade of C

**ISC 472 Advanced Data Management 3 cr**

This course provides an introduction to the concepts and technologies of business intelligence. Key concepts and techniques allow organizations to analyze data/information collected from transaction processing systems. The ultimate purpose of business intelligence, or business analytics, to support high quality decision support for executives and managers is presented. Concepts of data warehouses, data mining, including text and web mining, and considerations of new and emerging technologies are described in detail.

Pre-requisite: CIS 324 Minimum Grade of C and (ISC 360 Minimum Grade of C or ISC 355 Minimum Grade of C)

**ISC 475 Info Systems Proj Management 3 cr**

This course examines the principles and techniques of project management from an information systems perspective. Major topics covered include project context, project selection, and project planning. Students work in collaborative teams and are instructed in the use of a project software tool. Credit cannot be received for both ITE 475 and ISC 475.

Pre-requisite: CIS 324 Minimum Grade of C

**ISC 490 Info Systems Special Topics - 3 cr**

Advanced selected topics in information systems.  
Prerequisite: Permission of the ISC Coordinator.

**ISC 510 Health Informatics 3 cr**

This course provides an overview of the concepts, terms, tools, and architectures associated with health informatics as applied to healthcare delivery. Selected research topics are introduced and independently studied. Topics include: electronic record systems, computerized physician order entry, health system standards, terminologies, workflow modeling, security and privacy of clinical data, clinical reporting, and the impact of information technology use on the quality and efficiency of health care delivery and outcomes. Prerequisite: Permission of the Director of CI Graduate Studies.

**ISC 545 Management Information Systems 3 cr**

This course provides an overview of information systems from an organizational, managerial, and technical perspective. The topics covered will focus on the strategic role of information systems and information technology in business processes, change and knowledge management, group and individual decision-making, and electronic commerce. Specific topics include current hardware, infrastructure and connectivity technologies, software and systems development methodologies. Internet-based applications, management challenges and opportunities created by information systems and global connectivity such as privacy, data and systems security and control, intellectual property, ethical and social consequences of information technology, and the impact of digital integration on an organization's competitiveness, products, services, procedures, and management structures. Prerequisite: Permission of the Director of CIS Graduate Studies.

**ISC 550 Health Data Security & Comp 3 cr**

This course involves a thorough examination of the security and privacy requirements of the Health Insurance Portability and Accountability Act (HIPAA) and the implementation of these requirements in the clinical environment. Students will learn how to address security development all the way through post-implementation, how to evaluate systems for vulnerabilities, and how to identify protected health information and covered entities.

**ISC 551 Human-Comp Interface Design 3 cr**

The course covers principles, guidelines, and methods in human computer interface design. Students complete a project involving the development, evaluation, and demonstration of a user interface. The interface is designed around a user and task analysis performed on a given problem. Students plan and conduct a usability study of a working prototype and report on results and recommendations. Prerequisite: Graduate Professional Component.

Pre-requisite: Computer Science Graduate 030

**ISC 553 IS Web Site Management 3 cr**

This course addresses the design, development, and management of a web server. Topics include the selection, installation, and configuration of an operating system and web server software, web server security and monitoring, and website maintenance. Prerequisites: Graduate Professional Component.

Pre-requisite: Computer Science Graduate 030

**ISC 555 Health Data Mgt/Decision Supp 3 cr**

This course focuses on the design and management of electronic medical record systems and clinical decision support systems. Course content related to electronic medical record systems includes architectural components, technical design issues, and management; and, content related to clinical decision support systems includes decision support roles, extracting useful information from data, and legal and regulatory restrictions. Laboratory assignments will provide students with opportunities to interact with these systems.

**ISC 559 IS App Design-Implementation 3 cr**

Analysis and design of information systems infrastructures to support multiple locations, intranet/internet access, corporate privacy, and security. Capacity analysis and planning, installation, performance monitoring, and problem solving strategies. Prerequisites: Graduate Professional Component.

Pre-requisite: Computer Science Graduate 030

**ISC 560 Info Systems Analysis-Design 3 cr**

This course will include an introduction to the systems development life cycle as well as a survey of analysis and design techniques. Detail topics will include information systems planning and project identification and selection, requirements collection and structuring, process modeling, data modeling, design of interface and data management, system implementation and operation, system maintenance, and change management implications of systems. Globalization issues in systems will also be discussed. Students will use current methods and tools such as rapid application development, prototyping, and visual development. Prerequisite: Graduate Professional Component

Pre-requisite: Computer Science Graduate 030

- ISC 561 IS Database Management** 3 cr  
An introduction to database management systems. The data environment, basic technical concepts and systems resources, database concepts, including use and management of databases. Classical and current DBMS models will be presented. Laboratory project activity will involve definition, creation, and development of a database. Prerequisites: Graduate Professional Component. Pre-requisite: Computer Science Graduate 030
- ISC 562 IS Policy and Strategy** 3 cr  
This course provides the top management, strategic perspective for aligning competitive strategy, core competencies, and information systems. Issues include the development and implementation of policies and plans to achieve organizational goals, including defining systems that support the operational, administrative, and strategic needs of the organization, its business units, and individual employees. Prerequisites: Professional Component. Pre-requisite: Computer Sci Prof Component 30
- ISC 563 IS Database Administration** 3 cr  
This course will examine the issues and activities associated with the administrator function for organizational databases. Topics include storage and indexing, query evaluation, physical database design, crash recovery, and security. Prerequisite: CIS Graduate Professional Component. Pre-requisite: Computer Science Graduate 030
- ISC 565 IS Project-Change Management** 3 cr  
A study of the concepts and techniques of project management from an information systems perspective. The course provides an overview of project lifecycle activities, and a focus on managerial, behavioral, and process issues that surround the dynamic context of systems development. The issue of managing the change brought about by the introduction or modification of information systems in organizations will be discussed. Students will be instructed in the use of software tools for project management. Prerequisites: Graduate Professional Component. Pre-requisite: Computer Science Graduate 030
- ISC 567 IS Function Integration** 3 cr  
The tactical/operational responsibilities and roles of the CIO. Governance considerations that link the IS-business organizations. Current/emerging issues in creating and coordinating the key activities necessary to manage the day-to-day operations of the IS function. Coordinating skills and organizational IS infrastructure. Prerequisites: Graduate Professional Component. Pre-requisite: (ISC 526 Minimum Grade of B or ISC 561 Minimum Grade of B)
- ISC 568 IS Enterprise Integration** 3 cr  
Information systems role in transforming organizations and industries. An integrated view of the organization from an external and internal perspective. IS' internal role in integrating the enterprise through a cohesive set of business processes and functional applications to meet business needs. Enterprise resource planning and enterprise functionality. Collaborative systems. Consideration of external relations with suppliers, outsourcers, and customers. Prerequisite: Graduate Professional Component. Pre-requisite: ISC 567 Minimum Grade of B and Computer Science Graduate 030
- ISC 572 Advanced Data Management** 3 cr  
The focus here is on the management of data and the technologies which specifically targets mass data storage with a view to online and after-the-fact examination of data to acquire new insights. The major topics include: data warehouse planning, data warehouse models, and supporting software, data mining concepts and tools, creation of data mining models for the tools and matching the tool to the task. Prerequisite: CIS Graduate Professional Component. Pre-requisite: Computer Science Graduate 030
- ISC 590 IS Sp Top -** 3 cr  
Advanced selected topics in information systems. Prerequisite: Permission of ISC coordinator. Pre-requisite: Computer Science Graduate 030
- ISC 595 IS Project Proposal Develop** 1 TO 3 cr  
Development of the project proposal for the Information Systems specialization master's project. Prerequisites: CIS 518, Graduate Professional Component, Permission of Director of CIS Graduate Studies. Pre-requisite: CIS 518 Minimum Grade of S and Computer Science Graduate 030
- ISC 598 Information Systems Project** 1 TO 3 cr  
This course may be repeated for a maximum of six (6) credits. A CIS project committee will provide direction during the project. Prerequisite: Approval of project proposal by the student's project committee, and permission by Director of CIS Graduate Studies. Pre-requisite: ISC 595 Minimum Grade of B
- ISC 629 Comp Ecosystems** 3 cr  
This course focuses on developing expertise and preparation for independent research in computing ecosystems through an in-depth review of the computing literature. The course will explore concepts and issues associated with large scale parallel data processing, virtualized storage, application, and infrastructure architectures and the attendant security, privacy and legal issues.

**ISC 673 Digital Investigations 3 cr**

This course focuses on developing expertise and preparation for independent research in Digital Forensics Investigations through an in-depth review of the Digital Forensics literature. The student will be conversant in broad issues and trends in Digital Forensics as defined by skill sets and occupations.

**ISC 675 Information Systems 3 cr**

This course focuses on developing expertise and preparation for independent research in information systems through an in-depth review of the information systems literature. The course will explore the current major streams of theory, research, and methodologies in information systems.

**ISC 686 Risk Analysis 3 cr**

This course focuses on developing expertise and preparation for independent research in risk analysis through an in-depth review of the risk assessment and information assurance literature. The student will be conversant in broad issues and trends in risk analysis as defined by techniques, methodologies, policies, frameworks, and skill sets.

## Information Technology (ITE)

**ITE 190 ITE Special Topics 1 cr**

Selected topics in information technology. Prerequisite: Permission of the ITE coordinator.

**ITE 271 Info Techn in Organizations 3 cr**

This course introduces students to the Information Technology (IT) concepts and the software that facilitates IT solutions. Topics include: data, information, and knowledge concepts, productivity software tools, role of networking and communication, the "digital phenomena", and the benefits of IT. Also included are IT program concepts such as: ethics, the importance of effective written and oral communication, continuous learning, and technology monitoring-evaluation.

**ITE 272 Systems Architecture 3 cr**

This course introduces students to the Information Technology (IT) hardware and systems software concepts. Topics include: computer hardware, operating systems, system software, hardware and software integration, operating procedures, system performance, security/safety, and compatibility. Student labs and hands-on activities will include: Windows, Unix, and Linux systems, system utilities and software tools.

Pre-requisite: CIS 115 Minimum Grade of C

**ITE 285 Intermediate Programming 3 cr**

A second course in visual, event-driven programming that builds on CIS 115. Topics include arrays, sequential files, random access files, structured exception handling, use of LINQ, object-oriented programming, debugging, and additional controls and objects. Programming projects are required. Credit cannot be received for both ISC 285 and ITE 285.

Pre-requisite: CIS 115 Minimum Grade of C

**ITE 370 Adv Application Development 3 cr**

This course explores advanced topics in visual applications development. Emphasis is placed upon developing increased program functionality and connectivity with local and remote databases. Other topics: integrating programming components and libraries, object-oriented application development and testing methodologies, and using an object-oriented approach for multi-tiered applications. Programming projects are required.

Pre-requisite: (ITE 285 Minimum Grade of C or ISC 285 Minimum Grade of C) and CIS 324 Minimum Grade of C

**ITE 372 Advanced Operating Systems 3 cr**

This course introduces students to advanced Operating Systems techniques and related system architecture concepts. Students will examine how Operating Systems retain parameters set during installation and customization as well as the basic strategies used in Operating System security. Students will use advanced command-line tools to discover and modify settings within the Operating System and will use advanced scripting techniques to parse data within Operating System's files.

Pre-requisite: (ISC 272 Minimum Grade of C or ITE 272 Minimum Grade of C) and (ISC 285 Minimum Grade of C or ITE 285 Minimum Grade of C)

**ITE 373 File Sys for Digital Forensics 3 cr**

This course introduces students to advanced file system techniques used in Forensic Analysis. Students will examine the current principles in drive storage hardware and file systems, including Windows and Linux-based systems and evaluate possible data hiding techniques which can be employed within these systems. Students will be required to perform imaging of hard drives for analysis of possible hidden data using techniques covered in this course.

Pre-requisite: (ISC 272 Minimum Grade of C or ITE 272 Minimum Grade of C)

**ITE 375 Publishing for the WWW 3 cr**

This course is an introduction to the models and tools used to develop documents for the World Wide Web. Course topics include website planning and design, markup and styling languages, graphics, multimedia utilization, typography, and scripting. Website design issues such as ethics, copyright and intellectual property rights are also covered. Prerequisites: CIS 321 and either ISC 272 or ITE 272.

Pre-requisite: CIS 321 Minimum Grade of C and (ISC 272 Minimum Grade of C or ITE 272 Minimum Grade of C)

**ITE 380 Multimedia Production 3 cr**

This course covers the models and tools of multimedia development and production. Development models include: message analysis, audience analysis, and media formats. Technical issues include: data formats, data interoperability, and hardware concepts. From a practical perspective, students will develop a multimedia project.  
Pre-requisite: (ISC 272 Minimum Grade of C or ITE 272 Minimum Grade of C)

**ITE 382 Network Administration 3 cr**

This course examines the network and database administrator functions in an organization. Students study the functions required of an administrator to facilitate the usage of the environment while securing the resources. Various methods and software products will demonstrate the areas of access and security.  
Pre-requisite: CIS 321 Minimum Grade of C and (ISC 272 Minimum Grade of C or ITE 272 Minimum Grade of C) and (ISC 272 Minimum Grade of C)

**ITE 384 Network Infrastructure Systems 3 cr**

This course focuses upon the concepts of network hardware systems that provide interconnection of communication devices. Topics include: network architectures and technologies, concepts such as routing, addressing, and network protocols (TCP/IP and others). Students will be required to setup, configure, and manage wired and wireless network equipment such as switches, routers, access points, and gateways  
Pre-requisite: CIS 321 Minimum Grade of C and (ISC 272 Minimum Grade of C or ITE 272 Minimum Grade of C)

**ITE 453 Web Site Management 3 cr**

This course addresses the design, establishment and implementation of a World Wide Web site. Issues addressed are: definition of the site, establishment of a physical site, choice of a Web server, determination of software requirements, implementation details, security, management, and monitoring of the site.  
Pre-requisite: CIS 321 Minimum Grade of C and (ISC 272 Minimum Grade of C or ITE 272 Minimum Grade of C)

**ITE 473 Digital Forensic Analysis 3 cr**

This course introduces students to acceptable methodologies of securing, collecting, analyzing and reporting data of a computer forensics investigation. Topics include: Ethics, introduction to computer investigations, evidence control, forensics tools, data acquisition, data recovery, data analysis and presenting the results. Students will be required to perform several forensics analyses in a controlled lab environment.  
Pre-requisite: ITE 372 Minimum Grade of C and ITE 373 Minimum Grade of C and CJ 205 Minimum Grade of C

**ITE 474 Human Computer Interface 3 cr**

Students will study the concepts of human-computer interaction and interface design. Topics include: detailed human-computer interaction concepts, modern graphical user interface models, and interface usability testing. Students will use rapid-prototyping tools to develop and test a typical user interface. Credit cannot be received for both ITE 474 and ISC 474.  
Pre-requisite: (EH 372 Minimum Grade of C or EH 373 Minimum Grade of C) and (ISC 285 Minimum Grade of C or ITE 285 Minimum Grade of C)

**ITE 475 IT Project Management 3 cr**

This course examines the principles and techniques of project management from an information technology perspective. Topics included are: project planning, scheduling, resource allocation, and project management software tools. There is a specific focus on management of software projects, integrating the principles of information systems/needs analysis, software engineering, risk management, and change management. Both the technical and behavioral aspects of project management are covered. Credit cannot be received for both ITE 475 and ISC 475.  
Pre-requisite: CIS 324 Minimum Grade of C

**ITE 476 Network Security Management 3 cr**

This course examines network and web security issues including: risks and threats, system access points, hardware and software defense methods, and organizational security policies. Labs will require students to analyze systems for potential threats, implement security procedures, monitor systems for security breaches, and institute recovery or repairs.  
Pre-requisite: ITE 382 Minimum Grade of C and ITE 384 Minimum Grade of C

**ITE 480 Needs Assess-Tech Eval - W 3 cr**

This course presents methodologies for assessing technological needs in support of organizational information requirements. Students learn the next logical step is a formal means of evaluating a given technology. Major topics of the course are specifying organizational needs, identifying potential technologies, evaluating potential benefits, assessing the organization's ability to utilize the technology. Students will examine planning for technological change and strategic implementation of the change.  
Pre-requisite: ITE 271 Minimum Grade of C and (EH 372 Minimum Grade of C or EH 373 Minimum Grade of C)

**ITE 482 Adv Web Development 3 cr**

This is an advanced course in web programming and development. This course provides a hands-on approach using high-level development tools to learning advanced web programming concepts including server-side and database processing. Students will implement usability and security features into the development of modern web applications.  
Pre-requisite: CIS 324 Minimum Grade of C and ITE 375 Minimum Grade of C

**ITE 484 Advanced Network Management 3 cr**

This course explores advanced network management issues including: developing/designing network implementation strategies, managing users and data, providing operational support and help-desk, developing network use policies, developing network recovery procedures. Labs will require that students manage an operational network that provides typical network services and experience the day-to-day problems that network administrators encounter.

Pre-requisite: ITE 382 Minimum Grade of C and ITE 384 Minimum Grade of C

**ITE 485 ITE Senior Demo Project 3 cr**

A senior capstone project course that utilizes teams and/or individuals working from problem requirements and specifications to produce a solution. This requires exploration of suitable information technologies to produce a solution that improves the problem situation. Students/teams will analyze, plan, and report on the project and implement a prototype. Prerequisites: Permission of the ITE coordinator.

Pre-requisite: ITE 370 Minimum Grade of C and (EH 372 Minimum Grade of C or EH 373 Minimum Grade of C)

**ITE 490 ITE Sp Top - 3 cr**

Advanced selected topics in information technology.

Prerequisite: Permission of the ITE coordinator.

Pre-requisite: Computer Sci Prof Component 30 or Computer Science Graduate 030

## Instructional Systems Design (ISD)

**ISD 301 Trends & Issues in IDPI-W 3 cr**

This is an introductory course that provides an overview of current trends, technology and issues in instructional design and performance improvement.

Pre-requisite: EH 101 Minimum Grade of C and EH 102 Minimum Grade of C

**ISD 310 Instructional Design 3 cr**

Instructional Design is a project-based course that includes step-by-step strategies to create instruction using the design models, instructional strategies, and technology applications. Students will explore the processes of analysis, design, development, implementation, and evaluation in order to apply real-world training solutions to actual instructional problems.

**ISD 320 Training Interventions 3 cr**

This course will provide students with experience in designing and developing facilitator-lead training interventions focused on improving performance in various contexts. Students will interact with a client in a professional manner and create a professional training session incorporating motivational strategies, instructional delivery methods, and appropriate assessment measures from initial contact needs assessment to final session evaluations.

**ISD 340 Analysis, Assessment & Eval 3 cr**

Students will learn how to make assessments of human attitudes, knowledge, and performance, analyze empirical data, and evaluate training and human performance programs.

**ISD 350 Emerg Learning Technologies 3 cr**

This course provides students with the skills and knowledge necessary to develop technology-based modules using different delivery methods for application in non-instructional and instructional training solutions.

Pre-requisite: ISD 310 Minimum Grade of C

**ISD 360 Communication Skills in Org 3 cr**

This course is designed to utilize theory and practice of communication in the processes of analysis, design, development, implementation and evaluation of instruction. Communication skills will be developed and applied in a practical setting.

**ISD 370 Distance and Mobile Learning 3 cr**

This course will identify and utilize innovative technologies related to distance and mobile learning in various job sectors and learning environments.

Pre-requisite: ISD 310 Minimum Grade of C

**ISD 400 Portfolio Development 1 cr**

Students will create an online portfolio to showcase projects, assignments, and collaborations related to instructional design and performance improvement.

Pre-requisite: ISD 310 Minimum Grade of C

**ISD 410 Org/Coordination Training 3 cr**

This course is designed to develop knowledge and competencies in the coordination of large-scale, comprehensive training programs.

Pre-requisite: ISD 320 Minimum Grade of C and ISD 340 Minimum Grade of C

**ISD 420 Cultural Factors in IDD & HPI 3 cr**

This course will focus on the interaction of multicultural aspects of learning and teaching. Students will enhance their cognitive and affective awareness and understanding, as well as their personal acceptance of differences associated with the learning/teaching process. The ultimate goal is to prepare multiculturally competent designers of instruction for a global society.

- ISD 430 Psych of Learning in Organ-W** 3 cr  
The course covers major theoretical perspectives in organizational psychology based on empirical research and case studies. Students will explore learning theory, group dynamics, and change in different types of learning organizations.
- ISD 440 Human Develop. Interventions** 3 cr  
Students will learn and apply various human development theories and interpersonal skills related to the effective design of training interventions to improve learning and performance. A special area of emphasis will focus on students' own development experiences.
- ISD 450 Human Performance Tech** 3 cr  
This course includes conducting various types of analysis in order to solve human performance problems by design on non-instructional interventions.  
Pre-requisite: ISD 340 Minimum Grade of C
- ISD 480 Learn Train & Perf Project** 3 cr  
Students will complete a supervised field project on a topic related to instructional design and/or performance improvement.
- ISD 490 Sp Top -** 3 cr  
This course will allow faculty to work with students to explore current topics related to instructional design and performance improvement. Scholarly articles and current trends will be the basis for the designated learning outcome and end product.  
Pre-requisite: ISD 310 Minimum Grade of C and ISD 350 Minimum Grade of C and ISD 360 Minimum Grade of C
- ISD 495 Internship** 3 cr  
The internship is a supervised learning experience in an actual or similar setting in which instructional design or performance improvement related professionals are employed.  
Pre-requisite: EH 102 Minimum Grade of C
- ISD 581 Digital Media Tools** 3 cr  
This course helps students learn to use computers to design instruction.
- ISD 582 Evaluation of Digital Media** 3 cr  
An advanced course in the development, use and evaluation of multimedia instruction.
- ISD 583 Interactive Video** 3 cr  
This course involves digital editing and includes basic instruction in shooting, lighting and composing video sequences.
- ISD 584 Animation** 3 cr  
An introductory course that provides students with an opportunity to acquire the skills necessary to develop animated interactive modules for use in instruction.
- ISD 585 Integr Tech in Teaching** 3 cr  
The purpose of this course is to enable students with some technology background in computers to focus the use of a variety of technologies onto a specific content area of instruction. Students will demonstrate cognitive competency of curriculum integration, instructional design, and production techniques. Specific attention will be given to videodisc technology, AV and computer technology.
- ISD 590 Sp Top -** 3 cr  
Topics of contemporary interest in the area of Educational Media will be presented, discussed and investigated.
- ISD 594 Dir St and Research** 1 TO 3 cr  
Students explore problems and issues of special interest or significance in Instructional Design and Development. Not more than three semester hours may be accepted toward degree programs
- ISD 595 Internship - Masters** 1 TO 6 cr  
The internship is a supervised learning experience in an actual or similar setting to that in which instructional designers or media administrators are employed
- ISD 598 Research and Dev Project** 1 TO 6 cr  
A supervised field project, study or investigation on a topic related to Instructional Design and Development. Students will conduct an investigation which applies skills learned during the Instructional Design and Development Masters program.
- ISD 599 Thesis** 1 TO 3 cr  
A student selects a project, study or investigation related to the area of specialization in Instructional Design and Development. The project forms a basis for the thesis. A thesis committee provides direction during the investigation and during the writing of the thesis.
- ISD 600 Learning Tools** 1 cr  
This one-credit-hour course is designed to introduce students to some of the basic media tools that will help them with their coursework and in the work place. The course will typically be a series of two-hour class periods scheduled at somewhat regular intervals.
- ISD 601 Sem Instruct Design-Dev** 3 cr  
Discussion and investigation of particular topics related to Instructional Design and Development.
- ISD 602 Writing For Instruction** 3 cr  
Course serves as an overview and review of essential written communication skills needed by instructional design professionals.
- ISD 610 Trends and Issues in IDD** 3 cr  
Discussion and investigation of history, current trends, and issues in instructional design and their implications for education and training.

**ISD 611 Macro Lvl Trning & Perform Sys 3 cr**

Course provides an overview of concepts and current issues related to the design and development of training and performance systems at the macro-level. Rather than focusing on specific, small-scale instructional or non-instructional interventions, students in this course will study learning and performance from a broad organizational perspective.

Pre-requisite: ISD 621 Minimum Grade of B and ISD 641 Minimum Grade of B

**ISD 612 Alt Instructional Models 3 cr**

This course affords students the opportunity to apply a variety of well-established and emerging instructional design and development models

Pre-requisite: ISD 621 Minimum Grade of B

**ISD 613 Instructional Strategies 3 cr**

In this course, students explore the use of an assortment of instructional strategies to meet diverse learning needs.

**ISD 614 Human Cognition for IDD 3 cr**

A survey course of the cognitive science literature that is especially relevant for instructional designers and human performance technologists. The course covers major theoretical perspectives in cognitive science and has students read original empirical research. The goal is to enable IDD students to utilize the cognitive science literature in their careers.

Pre-requisite: EPY 502 Minimum Grade of B

**ISD 620 Research in Instr Tech 3 cr**

Students collaborate with a graduate faculty member who is conducting research in the area of instructional design and development. May be repeated for credit.

**ISD 621 Instructional Design 3 cr**

Introductory course that focuses on a recognized model of instructional design. Includes emphasis on instructional analysis, instructional objectives, performance assessment, instructional strategies and sequences, and formative evaluation.

**ISD 622 Adv Instructional Design 3 cr**

Application of advanced instructional design models and procedures for needs assessment, instructional development, and evaluation in various instructional and learning environments using current learning tools.

Pre-requisite: ISD 621 Minimum Grade of B

**ISD 623 Adv Research Methodology 3 cr**

A comprehensive course detailing advanced research methods and research. This course is specifically geared toward advanced IDD students who wish to develop the skills to properly design, propose, carry out, and critique scholarly research. The course covers the specifics of advanced research design and methods through a thorough analysis of empirical research. The goal is to equip IDD students with the research design skills to become successful scholars and researchers in their field.

Pre-requisite: IDE 510 Minimum Grade of B or IDE 620 Minimum Grade of B

**ISD 640 Needs Assessment 3 cr**

Analysis of needs assessment procedures related to the development of instructional systems. Considers a variety of needs assessment models. Students apply needs assessment models in selected settings.

**ISD 641 Performance Systems Tech 3 cr**

This course provides students with practical methods of analyzing and solving human performance problems. Emphasis is placed on development of both non-instructional and instructional interventions.

**ISD 642 Project Coordination 3 cr**

This course will develop knowledge and competencies in the coordination of large instructional projects. It is designed to enhance skills in the basic functions of instructional project coordination: planning, organizing, controlling, and directing.

**ISD 650 Computer-Based Training 3 cr**

A course for persons interested in the use of the computer to present instructional materials to students. Current learning theory as it pertains to authoring will be discussed.

**ISD 651 Learning Theory and Technology 3 cr**

This course will present techniques for the integration of instructional design theory and practice into the newer delivery systems including those using video and digitized media.

**ISD 652 Technology-Based Instruction 3 cr**

This course is a continuation of ISD 651. It concentrates on the additional skills and software necessary to develop and produce an original interactive instructional product.

**ISD 653 Developing Online Instruction 3 cr**

Developing online instruction using course management tools, multi-media technologies, and instructional design principles.

Pre-requisite: ISD 621 Minimum Grade of B

**ISD 655 Print and Screen Courseware 3 cr**

Designing, producing and applying print and screen courseware. An analysis of graphic and instructional design principles and technologies, alternatives to conventional prose, learned capabilities, readability, formulate, and resource constraint analysis. Students design, develop, and apply print and screen courseware in instructional modules.

- ISD 656 Training Interventions** 3 cr  
Practical experience in designing and implementing facilitator-led training in various large-scale organizations.
- ISD 657 Teaching in Higher Education** 3 cr  
Theory and practice of pedagogy in higher education. Principles of the analysis, design, development, implementation, and evaluation of instruction will be addressed and then applied in a practical setting with a mentor instructor.
- ISD 680 Emerging Technologies** 3 cr  
Course introduces students to emerging technological breakthroughs in education and training settings especially emphasizing the effects of future technologies.
- ISD 682 Impact Emerging Technologies** 3 cr  
This course examines the impact of new digital technologies in education and training and prepares educators to use digital approaches in their institution.
- ISD 694 Dir St and Research -** 3 cr  
Students explore problems and issues of special interest or significance in Instructional Design. Not more than three semester hours may be accepted toward degree program.
- ISD 695 Internship - Doctoral** 1 TO 6 cr  
The internship is a supervised learning experience in an actual or similar setting to that which instructional designers or media administrators are employed.
- IDE 510 Educ Research and Evaluation** 3 cr  
Course will examine research and evaluation methodology, its application to questions in education, and the application of research findings to problems in education. The students will read and evaluate research in education.
- IDE 525 Fnds Teach Eng Sec Lang** 3 cr  
A comprehensive survey of current research, methodology and materials in the field of English as a Second Language.
- IDE 540 Found of Career Education** 3 cr  
The underlying philosophies behind the career education movement and various approaches to career education are discussed. Ways to increase the career options available to individuals and to facilitate more rational and valid career planning and preparation, are explored through the career education phases: career awareness, career exploration, and career preparation.
- IDE 590 Sp Top -** 1 TO 3 cr  
Current topics of special concern to educators. Not more than 6 hours may be earned in Special Topics courses.
- IDE 594 Dir St and Research** 1 TO 3 cr  
Exploration of problems and issues of special interest or significance in education. Not more than 3 hours can be accepted for a degree.
- IDE 597 Student Teaching -** 3 TO 6 cr  
Observation and supervised teaching in selected schools with opportunity for study and discussion of problems and issues encountered. Prerequisite: Permission of advisor.
- IDE 615 Assess & Eval for Leaders** 3 cr  
This course will focus on the assessment and evaluation skills needed by educational leaders. The course will provide students with the knowledge and skills to carry out, and utilize effectively, the evaluations of programs, organizations, personnel, and students. The course will also cover how to create, interpret, and evaluate the reliability and validity of assessments.
- IDE 620 Quantitative Methods I** 3 cr  
Basic quantitative methods for decision making in the educational environment. Computer application of basic descriptive and inferential statistics.  
Pre-requisite: IDE 510 Minimum Grade of B
- IDE 621 Quantitative Methods II** 3 cr  
Basic research designs, with appropriate statistical analysis. The course will consider strategies needed for, but not limited to, the following: N-of-One research surveys and needs assessments; ex-post-facto designs, and true experimental designs.  
Pre-requisite: IDE 620 Minimum Grade of B

## Interdepartmental Education (IDE)

- IDE 010 Reading Exam** 0 cr  
IDE 010 is a one hour reading exam that tests students' current proficiency in communication skills. Failure to complete the exam as scheduled, with a passing score, will require the students to re-register for IDE 010.
- IDE 101 Freshman Seminar in Education** 2 cr  
Assists freshman with maximizing the student's potential to achieve success and to respond responsibly to the individual and interpersonal challenges presented by college life. Emphasis will be placed on study skills, time management, and writing skills. The course also provides information on the functions and resources of the University that support student academic success. Special emphasis is placed on orienting the student to the special roles and responsibilities of being an educator in today's society.
- IDE 400 Positive Classroom Mgt** 3 cr  
Emphasis is placed on ways to create a class and school environment that encourages responsible student behavior. William Glasser's concept of Reality Therapy as a process for successful teacher-student involvement is examined.

- IDE 630 Quantitative Methods III** 3 cr  
An extensive examination of the nature and character of experimental design in educational research. Includes the development of appropriate analytical techniques.  
Pre-requisite: IDE 620 Minimum Grade of B and IDE 621 Minimum Grade of B
- IDE 631 Intro Qual/Mixed Methods Res** 3 cr  
Introduces students to the major kinds of qualitative research and mixed methods research. Attention is given to underlying philosophies, methods of data collection, theoretical perspectives, research design, sampling, data analysis and interpretation, validity types and strategies, and writing research reports.  
Pre-requisite: IDE 510 Minimum Grade of B or IDE 692 Minimum Grade of B
- IDE 635 Adv Measurement and Eval** 3 cr  
Nature and function of measurement in instructional design and development environments. Approaches to reducing test error, including establishing validity and reliability estimates. Item analysis and discrimination. Test development for norm-based and criterion-referenced tests. Knowledge of descriptive statistics required.  
Pre-requisite: IDE 620 Minimum Grade of B
- IDE 640 Instructional Development** 3 cr  
Preparation of a modular program of instruction which incorporates all elements of the instructional-design process.
- IDE 645 Adv Human Perform Improvement** 3 cr  
This course provides students with knowledge and skills related to human performance improvement in relation to instructional design profession. It provides an overview of foundational theories of industrial-organizational psychology, organizational behavior, and organizational development and change in relation to instructional design and performance improvement practices.
- IDE 650 Instructional Techniques** 3 cr  
This course assists teachers in becoming more professional in instructional skills through the use of micro-teaching techniques and analysis of research in teaching.
- IDE 660 Program Research and Eval** 3 cr  
Course strives to increase the effectiveness of instructional personnel in their use of research and evaluative techniques in instructional environments. Three major areas of focus are: the conceptualization of research and evaluative models appropriate for the population; the application of basic assessment concepts to the teaching- learning environment; and the analysis of basic applied research in evaluation.  
Pre-requisite: IDE 510 Minimum Grade of B
- IDE 665 Inter Techniques Instr Envrmts** 3 cr  
This courses concentrates on developing three major areas: the examination of psychological underpinning of various communicative models and concepts; the practicing of interactional skills, such as active listening, congruent sending, and conflict resolution; the building of a communication model for the student's instructional environment.
- IDE 685 Ed Simulation and Games** 3 cr  
Teaches the role and function of simulation and games as effective instructional and learning devices.
- IDE 690 Special Topics -** 1 TO 3 cr  
Current topics of special concern to educators. Not more than 6 semester hours may be earned in Special Topics courses.
- IDE 692 Research Project Seminar** 3 cr  
Survey of both current and classic research in education. Students will identify a research problem of significance in their area of specialization and develop a strategy or research design to solve this problem.  
Pre-requisite: IDE 510 Minimum Grade of B
- IDE 694 Dir St and Research** 1 TO 3 cr  
Exploration of problems and issues of special interest or significance in education. Not more than 3 semester hours can be accepted for a degree.
- IDE 696 Internship-Masters/Doctoral-** 0 cr  
The internship is a supervised learning experience in an actual or similar setting to that in which instructional designers or medial administrators are employed.  
Prerequisite: Approval of internship coordinator.
- IDE 700 AU-USA Doctoral Program** 1 cr  
Provides an opportunity for advanced graduate students and professors to pursue cooperatively selected concepts and theoretical formulations. May be repeated as necessary.
- IDE 710 Research Seminar I** 1 TO 6 cr  
This course provides an introduction to doctoral study in IDD. Topics include graduate student socialization, nature of scholarship and scholarly writing, epistemology, sociology of knowledge, and systems theory as a meta-theory. Admission to doctoral program is required. 3 credit hours.
- IDE 711 Research Seminar II** 1 cr  
This course is designed to help doctoral students think about their dissertation research, understand the process of reviewing the literature, and organizing and writing a dissertation-level research proposal. Prerequisite: Approval of student's dissertation advisor. 1 credit hour per semester for 3 semesters.  
Pre-requisite: IDE 710 Minimum Grade of S

**IDE 790 Sp Top -** 1 TO 3 cr  
Current topics of special concern to educators. Not more than 6 semester hours may be earned in Special Topics courses.

**IDE 792 Research Proj Seminar** 3 cr  
Survey of both current and classic research in education. Students will identify a research problem of significance in their area of specialization and develop a strategy or research design to solve this problem.  
Pre-requisite: IDE 510 Minimum Grade of B

**IDE 794 Dir St and Research** 1 TO 3 cr  
Exploration of problems and issues of special interest or significance in education. Not more than 3 hours can be accepted for a degree.

**IDE 799 Research-Dissertation** 1 TO 9 cr  
Independent research by the student under the sponsorship of the graduate faculty. Students are required to achieve doctoral candidacy before enrolling in the course. Requires faculty advisor approval.

## Interdepartmental Studies (IDL)

**IDL 560 Cancer Biology** 3 cr  
This course provides a comprehensive coverage of molecular and cellular aspects of carcinogenesis as well as clinical issues related to human cancer. This course will specifically cover areas of histology, pathology, epidemiology, genetics, viruses, oncogenes and tumor suppressor genes. Additionally, topics to be covered include cellular and molecular basis of chemotherapy, pharmacology of anticancer drugs, molecular and cellular basis of radiotherapy, and biological therapy of cancer and clinical trial design.

**IDL 566 Topics in Cancer Biology** 1 cr  
Students and faculty participate in a supervised reading of current literature and meet once a week to interact in a discussion of the selected article. The goal of this course is to maintain the student's level of information at a "state of the art" in both methods and theory in the discipline and to develop critical skills in reviewing the literature.

**IDL 567 Dir Studies in Cancer Biology** 1 TO 6 cr  
Students participate in research under the direction of a graduate faculty member. The student may pursue independent research or participate in a literature project.

**IDL 571 Mouse Models Biomed Research** 3 cr  
This course utilizes the primary scientific literature to provide students with in-depth knowledge regarding the development and utilization of mouse models in biomedical research. Students are required to actively participate in class discussions, present scientific papers, and develop a research project that utilizes mouse models.

**IDL 576 Interdisciplinary Lit Reports** 1 cr  
Students and faculty participate in a supervised reading of the current literature and meet periodically (usually once a week) to interact in a discussion of the selected article or topic. The goal of this course is to maintain the faculty's and students' level of information at a "state of the art" in both methods and theory in the discipline and to develop critical skills in reviewing the literature.

**IDL 577 Intro to Research Methods** 3 cr  
Theoretical and practical training in basic skills utilized in basic medical science research laboratories, for students entering the first year interdisciplinary curriculum. Discussion of regulatory issues in biomedical research will be interwoven with hands-on laboratory exercises. Offered concurrently with IDL 580.

**IDL 580 Fund Basic Medical Sciences I** 8 cr  
First of a two-semester sequence designed for students in the first year interdisciplinary curriculum. In-depth exploration of the fundamentals of biochemistry, cell biology, and molecular biology prerequisite to advanced study of basic medical sciences. Didactic lectures will be complemented with discussions of the literature.

**IDL 581 Fund Basic Medical Sciences II** 8 cr  
Second of a two-semester sequence designed for students in the first year interdisciplinary curriculum. Detailed exploration of the fundamentals of microbiology and immunology, developmental biology, integrative systems physiology, and mechanisms of drug action prerequisite to advanced study of basic medical sciences. Didactic lectures will be complemented with discussions of the literature.  
Pre-requisite: IDL 580 Minimum Grade of C

**IDL 590 Interdisciplinary Sp Top -** 1 TO 3 cr  
In-depth tutorial exposure to interdisciplinary topics in Basic Medical Sciences.

**IDL 594 Interdisciplinary Dir Studies** 1 TO 6 cr  
Directed research study under the direction of a member of the graduate faculty. This course should be taken by students who have not yet identified a major professor in Basic Medical Sciences.

**IDL 595 Distinguished Scientist Sem** 0 cr  
A seminar course in which outside speakers are brought in to discuss their research. Students will attend the seminar and have an opportunity to meet informally with the speaker. Attendance will be required, and the material will be testable during each student's qualifying exam.

**IDL 620 Biomedical Engineering I** 4 cr  
Fundamental concepts of medical instrumentation, biomedical imaging and biological systems modeling as used in biomedical engineering. Course is cross-listed with EG 620.

- IDL 621 Biomedical Engineering II** 4 cr  
Fundamental concepts of transport phenomena, cellular and tissue mechanics, and materials as used in biomedical engineering. Course is cross-listed with EG 621.
- IDL 630 Lung Biology** 4 cr  
This course introduces an advanced level of lung physiology. An understanding of fundamental lung development, anatomy, and cell and organ physiology is emphasized. The course consists of lectures and written assignments and essay exams. Reading assignments are from the primary literature.  
Pre-requisite: IDL 580 Minimum Grade of C and IDL 581 Minimum Grade of C
- IDL 631 Lung Pathobiology** 4 cr  
This course builds on an in-depth understanding of normal lung biochemistry, cell biology, pharmacology, and physiology to examine lung disease. Emphasis is given on understanding mechanism(s) underlying the genetic, cell biology, anatomy and physiology of disease development and progression. Current therapeutic interventions are discussed. Clinical correlations are utilized to track signs and symptoms of specified diseases, and provide a framework for treatment options. The course consists of lectures and written assignments and essay exams. Reading assignments are exclusively from the primary literature.  
Pre-requisite: IDL 630 Minimum Grade of C
- IDL 635 Advanced Signal Transduction** 4 cr  
This course builds on signal transduction topics discussed in the Fundamentals course (IDL 580, 581). The mechanisms of more generalized signaling pathways (e.g., G-protein couples pathways) to specific signaling pathways (e.g., TGF/BMP family) will be discussed. Signal transduction pathways will be examined using classic literature references, from the molecular details of pathway components to the effects on the organ-system. The course consists of lectures, student presentations, and essay/problem solving examinations.  
Pre-requisite: IDL 580 Minimum Grade of C and IDL 581 Minimum Grade of C
- IDL 640 Stat Exp Design in Biomed Res** 2 cr  
This course covers statistical analysis, logic and hypothesis-driven experimental design in biomedical research, utilizing a combination of lectures, weekly practical data sets or written assignments, and student presentation.
- IDL 641 Effective Scientific Writing** 1 cr  
This course provides strategies to improve communication skills via construction of logical scientific arguments and effective writing. Course format will include lecture/discussion, in class practical exercises, and writing assignments. In addition, participants will be introduced to the Turnitin software, reference databases, and other electronic resources useful in preparation of proposals and manuscripts.  
Pre-requisite: IDL 580 Minimum Grade of C and IDL 581 Minimum Grade of C
- IDL 645 Res Prog Smth Musc/Vasc Blgy** 1 cr  
Students meet on alternate weeks for 2 hr with faculty and other research professionals to discuss on-going research projects in the field of smooth muscle and vascular biology. Signal transduction pathways, pathophysiological mechanisms in vascular disorders associated with smooth muscle, and other topics of interest will be discussed. Emphasis will be on up-to-date research results from laboratories as well as newly published literature findings. Students will be expected to present the results of their own laboratory research at least once a year to the group.
- IDL 650 Topics in Lung Biology** 1 cr  
In-depth exposure to selected topics in lung biology or pathobiology. Course may be repeated for credit when course content varies.  
Pre-requisite: IDL 630 Minimum Grade of B and IDL 631 Minimum Grade of B
- IDL 656 Research Sem Lung Biology** 1 cr  
Students and faculty present a research topic for discussion before members of the Center for Lung Biology. The presentations are usually scheduled on a rotational basis. The student may present research data for critique by the faculty.
- IDL 667 Cancer Biology Research Sem** 1 cr  
Students and faculty present a research topic for discussion before members of the department. The presentations are usually scheduled on a rotational basis. The student may present research data for critique by the faculty.
- IDL 676 Literature Report Lung Biology** 1 cr  
Students and faculty participate in a supervised reading of the current literature and meet once a week to discuss the selected article or topic and its relation to ongoing research. The goal of this course is to maintain the faculty's and students' level of information at a "state of the art" in both methods and theory in the discipline and to develop critical skills in reviewing the literature of lung biology.
- IDL 799 Research-Dissertation** 1 TO 6 cr  
Independent research by the student under the sponsorship of the graduate faculty in individual departments in the Basic Medical Sciences. Prerequisite: Approved formal research proposal

## Interdisciplinary Programs (IDS)

- IDS 290 Special Topics** 1 TO 3 cr  
A study of selected topics of an interdisciplinary nature. May be repeated for credit when content varies. Requires permission of instructor.

**IDS 490 Special Topics** 1 TO 3 cr  
Advanced study of selected topics of an interdisciplinary nature. May be repeated for credit when content varies. Requires permission of instructor.

**IDS 590 Sp Top** 1 TO 9 cr  
Specialized topics not generally listed in the course offerings. Requires consent of Graduate Director.

## Interdisciplinary Studies (IST)

**IST 100 Freshman Seminar** 2 cr  
A course for first-time students that assists with maximizing the student's potential to achieve academic success and to adjust responsibly to the individual and interpersonal challenges presented by college life. The course provides an introduction to the nature of higher education and a general orientation to the functions and resources of the University. Extensive reading and writing assignments relevant to the student's first year experience are required.

**IST 101 Foundations of Inter Studies** 3 cr  
This course will assist students with clarifying educational goals, understanding effective learning methods, and becoming acquainted with university resources, diversity, and culture. It introduces students to basic theories and principles of education and development, with emphasis on liberal education. The focus is to develop written and oral skills to enhance students' critical thinking and problem solving abilities. Assists students in defining competencies needed for success in academic study, professional leadership, and career opportunities. Students will develop a working knowledge of Sakai, Skype and WebEx.

**IST 105 Encounter with the Humanities** 3 cr  
Introduction to the various disciplines within the Humanities with emphasis on the role each plays in a liberal arts education. Identical with CLA 105. Credit cannot be received for both CLA 105 and IST 105.

**IST 110 Encounter the Natural Sciences** 3 cr  
Introduction to the various disciplines within the natural sciences with emphasis on the role each plays in a liberal arts education.

**IST 115 Encounter the Social Sciences** 3 cr  
Introduction to the various disciplines within the social sciences with emphasis on the role each plays in a liberal arts education.

**IST 120 Encounter Fine Performing Arts** 3 cr  
Introduction to the various disciplines within the fine arts with emphasis on the role each plays in a liberal arts education.

**IST 125 Professional Conduct** 3 cr  
Introduces students to primary sources in ethical theory and includes readings and discussions of theories of human nature. Provides a basis for understanding one's rationale for personal moral decisions and offers a foundation for an approach to the ethics of business.

**IST 200 Clinical Observation** 1 cr  
Clinical Observations (Medicine, Dentistry, Optometry, and Veterinary Medicine). This course gives the student clinical exposure to various health-care services. It is designed to help students make informed decisions when selecting a career in the health professions. A written report on the clinical experience or a scenario dealing with medical ethics is required. May be repeated for a maximum of six hours credit. Prereq: Permission of Chair of Preprofessional Advisory Committee.

**IST 201 Seasons of Life** 3 cr  
An interdisciplinary media-assisted course in which students study human development from the biosocial, cognitive, and psychosocial perspectives with special emphasis on the adult years. Through readings, audio, written exercises, and class discussions, students explore the theories and research findings of life span development which enable them to reflect on their own lives as well as the lives of others.

**IST 210 Introduction to Disability** 3 cr  
This course will provide students from any discipline the opportunity to develop the knowledge and skills needed to effectively work with people with disabilities in a variety of settings. Disability is examined as a type of diversity. Topics include: the history and sociological context of disability; the impact of disability on the individual and family; advocacy and civil rights; current trends in services and supports for children and adults with disabilities; and respectful language and interaction. Students will actively engage in readings, discussions, and writing on disability issues. Pre-requisite: EH 102 Minimum Grade of C or EH 105 Minimum Grade of C

**IST 250 Career Planning and Develop** 3 cr  
Principles, methods, and practice in career planning and development with an emphasis on career information, self-analysis, exploration of careers, career opportunities, and guidelines for goal achievement.

**IST 290 Special Topics -** 1 TO 3 cr  
A variable topics course treating special themes. May be repeated for credit when course content varies.

**IST 294 Directed Studies -** 1 TO 3 cr  
Directed study of a topic consistent with the student's individualized program under the supervision of a member of the university faculty.

- IST 300 Global Orientn-Ed Abroad** 1 cr  
Study Abroad applicants will prepare for their study abroad experience through an examination of selected country-specific reading as well as cross-cultural orientation materials. Travel safety, University of South Alabama policies and procedures for study abroad, and advice for cultural adjustment will be covered during the course. IST 300 satisfies the requirements of LG 394.
- IST 302 Interdis and Critical Thinking** 3 cr  
Provides students an introduction to the field of interdisciplinary studies and an opportunity to critically reflect on the experience of self, education, and career and the relationship among these three phenomena.
- IST 305 Issues in Human Services** 3 cr  
An interdisciplinary course for students who plan to work in the helping professions (counseling, social work, nursing etc.). Guest speakers from various disciplines present information about their fields. Discussion topics include: similarities and differences in the helping professions, the helping relationship, empathic communication, multicultural and legal issues, and stress and burnout management.
- IST 310 Global Leadership** 3 cr  
This course helps prepare students to assume global leadership roles in their careers and the community at large. Students explore leadership theories and principles as well as investigate leadership qualities among historical and contemporary individuals. In addition, students confront present-day global issues and argue viewpoints orally, as well as through persuasive and technical papers. Students are expected to complete an interdisciplinary project based on global issues.  
Pre-requisite: ACT English 27( or SAT Critical Reading 550 or University - EH101 Exempt P or EH 101 Minimum Grade of C or EH 110 Minimum Grade of C or EH 190 Minimum Grade of C or USA 010 Minimum Grade of S) and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)
- IST 315 Women's Issues in Wrkpl-Comm** 3 cr  
This course will examine contemporary issues faced by women in the workplace and the community from an interdisciplinary perspective. Some of the topics to be covered are gender communication issues, developing a leadership plan, playing the game, power talk, conflict management from a woman's point of view, international development, and women, sexuality and labor.
- IST 320 Cultural Competency** 3 cr  
An interdisciplinary exploration of issues related to interactions between diverse groups in teams, communities, and organizations. Reviews research from a variety of disciplines, introduces the history and law of equal opportunity in the U.S., and examines the costs and benefits of diversity. Topics include prejudice, stereotyping, affirmative action, barriers to mobility, discrimination, marginalization, mentoring, cooperative teamwork, and international issues.
- IST 330 Analytical & Info Literacy** 3 cr  
This course examines principles of qualitative and quantitative research methods and their application to interdisciplinary studies in the social sciences. Emphasis is on the development of functional literacy for information expressed quantitatively and thoughtful integration of such information into academic and practical research.
- IST 350 Adv Verbal & Written Comm - W** 3 cr  
This course builds on the foundation laid in freshman composition, stressing critical thinking, analysis, and research. It aims to prepare students oral presentations, research and writing papers.
- IST 401 Adults in Society** 3 cr  
Adults in Society is a media-assisted course that uses print material, videos, written assignments, and class discussions to explore issues which relate to adult development. Using an interdisciplinary approach, students will examine the relationship of adults to their families, work and communities.
- IST 405 Issues Ideas - Humanities** 3 cr  
Identification and analysis of current concepts and problems in the humanities and their relation to the needs, values, and operation of modern society.
- IST 410 Issues and Ideas-Nat Science** 3 cr  
Identification and analysis of current concepts and problems in the natural sciences and their relation to the needs, values, and operation of modern society.
- IST 415 Issues Ideas - Social Sciences** 3 cr  
Identification and analysis of current concepts and problems in the social sciences and their relation to the needs, values, and operation of modern society.
- IST 420 Comm. Dev and Leadership** 3 cr  
Presents the conceptual foundations of community development and leadership, including basic concepts, methods and literature. Students will study theories of leadership, community development and human capital, investigate public relationships, examine community decision-making and responsible civic action. The course lays foundations for further study and practice in the field. Students will experience the interdisciplinary approaches to community development, leadership, politics, civic responsibility and teamwork.
- IST 425 Workplace Learning & Dev** 3 cr  
This project-based course explores workplace learning and development. It will introduce students to interdisciplinary learning and motivational theories necessary to prepare them to be effective in today's changing workplace, and provide them with the skills to problem-solve, lead and work as part of a team.

**IST 430 Senior Research Thesis - W 3 cr**

An in-depth research project in the student's concentration. Provides an opportunity for the student to design a comprehensive research project, analyze and synthesize research data, and develop expertise in a particular subject.

**IST 450 The Job Campaign 3 cr**

Practical approach to career development designed to help students develop strategies for obtaining suitable employment and making career choices. Emphasis is on the principles, methods, and practice in achieving career goals through the study of careers, preparing resumes, writing letters of application, practicing job interview techniques, and identifying prospective employers.

**IST 490 Special Topics - 1 TO 6 cr**

A variable topics course treating special themes. May be repeated for credit when course content varies.

**IST 494 Directed Study - 1 TO 3 cr**

Directed Study of a topic consistent with the student's individualized program under the supervision of a member of the university faculty.

**IST 495 Prof Leadership & Teamwork 3 cr**

Students will examine their skills, abilities, personality, attitudes, values, interests, and behaviors within the context of current scholarship on leadership to increase awareness of their leadership competencies.

**IST 498 Internship I-Capstone Exp-W 3 cr**

This internship course provides the student an opportunity to have an internship field experience and to reflect on and critically evaluate that internship experience, particularly as it relates to the interdisciplinary course of study. Students will prepare reports, write papers, make presentations, and engage in group discussion that critically considers their internship experience.

**IST 499 Honors Senior Thesis - H-W 3 TO 6 cr**

A substantial research project reflecting a commitment to genuine scholarship in the student's field of study. Provides an opportunity for the student to design a comprehensive research project, analyze and synthesize research data, and develop expertise in a particular subject. Fulfills the senior project requirement for the honors program.

**IST 500 Global Orientn-Ed Abroad-Grad 0 TO 1 cr**

This is a pre-departure academic and orientation process course for all graduate students who plan on studying abroad in terms following their participating in this course. This course will facilitate the application, academic advising, pre-departure advising, and activities related to getting students ready for participation in their actual program abroad.

**IS 100 Global Issues 3 cr**

This course introduces students to the basic structural components of the global system, including the nation-state system and the world economy, and explores the major schools of thought in such areas as security, economic prosperity and development, international law, gender and environmental studies. The course helps students understand the complex and interlinked issues facing global society, and current problems, and view the U.S. within a broader global context.

**IS 200 People-Nations - 3 cr**

Variable content course focusing on particular nation or region of the world. Course offers a multi-disciplinary introduction to the people, society and politics. May be repeated for credit when content varies up to a total of 6 hours.

**IS 210 Global Engagement Orientation 1 cr**

Global Engagement Capstone is required for students completing the Global Engagement Certificate (GEC) and is designed to introduce students to international issues and relevant topics. Students will also outline their individualized program of study required to complete the GEC as part of the course.

**IS 290 Special Topics - 3 cr**

Study of selected topics within a particular Area Studies Concentration. May be repeated for credit when content varies.

Pre-requisite: IS 100 Minimum Grade of D

**IS 390 Sp Top- 1 TO 3 cr**

Advanced study of selected topics within a particular concentration. May be repeated for credit when content varies.

**IS 391 Study Abroad - 0 TO 15 cr**

Study of selected topics within a particular Area Studies Concentration. May be repeated.

**IS 410 Global Engagement Capstone 1 cr**

Global Engagement Capstone is required for students completing the Global Engagement Certificate (GEC), and is a one hour course designed to help students reflect on the 16 hours of coursework and nine hours of globally engaged activities they have completed. Students will create a portfolio during the course, which will be presented to students and affiliated faculty at its conclusion.

Pre-requisite: IS 210 Minimum Grade of P

**IS 490 Special Topics - 3 cr**

Advanced study of selected topics within a particular Area Studies Concentration. May be repeated for credit when content varies.

Pre-requisite: IS 100 Minimum Grade of D

## International Studies (IS)

**IS 492 Seminar - 3 cr**

Advanced study of selected topics in international studies from a comparative perspective. May be repeated for credit when content varies.

Pre-requisite: IS 100 Minimum Grade of D

**IS 494 Directed Studies - 1 TO 3 cr**

Directed research in the field of international studies. May be repeated or credit up to a total of 9 hours. Prerequisite: permission of IS Director

**IS 495 Senior Seminar - W 3 cr**

The course seeks to provide an interdisciplinary and cross-regional overview of the fields and research opportunities within international studies.

Pre-requisite: EH 102 Minimum Grade of C

**IS 496 Prof St Internship - 3 TO 9 cr**

Practical learning experiences through occupational or professional work with an approved international organization, governmental agency, or international business Prerequisite: Permission of IS Director

**IS 499 Senior Honors Thesis 3 cr**

The course covers major theoretical perspectives in organizational psychology based on empirical research and case studies. Students will explore learning theory, group dynamics, and change in different types of learning organizations.

Pre-requisite: (EH 102 Minimum Grade of D or EH 105 Minimum Grade of D)

**IS 591 Study Abroad 0 cr**

Graduate level international exchange programs for University of South Alabama students.

## Leadership And Teacher Educ (LTE)

**LTE 645 Curriculum Leadership 3 cr**

A purpose of this course will be to prepare professional educators through teaching, research and services to become committed to life-long learning and to facilitating the process of building better communities.

**LTE 646 Community Leadership 3 cr**

This course will prepare future teacher leaders to work effectively within their school community as well as with the communities in which they work and with the families of the students they teach.

**LTE 647 Instructional Coaching 3 cr**

A purpose of this course is to prepare professional educators through teaching, research, and service to become committed to life-long learning and to facilitate the process of building better communities. Students will demonstrate best educational practices and professional dispositions and will learn how to create a positive, motivational learning environment in schools while recognizing, appreciating, and including diverse learners and perspectives. Additionally, students are expected to demonstrate satisfactory skills in curriculum leadership; to engage in action research related to schools; to engage in literacy coaching; to address current family, community, regional, and national issues related to scholastic achievement, and to use tenets of instructional leadership to guide teachers and other professionals toward improving student achievement.

**LTE 699 Research Project 1 TO 3 cr**

The Research Project, as the culminating experience in the Instructional Specialist Program, provides the candidate an opportunity to synthesize and apply program components and a timely topic in the field.

Pre-requisite: IDE 692 Minimum Grade of B or EDU 692 Minimum Grade of B

## Leisure Studies (LS)

**LS 191 Intro to Leisure Studies 3 cr**

An introduction to the Leisure Services profession; its history, philosophies, and the psychology of leisure in the changing society. Includes an orientation to community leisure agencies.

**LS 194 Leisure Crafts 3 cr**

Adapting various crafts media for use in recreational programs. Design and execution of creative crafts with emphasis on use of indigenous materials.

**LS 276 Introduction to Sport Mgt 3 cr**

A study of the activities, organizations, and businesses involved in producing, facilitating, and organizing sport, fitness, and recreation related products and services.

**LS 280 Hospitality Services 3 cr**

A study of hotel/motel resort services. Includes an overview of recreation services, food and beverage, guest services, marketing, housekeeping, maintenance, and fiscal concerns.

**LS 292 Outdoor Recreation-Adventure 3 cr**

A classroom introduction to a wide range of outdoor recreation pursuits with an emphasis on safety, minimum impact, and "how to get started" in outdoor activities like backpacking, canoeing, rafting, car camping, hiking, and others.

- LS 295 Intro to Therapeutic Rec** 3 cr  
Introduces students to the field of therapeutic recreation including the history, foundations, and philosophy of the field. In addition, characteristics and leisure needs of numerous special populations will be introduced.
- LS 297 Campus Recreation** 3 cr  
Planning, organization, and leadership of intramural recreation and community sport activities.
- LS 298 Field Work in Leisure Studies** 3 cr  
Opportunity to gain leadership experience in leisure studies settings.
- LS 300 Global Tourism** 3 cr  
Examination of the impact of recreational socio-cultural, economic, physical environment and governmental factors on leisure travelers within the global tourism industry.
- LS 375 Mgmt in Therapeutic Recreation** 3 cr  
Management and organization of therapeutic recreation programs including professional and agency standards, staff development, internship and credential requirements, fiscal planning, continuous quality improvement, equipment maintenance, advocacy, and public relations.  
Pre-requisite: LS 295 Minimum Grade of D
- LS 384 Sports Marketing** 3 cr  
An examination of marketing and media concepts and theories applied to the sport industry. Content areas include basic marketing, target marketing and segmentation, advertising and sponsorships, event marketing and promotions, branding, public relations, social media, consumer behavior research, sponsorship proposals, and sport marketing plans.
- LS 391 Leadership in Leisure Studies** 3 cr  
Theories, principles, and philosophies of leadership as applied to the delivery of leisure services. Also includes a study of programming principles and techniques.
- LS 394 Sport Business and Finance** 3 cr  
This course provides undergraduate students with an introduction to investment valuation and key financial concepts of sport related entities. Students will develop revenue generating insight and budgeting knowledge of actual situations occurring in the sport and recreation industry. Topical areas covered include capital budgeting, facility financing, corporate sponsorship, salary structures, franchise valuations, and personal business transactions.
- LS 395 Therapeutic Rec Process (W)** 3 cr  
This course introduces the comprehensive program planning process and the elements of assessment and documentation in a variety of therapeutic recreation service settings. A field work component may be required.  
Pre-requisite: LS 295 Minimum Grade of D
- LS 397 Intergenerational Rec/Wellness** 3 cr  
This course is an intergenerational experience combining theory and practice in aging and recreation. Students utilize the therapeutic recreation process (assessment, program planning, implementation and evaluation) with older adults who have special needs, to promote health, wellness, and rehabilitation.
- LS 465 TR Prog Des & Interventions I** 3 cr  
This course provides a examination of Therapeutic Recreation interventions and the role of research and theory in influencing practice. Course topics include: activity analysis, programming techniques, scope of service, intervention descriptions, historical perspectives, current research, and theoretical foundations related to TR intervention. A field work component of 40 hours is required that will allow students to gain experience implementing TR programs.  
Pre-requisite: LS 295 Minimum Grade of D
- LS 466 TR Prog Des & Interventions II** 3 cr  
This course examines modalities and issues in therapeutic recreation practice with the primary emphasis on leisure education, scope of service, nature of populations served, systematic programming, activity analysis and documentation of results. The course also addresses contemporary problems and issues in therapeutic recreation, and acquiring knowledge of medical terminology and therapeutic drugs.  
Pre-requisite: LS 295 Minimum Grade of D
- LS 467 TR for Phys Disabilities** 3 cr  
This course will familiarize the student with the etiology, characteristics, and course of treatment provided to individuals with various physically disabling conditions, and promote awareness of the role of therapeutic recreation in the physical rehabilitation process. A field work component of 40 hours is required.
- LS 468 Facilitation Techniques in TR** 3 cr  
Assessment, documentation, and practical application of facilitation techniques in therapeutic recreation. Students will be required to prepare for, and assist, in the implementation of therapeutic recreation programs with regional organizations. Special permission of the instructor is required.
- LS 469 TR for Pysch Impairments** 3 cr  
This course will familiarize students with etiology, characteristics, and course of treatment provided to individuals with psychological impairments and developmental disabilities and promote awareness of the role of therapeutic recreation in the habilitation/rehabilitation process. A field work component of 40 hours is required.

- LS 471 Evaluation & Research in LS-W** 3 cr  
This course offers an overview of the research and evaluation process in recreation and leisure studies. The first part of the course will emphasize the scope, meaning, and basic concepts of scientific research including aspects of research design. The second part of the course will focus on the application of the basic skills in a practical context in the environment of leisure studies.
- LS 472 Legal Issues in Sports/Rec - W** 3 cr  
This course introduces students to the legal liabilities, negligence, contractual agreements, and risk management issues pertaining to the areas of sport, recreation, and physical activity.
- LS 479 Leisure and Aging** 3 cr  
This course will provide an overview of the changes affecting the psychomotor, cognitive and affective domains of the aged; implications of leisure and retirement; and institutional and community settings that provide leisure services for the older adult.
- LS 480 Private and Commercial LS** 3 cr  
A survey of private and commercial leisure service operations including a study of resort operations.
- LS 481 Tourism & Resort Development** 3 cr  
Tourism and recreational travel; nature of resort development and its effect on generating tourist flow to and within regions. Economic importance of both tourism and resort development.
- LS 483 Issues in Leisure Studies** 3 cr  
A study of major trends, problems, and issues in various areas of Leisure Services.
- LS 486 Sport/Rec Facility Plan/Design** 3 cr  
This course will familiarize students with the basic methodologies, objectives, and principles applied to the design and strategic planning of sport and recreation service facilities. It includes the examination and implementation of guidelines used to create a facility planning brief.
- LS 490 Sp Top -** 3 cr  
Selected topics in leisure studies. Topics will vary according to needs and interests of students. Course may be repeated for credit when content varies.
- LS 492 Outdoor Ed and Interpretation** 3 cr  
Theories, philosophies, and principles of outdoor education with emphasis on the development of interpretive programs.
- LS 496 Sport and Rec Resource Mgt** 3 cr  
A study of event and facility resource management in sport and recreation. Applies the functions of management to the supervision, operation, development, evaluation, and financing of sport and recreation facilities in public and private environments.
- LS 498 Internship in Leisure Studies** 0 TO 12 cr  
Supervised experiences in an assigned leisure studies or related agency. HPELS advisor approval required.
- LS 569 Leisure and Society** 3 cr  
An exploration of the economic, religious, political, and socio-cultural factors which influence leisure behavior in modern society.
- LS 570 Procedures in TR I** 3 cr  
Procedures in Therapeutic Recreation I was designed to prepare the graduate student for the more complex areas of present day professional issues and service provision including: an in-depth analysis of historical and philosophical influences, therapy and facilitation techniques, quality management, ethics, standards of practice, clinical supervision, healthcare reimbursement and professional credentialing.
- LS 571 Procedures In TR II** 3 cr  
This course is designed to familiarize the graduate student with the therapeutic recreation process. Content areas will include analyzation of assessment procedures, sources and processes, treatment planning, interdisciplinary procedures, medical record documentation, activity-based interventions, and evaluation of program effectiveness.
- LS 573 Issues and Trends in LS** 3 cr  
An in-depth examination of current issues and trends in leisure studies with respect to their impact on the profession and society.
- LS 576 Conceptual Foundations of TR** 3 cr  
Designed to introduce the student to the field of therapeutic recreation including philosophy, history, current issues and trends, administration and program development. The course will also provide an overview of various disabling conditions.
- LS 580 Internship in Leisure Studies** 3 TO 9 cr  
An individually planned practicum experience in an approved leisure studies setting. Requires a minimum of 150 work hours per 3 hours of credit. HPELS advisor approval required.
- LS 585 Mgmt in Leisure Studies** 3 cr  
An in-depth examination into the research, foundations, and functions in the delivery of leisure services, including current practices in management of fiscal procedures, budgeting, and grants.
- LS 590 Sp Top -** 3 cr  
A varying-content course treating various aspects of Leisure Studies. May be repeated for credit when course content varies.
- LS 591 Travel and Tourism** 3 cr  
A survey course designed to provide students with an overview of travel and tourism as an area of study. Discussions will center on tourism at the macro (regional and national) level. Tourist behavior, the social, environmental and economic impact of tourism will be highlighted.

**LS 592 Outdoor Rec - Adventure Prog 3 cr**

Study and practicum in popular adventure activities (e.g, shooting sports, angling, backpacking, orienteering, rock climbing, canoeing). Emphasis on attitudes, skills, environmental awareness, teaching methodology, and principles of group leadership as they relate to adventuresome activities.

**LS 596 Special Projects 3 cr**

An individually planned experience whereby a student conceptualizes and researches a special problem relevant to the leisure services profession. Students will share their experiences in a weekly seminar (non-thesis option),

## Management (MGT)

**MGT 300 Management Theory and Practice 3 cr**

Theories of organizational structures, practices, and behavior, and the effective management of organizations. Emphasis on developing patterns and strategies of organizational management in a dynamic environment as affected by the interaction of material and human resources using the technique of applied social and management sciences.

**MGT 305 Organizational Comm - W 3 cr**

A study of written and oral communication of organizations. Emphasis is given to communication theory, including organization flows and barriers to organizational communication. The preparation of neutral, negative, and persuasive written messages as well as formal written reports is covered in depth. In addition, oral presentations and employment interviews are discussed.  
Pre-requisite: (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**MGT 311 Legal Environ of Bus II 3 cr**

An advanced treatment of the law of agency, commercial transactions, business organizations, property, negotiable instruments, secured transactions, professional liability, debtor-creditor relations, including applicable sections of Uniform Commercial Code.  
Pre-requisite: BUS 265 Minimum Grade of D or (MGT 310 Minimum Grade of D or BMS 422 Minimum Grade of D or MGT 332 Minimum Grade of D or MGT 422 Minimum Grade of D)

**MGT 325 Operations Management 3 cr**

Addresses concepts, problems, and managerial approaches applicable to the management of manufacturing and service operations. The course will examine the strategic and tactical considerations that are involved in creating a systematic framework that supports the creation of competitive advantages through effective operations and the production of high quality products. Topics covered include the role of operations in the overall organization, operations strategy development and implementation, product design and process selection, location and capacity planning, facilities layout, quality management, inventory management, production planning, scheduling and control, and project management. An important component of the overall course is the incorporation of computer applications for problem solving and decision making in operations.  
Pre-requisite: (MGT 300 Minimum Grade of D or BMS 322 Minimum Grade of D or MGT 322 Minimum Grade of D) and (BUS 255 Minimum Grade of D or BMS 250 Minimum Grade of D or BMS 255 Minimum Grade of D or BMS 300 Minimum Grade of D or ST 275 Minimum Grade of D)

**MGT 334 International Mgt 3 cr**

This course exposes students to the challenges that confront the managers of organizations & individuals in global settings. Special focus is on dealing with and benefitting from the diversity that exists across international cultures, markets, economics, governments, and organizations  
Pre-requisite: MGT 300 Minimum Grade of D or MGT 322 Minimum Grade of D

**MGT 340 Organizational Behavior - W 3 cr**

A study of human and group behavior in the workplace and within society. The focus is on individual characteristics and processes such as personality, perception, and motivation; interpersonal processes such as group behavior, leadership, communication, and decision making; and organizational processes such as culture, structure, power, and change.  
Prerequisite: Junior Standing.  
Pre-requisite: (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C) and (MGT 300 Minimum Grade of D or BMS 322 Minimum Grade of D or MGT 322 Minimum Grade of D) and (MGT 305 Minimum Grade of D or MGT 324 Minimum Grade of D)

**MGT 345 Creativity and Innovation 3 cr**

This course provides a broad framework for understanding the nature of entrepreneurship in multiple organizational settings. The course introduces students to the innovation and idea generation process and helps students determine the most desirable educational path for them to achieve their career goals. Sophomore standing.

**MGT 347 Franchising 3 cr**

This course is designed for students who are interested in learning about the opportunities and threats that abound in the modern world of franchising. Students will study existing franchising from both a historical and theoretical context. The logic of this course is that franchising is one of the development models that minimize risk for the "small business" focused student. Some franchising oriented people may want to start a franchise and grow it rapidly. This option is often a first step into business ownership for inexperienced owners. We discuss the applicability, opportunities, challenges, and implementation of the franchising model for expanding existing businesses. The format consists of case study and lecture discussion sequenced with extensive background readings, occasional guest lecturers, and a term case-based project culminating in a transactional plan.

**MGT 351 Human Resource Management 3 cr**

Principles, policies, and practices used to develop a sound human resource management program in the business organization. Among the topics included are job analysis, employment, organization development, employee development and evaluation, wage and salary administration and labor relations.  
Pre-requisite: MGT 300 Minimum Grade of D or MGT 322 Minimum Grade of D

**MGT 355 Leg & Fin Aspects of Entrepren 3 cr**

This course provides an overview of the legal and financial issues most frequently encountered by entrepreneurs and others involved in start-ups and small closely held, or family businesses. The course covers various aspects of financing and entrepreneurial venture. Major topics attracting seed and growth capital from sources such as venture capital, investment banking, government, and commercial banks; creating, protecting and leveraging intellectual property. Among the issues discussed are valuing a company, going public, selling out, acquisitions, bankruptcy, different legal forms or organizations, partnerships, and taxes.

**MGT 356 Strategic Issues in Family Bus 3 cr**

This course examines a new discipline that has developed in the last ten years and focuses on the unique aspects of family businesses. Organizational behavior, law, finance, operations, and basic small business concepts are being integrated into this course. Students will have an opportunity to consult with and develop transition plans for a family firm in a live field project.

**MGT 357 Leadership 3 cr**

This course includes a review of traditional as well as current thinking in Leadership theory. Students will complete several self-assessment exercises designed to assess one's leadership style and ability as a leader. A series of successful leaders will be studied in-depth. Prerequisite: Junior or senior standing.

**MGT 365 New Venture Creation 3 cr**

How new businesses are organized and planned. Objectives are: 1) understanding the knowledge, skills and abilities required of entrepreneurs, 2) creating and developing opportunities for new ventures, and 3) planning resources to convert those opportunities into businesses. Students work in teams to develop a business plan for a new venture they have chosen.  
Pre-requisite: MGT 345 Minimum Grade of D and MGT 355 Minimum Grade of D

**MGT 390 Total Quality Management 3 cr**

Total Quality Management (TQM) is a management philosophy which emphasizes customer focus, continuous improvement, and employee involvement throughout the organization. This course is an introductory course which examines these components and their integration into a comprehensive quality management system.  
Pre-requisite: (MGT 300 Minimum Grade of D or MGT 322 Minimum Grade of D) and (MGT 325 Minimum Grade of D or MGT 396 Minimum Grade of D or BMS 384 Minimum Grade of D)

**MGT 430 Operations Research 3 cr**

Reviews selected operations research concepts; nonlinear optimization methods, linear programming; dynamic programming; model building; and simulation methods. The student is expected to understand the concepts of operations research and to be able to use computer procedure to solve problems.  
Pre-requisite: MGT 325 Minimum Grade of D or MGT 396 Minimum Grade of D or BMS 384 Minimum Grade of D

**MGT 441 Service Operations 3 cr**

This course will provide students the opportunity to learn about service operations management, including service strategies and operations considerations and imperatives for service enterprises and how service systems are structured and operated. Students will also learn about various tools and techniques for managing service operations such as how to forecast service demand, determine capacity requirements, schedule activities, coordinate operations, plan and schedule service activities, and evaluate system performance.  
Pre-requisite: (MGT 325 Minimum Grade of D or BMS 384 Minimum Grade of D or MGT 396 Minimum Grade of D)

**MGT 450 Organizational Staffing 3 cr**

A detailed study of the function of employee staffing in a modern work organization. Emphasis on job analysis, criterion development, development and use of employment tests, validation of selection techniques, and statistical methods for making fair employment decisions. Course work includes a comprehensive staffing project.  
Pre-requisite: MGT 351 Minimum Grade of D and (BUS 245 Minimum Grade of D or ST 175 Minimum Grade of D or BMS 245 Minimum Grade of D or BMS 250 Minimum Grade of D or ST 210 Minimum Grade of D)

**MGT 451 Employee Training -Development 3 cr**

An applied course which details the training and development function. Content areas of job analysis, training needs analysis, training program development and implementation, and program evaluation will be incorporated in a comprehensive training and development project.

Pre-requisite: MGT 340 Minimum Grade of D and MGT 351 Minimum Grade of D

**MGT 452 Employment Law 3 cr**

Analysis of significant workplace torts and laws regulating the employment relationship including: Title VII, FMLA, AOA, ADEA, FLSA, OSHA and related state laws. Emphasis on federal legislation and developing case law.

Pre-requisite: MGT 351 Minimum Grade of D and (BUS 265 Minimum Grade of D or MGT 310 Minimum Grade of D or MGT 332 Minimum Grade of D or MGT 422 Minimum Grade of D or BMS 422 Minimum Grade of D)

**MGT 454 Compensation Administration 3 cr**

A study of the fundamentals of compensation administration in organizations. Topics include job analysis, KSA determination, job evaluation, wage structure development, incentive pay systems, legal aspects of compensation and new developments in compensation. Comprehensive course project required.

Pre-requisite: MGT 351 Minimum Grade of D

**MGT 455 Labor - Management Relations 3 cr**

An examination of the organizing, negotiation, and contract administration phases of union-management relations. Case analyses, federal legislation and case law in labor relations, significant current issues, and a collective bargaining simulation are featured.

Pre-requisite: MGT 351 Minimum Grade of D

**MGT 460 Organiz Development and Change 3 cr**

Provides insight into the theory and practice of organization change and development. It bridges the gap between theory and practice and emphasizes the process of improving both organizations and individuals. Topics covered encompass understanding organizations and how they change, intervention strategies and methods for improving organizations, quality of work-life approaches and strategic considerations in system-wide change.

Pre-requisite: MGT 300 Minimum Grade of D or MGT 322 Minimum Grade of D

**MGT 462 Negotiatn/Disp Resolutn in Bus 3 cr**

This course provides theoretical background and practical applications in business negotiation, conflict management, and alternative dispute resolution. Areas covered include positional and interest-based bargaining, business and employment arbitration, organizational conflict management strategies, mediation, and effective communications for negotiators and ADR participants.

Pre-requisite: (MGT 300 Minimum Grade of D or BMS 322 Minimum Grade of D or MGT 322 Minimum Grade of D)

**MGT 470 High Performance Organizations 3 cr**

Course examines the role of organization culture, leadership, employee involvement, work teams, and human resource practices in developing and sustaining high performance organizations that practice the principles of total quality management. Senior Standing.

Pre-requisite: (MGT 300 Minimum Grade of D or MGT 322 Minimum Grade of D or BMS 322 Minimum Grade of D)

**MGT 475 Strategic HRM 3 cr**

This is a capstone course in human resource management that reviews essential human resource management topics to prepare students for the SHRM Assurance of Learning Exam. Topics covered include strategic HR, ethics, recruiting and selection, employee and organizational development, performance management, employment law, compensation administration, workplace safety, employee relations, labor relations, and general management topics including motivation, individual differences, organizational culture, and leadership. In addition, the course covers state of the art issues in human resource management, which are new and not well developed in existing texts.

Pre-requisite: MGT 351 Minimum Grade of D and (MGT 340 Minimum Grade of D or MGT 320 Minimum Grade of D)

**MGT 483 Social Entrepreneurship 3 cr**

The course provides a broad theoretical perspective and practical framework for understanding social entrepreneurs and the social ventures they create ranging from local social organizations to large international social ventures leading global change. The course introduces students to the possibilities of social entrepreneurship and an introduction to the entire social venture creation process and life cycle. This course is a service-learning based and all students will participate in term-based community-based projects with local non-profit organizations. Extensive work outside of the normal classroom hours is required for this course.

**MGT 485 Bus Policy in Global Eco - W 3 cr**

The culmination course in business and management education. Interdisciplinary and global in nature, the course uses the case method to develop a top management perspective in which all business disciplines are integrated into the organization's effective total functioning.

Prerequisites: Seniors who have completed all core courses, have petitioned for graduation and are beginning the final semester.

Co-requisite: MGT 486

Pre-requisite: (BUS 305 Minimum Grade of D or MGT 350 Minimum Grade of D or BMS 412 Minimum Grade of D) and (FIN 315 Minimum Grade of D or BMS 341 Minimum Grade of D or FIN 341 Minimum Grade of D) and (MGT 305 Minimum Grade of D or MGT 324 Minimum Grade of D) and (MGT 310 Minimum Grade of D or BUS 265 Minimum Grade of D or MGT 332 Minimum Grade of D or MGT 422 Minimum Grade of D or BMS 422 Minimum Grade of D) and (MGT 325 Minimum Grade of D or MGT 396 Minimum Grade of D or BMS 384 Minimum Grade of D) and (MKT 320 Minimum Grade of D or BMS 371 Minimum Grade of D or MKT 371 Minimum Grade of D)

- MGT 486 Undergraduate Comp Exam** 0 cr  
Comprehensive exam  
Co-requisite: MGT 485
- MGT 490 Sp Top -** 3 cr  
Designed to provide senior students an opportunity to study selected topics of particular interest. A student may count no more than six hours of Special Topics in the concentration.  
Prerequisite: Approval of Department Chair.
- MGT 492 Management Analysis & Consult** 3 cr  
Designed to help students bridge the gap between management theory and the realities involved in the practice of management. Topics include (1) development of the human, social, and political skills of the student as an individual, (2) business ethics, (3) global management issues, and (4) current trends in society that affect business and management. Assignments include a project with a local organization to identify critical management issues, analyze alternatives, and present specific recommended solutions to company managers. Senior standing.  
Pre-requisite: (MGT 300 Minimum Grade of D or BMS 322 Minimum Grade of D or MGT 322 Minimum Grade of D) and (MGT 320 Minimum Grade of D or MGT 340 Minimum Grade of D) and MGT 351 Minimum Grade of D
- MGT 494 Dir St in Management** 3 cr  
Primarily designed to give superior students an opportunity to study some phase of management of particular interest. Conferences, a bibliography, and a formal research report are required. Junior or senior standing, a cumulative GPA of 2.5 or better, and approval of the department chair following the evaluation of a written proposal.
- MGT 496 Management Internship** 3 cr  
The internship program is designed to give students practical experience in their field of study. Students complete directed projects under the supervision of Department Chair. No more than three hours of internship credit may be counted toward a degree in the Mitchell College of Business. Prerequisites: Junior or Senior standing, declared major in management, overall GPA of at least 2.5, and Internship Agreement signed by department Chair.
- MGT 498 Management Internship II** 3 cr  
The internship program is designed to give students practical experience in their field of study. Students complete directed learning experiences under the supervision of a Department Chair. Requirements: Junior or senior standing, declared major in marketing, overall GPA of at least 2.5, and internship agreement signed by the Department Chair.  
Pre-requisite: MGT 496 Minimum Grade of P
- MGT 521 Data Analy for Bus Decisions** 3 cr  
An examination of basic statistical concepts used in business analysis. Topics include fundamental probability, sampling, statistical estimation, test of hypothesis, analysis of variance, and regression analysis. Emphasis is placed on the use of statistical techniques for business decision making.
- MGT 522 Supply Chain & Operations Mgmt** 3 cr  
An integrative approach to the processes, operations, and information required to produce and transform resources into value-added outputs that maximize customer satisfaction. Particular emphasis is placed on strategic supply chain management, operations strategy, value chain analysis, demand management, process mapping, quality assurance, customer fulfillment strategies, order fulfillment processes, relationship and information management in supply networks, measuring operational performance, and analytical tools for managing operations and supply systems.
- MGT 532 Legal & Ethical Environ of Bus** 3 cr  
Legal and Ethical Environment of Business is designed to develop an in-depth analytical understanding of selected legal/ethical issues and trends and their impact on management and other business functions. Students will analyze the legal and ethical implications of issues including products liability, professional regulations, corporate responsibility, workplace discrimination and harassment, privacy, workplace safety, restraints on trade, land use regulation, international law, and alternative dispute resolution.
- MGT 590 Sp Top -** 3 cr  
Designed to provide graduate students an opportunity to study selected topics. Approval of Department Chair. A student may count no more than three hours if Special Topics in the MBA degree program.  
Pre-requisite: MBA Prerequisites P
- MGT 594 Independent Study - Management** 3 cr  
Readings and research on selected topics. Conferences and formal research report required. Prerequisites: Approval of Department Chair.
- MGT 599 MBA Comprehensive Exam** 0 cr  
A corequisite course with MGT 580 with no credit hours which includes a graduate comprehensive business exam.
- MGT 601 Sem in Org Behavior** 3 cr  
This seminar provides an introduction to established theories and emerging trends in the field of organizational behavior. The course explores the thoughts, emotions, and behaviors of individuals within the context of work, teams, organizations, and society. The emphasis is on organizational theory and development.

**MGT 603 Seminar in Org Theory & Change 3 cr**

This is a foundational overview seminar. The purposes of the seminar are to 1) provide an in-depth understanding of the dominant theoretical approaches used in organizational theory, 2) give a historical overview of the theories of organization change, and 3) develop student skills in evaluating, extending, and communicating ideas about organizational theory and/or change as it relates to the student's research.

**MGT 605 Leadership 3 cr**

This course includes a review of traditional as well as current thinking in leadership theory with a special emphasis on emotional and social intelligence and organizational citizenship behavior.

**MGT 607 Strategic Management 3 cr**

The course is designed to develop a thorough understanding of the primary frameworks of competitive strategy and corporate strategy. Topics covered in the course include: industry and competitive analysis, resource-based view of the firm, value chain analysis, competitive strategies, business models, scope of the firm, strategic alliances, and offensive and defensive strategies.

**MGT 609 Sem. Sp. Topics 3 cr**

This course will cover two broad areas. The first is a reprise and extension of Structural Equation Modeling (SEM). The second is an introduction to Game Theory (GT) and applications thereof.

**MGT 799 Dissertation Research 1 TO 6 cr**

Independent Scholarship working with committee.  
Pre-requisite: MGT 798 Minimum Grade of P

## Marine Sciences (MAS)

**MAS 134L Ocean Science Laboratory 1 cr**

Laboratory experiences associated with BLY 134.

**MAS 134 Ocean Science 3 cr**

An introduction to physical, chemical, geological and biological oceanography. Equivalent to BLY 134.

**MAS 331 Marine Science I 3 cr**

This course will present the basic principles of geological and physical oceanography. Marine science is an interdisciplinary science field in which geology, physics, chemistry and biology interact in complex ways that are fundamental to the oceanic environment. This course will examine the characteristics of oceanic and coastal geomorphology and the associated marine sediments as well as the circulation of water masses that reside in these different regions of the world's oceans. Geological oceanography topics that will be covered include: Structure and evolution of ocean basins, types and properties of marine sediments, sediment transport processes and characterizing coastal regions. Physical oceanography topics that will be covered include: basic physical laws, properties of the water and the ocean, air-sea interactions, general circulation and coastal processes.

**MAS 332 Marine Science II 3 cr**

Oceanography ("ocean"= the marine environment, and "graphy"= the study of) is literally the study of the marine environment. In practice, oceanography is an interdisciplinary science at the intersection of geology, chemistry, physics and biology. Marine Science II focuses on fundamental concepts in chemical and biological oceanography. The study of chemical oceanography will encompass dissolved components, stratification, chemical tracers, marine pollution, ocean acidification and global warming. This will lead to an introduction to biological oceanography, which will include organismal biology, marine adaptation and fisheries. In-class lectures will provide the students with the foundation to understand the principles discussed and will be supplemented with discussion of the modern ways in which these disciplines are pursued.

**MAS 367 Marine Biology 4 cr**

Local marine environments and the classification, morphology, and ecology of the locally occurring flora and fauna. (usually taught in the summer semester) Equivalent to BLY 367.

Pre-requisite: ( (BLY 121 Minimum Grade of D or BLY 141 Minimum Grade of D) and (BLY 122 Minimum Grade of D or BLY 142 Minimum Grade of D) ) and (BLY 301 Minimum Grade of C or BLY 341 Minimum Grade of C) and (BLY 302 Minimum Grade of C or BLY 311 Minimum Grade of C) and (BLY 303 Minimum Grade of C or BLY 325 Minimum Grade of C) and (CH 115 Minimum Grade of D or CH 131 Minimum Grade of D) and (CH 116 Minimum Grade of D or CH 132 Minimum Grade of D)

**MAS 371 Shark and Ray Biology 2 cr**

This course will provide an introduction to biology of sharks and rays, with special emphasis on regional shark fauna and field techniques. Topics to be covered include chondrichthyan origin, systematics, sensory biology, trophic ecology, reproductive biology, life history, ecology, fisheries and conservation. Lectures will be supplemented with discussions of papers from the primary literature to familiarize students with current research. In addition, longline, trawl and gillnet sampling will provide students with firsthand knowledge of field techniques and local shark identification. Equivalent to BLY 371.

Pre-requisite: ( (BLY 121 Minimum Grade of D or BLY 141 Minimum Grade of D) and (BLY 122 Minimum Grade of C or BLY 142 Minimum Grade of C) and (BLY 301 Minimum Grade of C or BLY 341 Minimum Grade of C) and (BLY 302 Minimum Grade of C or BLY 311 Minimum Grade of C) and (BLY 303 Minimum Grade of C or BLY 325 Minimum Grade of C) )

**MAS 430 Marine Botany 4 cr**

A general survey of marine algae and vascular and non-vascular plants associated with the marine environment. Distribution, identification, structure, ecology, and reproduction will be considered. Course offered only through Marine Environmental Science Consortium, (usually taught in the summer semester). Equivalent to BLY 430.

Pre-requisite: ( (BLY 121 Minimum Grade of D or BLY 141 Minimum Grade of D) and (BLY 122 Minimum Grade of D or BLY 142 Minimum Grade of D) and (CH 115 Minimum Grade of D or CH 131 Minimum Grade of D) and (CH 116 Minimum Grade of D or CH 132 Minimum Grade of D) )

**MAS 451 Marine Vertebrate Zoology 4 cr**

A study of marine vertebrates, with emphasis on fishes; their systematics, zoogeography, and ecology, (usually taught in the summer semester). Equivalent to BLY 451.

Pre-requisite: ( (BLY 121 Minimum Grade of C or BLY 142 Minimum Grade of C) and (BLY 122 Minimum Grade of C or BLY 142 Minimum Grade of C) and (BLY 301 Minimum Grade of C or BLY 341 Minimum Grade of C) and (BLY 302 Minimum Grade of C or BLY 311 Minimum Grade of C) and (BLY 303 Minimum Grade of C or BLY 325 Minimum Grade of C) )

**MAS 471 Marine Invertebrate Zoology 4 cr**

A study of natural history, systematics, and morphology of marine invertebrates, (usually taught in the summer semester). Equivalent to BLY 471.

Pre-requisite: ( (BLY 121 Minimum Grade of C or BLY 141 Minimum Grade of C) and (BLY 122 Minimum Grade of C or BLY 142 Minimum Grade of C) and (BLY 301 Minimum Grade of C or BLY 341 Minimum Grade of C) and (BLY 302 Minimum Grade of C or BLY 311 Minimum Grade of C) and (BLY 303 Minimum Grade of C or BLY 325 Minimum Grade of C) )

**MAS 475 Marine Ecology 4 cr**

The relationship of marine organisms to their environment, (usually taught in the summer semester). Equivalent to BLY 475.

Pre-requisite: ( (BLY 121 Minimum Grade of C or BLY 141 Minimum Grade of C) and (BLY 122 Minimum Grade of C or BLY 142 Minimum Grade of C) and (BLY 301 Minimum Grade of C or BLY 341 Minimum Grade of C) and (BLY 302 Minimum Grade of C or BLY 311 Minimum Grade of C) and (BLY 303 Minimum Grade of C or BLY 325 Minimum Grade of C) )

**MAS 510 Oceanography and Marine Bio 3 cr**

Oceanography is an interdisciplinary science at the intersection of geology, chemistry, physics and biology. This course is designed to be a survey course of these four disciplines with special emphasis on the biological aspects of ocean sciences. In-class lectures will provide the students with the foundation to understand the principles discussed, and will be supplemented with discussion of the modern ways in which these disciplines are pursued.

**MAS 511 Marine Analytical Methods 3 cr**

This course will provide an introduction to the analytical methods most commonly used in marine science: spectrometry, fluorometry, colorimetry, gas and liquid chromatography and the use of radio-isotopes. The course will consist of lectures covering the theory of each method and laboratory exercises in their use. Throughout, there will be a focus on the quality of the data being collected, as derived from quantitative assessments of accuracy, precision and repeatability; and propagation of errors. Students will be assessed on problem-sets based on data collected in the labs and on a research project using the instruments and techniques of their choice.

**MAS 512 Chlorophyll Fluorescence Tech 2 cr**

This course will provide an introduction to the scope and application of fluorescence techniques based on excitation of and emission from the ubiquitous plant pigment chlorophyll a. These include fluorometric determination of chlorophyll concentration in vitro; the use of active, single-wavelength fluorometry to assess temporal and spatial variability of chlorophyll a and microalgal biomass in natural assemblages; the use of multiple-wavelength excitation and/or hyperspectral emission to determine taxonomic distributions in vivo; and the use of modulated (pulse-amplitude modulated and fast repetition rate) fluorometry to investigate photosynthetic efficiency and model productivity.

**MAS 515 Environmental Toxicology 3 cr**

Introduction to the scientific and technical principles of toxicological processes in the context of the ecosystem. Students will understand the types of major environmental toxicants and how to properly evaluate their toxicity and factors that influence toxicity. Students will recognize and coherently formulate risk assessment and by using the tools and techniques acquired, develop and communicate proposals for remediation.

Pre-requisite: (BLY 301 Minimum Grade of C or BLY 341 Minimum Grade of C) and (BLY 302 Minimum Grade of C or BLY 311 Minimum Grade of C) and (BLY 303 Minimum Grade of C or BLY 325 Minimum Grade of C) and (CH 201 Minimum Grade of C or CH 222 Minimum Grade of C)

**MAS 520 Marine Resource Management 3 cr**

Designed to acquaint graduate students concerned with management of marine resources; development of legislation, evolution of policy, legal processes, impacts on human resources. The emphases will be placed on living resources.

**MAS 521 Marine Conservation Biology 3 cr**

This course will develop student's understanding of conservation biology in marine habitats. Lectures and assigned or student-selected readings will cover the widest possible range of current topics in marine conservation biology. Regular field trips will supplement and exemplify lecture topics. Each class will include an introductory lecture that presents an overview of basic ecological concepts and historical perspective for the assigned readings, followed by discussion. Students will lead discussion of student selected papers and write a topical term paper.

**MAS 522 Horseshoe Crabs- Resource Mgmt 2 cr**

The course will travel to Delaware Bay, home of the largest population of horseshoe crabs in the world. Students will gain and apply information on recent conflicts in horseshoe crab research and fishery management to explore political, ecological, and economic values of marine resources, options for management, conservation, and outreach, conflict resolution and applied ecology.

**MAS 523 Anthropogenic Impacts on Coast 3 cr**

This course will offer a state-of-the-art review of the nature and extent of anthropogenic impacts on marine coastal ecosystems, including climate change, destruction of wetlands, overfishing and nutrient pollution.

**MAS 524 Scientific Communication 3 cr**

Instruction on the principles of scientific communication and opportunities to practice different forms of written and oral communication common to marine and other sciences. Topics include: 1) the rationale for scientists to communicate effectively, 2) how to identify and share information to different audiences, 3) successful scientific date presentations, 4) writing, editing, publishing, and reviewing abstracts, scientific papers, and proposals, and 5) biases in scientific communication.

**MAS 530 Marine Microbial Ecology 3 cr**

A general survey of the types of microorganisms found in the marine environment. Emphasis will be on the interaction of microorganisms with each other and with their environment. In particular, the role of microorganisms in carbon cycling and biogeochemical processes will be stressed. Readings from current literature will expose students to the latest techniques and research.

**MAS 531 Physiol Eco Marine Microalgae 3 cr**

This course will cover the acclimative responses of marine microalgae to variability in light, nutrients, temperature and other environmental factors. Stress responses that are engendered when variability in these environmental factors exceeds the organisms' acclimative capacity will also be covered. The course will emphasize the commonality of these processes across taxa as well as considering taxon-specific responses that allow different groups to exploit their niches. Methods such as molecular biology, active fluorescence and remote sensing that can be used to investigate population dynamics and growth over a range of spatial and temporal scales will be covered.

**MAS 532 Marine Trophic Processes 3 cr**

This course will examine the nature and controls of the trophic routes followed by primary production and resulting carbon budgets in coastal ecosystems. Trophic processes in marine ecosystems such as herbivory, consumption by secondary consumers, decomposition, export/import and burial will be studied. The course will also offer a review of anthropogenic impacts, such as eutrophication and climate change, on the trophic rate of primary production and carbon budgets in coastal ecosystems. Students are expected to contribute with personal experimental projects and critical reading and discussion of seminal papers.

**MAS 533 Marine Molecular Ecology 3 cr**

The use of molecular biology in ecological studies has been increasing rapidly with the development of new techniques. These techniques can supplement the laboratory and field studies traditionally part of ecology. This course seeks to introduce the use of molecular techniques in marine ecology through lectures accompanied by computer exercises using data from public databases. Lectures will pull data from the primary literature, with emphasis on examples of applications in marine science. Computer exercises will introduce students to how data is analyzed as well as to some of the programs available to carry out this analysis.

**MAS 540 Sediment Biogeochemistry 3 cr**

Detailed examination of sediment biogeochemical processes and the implications thereof on nutrient cycles, plant production, and animal distribution, including discussion of early diagenesis in coastal sub-tidal and wetland sediment systems. permission of instructor.

**MAS 548 Marine Biogeochem Processes 2 cr**

The course will examine the interaction between biological, chemical and geological processes in the marine environment. This will be done by first reviewing the cycling of several of the major elements (e.g. carbon, nitrogen, phosphorus, sulfur, and iron) in the sea, and then examining how these cycles differ between various marine ecosystems (e.g. open ocean surface waters, estuaries, coral reefs, seagrass systems and tidal marshes). The focus will be on developing an understanding of how biogeochemical processes serve to regulate ecosystem function in these various habitats. Prerequisites: Organic chemistry, geology, marine ecology.

**MAS 550 Fisheries Techniques 3 cr**

Students are exposed to a detailed, semi-quantitative introduction to current biological and technological methodologies for studying fishes and aquatic habitats, with emphasis on study design and integration across sub-disciplines.

**MAS 551 Quant Methods Fish and Ecology 3 cr**

Ecological and fisheries research has progressed beyond qualitative inference and is continuing to adopt more quantitative methods. A diversity of modeling and experimental approaches exists for ecologists and fisheries scientists. This course is designed to familiarize the students with the most commonly used quantitative approaches. Requires permission of instructor.

**MAS 555 Fisheries Oceanography 2 cr**

Students examine the relationships between fish life history, recruitment dynamics and harvest potential, and local-, meso- and global scale oceanographic processes. Students are exposed to the evolution in thinking on the role of interaction between biology and physics relative to fish and fisheries.

**MAS 560 Mar Exp Ecol 4 cr**

Advances in marine ecology and oceanography are dependent on the ability of researchers to design effective and robust experiments to test hypothesis. Understanding the power, limitations and potential biological and statistical artifacts are critical to achieving this goal. The course focuses on fundamental concepts in the design and analysis of experiments in marine sciences, ecology and fisheries. Primary emphasis will be placed on design and interpretation and secondarily on techniques for analyses. Various analysis of variance models will be introduced beginning with completely randomized designs and factorial treatment structures, and proceeding through block and split-plot designs. In-class demonstrations and take-home problems will provide students with experience in performing many of these analyses.

Pre-requisite: BLY 520 Minimum Grade of C or ST 540 Minimum Grade of C and ST 545 Minimum Grade of C

**MAS 570 Ocean Var and Global Change 2 cr**

This course will examine large scale, spatial and temporal variability in the Earth/ocean system as evidenced by present-day and paleo records. Variability such as the El Nino Southern Oscillation will be covered. It will critically evaluate the evidence for and the consequences of modern global change as it pertains to the marine environment. Emphasis will be placed on potential changes in climate, biogeochemical cycles, hydrologic cycles, eutrophication/species diversity, and UV light fluxes. Prerequisites: Permission of instructor.

**MAS 571 Marine Hydrodynam-Biomechanics 4 cr**

To present an introduction to the importance of small scale fluid dynamics, thermodynamics, and solid mechanics to marine science and to present techniques for measurement of important parameters.

**MAS 572 Estuarine Hydrodynamics 3 cr**

This course will address physical processes in estuarine environments. With physical processes in estuaries occurring in various time scales, discussion will proceed in terms of three different time scales: turbulent, tidal, and residual time scales. Emphasis will be placed on mass transport by physical transport processes (water movement).

Pre-requisite: MAS 601 Minimum Grade of B

**MAS 573 Oceanology of Gulf of Mexico 3 cr**

This course provides a survey of the physics, chemistry, biology, geology and meteorology of the continental margins and deep ocean regions in the Gulf of Mexico and adjacent waters. Requires permission of instructor.

**MAS 574 Marine Ecosystem Modelling 3 cr**

An introduction to the principles, tools, and applications of marine ecosystem modelling. Emphasis will be placed on biological and physical coupling and numerical representations of these processes. Students will develop facility with numerical tools and learn how to apply coupled models to their ecosystems of interest.

**MAS 575 Marine Ecology 4 cr**

The course covers general ecological principles and how they apply to marine ecosystems. Both open ocean and nearshore waters are considered. Specific topics covered include: adaptations of marine organisms for life in the intertidal vs. subtidal zones; different modes of feeding and reproduction in marine organisms; and the importance of predation, competition, adult/larval interactions and dispersal mechanisms. The second half of the course is devoted to discussion of specific habitats including: coral reefs, mangrove swamps, kelp forests, and hydrothermal vents.

**MAS 576 Benthic Ecology 2 cr**

This course covers the evolutionary history and the ecology of marine benthic communities from the earliest fossils to present. The importance of scale and of proper design will be considered. Other topics include: predation, competition, adult/larval interactions and dispersal mechanisms. There will be discussion of productivity and materials cycling in benthic systems. Special topics of students' suggestions conclude the course.

**MAS 579 Coastal Ecosystem Dynamics 2 cr**

Coastal Ecosystem Dynamics will allow students to investigate the basic principles of ecosystem structure and function. The course is divided into 2 parts: an instructional phase for learning basics of ecosystem modeling, and a student-led investigation of the structure and function of a variety of coastal ecosystems. This approach will give the student a set of quantitative tools for modeling ecosystems. Also, students will learn to evaluate differences and similarities of energy and nutrient processing in disparate ecosystems. There will be one 2 hr class meeting each week during which students will learn to use the ecological modeling software packages 'Ecopath' and 'Ecoism'. During the initial period, students will 'dissect' published models (obtained from the Internet) as a mechanism to understand the utility of ecosystem modeling as well as the basics of this particular software. The second half of the course will be devoted to student-constructed ecosystem models. The models will be constructed from data and pathway descriptions in Alongi's 'Coastal Ecosystem Processes' (CRC Press). A synthesis of these models will be constructed and placed on the WWW.

**MAS 580 Marine Biogeo and Paleocology 3 cr**

This graduate level course will give students a broad overview of the time course of evolutionary changes in the structure and function of marine ecosystems, and will consider the interacting roles of both historical and current factors as they influence the distribution and abundance of marine organisms. Lectures will be mixed with discussions of assigned readings from the primary literature to stimulate critical thinking about the various topics.

**MAS 581 Advanced Marine Ecology 2 cr**

This course will build on the foundations provided by introductory ecology courses to enhance understanding of the mechanisms that control the distribution and abundance of marine plants and animals. The class periods will be dominated by discussions of assigned readings from the primary literature, which will be complemented by summary lecture material.

**MAS 582 Marine Larval Ecology 2 cr**

An in depth treatment of the taxonomy, nutrition, dispersal, bio-energetics, behavior, and bio-physical coupling of larval forms of marine species.

**MAS 583 Field Marine Science I 2 cr**

The Field Marine Science course will consist of an 11 day field exercise in representative coastal sites in Maine with emphasis on rocky intertidal, kelp bed and eelgrass habitats. Two faculty members will accompany the students, participate in the pre-trip readings and evaluate the product developed by each student.

**MAS 584 Oceanographic Experience 1 TO 3 cr**

This course provides students with practical skills involved in oceanographic research. Skills may include hydrographic, hydroacoustic, and organismic sampling, gear deployment and use of analytical instrumentation at sea. Students participate in one or more oceanographic cruises during a semester and carry out a defined project using research tools available on the ship. A final report on the project forms the major part of the course grade. Cruises are available only on an ad hoc basis so permission of the instructor is required.

**MAS 585 Marine Zooplankton 3 cr**

This course familiarizes the student with the taxonomic breadth of estuarine and marine zooplankton ranging from protists through all major phyla of metazoa. Though the focus of the course is on taxonomic familiarization, basic biology (including reproduction and feeding) of all major taxa represented in the plankton will be covered. Students will also learn basic and advanced field collection, laboratory and statistical techniques. Although not a prerequisite, it is useful for students to have a background in invertebrate zoology.

**MAS 586 Marine Restoration Ecology 3 cr**

The course examines factors in the evolution current U.S. and International marine and coastal policy related to the management of natural resources. Course includes policy components, policy information implementation, change processes and economic criteria for evaluating policy effectiveness. The course also surveys the basic approaches to economic valuation of marine resources.

**MAS 587 Seagrass Ecosystem Ecology 2 cr**

A survey of current literature on topics related to the ecology of seagrass ecosystems. Students will read assigned papers to be analyzed in faculty lead discussion format. A final research paper will be prepared by each student.

**MAS 588 Field Marine Science II 3 cr**

The Field Marine Science course will consist of an 8 - 12 day field exercise in representative coastal sites. Faculty members with diverse interests will accompany the students, participate in pre-trip discussions and evaluate the product developed by each student. The course is designed to familiarize students with habitats and research conditions on the Northern Gulf Coast. Field trip locations are selected on the basis of faculty and student interest, economics, and availability of logistic support. Students pay their room and board costs for the field exercise. The course is primarily for graduate students, but advanced undergraduates may enroll with consent of instructor. Both MAS 588 and MAS 583 may be taken for credit when each is taught in a different environment.

**MAS 589 Marine Plankton 3 cr**

The course familiarizes the student with the taxonomic breadth of phytoplankton, bacterioplankton and zooplankton in estuaries, coastal seas and open oceans. Though the focus of the course is on taxonomic familiarization, basic biology (including reproduction and feeding) of all major taxa represented in the plankton will be covered. Student will learn fundamental, as well as "cutting-edge", field laboratory and statistical techniques. Two hours of lectures each week will be accompanied by two hours of hand-on laboratory work. Prerequisites: Graduate status in one of the physical or biological sciences.

**MAS 590 Sp Top - 1 TO 4 cr**

An in-depth tutorial exposure to specific areas in the marine sciences. Credit and title will be arranged to examine the subject matter in an area of current interest to one or group of students. Specialized topics not currently listed in catalog course offerings. MAS 590 is available to master students - MAS 690 is available to Ph.D. students.

**MAS 592 Seminar 1 cr**

Students and faculty meet weekly in an interactive discussion of current literature in marine sciences. The focus will be on "state-of-the-art" theories and methodologies as they occur in the primary marine literature. Student presentation is required to receive credit.

**MAS 594 Directed Studies 1 TO 4 cr**

Independent research, not related to the thesis, under the direction of a member of the graduate faculty. May be used to learn new techniques or explore research questions of special interest. A maximum of 4 hours may be earned for this course toward the MS degree.

**MAS 599 Thesis 1 TO 8 cr**

Independent research by the student under the sponsorship of a member of the department. Progress reports of the work accomplished are required every six months.

**MAS 601 Physical Oceanography 4 cr**

Physical properties and circulation of the worlds oceans. Topics to be covered include: basic physical laws; properties of heat, water, and salt budgets; waves; tides; large and small scale circulations; sea-level fluctuations; interactions of the sea with the atmosphere and land masses; light and acoustics.

**MAS 602 Chemical Oceanography 4 cr**

An in-depth examination of the chemistry of sea water and its relationship with biological, geological, and physical processes in the oceans. Coverage of sea water composition, buffering capacity, redox potential, and photochemistry will form the basis for an in-depth analysis of dynamic equilibria of gases, organic materials, nutrients, and trace elements in the sea. Critical evaluation of recent primary literature in chemical oceanography will be used to illustrate state-of-the art research approaches.

**MAS 603 Geological Oceanography 3 cr**

Geological Oceanography encompasses the historic and current consequences of both geophysical and classical geological processes. Included topics are tectonic theory and its development, sedimentary processes in coastal and oceanic provinces, stratigraphy, structural geology, micropaleontology, erosion, diagenesis and the formation of hydrocarbons.

**MAS 604 Biological Oceanography 4 cr**

A comprehensive survey of marine organisms and their interaction including pelagic and benthic communities of the oceans, coastal waters and estuaries. Primary formation of particulate material, feeding processes, kinetics of food webs, biogeochemical processes, patterns of distribution, ecology of biotic systems, human interactions and current concerns are topics to be covered.

**MAS 690 Sp Top - 1 TO 4 cr**

An in-depth tutorial exposure to specific areas in the marine sciences. Credit and title will be arranged to examine the matter in an area of current interest to one or group of students. Specialized topics not currently listed in catalog course offerings. MAS 590 is available to master students - MAS 690 is available to Ph.D. students.

**MAS 692 Seminar 1 cr**

Students and faculty meet weekly in an interactive discussion of current literature in marine sciences. The focus will be on "state-of-the-art" theories and methodologies as they occur in the primary marine literature. Student presentation is required to receive credit.

**MAS 694 Directed Studies 1 TO 4 cr**

Independent research, not related to the dissertation, under the direction of a member of the graduate faculty. May be used to learn new techniques or explore research questions of special interest. A maximum of 4 hours may be earned for this course toward a Ph.D. degree.

**MAS 799 Dissertation** 1 TO 8 cr  
Independent research by the student under the sponsorship of a member of the department.

## Marketing (MKT)

**MKT 310 Intro International Business** 3 cr  
This course focuses on exploring the terminology, scope, status and evolving patterns of international business. Specifically, the course addresses the role of cultural, political, ethical, technological, and economic factors in the international business context and how businesses deal with uncertainty and risk. The course examines the impact of global forces on businesses at home and abroad, the role of governments in promoting and protecting business interests, the role of international agencies in the business environment.

**MKT 320 Principles of Marketing** 3 cr  
Study of the institutions involved in creating transactions necessary to satisfy the needs of households, businesses and government and international customers. Topics include marketing planning, market segmentation, societal and ethical obligations, strategies for product, promotion and channel decisions.

**MKT 336 International Marketing** 3 cr  
Examination of cultural, economic, and political factors that affect marketing of goods and services worldwide. Emphasis is placed on developing global marketing strategies of multinational corporations within existing trade structure and regulations. Both product and service flows between countries and regions are discussed.  
Pre-requisite: (MKT 320 Minimum Grade of D or MKT 371 Minimum Grade of D or BMS 371 Minimum Grade of D)

**MKT 340 Marketing Analytics** 3 cr  
Contemporary marketers acquire large amounts of data. Marketing Analytics explains a) the most common marketing metrics, and b) how to compute and interpret these metrics to improve decision making.  
Pre-requisite: MKT 320 Minimum Grade of D and BUS 245 Minimum Grade of D

**MKT 350 Internet Marketing** 3 cr  
Examination of the interactive processes and transactions involved in satisfying the needs of consumers, businesses, and government. Involves the study of marketing planning, consumer research, segmentation, and implementation of marketing strategies on the Internet in order to accomplish corporate objectives.  
Pre-requisite: (MKT 320 Minimum Grade of D or BMS 371 Minimum Grade of D or MKT 371 Minimum Grade of D)

**MKT 355 Customer Relationship Mgt** 3 cr  
The course provides a comprehensive business model integrating customers and suppliers along the value chain. The focus is on the methodologies, tools, and techniques required for customer acquisition, retention, and profitability in competitive buyer/supplier environments.  
Pre-requisite: MKT 320 Minimum Grade of D or MKT 371 Minimum Grade of D or BMS 371 Minimum Grade of D

**MKT 374 Consumer Behavior** 3 cr  
Study of the contributions of the behavioral sciences to the interpretation of market information. Involves the use of behavioral information which pertain to the analysis of consumers and organizational buyers in both domestic and international settings.  
Pre-requisite: MKT 320 Minimum Grade of D or MKT 371 Minimum Grade of D or BMS 371 Minimum Grade of D

**MKT 375 Supply Chain Management** 3 cr  
This course encompasses the design and management of the supply-chain system that collectively provides for the exchange of title, physical movement, and storage activities in marketing, including the use of new technologies. This course examines the role of manufacturers and intermediaries in channel strategies including scope, methods, problems, and opportunities of total supply chain coordination.  
Pre-requisite: MKT 320 Minimum Grade of D or MKT 371 Minimum Grade of D or BMS 371 Minimum Grade of D

**MKT 376 Business to Business Marketing** 3 cr  
Study of the participants, channels, and relationships that govern the behavior of industrial buyers and marketers.  
Pre-requisite: MKT 320 Minimum Grade of D or MKT 371 Minimum Grade of D or BMS 371 Minimum Grade of D

**MKT 377 Pricing Strategies** 3 cr  
Pricing strategies encompass the design and monitoring of an integrative framework for making pricing decisions. The purpose of this course is to synthesize economic and behavioral principles with marketing, accounting, and financial information, and to analyze the various pricing options within legal, market, and corporate constraints. This course covers both theory and application of pricing strategies for national and multinational concerns organized as either a profit or non-profit entity.  
Pre-requisite: (MKT 320 Minimum Grade of D or BMS 371 Minimum Grade of D or MKT 371 Minimum Grade of D)

**MKT 379 Retailing** 3 cr  
Study of the management of retail operations. Topics include store location and layout, merchandise buying and planning, legal and ethical issues, promotion, pricing, human resource management, financial planning, information systems and customer services.  
Pre-requisite: MKT 320 Minimum Grade of D or MKT 371 Minimum Grade of D or BMS 371 Minimum Grade of D

**MKT 380 Integrated Mkt Communications 3 cr**

Study of the fundamentals of marketing communications from a strategic perspective. Examines the roles of and relationships between a variety of marketing communication elements including advertising, direct marketing, database marketing, interactive marketing, media planning, public relations, sales promotion, and personal selling.

Pre-requisite: (MKT 320 Minimum Grade of D or BMS 371 Minimum Grade of D or MKT 371 Minimum Grade of D)

**MKT 381 Sales Mgt & Personal Selling 3 cr**

Study of the principles and practices of sales management in planning, organizing, directing, and controlling, the sales organization in both domestic and international markets. Included in the course are skills developed through presentation, discussion, and role playing. Special emphasis is directed to recruiting, selecting, training, evaluating, compensating, and supervising sales personnel and sales organizations.

Pre-requisite: MKT 320 Minimum Grade of D or MKT 371 Minimum Grade of D or BMS 371 Minimum Grade of D

**MKT 382 Brand Management 3 cr**

Systematic examination of strategies involved in tangible and intangible product decisions. Issues and strategies involved in identifying and implementing the development of new goods and services for both domestic and international markets are examined in-depth, as well as the management of mature products.

Pre-requisite: (MKT 320 Minimum Grade of D or BMS 371 Minimum Grade of D or MKT 371 Minimum Grade of D)

**MKT 384 Market Research 3 cr**

Study of information gathering techniques, research methods and procedures used to solve marketing problems in consumer and organizational in both domestic and international markets.

Pre-requisite: (BUS 255 Minimum Grade of D or ST 275 Minimum Grade of D or BMS 250 Minimum Grade of D or BMS 255 Minimum Grade of D or BMS 300 Minimum Grade of D) and (MKT 320 Minimum Grade of D or MKT 371 Minimum Grade of D or BMS 371 Minimum Grade of D)

**MKT 385 Services Marketing 3 cr**

Study of the unique features of services marketing and the service sector. Examines the strategies and activities of organizations and industries whose core product is service, such as sports, hospitality, healthcare, financial services, information technology, and event marketing.

Pre-requisite: (MKT 320 Minimum Grade of D or BMS 371 Minimum Grade of D or MKT 371 Minimum Grade of D)

**MKT 405 Curr Issues in Sup Chain Mgt 3 cr**

An integrative course highlighting the major managerial challenges in key components of the supply chain, including sourcing, production, and logistics, with special emphasis on supply chain integration, customer value and performance measurement.

Pre-requisite: MKT 375 Minimum Grade of C

**MKT 477 Export-Import Management 3 cr**

Study of exporting and importing strategies used by both domestic and multinational firms including a concentration in the areas of international pricing, governmental assistance, and channel selection. Emphasis is placed on the best practices and procedures of packing and documentation.

Pre-requisite: (MKT 320 Minimum Grade of D or MKT 371 Minimum Grade of D or BMS 371 Minimum Grade of D) and (MKT 336 Minimum Grade of D or MKT 383 Minimum Grade of D)

**MKT 479 Marketing Policy - W 3 cr**

The capstone course for marketing majors. Integration and application of marketing concepts requiring analysis of both domestic and international marketing problems.

Pre-requisite: (MKT 320 Minimum Grade of D or MKT 371 Minimum Grade of D or BMS 371 Minimum Grade of D) and MKT 374 Minimum Grade of D and (MKT 373 Minimum Grade of D or MKT 384 Minimum Grade of D or MKT 474 Minimum Grade of D)

**MKT 490 Special Topics - 3 cr**

Designed to provide senior students an opportunity to study selected topics of particular interest. A student may count no more than six hours of Special Topics in the concentration.

Prerequisite: Approval of Department Chair.

Pre-requisite: (MKT 320 Minimum Grade of D or MKT 371 Minimum Grade of D or BMS 371 Minimum Grade of D)

**MKT 494 Directed Study in Marketing 3 cr**

Primarily designed to give superior students an opportunity to study selected topics of particular interest. Conferences, a bibliography, and a formal research report are required. Grades are awarded on a satisfactory/unsatisfactory basis. Prerequisites: Junior or senior standing, a cumulative GPA of 2.5 or better, and approval of the department chair following the evaluation of a written proposal.

**MKT 496 Marketing Internship 3 cr**

The internship program is designed to give students practical experience in their field of study. Students complete directed projects under the supervision of Department Chair. No more than three hours of internship credit may be counted toward a degree in the Mitchell College of Business. Prerequisites: Junior or Senior standing, declared major in marketing, overall GPA of at least 2.5, and Internship Agreement signed by department Chair.

**MKT 497 Marketing Internship II 3 cr**

The internship program is designed to give students practical experience in their field of study. Students complete directed learning experiences under the supervision of the Department Chair. Prerequisites: Junior or Senior Standing, declared major in marketing, overall GPA of at least 2.5 and internship agreement signed by Department Chair

Pre-requisite: MKT 496 Minimum Grade of P

**MKT 590 Special Topics - 3 cr**

Designed to provide graduate students an opportunity to study selected topics. A student may count no more than 3 hours of Special Topics in the MBA degree program. Approval of Department Chair

**MKT 594 Independent Study 3 cr**

Readings and research on selected topics. Conferences and formal research report required. Approval of Department Chair

**MKT 601 Marketing Management 3 cr**

This seminar examines the theory underpinning the study of Marketing. The seminar uses the classic research in Marketing to frame modern theoretical developments and provide students with a strong fundamental platform for their future studies.

**MKT 603 Supply Chain & Logistics 3 cr**

The course examines the theory and applied research in the field of business to business logistics and supply chain management.

**MKT 605 Sem. Marketing Communications 3 cr**

This seminar investigates the theoretical and applied research in the field of marketing communications.

**MKT 607 Seminar in Marketing Strategy 3 cr**

Study of consumption behavior with an emphasis on underlying theories and relevant literature within the framework of both marketing and psychology. Examination of the influences on behaviors and the process of consumer decision making from conceptual and managerial perspectives.

**MKT 609 Marketing: Sp Topic- 3 cr**

This seminar focuses on special applications of Marketing. The instructor will develop an in-depth analysis on several contemporary areas of study.

**MKT 799 Dissertation Research 3 cr**

Independent Scholarship working with committee  
Pre-requisite: MKT 798 Minimum Grade of S

## Master Of Bus Administration (MBA)

**MBA 501 Analysis using Info Sys 3 cr**

Advanced management requires the ability to analyze, interpret data with datasets and calculate statistics from data. This course covers all the process of building, interpreting, calculating data and finally making decisions on the outcomes of that process. A significant part of the grade in this course comes from decision making exercises.

**MBA 502 Managing Accounting Info 3 cr**

This course focuses on making decisions using Accounting information which includes how to generate relevant and appropriate data and how to use accounting analysis to enhance success in making decisions.  
Pre-requisite: ACC 211 Minimum Grade of C

**MBA 503 Managing in the Bus. Env't 3 cr**

The course evaluates managerial decisions in a business environment impacted by ethical considerations, sustainability, social responsibility and stakeholder interests. The course also focuses on developing student skills in communication.  
Pre-requisite: ECO 215 Minimum Grade of C

**MBA 504 Customers & Supply Chains 3 cr**

This MBA course focuses on the role of customers and vendors on organizations. The course uses projects and decision scenarios to address the issues that result from managing supply chains and customer relationships.

**MBA 505 Managing People 3 cr**

This MBA course emphasizes the role of people within an organization and the issues and the decisions related to managing human assets. The course develops a number of techniques and scenarios that emphasize the importance of effective human resource management.  
Pre-requisite: MGT 300 Minimum Grade of C

**MBA 506 Managing Finance and Capital 3 cr**

Business managers must have a strong grasp of the role of finance and capital in the organization. The course focuses on establishing a strong knowledge base and the key decisions needed to be a successful manager.  
Pre-requisite: FIN 315 Minimum Grade of C

**MBA 507 Managing Strategic Decisions 3 cr**

The MBA Capstone course emphasizes decision making in a strategic context and builds upon all the courses taken prior to and concurrently with the course. The course includes decisions at the strategy development and strategy execution level. The evaluation exercises include an assessment of ethical, socially, responsible, and sustainability issues.  
Co-requisite: MGT 599

**MBA 508 Special Topics - 3 cr**

The MBA Program includes courses that are designed to allow students the opportunity to learn management skills and applications through non-traditional formats. This course is designed to achieve that objective. Subject to the approval of the Director of Graduate studies.

## Maternal Child Nursing (MCN)

**MCN 340 Maternal-Gyn Health Nsg 3 cr**

Provides students the opportunity to analyze theories, concepts, research, and issues and trends in nursing of the childbearing family. Content includes internal and external environmental factors affecting the health of the childbearing family. Emphasis is on the role of the professional nurse in health promotion and maintenance, and wellness/illness care of the childbearing family.

Co-requisite: MCN 341

Pre-requisite: NU 325 Minimum Grade of C and (HSC 243 Minimum Grade of C or HSC 343 Minimum Grade of C) and HSC 342 Minimum Grade of C and (NU 211 Minimum Grade of C or NU 300 Minimum Grade of C) and (NU 221 Minimum Grade of C or NU 301 Minimum Grade of C) and NU 327 Minimum Grade of C

**MCN 341 Maternal-Gyn Health Nsg Clin 3 cr**

Clinical practice course in nursing of the childbearing family. Focus is on the application of theories, concepts, research, and issues and trends in nursing of the childbearing family. Emphasis is on the role of the professional nurse in nursing care of the childbearing family and on the use of the nursing process with the childbearing family.

Co-requisite: MCN 340

Pre-requisite: (NU 211 Minimum Grade of C or NU 300 Minimum Grade of C) and (NU 221 Minimum Grade of C or NU 301 Minimum Grade of C) and NU 325 Minimum Grade of C and HSC 342 Minimum Grade of C and (HSC 243 Minimum Grade of C or HSC 343 Minimum Grade of C) and NU 327 Minimum Grade of C

**MCN 345 Child Health Nursing 3 cr**

Provides students the opportunity to analyze theories, concepts, research, and issues and trends in child health nursing. Content includes internal and external environmental factors affecting the health of children. Emphasis is on the role of the professional nurse in health promotion and maintenance, illness care, and rehabilitation of children.

Co-requisite: MCN 346

Pre-requisite: NU 325 Minimum Grade of C and (HSC 243 Minimum Grade of C or HSC 343 Minimum Grade of C) and HSC 342 Minimum Grade of C and (NU 211 Minimum Grade of C or NU 300 Minimum Grade of C) and (NU 221 Minimum Grade of C or NU 301 Minimum Grade of C) and NU 327 Minimum Grade of C

**MCN 346 Child Health Nursing Clinical 3 cr**

Clinical practice course in child health nursing. Focus is on the application of theories, concepts, research, and issues and trends in child health nursing. Emphasis is on the role of the professional nurse in child health nursing and on the use of the nursing process with children and their families.

Co-requisite: MCN 345

Pre-requisite: (NU 211 Minimum Grade of C or NU 300 Minimum Grade of C) and (NU 221 Minimum Grade of C or NU 301 Minimum Grade of C) and NU 325 Minimum Grade of C and HSC 342 Minimum Grade of C and (HSC 243 Minimum Grade of C or HSC 343 Minimum Grade of C) and NU 327 Minimum Grade of C

**MCN 347 NuChild-Bearing/Child Rearing 4 cr**

Analysis of theories, concepts, evidence, and issues and trends in professional nursing care of the childbearing and childrearing family. Emphasis on the use of the nursing process and other systematic approaches to plan, implement, and evaluate health promotion and maintenance activities, illness care, and rehabilitation with individuals and families in various stages of childbearing and childrearing, as well as the gynecological care of women in a variety of acute and community settings.

Co-requisite: MCN 348

Pre-requisite: CMN 350 Minimum Grade of C and CMN 351 Minimum Grade of C and (NU 211 Minimum Grade of C or NU 300 Minimum Grade of C) and (NU 221 Minimum Grade of C or NU 301 Minimum Grade of C)

**MCN 348 Childbearing/Childrearing Clin 4 cr**

The purpose of this course is to provide students the opportunity to engage in clinical practice with childbearing and childrearing families as well as the gynecologic care of women. Emphasis is on the role of the professional nurse in the application of concepts and theories related to health promotion and maintenance, illness care and rehabilitation with childbearing and childrearing families.

Co-requisite: MCN 347

Pre-requisite: CMN 350 Minimum Grade of C and CMN 351 Minimum Grade of C and (NU 211 Minimum Grade of C or NU 300 Minimum Grade of C) and (NU 221 Minimum Grade of C or NU 301 Minimum Grade of C)

**MCN 538 Intro to Women's Health NP 3 cr**

The purpose of this course is to expand the Women's Health Nurse Practitioner student's knowledge and skills for obtaining, recording and analyzing a systematic health assessment of women. Emphasis is on the synthesis and application of nursing and related theories and scientific knowledge to the development of differential/nursing diagnoses as a basis for health promotion and management.

Co-requisite: MCN 541

Pre-requisite: NU 545 Minimum Grade of C and NU 518 Minimum Grade of C

**MCN 541 HPDP Women's Health NP 2 cr**

The purpose of this didactic course is to prepare the Women's Nurse Practitioner student to identify and implement appropriate health promotion and disease prevention strategies across the lifespan. The focus is on the advanced practice nursing of individuals and families in primary care settings. Emphasis is placed on health promotion/disease prevention with strategic planning at the primary, secondary and tertiary levels of prevention. Various issues are explored pertinent to the advanced practice role. Co-requisite: MCN 538

**MCN 542 Women's Health NP I 3 cr**

The purpose of this didactic course is to prepare the Women's Health Nurse Practitioner student to assess, diagnose, and manage selected health care needs of women. The focus is on advanced practice nursing with women primary, acute, and chronic health care settings. Emphasis is on wellness and the pathophysiology and epidemiology underlying acute and chronic health problems. Co-requisite: MCN 543  
Pre-requisite: MCN 538 Minimum Grade of C and NU 578 Minimum Grade of C

**MCN 543 Women's Health NP Pract I 4 cr**

The purpose of this practicum course is to provide opportunities for the Women's Health Nurse Practitioner student to apply concepts from MCN 542 Advanced Women's Health Nursing II in select clinical settings. Focus is on advanced practice nursing with women and families in primary, acute, and chronic health care settings. The emphasis is on diagnostic reasoning and decision making/critical thinking. Co-requisite: MCN 542

**MCN 544 Women's Health NP II 3 cr**

The purpose of this course is to provide the Women's Health Nurse Practitioner student an in-depth study of the health care management of women within the framework of advanced nursing. The focus is on selected acute and chronic complex health care problems. Emphasis is on the interaction among health care providers in a culturally diverse environment. Co-requisite: MCN 545  
Pre-requisite: MCN 542 Minimum Grade of C

**MCN 545 Women's Health NP Pract II 2 cr**

The purpose of this course is to provide opportunity for the Women's Health Nurse Practitioner student to practice within an advanced nursing framework. The focus is on the role of the advanced practice nurse in the health care management of women. Emphasis is on collaboration with other health care providers in a culturally diverse environment. Co-requisite: MCN 544

**MCN 546 Women's Health NP Pract III 4 cr**

The purpose of this culminating course is to provide a preceptor and faculty facilitated experience in the Women's Health Nurse Practitioner role. The focus is on the application and synthesis of knowledge and skills acquired in all previous courses. Co-requisite: MCN 547  
Pre-requisite: MCN 544 Minimum Grade of C and NU 608 Minimum Grade of C and NU 607 Minimum Grade of C

**MCN 547 Adv Women's Health NP IV 3 cr**

The purpose of this course is to provide a forum for the evaluation of issues and trends encountered in advanced women's health nursing care. Emphasis is on critical analysis and management of issues by the Women's Health Nurse Practitioner student in an interdisciplinary health care system. Co-requisite: MCN 546  
Pre-requisite: NU 607 Minimum Grade of C and NU 608 Minimum Grade of C and NU 610 Minimum Grade of C and NU 613 Minimum Grade of C

**MCN 548 Intro to Ped Primary Care NP 3 cr**

The purpose of this first didactic course is to prepare Advanced Pediatric Primary Care Nurse Practitioner students to assess, diagnose, and manage selected health care needs of children. Emphasis is placed on synthesis and application of nursing and related theories and scientific knowledge to the development of differential/nursing diagnoses as a basis for health promotion and management. Co-requisite: MCN 551  
Pre-requisite: NU 545 Minimum Grade of C and NU 518 Minimum Grade of C

**MCN 551 HPDP Pediatric Primary Care NP 2 cr**

The purpose of this didactic course is to prepare the Pediatric Primary Care Nurse Practitioner student to identify and implement appropriate health promotion and disease prevention strategies for children from birth to adolescence. The focus is on the advanced practice nursing of children and families in primary care settings. Emphasis is placed on health promotion/disease prevention with strategic planning at the primary, secondary, and tertiary levels of prevention. Various issues are explored pertinent to the advanced practice role. Co-requisite: MCN 548

**MCN 552 Pediatric Prim Care NP I 3 cr**

The purpose of this didactic course is to prepare the Advanced Pediatric Primary Care Nurse Practitioner student to assess, diagnose, and manage selected health care needs of children from birth to school age. The focus is on advanced practice nursing with children and families in primary care settings. Emphasis is on the wellness, and the pathophysiology and epidemiology underlying acute and chronic health problems. Co-requisite: MCN 553  
Pre-requisite: MCN 548 Minimum Grade of C and NU 578 Minimum Grade of C

**MCN 553 Ped Prim Care NP Prac I 4 cr**

The purpose of this practicum course is to provide opportunities for the Advanced Pediatric Primary Care Nurse Practitioner student to apply concepts in select clinical settings. Focus is on advanced practice nursing with children and families in primary care settings. The emphasis is on diagnostic reasoning and decision making/critical thinking.

Co-requisite: MCN 552

**MCN 554 Pediatric Primary Care NP II 3 cr**

The purpose of this course is to provide the Advanced Pediatric Primary Care Nurse Practitioner student an in-depth study of the health care management of children from school age to adolescence within the framework of advanced nursing. The focus is on selected acute and chronic complex health problems. Emphasis is on the interaction among health care providers in a culturally diverse environment.

Co-requisite: MCN 555

Pre-requisite: MCN 552 Minimum Grade of C

**MCN 555 Ped Prim Care NP Prac II 2 cr**

The purpose of this course is to provide opportunity for the Pediatric Primary Care Nurse Practitioner student to practice within an advanced nursing framework. The focus is on the role of the advanced practice nurse in the health care management of children. Emphasis is on collaboration with other health care providers in a culturally diverse environment.

Co-requisite: MCN 554

**MCN 556 Adv Ped Prim Care NP Prac IV 3 cr**

The purpose of this culminating course is to provide a preceptor and faculty facilitated experience in the Pediatric Primary Care Nurse Practitioner role. The focus is on the application and synthesis of knowledge and skills acquired in all previous courses.

Co-requisite: MCN 557

Pre-requisite: MCN 554 Minimum Grade of C and NU 608 Minimum Grade of C and NU 607 Minimum Grade of C

**MCN 557 Adv Ped Prim Care NP IV 3 cr**

The purpose of this course is to provide a forum for the evaluation of issues and trends encountered in advanced pediatric primary care health nursing. Emphasis is on critical analysis and management of issues by the Advanced Pediatric Primary Care Nurse Practitioner in an interdisciplinary health care delivery system.

Co-requisite: MCN 556

Pre-requisite: NU 607 Minimum Grade of C and NU 608 Minimum Grade of C and NU 610 Minimum Grade of C and NU 613 Minimum Grade of C

**MCN 558 Intro to Acute Care NP 3 cr**

The purpose of this course is to expand the Advanced Pediatric Acute Care Nurse Practitioner student's knowledge and skills for obtaining, recording, and analyzing a systematic health assessment of the infant, child, and adolescent in a primary care setting. Emphasis is placed on the synthesis of nursing in application and related theories and scientific knowledge for the development of differential/nursing diagnosis as a basis for health promotion and management.

Co-requisite: MCN 571

Pre-requisite: NU 518 Minimum Grade of C and NU 545 Minimum Grade of C

**MCN 562 Pediatric Acute Care NP I 3 cr**

This course provides Advanced Pediatric Acute Care Nurse Practitioner students to assess, diagnose, and manage selected health care needs of children. The focus is on advanced practice nursing with children and families in acute care settings. Emphasis is placed on wellness and the pathophysiology and epidemiology underlying acute and chronic health problems.

Co-requisite: MCN 563

Pre-requisite: MCN 558 Minimum Grade of C and NU 578 Minimum Grade of C and MCN 571 Minimum Grade of C

**MCN 563 Ped Acute Care NP I 4 cr**

This course provides an opportunity for the Advanced Pediatric Acute Care Nurse Practitioner student to apply concepts in select clinical settings. Focus is on children and families in acute care settings. The emphasis is on diagnostic reasoning and decision making/critical thinking. Practicum experiences will include rotations with a primary preceptor.

Co-requisite: MCN 562

**MCN 564 Pediatric Acute Care NP II 3 cr**

This course provides an in-depth study of the health care management of the Advanced Pediatric Acute Care patient. Emphasis is on the interaction among health care providers in a culturally diverse environment.

Co-requisite: MCN 565

Pre-requisite: MCN 562 Minimum Grade of C and MCN 563 Minimum Grade of C

**MCN 565 Ped Acute Care NP Prac II 2 cr**

This course provides an opportunity for the Advanced Pediatric Acute Care Nurse Practitioner student to apply concepts in select clinical settings. The emphasis is on diagnostic reasoning and decision-making/critical thinking.

Co-requisite: MCN 564

Pre-requisite: MCN 562 Minimum Grade of C and MCN 563 Minimum Grade of C

**MCN 566 Adv Ped Acute Care NP Prac IV 3 cr**

This course provides a forum for the evaluation of issues and trends encountered in Advanced Pediatric Acute Care nursing. Emphasis is on critical analysis and management of issues by the Advanced Pediatric Acute Care Nurse Practitioner in an interdisciplinary health care delivery system.

Co-requisite: MCN 567

Pre-requisite: MCN 564 Minimum Grade of C and MCN 565 Minimum Grade of C or NU 607 Minimum Grade of C or NU 608 Minimum Grade of C or NU 610 Minimum Grade of C or NU 613 Minimum Grade of C

**MCN 567 Adv Ped Acute Care NP IV 3 cr**

The purpose of this course is to provide a preceptor and faculty facilitated experience in the Advanced Pediatric Acute Care Nurse Practitioner role. The focus is on application and synthesis of knowledge and skills acquired in all previous courses.

Co-requisite: MCN 566

Pre-requisite: NU 607 Minimum Grade of C and NU 608 Minimum Grade of C and NU 610 Minimum Grade of C and NU 613 Minimum Grade of C and MCN 564 Minimum Grade of C and MCN 565 Minimum Grade of C

**MCN 568 Intro to Neonatal NP 3 cr**

The purpose of this first didactic course is to prepare Advanced Neonatal Nurse Practitioner students to assess, diagnose, and manage selected health care needs of neonates. Emphasis is placed on synthesis and application of nursing and related theories and scientific knowledge to the development of differential/nursing diagnoses as a basis for health promotion and management.

Co-requisite: MCN 571

Pre-requisite: NU 545 Minimum Grade of C and NU 518 Minimum Grade of C

**MCN 571 HPDP NNP/Peds Acute NP 2 cr**

The purpose of this didactic course is to prepare the Neonatal and Acute Care Pediatric Nurse Practitioner students to identify and implement appropriate health promotion and disease prevention strategies for the neonate to age 21 years. The focus is on the advanced practice nursing of individuals and families in primary care settings. Emphasis is placed on health promotion/disease prevention with strategic planning at the primary, secondary and tertiary levels of prevention. Various issues are explored pertinent to the advanced practice role.

Co-requisite: MCN 568

Pre-requisite: MCN 558 Minimum Grade of C or MCN 568 Minimum Grade of C

**MCN 572 Neonatal NP I 3 cr**

The purpose of this didactic course is to prepare the Advanced Neonatal Nurse Practitioner student to assess, diagnose, and manage selected health care needs of neonates. The focus is on neonates and families in primary, acute, and chronic health care settings. Emphasis is placed on wellness and the pathophysiology and epidemiology underlying acute and chronic health problems.

Co-requisite: MCN 573

Pre-requisite: MCN 568 Minimum Grade of C and NU 578 Minimum Grade of C

**MCN 573 Neonatal NP Pract I 3 cr**

The purpose of this practicum course is to provide opportunities for the Advanced Neonatal Nurse Practitioner student to apply concepts in select clinical settings. Focus is on advanced nursing practice with neonates and their families in primary, acute, and chronic health care settings. The emphasis is on diagnostic reasoning and decision making/critical thinking.

Co-requisite: MCN 572

**MCN 574 Neonatal NP II 3 cr**

The purpose of this course is to provide the Advanced Neonatal Nurse Practitioner student an in-depth study of the neonate within the framework of nursing. The focus is on selected acute and chronic complex health problems of neonates in the primary, acute, and chronic care settings. Emphasis is on the interaction among health care providers in a culturally diverse environment.

Co-requisite: MCN 575

Pre-requisite: MCN 572 Minimum Grade of C

**MCN 575 Neonatal NP Prac II 2 cr**

The purpose of this course is to provide opportunity for the Advanced Neonatal Nurse Practitioner student to practice within an advanced nursing framework. The focus is on the role of the advanced practice nurse in the management of the neonate. Emphasis is on collaboration with other health care providers in a culturally diverse environment.

Co-requisite: MCN 574

**MCN 576 Advanced Neonatal NP Prac IV 3 cr**

The purpose of this culminating course is to provide a preceptor-faculty facilitated experience in the Advanced Neonatal Nurse Practitioner role. The focus is on the application and synthesis of knowledge and skills acquired in all previous courses.

Co-requisite: MCN 577

Pre-requisite: MCN 574 Minimum Grade of C and NU 607 Minimum Grade of C and NU 608 Minimum Grade of C

**MCN 577 Advanced Neonatal NP IV 3 cr**

The purpose of this course is to provide a forum of the evaluation of issues and trends encountered in advanced neonatal nursing care. Emphasis is on critical analysis and management of issues by the Advanced Neonatal Nurse Practitioner in an interdisciplinary health care system.

Co-requisite: MCN 576

Pre-requisite: NU 607 Minimum Grade of C and NU 608 Minimum Grade of C and NU 610 Minimum Grade of C and NU 613 Minimum Grade of C

**MCN 604 Pediatric Acute Care NP PP&D 3 cr**

This course assists the Pediatric Acute Care Nurse Practitioner DNP student to learn the processes embedded in developing a doctoral synthesis project. The course will address all aspects of project planning and development as a preliminary step to the Acute Care Pediatric Nurse Practitioner students' selection of a topic or phenomenon of interest for the project and will incorporate well-built questions, search strategies and outcomes, identification of resources needed, plan for evaluation and dissemination.

**MCN 617 Pediatric Acute Care NP Res I 3 cr**

Theories of leadership, motivation, power, and change are used to influence change in health care organizations. This course will implement evidence-based clinical models and evaluate their effectiveness in health outcomes. The student will synthesize, critique, and apply evidence to support quality clinical or organizational practices. In this mentored and supervised experience, the student will work with the primary faculty advisor to complete projects and advance their selected practice area. The student will have access to and authority for expanded scope of practice to master the DNP competencies. Residency sites will depend upon the student's career trajectory and approval by collaborating faculty. During the residency semester, students must participate in scheduled scholarly seminars online. Clinical hours of direct practice/management is required.

Pre-requisite: MCN 604 Minimum Grade of C

**MCN 618 Pediatric Acute Care NP Res II 3 cr**

Provides students the opportunity to fully express all DNP competencies. The student, guided by the faculty facilitator, will implement the scholarly doctoral system's change project.

Pre-requisite: MCN 617 Minimum Grade of C

**MCN 619 Pediatric Acute Cre NP Res III 3 cr**

Final course in residency series as student continues to implement and evaluate project plan. Provides student the opportunity to fully express all DNP competencies. The student, guided by the core faculty and advisor, completes quality improvement evidence-based system's change project.

Pre-requisite: MCN 618 Minimum Grade of C

**MCN 625 WHNP CNS PP&D 3 cr**

This course assists the women's health clinical nurse specialist DNP student to learn the processes embedded in developing a doctoral synthesis project. The course will address all aspects of project planning and development as a preliminary step to the women's health clinical nurse specialist students' selection of a topic or phenomenon of interest for the project and will incorporate well-built questions, search strategies and outcomes, identification of resources needed, plan for evaluation and dissemination.

**MCN 626 WHNP CNS Residency I 3 cr**

Theories of leadership, motivation, power, and change are used to influence change in health care organizations. This course will implement evidence-based clinical models and evaluate their effectiveness in health outcomes. The women's health clinical nurse specialist student will synthesize, critique, and apply evidence to support quality clinical or organizational practices. In this mentored and supervised experience, the women's health clinical nurse specialist student will work with the primary faculty advisor to complete projects and advance their selected practice area. The women's health clinical nurse specialist student will have access to and authority for expanded scope of practice to master the DNP competencies. Residency sites will depend upon the student's career trajectory and approval by collaborating faculty. During the residency semester, the women's health clinical nurse specialist student must participate in scheduled scholarly seminars online. Clinical hours of direct practice/management is required.

Pre-requisite: MCN 625 Minimum Grade of C

**MCN 627 WHNP CNS Residency II 3 cr**

Provides women's health clinical nurse specialist students the opportunity to fully express all DNP competencies. The women's health clinical nurse specialist student, guided by the faculty facilitator, will implement the scholarly doctoral system's change project.

Pre-requisite: MCN 626 Minimum Grade of C

**MCN 628 WHNP CNS Residency III 3 cr**

Final course in residency series as women's health clinical nurse specialist student continues to implement and evaluate project plan. Provides the women's health clinical nurse specialist student the opportunity to fully express all DNP competencies. The women's health clinical nurse specialist student, guided by the core faculty and advisor completes quality improvement evidence-based system's change project.

Pre-requisite: MCN 627 Minimum Grade of C

**MCN 637 Peds CNS Proj Plan/Development 3 cr**

This course assists the pediatric clinical nurse specialist DNP student to learn the processes embedded in developing a doctoral synthesis project. The course will address all aspects of project planning and development as a preliminary step to the pediatric clinical nurse specialist students' selection of a topic or phenomenon of interest for the project and will incorporate well-built questions, search strategies and outcomes, identification of resources needed, plan for evaluation and dissemination.

**MCN 638 Pediatric CNS Residency I 3 cr**

Theories of leadership, motivation, power, and change are used to influence change in health care organizations. This course will implement evidence-based clinical models and evaluate their effectiveness in health outcomes. The pediatric clinical nurse specialist student will synthesize, critique, and apply evidence to support quality clinical or organizational practices. In this mentored and supervised experience, the pediatric clinical nurse specialist student will work with the primary faculty advisor to complete projects and advance their selected practice area. The pediatric clinical nurse specialist student will have access to and authority for expanded scope of practice to master the DNP competencies. Residency sites will depend upon the pediatric clinical nurse specialist student's career trajectory and approval by collaborating faculty. During the residency semester, the pediatric clinical nurse specialist student must participate in scheduled scholarly seminars online. Clinical hours of direct practice/management is required.

Pre-requisite: MCN 637 Minimum Grade of C

**MCN 639 Peds CNS Residency II 3 cr**

Provides pediatric clinical nurse specialist students the opportunity to fully express all DNP competencies. The pediatric clinical nurse specialist student, guided by the faculty facilitator, will implement the scholarly doctoral system's change project.

Pre-requisite: MCN 638 Minimum Grade of C

**MCN 640 Peds CNS Residency III 3 cr**

Final course in residency series as pediatric clinical nurse specialist student continues to implement and evaluate project plan. Provides pediatric clinical nurse specialist student the opportunity to fully express all DNP competencies. The pediatric clinical nurse specialist student, guided by the core faculty and advisor completes quality improvement evidence-based system's change project.

Pre-requisite: MCN 639 Minimum Grade of C

**MCN 644 Women's Health NP PP&D 3 cr**

This course assists the women's health nurse practitioner DNP student to learn the processes embedded in developing a doctoral synthesis project. The course will address all aspects of project planning and development as a preliminary step to the women's health nurse practitioner student's selection of a topic or phenomenon of interest for the project and will incorporate well-built questions, search strategies and outcomes, identification of resources needed, plan for evaluation and dissemination.

**MCN 645 Women's Health NP Residency I 3 cr**

Theories of leadership, motivation, power, and change are used to influence change in health care organizations. This course will implement evidence-based clinical models and evaluate their effectiveness in health outcomes. The women's health nurse practitioner student will synthesize, critique, and apply evidence to support quality clinical or organizational practices. In this mentored and supervised experience, the women's health nurse practitioner student will work with the primary faculty advisor to complete projects and advance their selected practice area. The women's health nurse practitioner student will have access to and authority for expanded scope of practice to master the DNP competencies. Residency sites will depend upon the women's health nurse practitioner student's career trajectory and approval by collaborating faculty. During the residency semester, the women's health nurse practitioner student must participate in scheduled scholarly seminars online. Clinical hours of direct practice/management is required.

Pre-requisite: MCN 644 Minimum Grade of C

**MCN 646 Women's Health NP Residency II 3 cr**

Provides women's health nurse practitioner students the opportunity to fully express all DNP competencies. The women's health nurse practitioner student, guided by the faculty facilitator, will implement the scholarly doctoral system's change project.

Pre-requisite: MCN 645 Minimum Grade of C

**MCN 647 Women's Health NP Res III 3 cr**

Final course in residency series as women's health nurse practitioner student continues to implement and evaluate project plan. Provides women's health nurse practitioner student the opportunity to fully express all DNP competencies. The women's health nurse practitioner student, guided by the core faculty and advisor completes quality improvement evidence-based system's change project.

Pre-requisite: MCN 646 Minimum Grade of C

**MCN 654 Pediatric Primary Care NP PP&D 3 cr**

This course assists the pediatric primary care nurse practitioner DNP student to learn the processes embedded in developing a doctoral synthesis project. The course will address all aspects of project planning and development as a preliminary step to the pediatric primary care nurse practitioner student's selection of a topic or phenomenon of interest for the project and will incorporate well-built questions, search strategies and outcomes, identification of resources needed, plan for evaluation and dissemination.

**MCN 655 Pediatric Primary Care NP Res 3 cr**

Theories of leadership, motivation, power, and change are used to influence change in health care organizations. This course will implement evidence-based clinical models and evaluate their effectiveness in health outcomes. The pediatric primary care nurse practitioner student will synthesize, critique, and apply evidence to support quality clinical or organizational practices. In this mentored and supervised experience, the pediatric primary care nurse practitioner student will work with the primary faculty advisor to complete projects and advance their selected practice area. The pediatric primary care nurse practitioner student will have access to and authority for expanded scope of practice to master the DNP competences. Residency sites will depend upon the pediatric primary care nurse practitioner student's career trajectory and approval by collaborating faculty. During the residency semester, the pediatric primary care nurse practitioner student must participate in scheduled scholarly seminars online. Clinical hours of direct practice/management is required. Pre-requisite: MCN 654 Minimum Grade of C

**MCN 656 Ped Primary Care NP Res II 3 cr**

Provides pediatric primary care nurse practitioner students the opportunity to fully express all DNP competencies. The pediatric primary care nurse practitioner student, guided by the faculty facilitator, will implement the scholarly doctoral system's change project. Pre-requisite: MCN 655 Minimum Grade of C

**MCN 657 Ped Primary Care NP Res III 3 cr**

Final course in residency series as the Pediatric Primary Care Nurse Practitioner student continues to implement and evaluate project plan. Provides the Pediatric Primary Care Nurse Practitioner student the opportunity to fully express all DNP competencies. The Pediatric Primary Care Nurse Practitioner student, guided by the core faculty and advisor completes quality improvement evidence-based system's change project. Pre-requisite: MCN 656 Minimum Grade of C

**MCN 674 NNP Project Plan & Development 3 cr**

This course assists the neonatal nurse practitioner DNP student to learn the processes embedded in developing a doctoral synthesis project. The course will address all aspects of project planning and development as a preliminary step to the neonatal nurse practitioner students' selection of a topic or phenomenon of interest for the project and will incorporate well-built questions, search strategies and outcomes, identification of resources needed, plan for evaluation and dissemination.

**MCN 675 NNP Residency I 3 cr**

Theories of leadership, motivation, power, and change are used to influence change in health care organizations. This course will implement evidence-based clinical models and evaluate their effectiveness in health outcomes. The neonatal nurse practitioner student will synthesize, critique, and apply evidence to support quality clinical or organizational practices. In this mentored and supervised experience, the neonatal nurse practitioner student will work with the primary faculty advisor to complete projects and advance their selected practice area. The neonatal nurse practitioner student will have access to and authority for expanded scope of practice to master the DNP competences. Residency sites will depend upon the neonatal nurse practitioner student's career trajectory and approval by collaborating faculty. During the residency semester, the neonatal nurse practitioner student must participate in scheduled scholarly seminars online. Clinical hours of direct practice/management is required. Pre-requisite: MCN 674 Minimum Grade of C

**MCN 676 NNP Residency II 3 cr**

Provides neonatal nurse practitioner students the opportunity to fully express all DNP competencies. The neonatal nurse practitioner student, guided by the faculty facilitator, will implement the scholarly doctoral system's change project. Pre-requisite: MCN 675 Minimum Grade of C

**MCN 677 NNP Residency III 3 cr**

Final course in residency series as neonatal nurse practitioner student continues to implement and evaluate project plan. Provides neonatal nurse practitioner student the opportunity to fully express all DNP competences. The neonatal nurse practitioner student, guided by the core faculty and advisor completes quality improvement evidence-based system's change project. Pre-requisite: MCN 676 Minimum Grade of C

**MCN 692 MCN DNP Project Progression 3 cr**

Students will register for this course to complete residency course work under supervision of faculty. Students must remain continuously enrolled until all residency requirements are completed. Pre-requisite: MCN 618 Minimum Grade of C or MCN 627 Minimum Grade of C or MCN 639 Minimum Grade of C or MCN 646 Minimum Grade of C or MCN 656 Minimum Grade of C or MCN 676 Minimum Grade of C

## Mathematics (MA)

**MA 105 Algebra for Math Placement 4 cr**

Introduction to equations of straight lines in various forms and transition between these forms; Manipulation and solution of linear equations and linear inequalities; graphing solution sets on the number line and expression of solution sets in both set and interval notation. Simplification, multiplication, and division of polynomials; Factoring quadratic expressions and the solution of quadratic equations by factoring; Solution of basic rational equations; Addition, subtraction, multiplication and division of rational expressions; simplification of complicated ratios of rational expressions. Working with set operations: Absolute value inequalities and equations and compound inequalities; Addition, subtraction, multiplication, division, and simplification of expressions with radicals and/or rational exponents and rationalization of numerator or denominator. Credit for both MTH 100, MTH 101 and MA 105 is not allowed.

**MA 110 Finite Mathematics 3 cr**

This course is intended to give an overview of topics in finite mathematics together with their applications. The course includes logic, sets, counting, permutations, combinations, basic probability, descriptive statistics and their applications. Students are required to have a scientific calculator. Core Course. Note: May be offered for Honors credit NOTE: MA 110 is not a Pre-requisite for nor is it intended to be preparatory for any course listed below except MA 201 and MA 202.

**MA 112 Precalculus Algebra 3 cr**

The course covers algebraic, graphical and numerical properties of functions, focusing on linear, quadratic, general polynomial, absolute value, rational, exponential, and logarithmic functions. Topics also include equations, inequalities, and complex numbers. Applications of mathematics to modeling real world situations are emphasized. Credit for both MA 112 and MA 115 not allowed. Core Course.

Pre-requisite: ACT Math 22 or MTH 100 Minimum Grade of C or MyMathTest 070 or MTH 101 Minimum Grade of C or MA 105 Minimum Grade of C or SAT Mathematics 560 or MATH SECTION SCORE 580

**MA 113 Precalculus Trigonometry 3 cr**

Continuation of MA 112. Topics include numerical, graphical and algebraic properties of trigonometric functions, inverse trigonometric functions, right angle trigonometry, parametric equations, polar coordinates, and conic sections. Development and application of mathematical models to real-world situations is emphasized. Credit for both MA 113 and MA 115 not allowed. Core Course.

Pre-requisite: ACT Math 24 or MyMathTest 080 or MA 112 Minimum Grade of C or SAT Mathematics 590 or MATH SECTION SCORE 610

**MA 115 Precal Algebra-Trigonometry 4 cr**

This fast-paced course is designed as a review of the algebra and trigonometry needed in calculus. It covers the material of MA 112 and MA 113 in one semester. Topics include numerical, graphical and algebraic properties of polynomial, rational, exponential, logarithmic, and trigonometric functions; inverse trigonometric functions; right angle trigonometry; parametric equations; polar coordinates and conic sections. Applications of mathematics to modeling real world situations are emphasized. Credit for both MA 112 and MA 115 not allowed; credit for both MA 113 and MA 115 not allowed. Core Course.

Pre-requisite: ACT Math 25 or MyMathTest 080 or SAT Mathematics 620 or MATH SECTION SCORE 640

**MA 120 Calculus and Its Applications 3 cr**

Introduction to calculus with an emphasis on problem solving and applications. Key concepts are presented graphically, numerically and algebraically, although the stress is on a clear understanding of graphs and tabular data. The course covers: algebraic, exponential and logarithmic functions, their properties and their use in modeling; the concepts of derivative and definite integral and their applications to marginal analysis, optimization and probability; examples of multivariate functions, partial derivatives and applications to optimization problems. Students are encouraged to have a graphing calculator. Credit for both MA 120 and MA 125 not allowed. Prerequisite: Sufficient Mathematics Placement Exam score. MA 120 is not a prerequisite for subsequent calculus courses. Core Course.

Pre-requisite: ACT Math 23 or MyMathTest 080 or MA 112 Minimum Grade of C or MA 113 Minimum Grade of C or MA 115 Minimum Grade of C or SAT Mathematics 575 or MATH SECTION SCORE 595

**MA 125 Calculus I 4 cr**

The course provides an introduction to calculus with emphasis on differential calculus. Topics include limits of functions, derivatives of algebraic and transcendental functions, application of the derivative to curve sketching, optimization problems, and examples in the natural sciences, engineering, and economics. The course concludes with an introduction to anti-derivatives, definite integrals, and the fundamental theorem of calculus. Credit for both MA 120 and MA 125 is not allowed. Prerequisite: Sufficient Mathematics Placement Exam score. Core Course. NOTE: MA 110, MA 112, MA 113, MA 115, MA 120, and MA 125 have strict Pre-requisites. To be able to enroll in these courses a student needs either to pass the Pre-requisite course with C or better or to have a sufficient Mathematics Placement Exam score.

Pre-requisite: ACT Math 27 or MyMathTest 090 or MA 113 Minimum Grade of C or MA 115 Minimum Grade of C or SAT Mathematics 665 or MATH SECTION SCORE 695

**MA 126 Calculus II 4 cr**

This course is a continuation of MA 125 with emphasis on integral calculus. Topics include techniques of integration; applications of the definite integral to geometry, natural sciences, engineering, and economics; improper integrals; infinite sequences and series; Taylor polynomials and Taylor series; parametric equations and polar coordinates. Core Course.

Pre-requisite: MA 125 Minimum Grade of C

**MA 150 Contemporary Math-Stat Seminar 1 cr**

This course gives an overview of modern mathematics and statistics from the point of view of the practitioners. The course is designed for majors in mathematics and statistics at all levels as well as those student who are considering mathematics or statistics as a major or minor area of study. Topics usually included are elements of geometry, algebra, analysis, methods of statistical inference, the role of the computer in the analytical sciences; these topics vary from semester to semester. This course cannot be taken for credit simultaneously with ST 150. NOTE: May be offered for Honors Credit.

**MA 201 Math for Elem Teachers I 3 cr**

An examination of some of the major ideas encountered in the teaching of elementary mathematics. Topics include introduction to problem solving, sets, relations, logic, numeration systems, elementary number theory, properties and operations for whole numbers, integers, rational numbers, and real numbers. NOTE: MA 201 does not fulfill graduation requirements for any curriculum other than College of Education and Professional Studies.

Pre-requisite: MA 110 Minimum Grade of C or MA 112 Minimum Grade of C or MA 113 Minimum Grade of C or MA 115 Minimum Grade of C or MA 120 Minimum Grade of C or MA 125 Minimum Grade of C or MA 126 Minimum Grade of C or MA 150 Minimum Grade of C

**MA 202 Math for Elem Teachers II 3 cr**

Topics covered are those that a prospective elementary or middle school teacher should expect to encounter in the teaching of geometry in elementary or middle school. Topics include geometric shapes, measurement, triangle congruence and similarity, and coordinate geometry. NOTE: MA 202 does not fulfill graduation requirements for any curriculum other than College of Education and Professional Studies.

Pre-requisite: MA 110 Minimum Grade of C or MA 112 Minimum Grade of C or MA 113 Minimum Grade of C or MA 115 Minimum Grade of C or MA 120 Minimum Grade of C or MA 125 Minimum Grade of C or MA 126 Minimum Grade of C or MA 150 Minimum Grade of C

**MA 227 Calculus III 4 cr**

Vectors; functions of several variables; partial derivatives; local linearity; directional derivatives; the gradient; differential of a function; the chain rule; higher order partial derivatives; optimization of functions of several variables; multiple integrals and their applications; parametric curves and surfaces; vector fields; line and surface integrals; vector calculus. Core Course.

Pre-requisite: MA 126 Minimum Grade of C

**MA 237 Linear Algebra I 3 cr**

This course provides an introduction to linear algebra. Topics include systems of linear equations, matrices, Gaussian elimination, rank, linear independence, subspaces, basis, dimension, linear transformations, determinants, eigenvalues and eigenvectors, change of basis, diagonalization, the abstract concept of a vector space, and applications. Core Course.

Pre-requisite: MA 126 Minimum Grade of C

**MA 238 Differential Equations I 3 cr**

This course provides an introduction to ordinary differential equations. Topics include first order differential equations, higher order linear differential equations, systems of first order linear differential equations, Laplace transforms, methods for approximating solutions to first order differential equations, applications. Students should have taken or be taking MA 227. Core Course.

Pre-requisite: MA 227 Minimum Grade of D

**MA 267 Discrete Math Structures 3 cr**

This course is an introduction to discrete mathematics for students majoring in computer-related areas. Students will be introduced to concepts and methods that are essential to theoretical computer science. A strong emphasis is placed on developing skills in mathematical reasoning and understanding and writing proofs. Topics include sets, functions, induction, recursion, combinatorics and graphs. Prerequisite: Sufficient mathematics placement exam score. Pre-requisite: ACT Math 23 or MyMathTest 080 or MA 113 Minimum Grade of C or MA 115 Minimum Grade of C

**MA 290 Special Topics - 1 TO 3 cr**

Selected topics in elementary undergraduate mathematics. This course may be repeated for a maximum of six credits.

**MA 303 Math for Elem Teachers III 3 cr**

An exploration of problem solving strategies. Problems exemplifying the various problem solving strategies studied. Emphasis on the development of problem solving skills by exploring interesting problems which demand for their solution that the student select from a wide variety of possible strategies and use a wide variety of conceptual tools. NOTE: MA 303 does not fulfill graduation requirements for any curriculum other than elementary education.

Pre-requisite: MA 202 Minimum Grade of C

- MA 311 Intro to Number Theory** 3 cr  
An introduction to classical number theory with a balance between theory and computation. Topics include mathematical induction, divisibility properties, properties of prime numbers, the theory of congruences, number theoretic functions, continued fractions.  
Pre-requisite: MA 126 Minimum Grade of C
- MA 316 Linear Algebra II** 3 cr  
A continuation of MA 237. Topics include inner product spaces, spectral theorem for symmetric operators, complex vector spaces, Jordan canonical form. Additional topics such as duality and Tensor products among others to be included at the discretion of the instructor.  
Pre-requisite: MA 237 Minimum Grade of C
- MA 320 Foundations of Math - W** 3 cr  
A transition to higher mathematics with an emphasis on proof techniques. Topics include symbolic logic, elementary set theory, induction, relations, functions, and the structure of the number system. Mathematics and Statistics majors are encouraged to take MA 320 as soon as possible after completing MA 125.  
Pre-requisite: MA 125 Minimum Grade of C and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)
- MA 321 Elementary Geometry** 3 cr  
This course covers the major topics from the secondary school curriculum of plane and solid geometry from a modern viewpoint. Emphasis will be placed on axioms, undefined terms, definitions, theorems, and proofs. Topics include straightedge and compass constructions, Euclidean geometry, Euclidean space, congruence, isometry, reflection, rotation, translation, vectors, parallel postulate, similarity, Pythagorean theorem, coordinate geometry, non-Euclidean geometry, projective geometry, projective space, perspective, homogenous coordinates.  
Pre-requisite: MA 320 Minimum Grade of C
- MA 332 Differential Equations II** 3 cr  
Series solutions of second order linear equations. Numerical methods. Nonlinear differential equations and stability. Partial differential equations and Fourier series. Sturm-Liouville problems.  
Pre-requisite: MA 227 Minimum Grade of C and MA 238 Minimum Grade of C
- MA 334 Advanced Calculus I** 3 cr  
This is the first of a two course sequence designed to provide students with the theoretical context of concepts encountered in MA 125 through MA 227. Topics covered include Completeness Axiom, sequences of real numbers, suprema and infima, Cauchy sequences, open sets and accumulation points in Euclidean space, completeness of Euclidean space, series of real numbers and vectors, compactness, Heine- Borel Theorem, connectedness, continuity, Extremum Theorem, Intermediate Value Theorem, differentiation of functions of one variable.  
Pre-requisite: MA 227 Minimum Grade of C and MA 237 Minimum Grade of C and MA 320 Minimum Grade of C
- MA 335 Advanced Calculus II** 3 cr  
This is the second of a two course sequence designed to provide students with the theoretical context of concepts encountered in MA 125 through MA 227. Topics covered include integration of functions of one variable, pointwise and uniform convergence, integration and differentiation of series, differentiable mappings of several variables, chain rule, product rule and gradients, Mean Value Theorem, Taylor's Theorem, Inverse Function Theorem, Implicit Function Theorem.  
Pre-requisite: MA 334 Minimum Grade of C
- MA 354 Comp Assist Math Modeling - W** 3 cr  
This course is intended to provide the basic ideas regarding formulation, development, testing and reporting of mathematical models of various real world problems. Deterministic and stochastic models, optimization and simulations will be covered. Emphasis will be on careful mathematical formulations and the use of computer software, such as Microsoft Excel, Mathematica and Matlab. A term project will be an important component of this course. The course is taught in a laboratory setting with computers as lab equipment.  
Pre-requisite: (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C) and MA 227 Minimum Grade of C and MA 238 Minimum Grade of C
- MA 367 Combinatorial Enumeration** 3 cr  
An introduction to the mathematical theory of counting. Basic counting principles, permutations and combinations, partitions, recurrence relations, and a selection of more advanced topics such as generating functions, combinatorial designs, Ramsey theory, or group actions and Poyla theory.  
Pre-requisite: MA 126 Minimum Grade of C
- MA 410 History of Mathematics - W** 3 cr  
Historical survey of the general development of mathematics with a balance of historical perspective and mathematical structure.  
Pre-requisite: (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C) and MA 320 Minimum Grade of C)
- MA 413 Abstract Algebra I - W** 3 cr  
An introduction to group theory and ring theory. Topics include permutations and symmetries, subgroups, quotient groups, homomorphisms, as well as examples of rings, integral domains, and fields.  
Pre-requisite: MA 237 Minimum Grade of C and (MA 311 Minimum Grade of C or MA 320 Minimum Grade of C or MA 334 Minimum Grade of C) and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)
- MA 414 Abstract Algebra II - W** 3 cr  
A continuation of MA 413 focusing on rings and fields. Topics include rings, ideals, integral domains, fields and extension fields. Geometric constructions and Galois theory are introduced.  
Pre-requisite: MA 413 Minimum Grade of C and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

- MA 434 Topology** **3 cr**  
 An introduction to topology with emphasis on the geometric aspects of the subject. Topics covered include surfaces, topological spaces, open and closed sets, continuity, compactness, connectedness, product spaces, and identification and quotient spaces. Credit for both MA 434 and MA 542 is not allowed.  
 Pre-requisite: MA 334 Minimum Grade of C
- MA 436 Numerical Analysis** **3 cr**  
 Topics include methods of numerical solution of nonlinear equations in one variable, fixed points, contraction mapping and functional iteration methods, interpolation and approximation methods, numerical differentiation and integration, numerical solution of ordinary differential equations, analysis of error for various numerical procedures. Implementation of Mathematica of all numerical methods discussed in class is an essential part of the course.  
 Pre-requisite: MA 227 Minimum Grade of C and MA 238 Minimum Grade of C
- MA 437 Complex Variables** **3 cr**  
 Arithmetic of complex numbers; regions in the complex plane, limits, continuity and derivatives of complex functions; elementary complex functions; mapping by elementary functions; contour integration, power series, Taylor series, Laurent series, calculus of residues; conformal representation; applications. Credit for both MA 437 and MA 537 not allowed.  
 Pre-requisite: MA 238 Minimum Grade of C
- MA 451 Probability** **3 cr**  
 A comprehensive introduction to probability, the mathematical theory used to model uncertainty, covering the axioms of probability, random variables, expectation, classical discrete and continuous families of probability models, the law of large numbers and the central limit theorem. Credit for both MA 451 and MA 550 is not allowed.  
 Pre-requisite: MA 227 Minimum Grade of C and MA 237 Minimum Grade of C
- MA 458 Operations Research - W** **3 cr**  
 An introduction to linear programming. The course will include a study of the simplex method as well as using computers to solve linear systems of equations. As time permits, topics covered will include sensitivity analysis, duality, integer programming, transportation, assignment, transshipment, and networks. Credit for both MA 458 and MA 567 is not allowed.  
 Pre-requisite: (MA 215 Minimum Grade of C or MA 237 Minimum Grade of C) and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)
- MA 467 Mathematical Logic** **3 cr**  
 An introduction to formal first-order logic, first-order metatheory, and its extensions. Topics include axiom systems and their models, completeness, compactness, and recursive sets and functions. Identical with PHL 467. Credit cannot be received for both PHL 467 and MA 467.  
 Pre-requisite: PHL 321 Minimum Grade of C or MA 311 Minimum Grade of C or MA 316 Minimum Grade of C or MA 318 Minimum Grade of C or MA 320 Minimum Grade of C or MA 321 Minimum Grade of C or MA 332 Minimum Grade of C or MA 334 Minimum Grade of C or MA 335 Minimum Grade of C or MA 354 Minimum Grade of C or MA 367 Minimum Grade of C or MA 410 Minimum Grade of C or MA 413 Minimum Grade of C or MA 414 Minimum Grade of C or MA 434 Minimum Grade of C or MA 436 Minimum Grade of C or MA 437 Minimum Grade of C or MA 451 Minimum Grade of C or MA 458 Minimum Grade of C or MA 490 Minimum Grade of C or MA 537 Minimum Grade of C or MA 542 Minimum Grade of C or MA 550 Minimum Grade of C
- MA 481 Cryptography** **3 cr**  
 This course provides an introduction to classical and modern methods of message encryption and decryption (cryptography) as well as possible attacks to cryptosystems (cryptanalysis). Topics include classical (symmetric) cryptosystems (DES, AES), public-key (asymmetric) cryptosystems (Diffie-Hellman, RSA, ElGamal), modes of operation, one-way and trapdoor functions, Hash functions, cryptographic protocols. Credit for both MA 481 and MA 581 is not allowed.  
 Pre-requisite: MA 311 Minimum Grade of C
- MA 490 Special Topics -** **1 TO 3 cr**  
 Selected topics in advanced undergraduate mathematics. This course may be repeated for a maximum of six credits.
- MA 494 Directed Studies -** **1 TO 3 cr**  
 Directed individual study. Requires permission of department chair.
- MA 499 Honors Senior Project - H** **3 TO 6 cr**  
 With the guidance and advice of a faculty mentor, honors students will identify, and carry out a research project in Mathematics. The outcome of the research project will include a formal presentation at the annual Honors Student Colloquium. The senior project will be judged and graded by three members of the faculty, chaired by the faculty mentor.
- MA 501 Number Systems** **3 cr**  
 A case study of axiom systems and the deductive method for graduate students in Mathematics Education. It is expected that students in this course will practice and improve their logical skills, better understand proof as a mathematical activity, and study the similarities and differences between several commonly used number systems.  
 Pre-requisite: MA 321 Minimum Grade of C or MA 413 Minimum Grade of C

- MA 502 Intro to Abstract Algebra** 3 cr  
An introduction to the fundamental concepts of modern algebra such as groups, rings, and fields through concrete examples. This course is designed for graduate students in the College of Education and Professional Studies.  
Pre-requisite: MA 413 Minimum Grade of C
- MA 503 Introduction to Analysis** 3 cr  
A careful look at the elements, procedures, and applications of differential and integral calculus. This course is designed for graduate students in the College of Education and Professional Studies.  
Pre-requisite: MA 227 Minimum Grade of C
- MA 504 Introduction to Geometry** 3 cr  
An introduction to the foundations of geometry using both synthetic and metric approaches. Euclidean, finite, projective, and hyperbolic geometries are discussed. The axioms for various geometries are discussed. The course is designed for graduate students in the College of Education and Professional Studies.  
Pre-requisite: MA 321 Minimum Grade of C
- MA 505 Mathematical Problem Solving** 3 cr  
An in-depth activity-based approach to the methods and strategies for mathematical problem solving for students in Mathematical Education. Problems selected from logic, algebra, analysis, geometry, combinatorics, number theory and probability. This course is designed for graduate students in the College of Education and Professional Studies.
- MA 506 Statistics for Teachers** 3 cr  
Prepares in-service and pre-service teachers to teach statistics in high schools using data-based approach. Uses hands-on-activities approach and simulation of situations to teach concepts and technology to teach data analysis. This course is designed for graduate students in the College of Education and Professional Studies.  
Pre-requisite: MA 126 Minimum Grade of C
- MA 507 Adv Ordinary Differential Eqns** 3 cr  
A graduate-level introduction to topics of ordinary differential equations and their applications in physics and engineering.
- MA 508 Adv Partial Differential Eqns** 3 cr  
A continuation of MA 507 with more emphasis on theory of partial differential equations, as well as their applications in physics and engineering problems.
- MA 511 Algebra I** 3 cr  
A graduate level introduction to group theory. Topics include quotient groups, homomorphisms, group actions, Sylow theorems, composition series, simple groups, free groups, fundamental theorem of abelian groups.
- MA 512 Algebra II** 3 cr  
A graduate level introduction to ring theory and fields. Topics include ring homomorphisms, quotient rings, ideals, rings of fractions, Euclidean domains, principal ideal domains, unique factorization domains, modules, finite fields, field extensions.  
Pre-requisite: MA 511 Minimum Grade of C
- MA 515 Number Theory** 3 cr  
Modular arithmetic, arithmetic functions; prime numbers; algebraic number theory.
- MA 516 Topics in Number Theory** 3 cr  
A second course in number theory, covering topics of interest to the students and instructor.  
Pre-requisite: MA 515 Minimum Grade of C
- MA 518 Linear Algebra I** 3 cr  
Fields, vector spaces, dual spaces, quotient spaces, multilinear forms, linear transformations, algebras, adjoints, eigenvalues.
- MA 519 Linear Algebra II** 3 cr  
Triangular form, nilpotence, Jordan form, inner products, self-adjoint transformations, positive transformations, isometries, Spectral Theorem, polar decomposition, applications to analysis.  
Pre-requisite: MA 518 Minimum Grade of C
- MA 521 Enumerative Combinatorics** 3 cr  
Pigeonhole principle, basic counting techniques, binomial coefficients, inclusion-exclusion principle, recurrence relations, generating functions, systems of distinct representatives, finite fields.
- MA 525 Graph Theory** 3 cr  
Fundamental concepts, connectedness, graph coloring, planarity and Kuratowski's theorem, four-color theorem, chromatic polynomial, Eulerian and Hamiltonian graphs, matching theory, network flows, NP-complete graph problems, Markov chains, matroids.
- MA 535 Real Analysis I** 3 cr  
An introduction to real analysis. Topics include: the metric topology of the reals, limits and continuity, differentiation, Riemann-Stieltjes integral. Prerequisite: Undergraduate course in advanced calculus.
- MA 536 Real Analysis II** 3 cr  
A continuation of MA 535. Topics covered include sequences and series of functions, differentiation and integration in several variables, an introduction to the Lebesgue integral and differential forms as time allows.  
Pre-requisite: MA 535 Minimum Grade of C

- MA 537 Complex Analysis** 3 cr  
Arithmetic of complex numbers; regions in the complex plane; limits, continuity and derivatives of complex functions; elementary complex functions; mappings by elementary functions; contour integration; power series; Taylor series; Laurent series; calculus of residues; conformal representation; applications. Credit for both MA 537 and MA 437 is not allowed.  
Pre-requisite: MA 238 Minimum Grade of C or MA 338 Minimum Grade of C
- MA 538 Topics in Complex Analysis** 3 cr  
A second course in complex analysis, covering topics of interest to the students and instructor.  
Pre-requisite: MA 537 Minimum Grade of C
- MA 539 Measure Theory** 3 cr  
Foundations of the general theory of measure and integration with particular attention to the Lebesgue integral. Function spaces, product measure and Fubini's theorem, the Radon-Nikodym theorem and applications to probability theory are discussed, and possibly additional topics such as Haar measure or the Ergodic Theorem.  
Pre-requisite: MA 536 Minimum Grade of C
- MA 540 Differential Geometry** 3 cr  
Local and global theory of curves and surfaces in three-dimensional space.
- MA 542 Topology I** 3 cr  
An introduction to topology with emphasis on the geometric aspects of the subject. Topics covered include surfaces, topological spaces, open and closed sets, continuity, compactness, connectedness, product spaces, and identification and quotient spaces. Credit for both MA 542 and MA 434 is not allowed.
- MA 543 Topology II** 3 cr  
A continuation of MA 542. Topics covered include the fundamental group, triangulations, classification of surfaces, homology, the Euler-Poincare formula, the Borsuk-Ulam theorem, the Lefschetz fixed-point theorem, knot theory, covering spaces, and applications.  
Pre-requisite: MA 542 Minimum Grade of C or MA 434 Minimum Grade of C
- MA 550 Probability** 3 cr  
A comprehensive introduction to probability, the mathematical theory used to model uncertainty, covering the axioms of probability, random variables, expectation, classical discrete and continuous families of probability models, the law of large numbers and the central limit theorem. Credit for both MA 550 and MA 451 is not allowed.  
Pre-requisite: (MA 227 Minimum Grade of C or MA 237 Minimum Grade of C)
- MA 551 Theory of Statistics** 3 cr  
A comprehensive introduction to the mathematical foundations of statistics. Sufficient statistics and information, parameter estimation, maximum likelihood and moment estimation, optimality properties of estimators and confidence intervals. Hypothesis testing, likelihood ratio tests and power functions. Credit for both MA 551 and ST 470 is not allowed.  
Pre-requisite: MA 451 Minimum Grade of C or MA 550 Minimum Grade of C
- MA 555 Statistical Analysis I** 3 cr  
A first course in an integrated two course sequence in applied statistical theory and methods for research workers in technical fields. Coverage includes probability and basic probability models, mathematical expectations, random sampling processes and central limit theorem, estimation, hypothesis testing and power analysis, some applications of the theory of least squares. Computer assisted data analysis is used.
- MA 560 Statistical Analysis II** 3 cr  
A second course (continuation of MA 555) in an integrated two-course sequence in applied statistical theory and methods for research workers in technical fields. Coverage includes regression analysis, design and analysis of experiments, factorial experiments, analysis of covariance, nonparametric analytical techniques, analysis of count data. Computer assisted data analysis is used.  
Pre-requisite: MA 555 Minimum Grade of C
- MA 565 Numerical Analysis** 3 cr  
An introduction to Numerical Analysis. Topics include error analysis, systems of linear equations, nonlinear equations, integration, ordinary differential equations among others.  
Pre-requisite: MA 535 Minimum Grade of C
- MA 567 Operations Research** 3 cr  
An introduction to linear programming. The course will include a study of the simplex method as well as using computers to solve linear systems of equations. As time permits, topics covered will include sensitivity analysis, duality, integer programming, transportation, assignment, transshipment, and networks. Credit for both MA 567 and MA 458 is not allowed.  
Pre-requisite: (MA 215 Minimum Grade of C or MA 237 Minimum Grade of C)
- MA 568 Topics in Operations Research** 3 cr  
A second course in operations research, covering topics of interest to the students and instructor.  
Pre-requisite: MA 567 Minimum Grade of C

**MA 571 Ordinary Diff Equations 3 cr**

An introduction to ordinary differential equations from a dynamical systems perspective. Topics include existence and uniqueness theorems, dependence on initial data, linear systems and exponential of operators, stability of equilibria, Poincare-Bendixon theorem. Additional topics such as applications to population dynamics, classical mechanics, periodic attractors among others will be included at the discretion of the instructor.

Pre-requisite: MA 518 Minimum Grade of C

**MA 572 Partial Differential Equations 3 cr**

An introduction to partial differential equations emphasizing spectral methods. Topics include elementary Hilbert spaces, Fourier series and integrals and their applications to the study of the basic partial differential equations of mathematical physics. More advanced topics such as asymptotic properties and regularity of solutions and nonlinear equations among others will be included at the discretion of the instructor.

Pre-requisite: MA 536 Minimum Grade of C

**MA 581 Cryptography 3 cr**

This course provides an introduction to classical and modern methods of message encryption and decryption (cryptography) as well as possible attacks to cryptosystems (cryptanalysis). Topics include classical (symmetric) cryptosystems (DES, AES), public-key (asymmetric) cryptosystems (Diffie-Hellman, RSA, ElGamal), modes of operation, one-way and trapdoor functions, Hash functions, cryptographic protocols. Credit for both MA 481 and MA 581 is not allowed.

Pre-requisite: MA 311 Minimum Grade of C

**MA 590 Special Topics - 1 TO 3 cr**

Selected topics in elementary graduate mathematics. This course may be repeated for a maximum of six credits.

**MA 592 Seminar 1 cr**

Student Seminar. Topics covered vary. This course may be repeated indefinitely, but only two credits count towards the degree. Grading system: satisfactory/unsatisfactory.

**MA 594 Directed Study 1 TO 3 cr**

Directed individual study. Prerequisites: Approval of the department chair.

**MA 599 Thesis 1 TO 6 cr**

Thesis. Requires approval of research prospectus by Department Graduate Committee.

## Mathematics For College (MTH)

**MTH 100 Intermediate College Algebra 3 cr**

Topics in this course include set, interval, roster and scientific notation; solving and graphing linear and quadratic equations, inequalities, absolute value equations, functions, and systems of inequalities. Various methods of solving quadratic equations are included. Operations on rational and radical expressions, solving rational and radical equations, and problem solving applications included. Credit for both MTH 100, MTH 101 and MA 105 is not allowed.

Pre-requisite: MyMathTest 060 or ACT Math 19 or SAT Mathematics 500 or MATH SECTION SCORE 530 or DS 082 Minimum Grade of C or DS 082 Minimum Grade of C

**MTH 101 College Algebra 4 cr**

This course combines Introductory Algebra and Intermediate College Algebra. Topics include fractions, percents, and order of operations. Various forms of linear equations manipulated; the solutions and graphs of linear equations and linear inequalities explored. Also included, rate of change, functions and graphs, piecewise-defined functions, solutions to absolute value inequalities expressed in set and interval notation, and systems of inequalities. Simplification of rational expressions, operations on rational and radical expressions, and solutions to rational and radical equations explored. Quadratic expressions factored and solutions to quadratic equations by factoring and graphing. Practical applications to problem solving are included. Pre-requisite: None. Credit for both MTH 100, MTH 101 and MTH 105 is not allowed.

## Mechanical Engineering (ME)

**ME 135 Engr Graphics and Comm 3 cr**

Graphical representation of objects, orthographic, oblique, and isometric views. Freehand lettering and sketching, computer aided graphics, presentation of graphics based on numerical data using spreadsheet, word processor and presentation software. Fee.

Pre-requisite: MA 125 Minimum Grade of C or MA 132 Minimum Grade of C

**ME 312 Mech Engr Thermodynamics 3 cr**

Thermodynamics power and refrigeration cycles, gas mixtures, psychometrics, and combustion. One-half hour of design.

Pre-requisite: EG 270 Minimum Grade of D

**ME 314 Machine Component Design 3 cr**

Analysis and design of machine elements to accomplish given tasks within limits of stress and size. One hour of design.

Pre-requisite: EG 284 Minimum Grade of D and EG 315 Minimum Grade of D

**ME 316 Instrumentatn & Exp Method 3 cr**

Measuring system analysis and design, signal conditioning, analysis of data, statistical error analysis, communication of results.

Pre-requisite: EG 220 Minimum Grade of D and (MA 238 Minimum Grade of D or MA 338 Minimum Grade of D) and (PH 202 Minimum Grade of C or PH 217 Minimum Grade of C) and ME 328 Minimum Grade of D

**ME 317 Heat Transfer 3 cr**

Steady and transient, multi-dimensional conduction, forced and natural convection, radiation, and heat exchangers. One-half hour of design.

Pre-requisite: EG 270 Minimum Grade of D and ME 328 Minimum Grade of D and (MA 238 Minimum Grade of D or MA 338 Minimum Grade of D) and (EG 360 Minimum Grade of D or CE 365 Minimum Grade of D or ME 324 Minimum Grade of D)

**ME 319 Instrumentatn & Exp Method Lab 1 cr**

Laboratory component of ME 316 Instrumentation. The same grade will be given in both courses.

Co-requisite: ME 316

Pre-requisite: EG 220 Minimum Grade of D and (MA 238 Minimum Grade of D or MA 338 Minimum Grade of D) and (PH 202 Minimum Grade of D or PH 217 Minimum Grade of D)

**ME 326 Materials Science 3 cr**

Mechanical, chemical, and physical properties of materials. Relationship between structure, processing, and properties engineering materials. One-half hour of design.

Pre-requisite: (PH 202 Minimum Grade of C or PH 217 Minimum Grade of C) and (CH 115 Minimum Grade of C or CH 131 Minimum Grade of C) and EG 315 Minimum Grade of C

**ME 328 ME Analysis 4 cr**

Numerical solutions of differential equations with applications to ME simulation and design. Introduction to Finite Element Analysis. One-half hour of design.

Pre-requisite: MA 227 Minimum Grade of C and MA 237 Minimum Grade of C and MA 238 Minimum Grade of C

**ME 336 Material Science Lab-W 1 cr**

Experimental study on the effect of thermal and mechanical processing on properties.

Pre-requisite: ME 326 Minimum Grade of D and PH 202 Minimum Grade of C and CH 131 Minimum Grade of C and EG 315 Minimum Grade of C

**ME 365 Design of Fluid Power Systems 3 cr**

Fluid power components are studied in detail. Design of complete hydraulic systems is stressed. One hour of design.

Pre-requisite: EG 284 Minimum Grade of D and EG 315 Minimum Grade of D and (EG 360 Minimum Grade of D or CE 365 Minimum Grade of D or ME 324 Minimum Grade of D) and ME 328 Minimum Grade of D

**ME 410 Principles of Eng Design-W 3 cr**

In this course, students learn to apply engineering theory and methods to the design process. Topics include problem definition, concept development and evaluation, project management, materials selection, risk analysis, quality improvement and ethics in design (0-3-0).

Pre-requisite: ME 314 Minimum Grade of D and EG 231 Minimum Grade of D and ME 336 Minimum Grade of D and ME 317 Minimum Grade of D

**ME 411 Thermal System Design 3 cr**

Thermal system design using principles of thermodynamics, fluid mechanics, heat transfer, and numerical simulation. Communication of results. Three hours of design.

Pre-requisite: ME 312 Minimum Grade of D and ME 317 Minimum Grade of D and ME 328 Minimum Grade of D and (EG 360 Minimum Grade of D or CE 365 Minimum Grade of D or ME 324 Minimum Grade of D)

**ME 412 Thermal Science Laboratory 1 cr**

Experimental study of thermal science principles and systems. Communication of results.

Pre-requisite: ME 312 Minimum Grade of D and ME 316 Minimum Grade of D and ME 317 Minimum Grade of D and (EG 360 Minimum Grade of D or CE 365 Minimum Grade of D or ME 324 Minimum Grade of D)

**ME 414 Capstone Design 1 cr**

This course is considered a "Senior Capstone Course."

Co-requisite: ME 416

Pre-requisite: ME 410 Minimum Grade of D

**ME 416 Capstone Design Project 2 cr**

This is a team-based capstone project course. Each team is assigned a unique design problem in mechanical engineering or a closely-related field. Students must be enrolled concurrently in ME 414 - Capstone Design.

Co-requisite: ME 414

Pre-requisite: ME 410 Minimum Grade of D

**ME 417 Dynamics of Machines 3 cr**

A study of the effects of external forces and moments on the motion of machines. Topics include the study of the position, velocity and acceleration of machine components during operation and the determination of forces on the connections and members. One hour of design.

Pre-requisite: EG 284 Minimum Grade of D and EG 315 Minimum Grade of D and ME 328 Minimum Grade of D

**ME 419 Computer Aided Design & Manu 3 cr**

Introduction to computer aided design (CAD) and computer aided manufacturing (CAM) principles and their practical applications as fundamental elements of contemporary product design and manufacturing. This course is dual listed with an equivalent 500-level mechanical engineering course. One hour of design.

Pre-requisite: ME 135 Minimum Grade of D and ME 314 Minimum Grade of D

- ME 421 Mechanical System Design** 3 cr  
A study of design techniques as applied to mechanical components and systems. Computer simulation and numerical techniques. Communication of results. Three hours of design.  
Pre-requisite: ME 314 Minimum Grade of D and ME 328 Minimum Grade of D
- ME 422 Gas Turbines** 3 cr  
Introduction to gas turbines covering thermodynamics, fluid mechanics, combustion, cycle analysis, compressors, turbines and component design. One hour of credit.  
Pre-requisite: (EG 360 Minimum Grade of D or CE 365 Minimum Grade of D or ME 324 Minimum Grade of D) and ME 312 Minimum Grade of D
- ME 426 Dynamic Systems and Control** 3 cr  
Modeling dynamic systems. Introduction to the principles of feedback control systems. Analysis of linear systems.  
Pre-requisite: (MA 238 Minimum Grade of D or MA 338 Minimum Grade of D) and ME 316 Minimum Grade of D and ME 328 Minimum Grade of D
- ME 429 Controls & Instr. Lab** 1 cr  
Design and implementation of analog and digital feedback control of systems. Design and implementation of measurement systems, including signal conditioning, analog-to-digital and digital-to-analog conversion, statistical estimation of error, data analysis. Communication of laboratory results is emphasized.  
Pre-requisite: ME 426 Minimum Grade of D
- ME 430 Mechanism Synthesis** 3 cr  
Kinematic synthesis of planar linkages for function, path, and motion generation. Topics include: degrees of freedom; graphical, linear analytical, and nonlinear analytical methods; and curvature theory. This course is dual-listed with an equivalent 500-level mechanical engineering course. One hour of design.  
Pre-requisite: EG 284 Minimum Grade of D and ME 328 Minimum Grade of D
- ME 431 Gas Dynamics** 3 cr  
Introduction to compressible fluid flow. Conservation laws, isentropic flow, adiabatic flow, flow with heat transfer, normal shock. One hour of design.  
Pre-requisite: (EG 360 Minimum Grade of D or CE 365 Minimum Grade of D or ME 324 Minimum Grade of D) and ME 312 Minimum Grade of D
- ME 432 Advanced Thermodynamics** 3 cr  
Continuation of Mechanical Engineering Thermodynamics to develop a broader and deeper understanding of thermal energy transformations. One hour of design.  
Pre-requisite: ME 312 Minimum Grade of D
- ME 438 Finite Element Analysis** 3 cr  
Introduction to the finite element method. Engineering application to stress-strain analysis is emphasized. Other field problems are also considered. This course is dual-listed with an equivalent 500-level mechanical engineering course.  
Pre-requisite: ME 328 Minimum Grade of D
- ME 439 Boundary Elements I** 3 cr  
Fundamental concepts of the boundary element method of numerically solving partial differential equations. Application to potential flow problems in heat transfer. This course is dual listed with an equivalent 500-level mechanical engineering course.  
Pre-requisite: ME 328 Minimum Grade of D
- ME 441 Microprocessors for Mech Engr** 3 cr  
Basic concepts of programming and applying microprocessors to the control of mechanical systems. Assembly language programming. Memory decoding and use. Input and output circuits. Interfacing with the PIA.  
Pre-requisite: EG 220 Minimum Grade of D and ME 316 Minimum Grade of D
- ME 450 Heat Vent and Air Conditioning** 3 cr  
Addresses the heating and cooling of buildings. Covers related engineering sciences, cooling and heating loads, systems, and equipment. One hour of design.  
Pre-requisite: (EG 360 Minimum Grade of D or CE 365 Minimum Grade of D or ME 324 Minimum Grade of D) and ME 312 Minimum Grade of D and ME 317 Minimum Grade of D
- ME 451 Refrigeration Systems** 3 cr  
Study of refrigeration systems including solutions of typical engineering design problems. Concepts from fluid mechanics, thermodynamics, and heat transfer are used. One hour of design.  
Pre-requisite: (EG 360 Minimum Grade of D or CE 365 Minimum Grade of D or ME 324 Minimum Grade of D) and ME 312 Minimum Grade of D and ME 317 Minimum Grade of D
- ME 452 Combustion** 3 cr  
Introduction to the theory of combustion processes, chemical equilibrium, adiabatic flame temperatures, reaction kinetics. This course is dual listed with an equivalent 500-level mechanical engineering courses.  
Pre-requisite: ME 312 Minimum Grade of D
- ME 453 IC Engines** 3 cr  
Principles for analysis and design of internal combustion (I.C.) engines. Topics: include fuel-air cycles, fuel, air and exhaust flows, heat and mass transfer, engine performance.  
Pre-requisite: (EG 360 Minimum Grade of D or CE 365 Minimum Grade of D or ME 324 Minimum Grade of D) and ME 312 Minimum Grade of D and ME 317 Minimum Grade of D

- ME 460 Intro to Marine Engineering** 3 cr  
Categorization of Ships, Ship Geometry and Hydrostatics, Ship Stability, Ship Hazards, Resistance and Power, Propellers and Propulsion Systems, Ship Dynamics and Control.  
Pre-requisite: EG 360 Minimum Grade of D and EG 315 Minimum Grade of D
- ME 461 Turbomachinery** 3 cr  
Energy transfer between fluid and rotor; fluid flow in turbomachines, centrifugal and axial flow pumps and compressors; radial and axial flow turbines. One hour of design.  
Pre-requisite: (EG 360 Minimum Grade of D or CE 365 Minimum Grade of D or ME 324 Minimum Grade of D) and ME 312 Minimum Grade of D
- ME 466 Aerospace Propulsion** 3 cr  
Airbreathing engines course. Apply fluids, thermodynamics, and heat transfer to analysis of air breathing engines. Topics to include: ideal cycle analysis, component performance, non-ideal cycle analysis, and blade aerodynamics.  
Pre-requisite: ME 312 Minimum Grade of D and ME 317 Minimum Grade of D and (EG 360 Minimum Grade of D or CE 365 Minimum Grade of D or ME 324 Minimum Grade of D)
- ME 467 Intro to Biomedical Eng** 3 cr  
Survey of topics and current issues in the field of biomedical engineering. Topics include biomechanics, biomedical instrumentation, biomaterials engineering, biomedical imaging, cellular mechanics, tissue engineering, biomedical design and ethics. A portion of the course is devoted to basic biology concepts and principles. Students will review literature and discuss technical and technological developments relevant to biomedical engineering.
- ME 468 Principles of Aircraft Design** 3 cr  
Introduction to aircraft design, including an understanding of the various components leading to a good conceptual design. Introduction to parameters in aerospace analysis and how they may impact a design. Application of design concepts to an RFP (request for proposal) for design competition.  
Pre-requisite: (ME 324 Minimum Grade of D or EG 360 Minimum Grade of D or CE 365 Minimum Grade of D) and ME 312 Minimum Grade of D and ME 317 Minimum Grade of D
- ME 469 Aircraft Stability and Control** 3 cr  
Introduction to flight dynamics of aerospace vehicles. Basic overview of stability analysis and linear feedback control.  
Pre-requisite: ME 328 Minimum Grade of C and EG 360 Minimum Grade of C
- ME 470 Aircraft Structural Analysis** 3 cr  
Introduction to elasticity. Torsion, bending and shearing of thin-walled skin-stringer structures. Failure mechanisms. Buckling of beams and plates. Introduction to finite element analysis and composite structural analysis.  
Pre-requisite: EG 284 Minimum Grade of C and EG 315 Minimum Grade of C and ME 328 Minimum Grade of C
- ME 472 Vibration Analysis-Synthesis** 3 cr  
Steady-state and transient vibration analysis of discrete and continuous systems. Vibration problems as related to design are also included.  
Pre-requisite: EG 284 Minimum Grade of D and EG 315 Minimum Grade of D and ME 328 Minimum Grade of D
- ME 474 Noise and Vibration Control** 3 cr  
Principles of acoustics; human response to noise; control of noise and vibration by means of vibration isolation, sound barriers, and absorption. One hour of design.  
Pre-requisite: ME 472 Minimum Grade of D
- ME 490 Special Topics -** 1 TO 3 cr  
Topics of current mechanical engineering interest.  
Prerequisite: Consent of instructor
- ME 494 Dir Independent Study** 1 TO 3 cr  
Selected mechanical engineering topics of special or current interest not available to regularly scheduled courses.  
Prerequisite: Consent of instructor.
- ME 499 Honors Senior Project - H** 1 TO 6 cr  
Under the advice and guidance of a faculty mentor, honors students will identify and carry out a research project, relevant to the field of Mechanical Engineering study, that will lead to a formal presentation at the Annual Honors Student Colloquium. The senior project will be judged and graded by three faculty, chaired by the honors mentor. This course is required for Honors recognition. A minimum of 4 credit hours is required, but students may enroll for a maximum of 6 credit hours over two semesters. Prerequisites: Completion of an approved project prospectus.
- ME 518 Adv Mechanical Engr Analysis** 3 cr  
Application of numerical methods including finite differences; finite element and boundary element techniques to the solution of problems in Mechanical Engineering.  
Prerequisite: Consent of instructor.
- ME 519 Computer Aided Design/Manufac** 3 cr  
Introduction to computer aided design (CAD) and computer aided manufacturing (CAM) principles and their practical applications as fundamental elements of contemporary product design and manufacturing. This course is dual listed with an equivalent 400-level mechanical engineering course.

- ME 520 Advanced Fluid Mechanics** 3 cr  
Analysis of steady and unsteady motion of a viscous fluid. Topics include: conservation equations, Newtonian fluids and the Navier-Stokes equations, vorticity, analytical solutions, boundary layers, instability of viscous flows. Prerequisite: Consent of instructor.
- ME 522 Gas Turbines** 3 cr  
Introduction to gas turbines covering thermodynamics, fluid mechanics, combustion, cycle analysis, compressors, turbines, and component matching. Pre-requisite: ME 520 Minimum Grade of C
- ME 525 Boundary Layer Theory** 3 cr  
Development of Navier-Stokes and boundary layer equations, perturbation theory application and boundary layer transition. Prerequisite: Consent of instructor.
- ME 530 Mechanism Synthesis** 3 cr  
Kinematic synthesis of planar linkages for function, path, and motion generation. Topics include: degrees of freedom; graphical, linear analytical, and nonlinear analytical methods; and curvature theory. This course is dual-listed with an equivalent 400-level mechanical engineering course. Prerequisite: Consent of instructor.
- ME 538 Finite Element Analysis** 3 cr  
Introduction to the finite element method. Engineering application to stress-strain analysis is emphasized. Other field problems are also considered. This course is dual-listed with an equivalent 400-level mechanical engineering course. Prerequisite: Consent of instructor. Pre-requisite: MA 507 Minimum Grade of C or MA 508 Minimum Grade of C
- ME 539 Boundary Elements I** 3 cr  
Fundamental concepts of the boundary element method of numerically solving partial differential equations. Application to potential flow problems in heat transfer. This course is dual listed with an equivalent 400 level mechanical engineering course. Requires special permission of instructor.
- ME 540 Advanced Heat Transfer** 3 cr  
Steady and transient conduction, external and internal forced convection, natural convection, radiation with participating media, boiling heat transfer, Stefan condition. Prerequisite: Consent of instructor.
- ME 541 Conduction Heat Transfer** 3 cr  
Closed form analytical and approximate numerical solutions of one, two- and three-dimensional steady state and transient problems in conduction heat transfer. Prerequisite: Consent of instructor. Pre-requisite: MA 507 Minimum Grade of C
- ME 542 Convection Heat Transfer** 3 cr  
Fundamental laws of motion and energy balance for a viscous fluid, classical solution of the Navier-Stokes and energy equations, laminar/turbulent hydrodynamic and thermal boundary layers, convection heat transfer in laminar/ turbulent internal flows. Prerequisite: Consent of instructor.
- ME 543 Radiation Heat Transfer** 3 cr  
Blackbody radiation, diffuse-gray surfaces, radiative exchange in a multi-surface enclosure, gas radiation in enclosures with participating media, introduction to available numerical methods. Prerequisite: Consent of instructor.
- ME 544 Heat Trans - Change of Phase** 3 cr  
Boiling heat transfer and critical heat flux, condensation heat transfer, Stefan problem, freezing and melting, ablation, introduction to available numerical techniques. Prerequisite: Consent of instructor. Pre-requisite: ME 540 Minimum Grade of C or ME 542 Minimum Grade of C
- ME 545 Exp Fluid Mech and Heat Trans** 3 cr  
Uncertainty analysis, system response, sampling theory and FFT, differential pressure measurement and multi-hole probes, thermo-couple and RTD, thermal anemometry, LDV and other non-intrusive optical methods, flow visualization. Prerequisites: Consent of instructor
- ME 550 Combustion** 3 cr  
Introduction to the theory of combustion processes, chemical equilibrium, adiabatic flame temperature, reaction kinetics, flame structure. This course is dual-listed with an equivalent 400-level mechanical engineering course. Prerequisite: Consent of instructor.
- ME 551 Classical Thermodynamics** 3 cr  
Postulational treatment of the physical laws of equilibrium, equations of state, processes, equilibrium, stability, reactive systems, phase transition. Prerequisite: Consent of instructor.
- ME 552 Statistical Thermodynamics** 3 cr  
Principles of kinetic theory, quantum mechanics, and statistical mechanics with particular reference to thermodynamic systems. Conclusions of classical thermodynamics are established from the microscopic viewpoint. Prerequisite: Consent of instructor.
- ME 553 IC Engines** 3 cr  
Principles for analysis and design of internal combustion (I.C.) engines. Topics include: fuel-air cycles, fuel, air and exhaust flows, heat and mass transfer, engine performance.
- ME 560 Compressible Fluid Flow** 3 cr  
Foundations of fluid dynamics and thermodynamics of one dimensional flow and heat transfer, isentropic flow, shock waves and method of characteristics. Prerequisite: Consent of Instructor.

- ME 561 Turbomachinery** 3 cr  
Energy transfer between fluid and rotor; fluid flow in turbomachines, centrifugal and axial-flow pumps and compressors; radial and axial flow turbines. Prerequisite: Consent of instructor.
- ME 562 Comp Fluid Dyn - Heat Trans I** 3 cr  
Derivation of conservation equations, numerical solution of inviscid and viscous incompressible flow problems, emphasis on finite volume method, introduction to finite element and spectral method. Prerequisite: Consent of instructor.
- ME 563 Comp Fluid Dyn - Heat Trans II** 3 cr  
Governing equations in general coordinates, differential geometry for curvilinear coordinates, grid generations, numerical uncertainties. Prerequisite: Consent of instructor. Pre-requisite: ME 562 Minimum Grade of C
- ME 564 Turbulent Flow** 3 cr  
Reynolds equations, statistics of turbulence, analysis of free and wall turbulence, turbulence models. Prerequisite: Consent of instructor. Pre-requisite: ME 520 Minimum Grade of C
- ME 565 Lubrication** 3 cr  
Friction of solids and fluids. Lubricants. Theory of sliding bearings. Multi-dimensional bearings with constant forces and velocities. Solid, hydrodynamic and gas lubrication. Design of bearings. Prerequisite: Consent of instructor.
- ME 566 Aerospace Propulsion** 3 cr  
Airbreathing engines course. Apply fluids, thermodynamics, and heat transfer to analysis of air breathing engines. Topics to include: ideal cycle analysis, component performance, non-ideal cycle analysis, and blade aerodynamics.
- ME 567 Principles Biomedical Eng** 3 cr  
Survey of topics and current issues in the field of biomedical engineering. Topics may include biomechanics, biomedical instrumentation, biomaterials engineering, biomedical imaging, cellular mechanics, tissue engineering, biomedical design and ethics. A portion of the course is devoted to basic biology concepts and principles. Students will review literature and discuss technical and technological developments relevant to biomedical engineering.
- ME 569 Aircraft Stability and Control** 3 cr  
Introduction to flight dynamics of aerospace vehicles. Basic overview of stability analysis and linear feedback control. Co-requisite: MA 507
- ME 571 Advanced Engineering Dynamics** 3 cr  
Three-dimensional kinematics and kinetics of particles and rigid bodies, energy, momentum, and stability; application of Lagrange's equations to machinery and gyro dynamics. Prerequisite: Consent of instructor.
- ME 572 Advanced Vibrations** 3 cr  
Free and forced vibrations of mechanical systems having lumped mass and elasticity; introduction to vibrations of continuous systems; engineering applications. Prerequisite: Consent of instructor. Pre-requisite: MA 507 Minimum Grade of C or MA 508 Minimum Grade of C
- ME 573 Vibrations of Continuous Sys** 3 cr  
Equations of motion for strings, membranes, bars, and plates with various boundary conditions, steady state and transient solutions, exact and approximate methods; wave propagation in elastic media. Prerequisite: Consent of instructor. Pre-requisite: MA 507 Minimum Grade of C
- ME 574 Nonlinear Vibrations** 3 cr  
Vibrations of damped and undamped systems with nonlinear restoring forces; free and forced oscillations in self-sustained systems; Hills equation and its application to the study of the stability of nonlinear oscillations. Prerequisites: Consent of instructor. Pre-requisite: ME 572 Minimum Grade of C and MA 508 Minimum Grade of C
- ME 575 Continuum Mechanics** 3 cr  
Cartesian tensor analysis. Analysis of stress and strain, fundamental laws of continuum mechanics. Constitutive equations, application to solid and fluid mechanics. Prerequisite: Consent of instructor.
- ME 582 Advanced Materials Science** 3 cr  
Classical and quantum mechanical model of atoms, bonding, magnetism, superconductivity, high strength low density materials, corrosion, biomedical materials. Prerequisite: Consent of the instructor.
- ME 583 Applied Elasticity** 3 cr  
Classical problems in elasticity, torsion and bending theory, plane problems in rectangular and polar coordinates; axisymmetric problems, thermoelasticity. Prerequisite: Consent of instructor. Pre-requisite: MA 507 Minimum Grade of C or MA 508 Minimum Grade of C
- ME 584 Introductory Metal Theory** 3 cr  
Theories of metal to explain electrical conductivity and scattering process, electronic and lattice heat capacity, magnetic behavior, cohesion and lattice constant. Prerequisite: Consent of instructor. Pre-requisite: MA 507 Minimum Grade of C
- ME 585 Theory of Plates** 3 cr  
Basic equations of rectangular and circular plates with various boundary conditions; classical solutions and approximate methods in the theory of thin plates. Prerequisite: Consent of instructor. Pre-requisite: MA 507 Minimum Grade of C

**ME 586 Theory of Shells** 3 cr

Introduction to differential geometry; general equations for arbitrary shells; shallow shell theory with applications; solutions to membrane and bending theory for shells of revolution. Prerequisite: Consent of instructor. Pre-requisite: ME 585 Minimum Grade of C

**ME 589 Biomechanics** 3 cr

Discrete mass and continuum mechanics description of biological materials, biodynamics of limb and gross body motions, various models for injury to head, neck, torso, and extremities. Prerequisite: Consent of instructor.

**ME 590 Sp Top -** 1 TO 3 cr

Topics of current mechanical engineering interest. Prerequisite: Consent of instructor.

**ME 592 Directed Independent Study** 1 TO 3 cr

Directed study, under the guidance of a faculty advisor, of a topic from the field of Mechanical Engineering not offered in a regularly scheduled course. Requires permission of the instructor.

**ME 594 Projects in Mechanical Engr** 1 TO 3 cr

May be repeated for credit. Prerequisite: Approved proposal and consent of director of engineering graduate studies.

**ME 599 Thesis** 1 TO 6 cr

Thesis research may be taken more than once. Prerequisite: Approved prospectus.

## Meteorology (MET)

**MET 140L Intro to Meteorology Lab** 1 cr

Laboratory exercises associated with MET 140. Fee. Co-requisite: MET 140

**MET 140 Introduction to Meteorology** 3 cr

This course focuses on introducing the student to the basic concepts of meteorology. Major topics include the structure of our atmosphere, heat balance, meteorological measurements, atmospheric stability, atmospheric motion, and wind circulations on both the global and local scales. Other areas covered may include an introduction to air masses, fronts, and precipitation processes. The analysis of US Government weather charts is also introduced. Core course. Co-requisite: MET 140L

**MET 191 Tropical Weather Discussion** 1 cr

Tropical Weather Discussion is an introductory course in current or recently-active tropical weather systems. This course mainly reviews the structure, behavior, history and potential forecasts of tropical cyclones in the Atlantic, Pacific, and Indian Ocean basins from a meteorological perspective with special emphasis on activity in the Atlantic basin. The course is taught during the Fall Semester because it overlaps with the most active period of the Atlantic Hurricane Season. Other tropical weather topics such as El Nino, La Nina, monsoon troughs, tropical upper-tropospheric troughs, Madden Julian Oscillation, and hurricane climatology are discussed during weeks of inactivity when no tropical cyclones may be occurring. This course may be repeated for credit up to two times for a total of three hours; however, the course may only count once toward a meteorology elective.

**MET 342 Severe Weather** 3 cr

A study of the causes, structure and impact of tornadoes, hurricanes, thunderstorms and severe weather systems (Identical to GEO 342).

Pre-requisite: MET 353 Minimum Grade of C or GEO 353 Minimum Grade of C

**MET 353 General Meteorology** 4 cr

An overall view of the field of meteorology for science majors and minors. This course uses a quantitative approach to study the composition of the atmosphere, atmospheric processes, global circulation, and storm development. Laboratory exercises pay particular attention to hands-on analysis of meteorological charts (identical to GEO 353.) Fee.

Pre-requisite: (MET 140 Minimum Grade of D and MET 140L Minimum Grade of D) and ( MA 112 Minimum Grade of C or MA 171 Minimum Grade of C) or (MA 113 Minimum Grade of C or MA 172 Minimum Grade of C) or (MA 125 Minimum Grade of C or MA 132 Minimum Grade of C ) or (MA 125 Minimum Grade of C

**MET 354 Dynamic Meteorology I** 3 cr

Dynamic meteorology is the study of atmospheric motions that control our weather and climate. Using fundamental laws of physics (fluid dynamics and thermodynamics), a set of mathematical equations that describe how the atmosphere behaves, is derived. These equations are too complex to solve analytically, but with certain assumptions they can be simplified so that approximate solutions can be found. Even though approximate, these solutions still give useful information about the current state of the atmosphere and its evolution into the future. The theories derived in dynamic meteorology underlie all forecasting rules and techniques. Thorough understanding of these theories is invaluable to becoming a skilled forecaster.

Pre-requisite: (MA 126 Minimum Grade of C or MA 233 Minimum Grade of C) and (PH 201 Minimum Grade of C or PH 216 Minimum Grade of C)

- MET 355 Dynamic Meteorology II** 3 cr  
The circulation of the atmosphere and the structure of storms is quantitatively analyzed using equations of atmospheric flow. The jet stream, atmospheric waves, mid-latitude cyclones, and the concept of vorticity are given considerable attention.  
Pre-requisite: MET 354 Minimum Grade of C or GEO 344 Minimum Grade of C or GEO 354 Minimum Grade of C
- MET 356 Physical Meteorology** 3 cr  
A detailed investigation of adiabatic processes, thermodynamic diagrams, atmospheric stability, and precipitation processes. Additional topics include atmospheric composition and aerosols, radiation and electricity.  
Pre-requisite: (MET 353 Minimum Grade of C or GEO 353 Minimum Grade of C) and (MA 126 Minimum Grade of C or MA 233 Minimum Grade of C) and (PH 201 Minimum Grade of C or PH 216 Minimum Grade of C)
- MET 357 Meteorological Instrumentation** 2 cr  
Design, calibration, use and maintenance of existing and newly developed meteorological instruments and instrumentation systems. Analysis of data collected by instruments and instrument systems.  
Pre-requisite: (MET 353 Minimum Grade of C or GEO 353 Minimum Grade of C)
- MET 358 Radar Meteorology** 4 cr  
This course is designed to give the student a three-fold introduction to weather radar and its value in the workplace. Basic radar principles and assumptions applicable to all radars are presented; the Doppler function and limitations are covered in depth with final emphasis on properly utilizing weather radar in an operations setting.  
Pre-requisite: (MET 354 Minimum Grade of C or GEO 344 Minimum Grade of C or GEO 354 Minimum Grade of C) and (PH 202 Minimum Grade of C or PH 217 Minimum Grade of C)
- MET 359 Introduction to TV Weather** 2 cr  
This course gives the students the basic skills necessary for broadcasting weather information on TV. This course will focus on the basic principles and techniques of effective TV weather broadcasting.  
Pre-requisite: (MET 353 Minimum Grade of C or GEO 353 Minimum Grade of C)
- MET 360 Atmospheric Analysis** 1 cr  
Analysis of meteorological charts. Provides additional preparation prior to Synoptic. Fee.  
Pre-requisite: (MET 353 Minimum Grade of C or GEO 353 Minimum Grade of C) and (MET 354 Minimum Grade of C or GEO 344 Minimum Grade of C or GEO 354 Minimum Grade of C)
- MET 370 Satellite MET** 3 cr  
This course is an introduction to the weather satellite and its influence on meteorological observations and forecasting. Both radiative propagation theory and satellite interpretation of meteorological features will be covered extensively.  
Pre-requisite: (MET 354 Minimum Grade of C or GEO 344 Minimum Grade of C or GEO 654 Minimum Grade of C) and (PH 202 Minimum Grade of C or PH 217 Minimum Grade of C)
- MET 401 Weather Forecasting I** 2 cr  
A course specifically designed for students minoring in Meteorology. Students are introduced to weather forecasting concepts and methods.  
Pre-requisite: (MET 353 Minimum Grade of C or GEO 353 Minimum Grade of C)
- MET 402 Weather Forecasting II** 2 cr  
A course specifically designed for students minoring in Meteorology. Weather forecasting techniques are discussed with an emphasis on the use of meteorological models and severe weather forecasting.  
Pre-requisite: MET 401 Minimum Grade of C
- MET 410 MET Phenomenology - W** 3 cr  
This class is an introduction to reading meteorological journal and professional writings and to writing some of the standard scientific forms common in both operational and research meteorology: summaries, conference abstracts, and scientific journal articles. The students will engage in brief examination of some of the fundamental phenomena in the atmosphere through selected journal articles and write about these topics in an appropriate manner as inquisitive meteorologists.  
Pre-requisite: (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C) and (MET 353 Minimum Grade of C or GEO 353 Minimum Grade of C) and (MET 354 Minimum Grade of C or GEO 344 Minimum Grade of C or GEO 354 Minimum Grade of C) or MET 401 Minimum Grade of C)
- MET 420 Computer Apps in Earth Science** 4 cr  
An introduction to basic Python programming, with examples and exercises pertinent to Earth Science and GIS applications.  
Pre-requisite: MA 112 Minimum Grade of D and (GEO 101 Minimum Grade of C or MET 140 Minimum Grade of C)
- MET 430 Mesoscale Meteorology** 3 cr  
Assessment of mesoscale phenomena, including frontogenesis and frontolysis, low-level jet streams, nocturnal boundary layer wind maxima, sea and land breezes, gravity waves, dry lines, lake-effect snow, and deep moist convection. Emphasis on scale analysis, subsynoptic-scale dynamics, interactions with larger-scale processes, and case study examples.  
Pre-requisite: (MET 355 Minimum Grade of C or GEO 345 Minimum Grade of C or GEO 355 Minimum Grade of C)

**MET 440 Air Pollution Meteorology 2 cr**

Air Pollution Meteorology is a survey course in air pollution topics taught primarily from an atmospheric perspective. This course covers topics on air pollution history, methods of measuring air quality, sources of air pollution, basic atmospheric pollution dispersion concepts, basic principles of air pollution modeling and prediction, and an overview of the impacts of polluted air on human health and the environment.

Pre-requisite: MET 140 Minimum Grade of C or GEO 101 Minimum Grade of C and MA 110 Minimum Grade of C

**MET 442 Tropical Meteorology 2 cr**

This course presents an overview of meteorology in the tropics. The tropical realm is defined and the importance of solar radiation and distribution of temperature, moisture and precipitation in driving tropical weather systems is discussed. The general circulation in the tropics is explored along with seasonal and non-seasonal variations, including the Monsoon and El Nino/La Nina. Certain mesoscale and local circulations common to the tropics are also discussed. Several weeks will be spent investigating tropical cyclones.

Pre-requisite: MET 353 Minimum Grade of C or GEO 353 Minimum Grade of C

**MET 443 Climatology - W 3 cr**

Analysis of global climate as aggregate weather. Component elements, factors controlling distribution, resulting area patterns, and climatic classification are studied (identical to GEO 443). Fee

Pre-requisite: MET 140 Minimum Grade of C or GEO 101 Minimum Grade of C

**MET 454 Synoptic Meteorology I 6 cr**

Principles of dynamic meteorology are applied to current surface and upper air analyses of frontal cyclones. An emphasis is placed on forecasting techniques, daily weather discussions, continuity, and analysis. Fee.

Pre-requisite: (MET 355 Minimum Grade of C or GEO 345 Minimum Grade of C or GEO 355 Minimum Grade of C) and (MET 356 Minimum Grade of C or GEO 346 Minimum Grade of C or GEO 356 Minimum Grade of C) and (MET 356 Minimum Grade of C

**MET 455 Synoptic Meteorology II 6 cr**

This course continues the development of principles learned in MET 454. Principles of atmospheric dynamics and conceptual models will be studied and forecast through the use of surface and upper air analyses, satellite and radar data. A multi-week overview of numerical weather prediction principles and concepts will be accomplished along with the integration and interpretation of model guidance into real-time forecasting. Students will participate in the generation, study and interpretation of actual modelling simulations using basic concepts of numerical weather prediction. Topics on mid-latitude cyclones and fronts will continue to be expanded beyond Synoptic I. Ensemble prediction and atmospheric oscillations will be discussed along with intrinsic predictability limitations. Fee. This course serves as a capstone class for meteorology majors.

Pre-requisite: MET 454 Minimum Grade of C or GEO 444 Minimum Grade of C or GEO 454 Minimum Grade of C

**MET 456 Applied Climatology - W 3 cr**

Training in the application of climatology to solve real world problems. In addition to an examination of present day climate patterns, their causes, and mechanisms, the course focuses on the El Nino, recent and past climates, the natural and human impact on the Earth's energy balance, global warming, ozone hole and the chaos theory.

Pre-requisite: (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C) and (MET 353 Minimum Grade of C or GEO 353 Minimum Grade of C) and (MET 341 Minimum Grade of C or GEO 341 Minimum Grade of C)

**MET 490 Sp Top - 1 TO 4 cr**

Meteorological topics not covered in current meteorology courses. May be repeated when content varies for a maximum of four hours. May require permission of instructor.

**MET 492 Seminar - 1 TO 4 cr**

Departmental seminar investigating a special field of meteorology. (Topic announced prior to registration.) May be repeated when content varies for a maximum of eight hours. Requires permission of instructor.

**MET 494 Directed Studies - 1 TO 4 cr**

Independent research in field, laboratory, or library under the direction of a member of the meteorology faculty. Prerequisite: Requires permission of instructor. May be taken for a total of eight hours.

**MET 495 Mesonet Internship 1 cr**

Students will learn various aspects of mesonet (mesoscale weather station network) operation and maintenance. Students will take part in routine weather station site visits, emergency site visits when a sensor malfunctions, and quality control of incoming data. Once a year every weather station receives a complete retrofit where all sensors are replaced with freshly calibrated sensors. If such a retrofit occurs during the semester of a student's internship, the student will be given the opportunity to take part in this process as well. A large component of this course will consist of field work. Depending on student schedules and mesonet behavior, time will also be spent in the lab performing manual data quality control using the USA Mesonet website.

Pre-requisite: (MET 353 Minimum Grade of C or GEO 353 Minimum Grade of C)

**MET 496 Internship in Meteorology 1 TO 3 cr**

On-the-job learning through occupational, professional, or research work with an approved firm, agency, or meteorology faculty member. Open only to meteorology majors. Prerequisite: Permission of department chair.

**MET 497 Broadcast Meteorology Pract I 3 cr**

This course focuses on introducing the student to the ever evolving technology in broadcast meteorology. Emphasis is placed on the application of meteorological data through the use of professional television weather graphics systems in order to develop a "weather story". Particular attention is given to the use of chroma key mechanics/techniques for public viewing.

Pre-requisite: MET 359 Minimum Grade of C

**MET 498 Broadcast Meteorology Prac II 3 cr**

This course focuses on communicating accurate forecasts and other important weather information to the public. Attention is given to fine-tuning the on-air weather presentation style, as well as developing a professional resume tape of weather shows in order to gain employment as a broadcast meteorologist. Special attention is given to severe weather cut-ins and accurately conveying severe weather threats to the public.

Pre-requisite: (MET 355 Minimum Grade of C or GEO 345 Minimum Grade of C or GEO 355 Minimum Grade of C) and MET 497 Minimum Grade of C

**MET 540 Topics in Air Pollution MET 3 cr**

Topics in Air Pollution Meteorology is a graduate course on advanced air pollution topics taught primarily from an atmospheric perspective. This course provides an overview of "dry" meteorological processes, such as temperature, pressure, wind, and general circulation combined with topics on air pollution history, methods of measuring air quality, sources of air pollution, atmospheric pollution dispersion concepts, principles of air pollution modeling and prediction, and the impacts of polluted air on human health and the environment.

**MET 594 Grad Dir St in Meteorology- 1 TO 4 cr**

Graduate level independent study in Meteorology under the direction of a member of Meteorology's Graduate Faculty. Student must have an approved topic and must be accepted by a Graduate Faculty mentor before registering for this class. Prerequisite: Graduate standing.

## Microbiology/Immunology - MD (MIC)

**MIC 400 Microbiology Externship 1 TO 4 cr**

To be determined.

**MIC 480 Molec Basis of Pathogenesis 1 TO 4 cr**

Bench research on the biology or the Rickettsiales family of intracellular pathogens and on the pathogenesis of the diseases caused by these organisms. Participation in ongoing research or initiation of new projects are possible.

**MIC 530 Microbes & Host Defense 3 cr**

Presents the fundamental aspects of microbiology including morphology, metabolism of micro-organisms, the basic principles of the use of antibiotics and chemotherapeutic agents, microbial genetics, virology, and medical microbial ecology. The principles of immunology and infection in relation to clinical disease are discussed with special emphasis on laboratory diagnosis.

**MIC 536 Literature Reports 1 cr**

Students and faculty participate in a supervised reading of the current literature and meet periodically to interact in a discussion of the selected article or topic. The goal of this course is to maintain the faculty's and students' level of information at a "state of the art" in both methods and theory in the discipline and to develop critical skills in reviewing the literature.

**MIC 537 Dir St - Microbiology 1 TO 6 cr**

Students participate in research under the direction of a graduate faculty member. This course should be taken by students who have completed their lab rotations, but have not yet submitted a formal research proposal.

**MIC 590 Sp Top - 1 TO 3 cr**

Each course provides in-depth tutorial exposure to specific areas in the discipline. Student and/or faculty presentations followed by group discussions, examine the subject matter in an area of current interest either to one student or a group of students. Credit and title are arranged with an individual faculty member.

**MIC 630 Adv Microbial Pathogenesis 3 cr**

This course discusses the fundamentals of this area with particular emphasis on *Escherichia coli* and *Salmonella typhimurium* as model systems. The development of problem solving skills will be stressed. Topics including aerobic vs. anaerobic metabolism, membrane physiology, biosynthesis of macromolecules and regulation of gene expression provide view of microbial cell.

Pre-requisite: IDL 580 Minimum Grade of B and IDL 581 Minimum Grade of B

**MIC 632 Advanced Immunology 3 cr**

Selected topics in immunology are considered using formal lectures followed by student presentations. Design and interpretation of immunological experiments are emphasized throughout the course.

Pre-requisite: IDL 580 Minimum Grade of B and IDL 581 Minimum Grade of B

**MIC 633 Advanced Virology 3 cr**

This course reviews the reproductive cycles of important human viruses and subviral agents and the diseases they cause. The focus is on the molecular biology of animal viruses and their mechanisms of regulation, assembly, and pathogenesis. Human immunodeficiency virus will be considered in detail. The course is constructed as an interactive lecture series with student reports and literature surveys.

Pre-requisite: IDL 580 Minimum Grade of B and IDL 581 Minimum Grade of B

**MIC 636 Microbiology-Immun Res Sem 1 cr**

Students present a research topic for discussion before members of the department. Usually scheduled on a rotational basis. Student participation required after end of second year. Attendance required.

**MIC 799 Research-Dissertation 1 TO 6 cr**

Independent research by the student under the sponsorship of the graduate faculty in individual departments in the Basic Medical Sciences. Students are required to submit a research project description form before enrolling in this course. Progress reports of the work accomplished are required every six months.

## Military Science (MS)

**MS 101 Basic Leadership Skills I 1 cr**

An introductory course of instruction and participation in common military task and leadership skills. Students are encouraged to attend Physical Training (PT) Lab three (3) times per week for 1 hour per session and a 2 hour leadership lab every other week. Fee.

**MS 102 Basic Leadership Skills II 1 cr**

A continuing course of instruction and participation in individual common military task and leadership skills. Students are encouraged to attend Physical Training (PT) Lab three (3) times per week for 1 hour per session and a 2 hour leadership lab every other week. Fee.

**MS 201 Intermediate Military Skills I 3 cr**

A further development of common task and leadership skills required to prepare cadets to lead small military units. Emphasis on practical application of basic military skills and ability through development of leadership skills. Students are required to attend Physical Training (PT) Lab three (3) times per week for 1 hour per session and a 2 hour leadership lab every other week. Fee.

Pre-requisite: MS 101 Minimum Grade of D and MS 102 Minimum Grade of D

**MS 202 Inter Military Skills II 3 cr**

A further development of common task and leadership skills required to prepare cadets to lead small military units. Emphasis on practical application of basic military skills and ability through development of leadership skills. Students are required to attend Physical Training (PT) Lab three (3) times per week for 1 hour per session and a 2 hour leadership lab every other week. Fee.

Pre-requisite: (MS 101 Minimum Grade of D and MS 102 Minimum Grade of D) or MS 201 Minimum Grade of D

**MS 301 Adaptive Team Leadership 3 cr**

Challenges cadets to study, practice, and evaluate adaptive leadership skills as they are presented with challenging scenarios related to military operations containing ethical dilemmas. Cadets receive systematic and specific feedback on their leadership attributes and actions. Based on such feedback, as well as their own self-evaluations, cadets continue to develop their leadership and critical thinking abilities. Cadets also conduct physical fitness training three times per week focusing on development of individual flexibility, muscular strength, and cardio-respiratory endurance. Students are required to attend Physical Training (PT) Lab three (3) times per week for 1 hour per session and a 2 hour leadership lab every week. Contact Hour Distributions: 3 hours and 1 lab. Fee.

**MS 302 Applied Team Leadership 3 cr**

Increasingly intense situational leadership challenges in order to develop a cadet's awareness and critical thinking skills while in a leadership role. Cadets review aspects of combat, stability, and support operations. They also conduct military briefings and develop proficiency in the operational orders process. Cadets also conduct physical fitness training three times per week focusing on development of individual flexibility, muscular strength, and cardio-respiratory endurance. Students are required to attend Physical Training (PT) Lab three (3) times per week for 1 hour per session and a 2 hour leadership lab every week. Fee.

Pre-requisite: MS 301 Minimum Grade of C

**MS 401 The Army Profession 3 cr**

MS 401 introduces Cadets to the challenges of mission command and gaining an understanding of the Army Profession. Cadets learn the basics of what mission command is and how it is used in Army operations. Students will examine the Army Profession and what it means to be a professional in the U.S. Army. The overall focus is on developing basic knowledge and comprehension of Army leadership while gaining a big picture of understanding the Reserve Officers' Training Corps (ROTC) program, its purpose in the Army, and its advantages for the student. In addition, MSL IVs are rotated through a variety of leadership positions that support a variety of ROTC battalion training and recruiting events throughout the semester where the MSL IV student will receive detailed and constructive feedback on their leader attributes and core leader competencies from experienced cadre. Students are required to attend Physical Training (PT) Lab three (3) times per week for 1 hour per session and a 2 hour leadership lab every week. Fee.

Pre-requisite: MS 301 Minimum Grade of C and MS 302 Minimum Grade of C

**MS 402 The Company Grade Officer 3 cr**

MSL 402 explores the dynamics of leading Soldier's in Full Spectrum Operations in the Operating Environment (OE). This course will introduce you to the Army Operating Concept, Combatant Commands (COCOM), and Unified Land Operations. Additionally, it will discuss platoon leadership, how to take charge of your platoon and the additional duties you may have as a 2LT. Students will continue to examine the Army Profession and what it means to be a professional in the U.S. Army. The overall focus is on broadening the students knowledge of the Army.

Pre-requisite: MS 401 Minimum Grade of C

**MS 494 Directed Studies - 1 TO 3 cr**

Directed study and research. May be repeated in different subject areas. Course work will be specified by the instructor prior to the beginning of the semester. Studies may include but are not limited to research papers, special projects, and leadership seminars. One and three hour courses are available. Fee.

**Museum Studies (MUM)****MUM 201 Intro to Museum Studies 3 cr**

This course is designed to provide a general introduction to museum history, practice, and the role of museums in contemporary society. The class will explore a range of museum positions, curatorial practices, collection management, museum administration, and the academic and public roles museums play in society.

Pre-requisite: EH 102 Minimum Grade of C

**MUM 290 Special Topics - 3 cr**

Different subjects or themes in museum studies as announced. This course may be repeated twice when content varies, for a maximum of nine credit hours. Prerequisite: To be announced.

**MUM 390 Special Topics - 3 cr**

Different subjects or themes in museum studies as announced. This course may be repeated twice when content varies. for a maximum of nine credit hours. Prerequisite: To be announced.

**Music Education (MUE)****MUE 010 Music Education 0 cr**

The Piano Proficiency documents mastery of minimum piano proficiency skills for students who do not need to enroll in class piano.

**MUE 102 Elementary Class Piano 1 cr**

Functional keyboard playing. Open to music majors and minors only. No previous knowledge in piano necessary. To be taken in sequence. Fee.

**MUE 103 Elementary Class Piano 1 cr**

Functional keyboard playing. Open to music majors and minors only. Fee.

Pre-requisite: MUE 102 Minimum Grade of D

**MUE 120 Elementary Class Voice 1 cr**

Beginning voice instruction emphasizing the fundamentals of singing and the vocal mechanism. This is the first semester of a two semester sequence.

**MUE 121 Intermediate Class Voice 1 cr**

This course is a continuation of MUE 120. Vocal fundamentals and the mechanics of singing will be emphasized. More advanced vocal exercises, diction, and interpretation will be stressed.

Pre-requisite: MUE 120 Minimum Grade of D

**MUE 170 Elementary Class Percussion 1 cr**

Beginning percussion instruction with emphasis on development of sight-reading, concert style/mallet techniques and basic concepts of percussion instruments.

**MUE 182 Elementary Class Guitar 1 cr**

Beginning guitar instruction with the development of proficiency in sight reading and correct right and left hand techniques. No previous knowledge of guitar is necessary. Open to any university student except guitar majors. To be taken in sequence.

**MUE 183 Elementary Class Guitar 1 cr**

Beginning guitar instruction with the development of proficiency in sight reading and correct right and left hand techniques.

Pre-requisite: MUE 182 Minimum Grade of D

- MUE 202 Intermediate Class Piano 1 cr**  
A continuation of elementary class piano including sight reading and keyboard harmony. Open to music majors and minors only. Fee.  
Pre-requisite: MUE 103 Minimum Grade of D
- MUE 203 Intermediate Class Piano 1 cr**  
A continuation of elementary class piano including sight-reading and keyboard harmony. Open to music majors and minors only. Fee.  
Pre-requisite: MUE 202 Minimum Grade of D
- MUE 212 Adv Keyboard Musicianship I 1 cr**  
MUE 212 is the first of four courses required of all concentration level and performance level piano majors. During the course students develop sight reading ability, read lead sheets, learn accompanying strategies and practice systematic piano technique. Class piano pedagogy is also addressed. Prerequisite: Piano major or concentration. Fee.
- MUE 213 Adv Keyboard Musicianship II 1 cr**  
The second of four courses required of all concentration level and performance level piano majors. During the course, students develop sight-reading ability, read lead sheets, learn accompanying strategies and practice systematic piano technique. Class piano pedagogy is also addressed. Fee.  
Pre-requisite: MUE 212 Minimum Grade of D
- MUE 236 Mus-Lit Integ for Early Chldhd 3 cr**  
This course examines the use of music and literature integration in the early childhood classroom - establishing an active-learning environment, identifying elements of music in children's literature, engaging students in the storytelling process, and preparing music-literature instruction.
- MUE 240 String Methods 1 cr**  
The techniques of teaching the string instruments in class situations and the development of some proficiency on each string instrument.
- MUE 241 Woodwind Methods 1 cr**  
The techniques of teaching the woodwind instruments in class situations and the development of some proficiency on each of the main woodwinds.
- MUE 242 Brass Methods 1 cr**  
The techniques of teaching the brass instruments in class situations and the development of some proficiency on each of the main brass instruments.
- MUE 243 Percussion Methods 1 cr**  
The techniques of teaching percussion instruments in class situations and the development of some proficiency on all percussion instruments.
- MUE 301 Music Literacy Child and Youth 3 cr**  
The fundamentals of music, music reading, and instruction for those working with children and youth in group settings.
- MUE 312 Adv Keyboard Music III Vocal 1 cr**  
MUE 213 is the third of four courses required of all concentration and performance level piano majors. Students will develop sight reading ability, read lead sheets, learn accompanying strategies and practice systematic piano technique. Vocal accompanying workshops and class piano pedagogy are included. Fee.  
Pre-requisite: MUE 213 Minimum Grade of D
- MUE 313 Adv Keyboard Music IV Inst 1 cr**  
MUE 313 is the fourth of four courses required of all concentration and performance level piano majors. During the course, students develop sight reading ability, read lead sheets, learn accompanying strategies and practice systematic piano technique. Instrumental accompanying workshops and class piano pedagogy are included. Fee.  
Pre-requisite: MUE 312 Minimum Grade of D
- MUE 322 Early Chld/Elem Mus Perf Mthds 3 cr**  
The study of music and performance methods as used in dance and theatre throughout various early childhood and elementary settings.
- MUE 336 Performing Arts for Young Chld 3 cr**  
This course provides an overview of the planning, preparation, and delivery of the performing arts in a developmentally appropriate environment. Students will explore dramatic arts, improvisation, use of musical instruments, and vocal exploration as a means of communication, expression, and learning for the young child. Appropriate learning environments and routines will be discussed regarding the individual child's needs of social, physical, and sensory motor skills and the role of facilitating the growth through discovery.
- MUE 346 Marching Band Techniques 1 cr**  
The techniques of organization, administration, instruction, and rehearsal of the marching band.
- MUE 411 Woodwind Pedagogy 2 cr**  
A survey of the teaching techniques, instruments, accessories and pedagogical materials for woodwind instruments. Prerequisite: Upper division studio study in woodwinds or permission of instructor
- MUE 412 Brass Pedagogy 2 cr**  
This course is intended as a technique course specific to high and low brass instruments. Topics of study will include: development of technique, etudes, performance preparation, pedagogical literature, performance anxiety. Upper division studio study in brass or permission of instructor.
- MUE 413 Percussion Pedagogy 2 cr**  
A comprehensive study of methods and materials used to teach percussion instruments. Upper division studio study in percussion or permission of instructor.

- MUE 414 Guitar Pedagogy** 2 cr  
A survey of the teaching techniques, instruments, accessories and pedagogical materials for guitar. Prerequisite: Upper division studio study in guitar or permission of the instructor.
- MUE 430 Exceptional Music** 3 cr  
The philosophical and practical approach to increasing the effectiveness of learning and content retention for the exceptional student through music.
- MUE 434 Keyboard, Voice, Guitar** 3 cr  
The study of music literature, note reading, and the effective practice of incorporating keyboard, voice, and guitar through music education and music therapy.
- MUE 436 Integrating Arts in Education** 1 TO 3 cr  
This course examines arts integration as a philosophical approach to increasing the effectiveness of learning and content retention in the PK-12 classroom.
- MUE 444 Elementary/General Music** 3 cr  
Music program, methods, music literature, and teaching aids for elementary and middle school students. Prerequisites: Junior level or above in music education, concentration, admission to candidacy, completion of two-thirds of teaching field. Pre-requisite: (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)
- MUE 446 Piano Pedagogy** 2 cr  
Methods and materials for the private lesson. Lab practice in teaching included. Offered in alternate years. Prerequisite: Piano major or piano concentration.
- MUE 448 Vocal Pedagogy** 2 cr  
Theory and practice of the art of teaching singing as it relates to Voice Science, with regard to both current and historical practices, physiology, function, acoustics, observations, and hands-on experience. Prerequisite: Upper division in vocal studio studies or permission of instructor
- MUE 455 Tch Mu in Middle-Scndary Sch** 3 cr  
Assists the student in organizing materials and in developing methods of teaching music in middle and secondary schools. Prerequisites: Junior level or above in music education concentration, admission to candidacy, completion of two-thirds of teaching field.
- MUE 494 Directed Studies -** 1 TO 3 cr  
An individual project concerned with the student's special interests in music education. May be repeated for a maximum of six hours. Prerequisite: Department Chair permission.
- MUE 501 Instrumental Music Education** 3 cr  
Study of the organization, development, appraisal, role and future trends of instrumental programs in the public schools.
- MUE 512 Foundations of Music Education** 4 cr  
Sequential study of major philosophies guiding music teaching and the history of music education that have led to contemporary issues and problems in Music Education. Major philosophies including Pestalozzi, Reimer, and the praxial approach of Mark and history from perspectives of sociology, psychology, philosophy, curriculum, history and comparative curricula, including emerging trends in the profession.
- MUE 513 Curr and Assess in Music Ed** 4 cr  
Critical evaluation of current literature, research, and assessment tools used in the curriculum and teaching of music. This course examines the relationship between curriculum theory and philosophy of music education. Through the study of traditional and contemporary models of curriculum development and evaluation, students broaden their understanding of curriculum as it impacts the learning process. Field experience required.
- MUE 519 Brass Pedagogy** 3 cr  
A teaching techniques course specific to brass instruments. Topics of study will include teaching philosophy and techniques, pedagogical literature, lesson structure, and resources for further brass research.
- MUE 520 Adv Stdy in EC/Elem/Gen Music** 4 cr  
Music supervision and administration, program development, conducting children's choirs, inclusion, instructional materials and innovative teaching techniques for early childhood and elementary music programs, including Kodaly, Orff, Dacroze, and Gordon.
- MUE 534 Keyboard, Voice, Guitar** 3 cr  
The study of music literature, note reading, and the effective practice of incorporating keyboard, voice, and guitar through music education and music therapy.
- MUE 536 Integrating Arts in Education** 1 TO 3 cr  
This course examines arts integration as a philosophical approach to increasing the effectiveness of learning and content retention in the PK-12 classroom.
- MUE 540 Adv Study in Tchg Choral Music** 4 cr  
Focus of the course is to enhance the student's knowledge of rehearsal techniques and instructional strategies, strengthening the role of the conductor, techniques for analytical preparation of choral music, and organization of choral programs. Emphasis will also be given to expanding knowledge of choral repertoire and resources for the choral conductor.
- MUE 548 Graduate Vocal Pedagogy** 2 cr  
Vocal Pedagogy is a 2 credit hour course for the upper level undergraduate voice major and graduate vocal performance majors. It focuses on the art, science and profession of teaching singing. Class meetings will be dedicated to lecture, class discussion, presentations, and workshops with various pedagogical and voice science topics.

**MUE 560 Adv Study in Tchgr Instr Music 4 cr**

The purpose of this course is to help the student develop teaching materials, gain greater familiarity with instrumental music repertoire, and develop instructional strategies for instrumental music. Emphasis will be placed on rehearsal procedures, analytical techniques, organizational structure, instrumental music program management, and advanced instrumental conducting.

**MUE 564 Woodwind Pedagogy 3 cr**

This course involves the study of teaching principles of the woodwind family, with specialized instruction given to students' primary woodwind instrument. Focusing on the art of teaching by examining pedagogical concepts and history, woodwind performance majors will experience teaching demonstrations and the discovery of new and standard teaching literature for woodwind instruments.

**MUE 585 Practicum in Music Education 1 TO 4 cr**

Observation and involvement in the teaching of undergraduate music courses at the college level with opportunities for individual research and teaching experiences.

**MUE 587 Percussion Pedagogy 2 cr**

A comprehensive study of methods and materials used to teach percussion instruments.

**MUE 589 Reading and Conference 1 cr**

Guided study in preparation of the portfolio-video recording and self critique, pedagogical project and research paper - which should be taken in conjunction with preparation of the final portfolio.

**MUE 590 Special Topics - 1 TO 3 cr**

Special topics in music education designed to meet specific needs and special interests, and to explore current issues in the field. May be repeated for a maximum of nine hours when content varies. Requires permission of department chair.

## Music Literature (MUL)

**MUL 101 Introduction to Music 3 cr**

Music, what it is and how to listen to it; basic materials of music and the great style periods of music literature in the Western World. Attendance at approved concerts is required.

**MUL 201 Contemporary Music 3 cr**

An introduction to music-literature trends in the 20th century.

**MUL 235 Survey Musical Masterworks I 2 cr**

This course is the first of a two semester sequence and will familiarize the student with the vocabulary, traditions, conventions, genres, and repertoire of the art music world. The course will focus on the 'greatest hits' of the concert repertory and other works of a regional/timely interest. Pre-requisite: MUT 113 Minimum Grade of C

**MUL 236 Survey Musical of Masterwks II 2 cr**

This course is the second of a two semester sequence and will familiarize the student with the vocabulary, traditions, conventions, genres, repertoire of the art music world. The course will focus on the 'greatest hits' of the concert repertory and other works of a regional/timely interest. Pre-requisite: MUL 235 Minimum Grade of D

**MUL 315 History of Music Theatre - W 3 cr**

A comprehensive overview of the origins and evolution of American Music Theatre to present time. The course also includes both general and specific information toward appropriate performance choices. Cross-listed with DRA 315. Credit cannot be received for both DRA 315 and MUL 315.

**MUL 335 History of Music I - W 3 cr**

Music of the Western World from pre-Christian times to 1750: evolution of forms, styles, and media. Pre-requisite: MUT 113 Minimum Grade of C and MUL 236 Minimum Grade of D and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**MUL 336 History of Music II - W 3 cr**

Music of the Western World from 1750 to the present: evolution of forms, styles, and media. Pre-requisite: MUL 335 Minimum Grade of D and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**MUL 411 Woodwind Literature 3 cr**

A survey of the major works of the solo, concerto, and chamber music repertoire for the woodwind instruments. Prerequisites: Upper division studio study in woodwinds or permission of instructor.

**MUL 412 Brass Literature 3 cr**

A survey of the major works of the solo, concerto, and chamber music repertoire for brass instruments. Prerequisite: Upper division brass studio study or permission of instructor.

**MUL 413 Percussion Literature 3 cr**

A survey of the major works of the solo, concerto, and chamber music repertoire for percussion instruments. Prerequisite: Upper division studio study in percussion or permission of instructor.

**MUL 414 Guitar Literature 3 cr**

A survey of the major works of the solo, concerto, and chamber music repertoire for guitar. Prerequisite: Upper division studio study in guitar or permission of instructor.

**MUL 438 Keyboard Literature 3 cr**

Major works and styles in the keyboard literature from English Virginalists through the contemporary period. Offered in alternate years. Prerequisites: Upper division piano study or instructor permission.

- MUL 442 Organ Literature** 3 cr  
Music for pipe organ, both secular and sacred. Offered in alternate years. Prerequisites: Upper division organ study or instructor permission.
- MUL 444 Vocal Solo Literature** 3 cr  
A comprehensive overview of standard solo vocal repertoire within the foundation of historical performance practice of sacred and secular vocal music from its beginnings to the present.  
Pre-requisite: MUL 335 Minimum Grade of D and MUL 336 Minimum Grade of D
- MUL 494 Dir St -** 1 TO 3 cr  
An individual project concerned with the student's special interests. May be repeated for up to 6 hours. Requires Department Chair permission.
- MUL 501 Graduate Research in Music** 2 cr  
Methods and materials of research in music. Bibliography and bibliographical aids. Introduction to musicology. Critical and historical writing. A survey of references and sources consulted in graduate music courses; format for papers and thesis, including footnotes and bibliography.
- MUL 512 Brass Literature** 3 cr  
A survey of the major works of the method, solo, orchestral, and chamber music repertoire for brass instruments.
- MUL 530 Symphonic Literature** 3 cr  
A survey of the development of the symphony and related forms from its origins through the twentieth century.
- MUL 535 American Music** 4 cr  
Early music in the colonies. Various attempts to create an individual 'American' musical style. Diversity of influences: European, African American, Native American, Spanish-Mexican, religious, jazz, folk song, minstrel, etc. Music of Billings, Mason, Gottschalk, MacDowell, Sousa, Ives, Gershwin, Copland, and others.
- MUL 544 Art Song Literature & History** 2 cr  
Art Song Literature and History is an advanced study of art song literature from 1800-present for the graduate vocal performance major. Elements of form, style, poetic materials, and performance practice will be covered. Special emphasis will be given to elements of preparation and literature exploration for the emerging performer.
- MUL 545 Opera Literature and History** 2 cr  
Opera Literature and History is designed to provide the student with a comprehensive study of opera from its earliest development to the present day. Elements of form, style, social/political influences, and stagecraft will be explored. Critical analysis of operatic works will be developed through guided listening and viewing assignments.
- MUL 546 Collab Piano Lit for Vocal** 3 cr  
The graduate-level Vocal Accompanying Literature course offers a survey of music composed for voice(s) and piano from the pianist's perspective. Music for solo voice and piano will be explored chronologically. Additional units will feature standard choral music, choral/vocal music for church services, strategies for playing musical theater scores and techniques for operatic score reduction.
- MUL 564 Woodwind Literature** 3 cr  
Woodwind Literature examines solo and chamber woodwind literature. The course will focus on the evolution of woodwind literature and masterworks in the repertoire.
- MUL 566 Coll Piano Lit for Instruments** 3 cr  
Graduate-level Collaborative Piano Literature for keyboard and various instruments is a survey course which seeks to expose students to musical works written for solo instrument and piano/keyboard, standard chamber music (piano trios, quartets and quintets), non-standard chamber music and piano concertos. Collaborative duos will be explored by instrument type (violin, flute, trumpet, etc.), while chamber music will be studied chronologically.
- MUL 585 Grad Piano Literature Survey** 2 cr  
The chronological survey includes units on pre-piano literature from England, France, Germany and Italy, early development of the classical sonata, the Viennese Classical period, late Beethoven and Schubert, the Romantics, Brahms and Nationalism, Debussy and Impressionism, piano music from 1920-1950, piano music since 1950.
- MUL 587 Percussion Literature** 3 cr  
A survey of the major works of solo, concerto and chamber music repertoire for percussion instruments.
- MUL 590 Spec Topics in Music History** 1 TO 4 cr  
A study of works and styles appropriate to the topics listed: (1) Middle Ages; (2)Renaissance; (3) Baroque Period; (4) Classical Period; (5) Romantic Period; (6) Modern. May be repeated for credit when topics vary.

## Music Organization (MUO)

- MUO 111 University Concert Choir** .5 OR 1 cr  
This large ensemble is open to all majors, and performs the masterpieces of choral literature. Required of all voice majors, and a placement audition is required for all participants.
- MUO 114 Chamber Singers** .5 cr  
A small, select ensemble devoted to the performance of vocal chamber music. Audition and instructor permission required.

- MUO 115 Chorale** .5 OR 1 cr  
The Chorale is the preeminent choral ensemble on campus. Chorale members are chosen through special auditions, and perform in area schools and venues to promote the University and the Department of Music.
- MUO 116 Opera & Musical Theatre Wkshop** .5 cr  
A performing ensemble dedicated to training students in the fundamentals of stage craft, performance, and production through experience with music for the stage. Standards of opera, operetta, and American musical theater are explored in scene exercises and fully-staged productions on and off campus. Enrollment is open to all students through audition or permission of the instructor. Course is cross-listed with DRA 116. Credit cannot be received for both MUO 116 and DRA 116.
- MUO 117 University Symphony Band** .5 OR 1 cr  
A large performing ensemble of woodwind, brass and percussion instrumentalists with an emphasis on wind band literature and live performance. Open to music majors and non-music majors with prior instrumental performance experience in high school or junior college.
- MUO 118 Woodwind Ensemble** .5 cr  
The study and performance of literature for all combinations of woodwind instruments.
- MUO 119 Brass Ensemble** .5 cr  
The study and performance of literature for all combinations of brass instruments.
- MUO 120 Percussion Ensemble** .5 cr  
The study and performance of literature for all combinations of percussion instruments.
- MUO 121 Jazz Band** .5 cr  
The ensemble study of jazz with an emphasis on literature and live performance.
- MUO 122 Basketball Pep Band** .5 cr  
Performs for USA Basketball Games throughout the basketball season. Schedule varies annually.
- MUO 123 String Ensemble** .5 cr  
The study and performance of literature for all combinations of string instruments.
- MUO 124 Piano Ensemble** .5 cr  
The study and performance of two-piano and piano-ensemble literature. Required of piano majors.
- MUO 125 Guitar Ensemble** .5 cr  
The study and performance for ensemble literature for guitar. Required for all guitar majors.
- MUO 126 Collegium Musicum** .5 cr  
A performing ensemble dedicated to combined chamber music experience of both vocal and instrumental forces, playing one-to-a-part, and focusing on music written before 1800. Enrollment is open to the entire university community through audition or permission of the co-directors. By virtue of the terms of the attached constitution, members will learn to choose repertoire, budget and raise small funds, develop programs, reserve performance space, organize print material, and explore the dynamics of team production. This team-taught course will also be dedicated to sharing cultural forces and encouraging the exchange of attitudes shared historically by all people.
- MUO 127 Wind Ensemble** .5 OR 1 cr  
A select performing ensemble of woodwind, brass, and percussion instrumentalists with an emphasis on wind ensemble literature and live performance. Open to music majors and non-majors with prior instrumental performance experience in high school or junior college. Audition or permission of instructor required for participation.
- MUO 129 Mixed Chamber Ensemble** .5 cr  
The study and performance of chamber literature for all combinations of instruments and voices.
- MUO 130 University Marching Band** 1 cr  
A large performing ensemble of woodwind, brass, percussion instrumentalists, and appropriate auxiliary personnel with an emphasis on live performance for athletic events. Open to music majors and non-music majors with prior instrumental performance experience in high school or junior college.
- MUO 131 University Winterguard** .5 OR 1 cr  
A large performing ensemble consisting of appropriate auxiliary personnel (flags, rifles, sabres, etc.) with an emphasis on live performance.
- MUO 133 University Orchestra** .5 OR 1 cr  
A large performing ensemble of string, woodwind, brass, and percussion instrumentalists with an emphasis on orchestral literature and live performance. Open to music majors and non-music majors with prior instrumental performance experience in high school or junior college. Audition or permission of instructor required for participation.
- MUO 136 World Music Ensemble** .5 cr  
The study and performance of world literature for all combinations of instruments with an emphasis on music from non-Western cultures.
- MUO 137 University Band** .5 OR 1 cr  
A performing ensemble of woodwind, brass, and percussion instrumentalists with an emphasis on concert band literature and live performance. Open to music majors and non-majors with prior instrumental performance experience in high school, junior college, or at the university level. No audition is required for this ensemble and it is open to the entire campus community as well as faculty and staff.

- MUO 138 Flute Choir** .5 cr  
The study and performance of literature for all combinations of flutes.
- MUO 139 Trumpet Ensemble** .5 cr  
The study and performance of literature for all combinations of trumpets.
- MUO 140 Horn Choir** .5 cr  
The study and performance of literature for all combinations of horns.
- MUO 141 Trombone Choir** .5 cr  
The study and performance of literature for all combinations of trombones.
- MUO 142 Tuba-Euphonium Ensemble** .5 cr  
The study and performance of literature for all combinations of tubas and euphoniums.
- MUO 143 Brass Choir** .5 cr  
The study and performance of literature for large brass ensemble.
- MUO 144 USA Steel Band** .5 cr  
The study and performance of literature for steel band including the traditional styles of soca and calypso music from the Caribbean. Instructor permission required.
- MUO 145 Clarinet Ensemble** .5 cr  
The study and performance of literature for all combinations of clarinets.
- MUO 411 University Concert Choir** .5 OR 1 cr  
This large ensemble is open to all majors, and performs the masterpieces of choral literature. Required for all voice majors, and a placement audition is required for all participants.
- MUO 414 Chamber Singers** .5 cr  
A small, select ensemble devoted to the performance of vocal chamber music. Audition and instructor permission required.
- MUO 415 Chorale** .5 OR 1 cr  
The Chorale is the preeminent choral ensemble on campus. Chorale members are chosen through special auditions and perform in area schools and venues to promote the University and the Department of Music.
- MUO 416 Opera & Musical Theatre Wkshop** .5 cr  
A performing ensemble dedicated to training students in the fundamentals of stage craft, performance, and production through experience with music for the stage. Standards of opera, operetta, and American musical theater are explored in scene exercises and fully-staged productions on and off campus. Enrollment is open to all students through audition or permission of the instructor. Course is cross-listed with DRA 416. Credit cannot be received for both MUO 416 and DRA 416.
- MUO 417 University Symphony Band** .5 OR 1 cr  
A large performing ensemble of woodwind, brass and percussion instrumentalists with an emphasis on wind band literature and live performance. Open to music majors and non-music majors with prior instrumental performance experience in high school or junior college.
- MUO 418 Woodwind Ensemble** .5 cr  
The study and performance of literature for all combinations of woodwind instruments.
- MUO 419 Brass Ensemble** .5 cr  
The study and performance of literature for all combinations of brass instruments.
- MUO 420 Percussion Ensemble** .5 cr  
The study and performance of literature for all combinations of percussion instruments.
- MUO 421 Jazz Band** .5 cr  
The ensemble study of jazz with an emphasis on literature and live performance.
- MUO 423 String Ensemble** .5 cr  
The study and performance of literature for all combinations of string instruments.
- MUO 424 Piano Ensemble** .5 cr  
The study and performance of two-piano and piano-ensemble literature. Required of piano majors.
- MUO 425 Guitar Ensemble** .5 cr  
The study and performance of ensemble literature for guitar. Required of guitar majors.
- MUO 426 Collegium Musicum** .5 cr  
A performing ensemble dedicated to combined chamber music experience of both vocal and instrumental forces, playing one-to-a-part, and focusing on music written before 1800. Enrollment is open to the entire university community through audition or permission of the co-directors. By virtue of the terms of the attached constitution, members will learn to choose repertoire, budget and raise small funds, develop programs, reserve performance space, organize print material, and explore the dynamics of team production. This team-taught course will also be dedicated to sharing cultural forces and encouraging the exchange of attitudes shared historically by all people.
- MUO 427 Wind Ensemble** .5 OR 1 cr  
A select performing ensemble of woodwind, brass and percussion instrumentalists with an emphasis on wind ensemble literature and live performance. Open to music majors and non-majors with prior instrumental performance experience in high school or junior college. Audition or permission of instructor required for participation.
- MUO 429 Mixed Chamber Ensemble** .5 cr  
The study and performance of chamber literature for all combinations of instruments and voices.

- MUO 430 University Marching Band** 1 cr  
A large performing ensemble of woodwind, brass, percussion instrumentalists, and appropriate auxiliary personnel with an emphasis on live performance for athletic events. Open to music majors and non-music majors with prior instrumental performances experience in high school or junior college.
- MUO 431 University Winterguard** .5 OR 1 cr  
A large performing ensemble consisting of appropriate auxiliary personnel (flags, rifles, sabres, etc.) with an emphasis on live performance.
- MUO 433 University Orchestra** .5 TO 1 cr  
A large performing ensemble of string, woodwind, brass and percussion instrumentalists, with an emphasis on orchestral literature and live performance. Open to music majors and non-music majors with prior instrumental performance experience in high school or junior college. Audition or permission of instructor required for participation.
- MUO 436 World Music Ensemble** .5 cr  
The study and performance of world literature for all combinations of instruments with an emphasis on music from non-Western cultures.
- MUO 437 University Band** .5 OR 1 cr  
A performing ensemble of woodwind, brass, and percussion instrumentalists with an emphasis on concert band literature and live performance. Open to music majors and non-majors with prior instrumental performance experience in high school, junior college, or at the university level. No audition is required for this ensemble and it is open to the entire campus community as well as faculty and staff.
- MUO 438 Flute Choir** .5 cr  
The study and performance of literature for all combinations of flutes.
- MUO 439 Trumpet Ensemble** .5 cr  
The study and performance of literature for all combinations of trumpets.
- MUO 440 Horn Choir** .5 cr  
The study and performance of literature for all combinations of horns.
- MUO 441 Trombone Choir** .5 cr  
The study and performance of literature for all combinations of trombones.
- MUO 442 Tuba-Euphonium Ensemble** .5 cr  
The study and performance of literature for all combinations of tubas and euphoniums.
- MUO 443 Brass Choir** .5 cr  
The study and performance of literature for large brass ensemble.
- MUO 444 USA Steel Band** .5 cr  
The study and performance of literature for steel band including the traditional styles of soca and calypso music from the Caribbean. Instructor permission required.
- MUO 445 Clarinet Ensemble** .5 cr  
The Study and performance of literature for all combinations of clarinets.
- MUO 507 Ensemble with Coll Keyboard** 1 cr  
The Director for Collaborative Keyboard studies will meet with the student enrolled in MUO 507 to determine an ensemble assignment. Assignments may include one of the following: accompany/collaborate with Opera Theater, Symphony Band, Wind Ensemble, Concert Choir, Chorale, Chamber Music Ensemble or smaller ensemble.
- MUO 511 University Concert Choir** .5 OR 1 cr  
This large ensemble is open to all majors, and performs the masterpieces of choral literature. Required for all voice majors, and a placement audition is required for all participants.
- MUO 514 Chamber Singers** .5 cr  
A small, select ensemble devoted to the performance of vocal chamber music . Audition and instructor permission required.
- MUO 515 Chorale** .5 OR 1 cr  
The Chorale is the preeminent choral ensemble on campus. Chorale members are chosen through special auditions, and perform in area schools and venues to promote the University and the Department of Music.
- MUO 516 Opera & Musical Theatre Wrkshp** .5 cr  
A performing ensemble dedicated to training students in the fundamentals of stage craft, performance, and production through experience with music for the stage. Standards of opera, operetta, and American musical theatre are explored in scene exercises and fully-staged productions on and off campus. Enrollment is open to all students through audition or permission of the instructor.
- MUO 517 University Symphony Band** .5 OR 1 cr  
A large performing ensemble of woodwind, brass and percussion instrumentalists with an emphasis on wind band literature and live performance. Open to music majors and non-music majors with prior instrumental performance experience in high school or junior college.
- MUO 518 Woodwind Ensemble** .5 cr  
The study and performance of literature for all combinations of woodwind instruments.
- MUO 519 Brass Ensemble** .5 cr  
The study and performance of literature for all combinations of brass instruments.
- MUO 520 Percussion Ensemble** .5 cr  
The study and performance of literature for all combinations of percussion instruments.

- MUO 521 Jazz Band** .5 cr  
The ensemble study of jazz with an emphasis on literature and live performance.
- MUO 523 String Ensemble** .5 cr  
The study and performance of literature for all combinations of string instruments.
- MUO 524 Piano Ensemble** .5 cr  
The study and performance of two-piano and piano-ensemble literature. Required of piano majors.
- MUO 525 Guitar Ensemble** .5 cr  
The study and performance of ensemble literature for guitar. Required of guitar majors.
- MUO 526 Collegium Musicum** .5 cr  
A performing ensemble dedicated to combined chamber music experience of both vocal and instrumental forces, playing one-to-a-part, and focusing on music written before 1800. Enrollment is open to the entire university community through audition or permission of the co-directors. By virtue of the terms of the attached constitution, members will learn to choose repertoire, budget and raise small funds, develop programs, reserve performance space, organize print material, and explore the dynamics of team production. This team-taught course will also be dedicated to sharing cultural forces and encouraging the exchange of attitudes shared historically by all people.
- MUO 527 Wind Ensemble** 1 cr  
A select performing ensemble of woodwind, brass and percussion instrumentalist with an emphasis on wind ensemble literature and live performance. Open to music majors and non-majors with prior instrumental performance experience in high school or junior college. Audition or permission of instructor required for participation.
- MUO 529 Mixed Chamber Ensemble** .5 cr  
The study and performance of chamber literature for all combinations of instruments and voices.
- MUO 530 University Marching Band** 1 cr  
A large performing ensemble of woodwind, brass, percussion instrumentalists, and appropriate auxiliary personnel with an emphasis on live performance for athletic events. Open to music majors and non-majors with prior instrumental performance experience in high school or junior college.
- MUO 531 University Winterguard** .5 OR 1 cr  
A large performing ensemble consisting of appropriate auxiliary personnel (flags, rifles, sabres, etc.) with an emphasis on live performance.
- MUO 533 University Orchestra** .5 OR 1 cr  
A large performing ensemble of string, woodwind, brass and percussion instrumentalists with an emphasis on orchestral literature and live performance. Open to music majors and non-majors with prior instrumental performance experience in high school or junior college. Audition or permission of instructor required for participation.
- MUO 536 World Music Ensemble** .5 cr  
The study and performance of world literature for all combinations of instruments with an emphasis on music from non-Western cultures.
- MUO 537 University Band** .5 OR 1 cr  
A performing ensemble of woodwind, brass and percussion instrumentalists with an emphasis on concert band literature and live performance. Open to music majors and non-majors with prior instrumental performance experience in high school, junior college, or at the university level. No audition is required for this ensemble and is open to the entire campus community as well as faculty and staff.
- MUO 538 Flute Choir** .5 cr  
The study of performance of literature for all combinations of flutes.
- MUO 539 Trumpet Ensemble** .5 cr  
The study and performance of literature for all combinations of trumpets.
- MUO 540 Horn Choir** .5 cr  
The study and performance of literature for all combinations of horns.
- MUO 541 Trombone Choir** .5 cr  
The study and performance of literature for all combinations of trombones.
- MUO 542 Tuba - Euphonium Ensemble** .5 cr  
The study and performance of literature for all combinations of tubas and euphoniums.
- MUO 543 Brass Choir** .5 cr  
The study and performance of literature for large brass ensemble.
- MUO 544 USA Steel Band** .5 cr  
The study and performance of literature for steel band including the traditional styles of soca and calypso music from the Caribbean. Instructor permission required.
- MUO 545 Clarinet Ensemble** .5 cr  
The study and performance of literature for all combinations of clarinets.

## Music Studio (MUS)

**MUS 201 Intro to Music Edu Technology 2 cr**

Application of current Music Technology for the N-12 curriculum. Laboratory experience is given in selected software programs appropriate to music education.  
Pre-requisite: MUT 113 Minimum Grade of C

**MUS 202 Vocal Diction I 1 cr**

A lecture/performance course, rooted in the International Phonetic Alphabet (IPA), designed to enable singers to analyze and perform vocal repertoire in English and Italian.  
Pre-requisite: Open to music majors and minors only.

**MUS 203 Vocal Diction II 1 cr**

A lecture/performance course, rooted in the International Phonetic Alphabet (IPA), designed to enable singers to analyze and perform vocal repertoire in French and German.  
Pre-requisite: MUS 202 Minimum Grade of D

**MUS 204 Introduction to Music Business 3 cr**

A general overview of the music industry is the primary objective of the course. Some emphasis will be placed on career options.

**MUS 304 Principles of Music Business I 3 cr**

A continuation of MUS 204, 304 will place emphasis on the legal aspects of the music industry.  
Pre-requisite: MUS 204 Minimum Grade of D

**MUS 305 Principles Music Business II 3 cr**

A continuation of MUS 304, 305 will address marketing and promoting in music.  
Pre-requisite: MUS 304 Minimum Grade of D

**MUS 404 Recording Technology 2 cr**

This course provides an overview of analog and digital audio, introduces students to basic recording/mixing tools and topics include: microphone and mixer preparation, studio and computing capture/edit. Also addressed: project management, assets, and project. Prerequisites: Technology Placement Exam or consent of instructor.

**MUS 421 Music - Sound and Multimedia 2 cr**

This course familiarizes students with the techniques and materials for incorporating sound and music in the Wintel and Macintosh multimedia environments. Topics to be addressed will include making music with and without MIDI, sound resources, special effects, commercial libraries and sounds, digital sequencing, authoring environments, and legal issues.

**MUS 422 Sequencing 2 cr**

To familiarize students with professional-level music sequencing software, hardware, and techniques. Students will gain practical skills with MIDI recording, playback, and editing.

**MUS 470 Internship Music Bus 9 TO 12 cr**

Internship is a program that provides qualified university students with supervised experience in production practices, management techniques, research applications, personnel matters, and other activities found in the modern music industry. Prerequisites: Completion of the Music Industry Concentration core including College of Business course requirements, permission of the participating business-organization, and approval of the departmental internship coordinator and department chair.

**MUS 490 Special Topics - 1 TO 3 cr**

This course introduces students to fundamental techniques and materials for working with studio-quality sound, hardware and software. Topics will be drawn from: MIDI/music networks, graphic notation, MIDI controllers/sequencers, sampling basics, and film and video synchronization fundamentals. May be repeated for a maximum of nine credit hours.

Pre-requisite: MUS 421 Minimum Grade of D and MUS 422 Minimum Grade of D

**MUS 499 Senior Honors Proj in Music-H 3 TO 6 cr**

With the guidance and advice of a faculty mentor, Honors Students will identify, and carry out a research project in music. The outcome of the research project will include a written report and formal presentation at the annual Honors Student Colloquium. The senior project will be judged and graded by three members of the faculty, chaired by the faculty mentor. Requires permission of department chair.

**MUS 521 Music - Sound and Multimedia 3 cr**

To familiarize students with the techniques and materials for incorporating sound and music in the multimedia environment. Topics to be addressed will include making music with and without MIDI, sound resources, special effects, commercial libraries and sounds, digital sequencing, authoring environments, and legal issues.

**MUS 522 Sequencing 2 cr**

This course familiarizes students with professional-level music sequencing software, hardware, and techniques. Students will gain practical skills with MIDI recording, playback, and editing. Instructor permission required.

**MUS 585 Practicum in Coll Keyboard 2 cr**

The Director for Collaborative Keyboard studies will meet with the student enrolled in MUS 585 to assign literature, which will be studied during the semester. Assignments may include several selections with vocalists, as well as collaboration with strings, woodwinds and brass. The goal of the course is to gain practical experience as collaborator studying standard repertoire with a varied group of vocalists and instrumentalists.

**MUS 587 Arranging for Percussions 1 cr**

The analysis of existing musical works from various entres and the ability to create effective musical arrangements scored only for percussion instruments.

**MUS 590 Sp Top in Music Technology 1 TO 3 cr**  
Special topics in Music Technology. May be repeated for a maximum of 9 hours.  
Pre-requisite: MUS 522 Minimum Grade of D

## Music Theory (MUT)

**MUT 112 Basic Music Theory I 3 cr**  
Integrated course in aural and non-aural music theory including music skills, part writing analysis, counterpoint, sight singing, dictation, keyboard harmony, and computer applications in part writing and ear training.

**MUT 113 Basic Music Theory II 3 cr**  
Elementary part-writing in two, three, and four voices. Sight-singing, ear-training, and keyboard harmony. Must be taken in sequence.  
Pre-requisite: MUT 112 Minimum Grade of C

**MUT 212 Intermediate Music Theory I 3 cr**  
A continuation of elementary theory. Chromatic harmony and remote modulation; sight-singing, ear training, keyboard harmony. Must be taken in sequence.  
Pre-requisite: MUT 113 Minimum Grade of C

**MUT 213 Intermediate Music Theory II 3 cr**  
A continuation of elementary theory. Chromatic harmony and remote modulation; sight-singing, ear-training, keyboard harmony. Must be taken in sequence.  
Pre-requisite: MUT 212 Minimum Grade of C

**MUT 312 Integrated Analytical Tech I 2 cr**  
This is the first semester of a two semester sequence designed to familiarize students with the rudiments of formal analysis, counterpoint, and practical orchestration for 18th, 19th, and 20th century music - particularly emphasizing classical, jazz, pop, and selected world-music styles.  
Pre-requisite: MUT 213 Minimum Grade of C

**MUT 313 Integrated Analytical Tech II 2 cr**  
This is the second semester of a two semester sequence designed to familiarize students with the rudiments of formal analysis, counterpoint, and practical orchestration for 18th, 19th, and 20th century musics-particularly emphasizing classical, jazz, pop, and selected world-music styles.  
Pre-requisite: MUT 312 Minimum Grade of C

**MUT 314 Introduction to Composition 2 cr**  
Compositional techniques and the writing of original compositions for solo instruments and small ensembles.  
Pre-requisite: MUT 213 Minimum Grade of D

**MUT 361 Fundamentals of Conducting 3 cr**  
Basic baton technique; simple and complex rhythms; score reading; practical choral and instrumental conducting techniques.  
Pre-requisite: MUT 213 Minimum Grade of D

**MUT 362 Instrumental Conducting 3 cr**  
Advanced baton technique; psychology of rehearsal; interpretative and conducting techniques for instrumental organization.  
Pre-requisite: MUT 361 Minimum Grade of D

**MUT 364 Choral Cond and Lit 3 cr**  
Advanced conducting with attention to the harmonic and formal analysis of choral works; special emphasis on performance practice.  
Pre-requisite: MUT 361 Minimum Grade of D

**MUT 412 Orchestration 2 cr**  
The techniques of scoring for the orchestra, band, and small ensembles.  
Pre-requisite: MUT 213 Minimum Grade of D

**MUT 413 Band Arranging 2 cr**  
The techniques of scoring for the modern concert wind band. Offered in alternate years.  
Pre-requisite: MUT 213 Minimum Grade of D

**MUT 421 Composition I 3 cr**  
Original work in musical composition. To be taken in sequence. Offered by special arrangement only.  
Pre-requisite: MUT 314 Minimum Grade of D

**MUT 422 Composition II 3 cr**  
Original work in musical composition. To be taken in sequence. Offered by special arrangement only.  
Pre-requisite: MUT 421 Minimum Grade of D

**MUT 431 Jazz Improvisation I 2 cr**  
The study of elementary improvisation techniques used in contemporary jazz performance. Instructor permission required.

**MUT 432 Jazz Improvisation II 2 cr**  
The study of intermediate to advanced improvisation techniques used in contemporary jazz performance. Instructor permission required.

**MUT 490 Special Topics - 1 TO 3 cr**  
Special topics in music theory and composition. May be repeated for a maximum of six hours credit when content varies.

**MUT 512 Intro Analysis of Music Lit 4 cr**  
Introduction to the techniques of analysis applied to a selection of music literature emphasizing works from the seventeenth century to the middle of the twentieth century.

**MUT 513 Pedagogy of Theory 1 TO 4 cr**  
Practices and principles of teaching music theory, emphasizing most desirable and practical offerings possible. A comparative survey of current systems and materials for teaching music theory and aural skills. Review of materials and methods used in teaching the written music theory sequence and in teaching aural skills (music dictation and sight singing). Includes review of textbooks and technology used in the classroom.

**MUT 531 Jazz Improvisation I 2 cr**

The study of elementary improvisation techniques used in contemporary jazz performance. Instructor permission required.

**MUT 532 Jazz Improvisation II 2 cr**

The study of intermediate to advanced improvisation techniques used in contemporary jazz performance. Instructor permission required.

## Natural Science Education (NSE)

**NSE 201 Intro to Physical Science 3 cr**

The scientific attitude, the application of physical laws and principles to modern life, and assembling of apparatus and materials for demonstrating these principles are studied. (Not open to science majors.)

**NSE 202 Intro to Physical Science 3 cr**

The scientific attitude, the application of physical science laws and principles to modern life, and assembling of apparatus and materials for demonstrating these principles are studied. (Not open to science majors.)

**NSE 403 Aerospace Education 3 cr**

Basic principles of flight; survey of space exploration, military, commercial, and general aviation. Preparation of materials for use in teaching.

**NSE 404 Aerospace Education 3 cr**

Basic scientific principles applied in aerospace. Development of model rockets and aircraft. Preparation of materials for use in teaching.

**NSE 494 Dir St - 1 TO 3 cr**

Directed study. No more than 6 hours can be accepted for a Bachelor's Degree and Class B Certificate. Prerequisite: Permission of department chair.

**NSE 501 Adv Aerospace Education 3 cr**

Scientific principles applied in aerospace education. Development of model rockets and aircraft. Preparation of advanced materials for teaching.

**NSE 594 Dir St and Research 1 TO 3 cr**

Students explore through directed study problems and issues of special interest or signification in Science Education. No more than 3 hours of any departmental 594 courses can be applied toward a degree program. Prerequisite: Permission of department chair.

**LNG 300 Intro to Linguistics 3 cr**

LNG 300-Introduction to Linguistics is the introductory class for the Applied Linguistics minor. It will introduce linguistics concepts to the students and give them the foundation needed for the higher level classes required as part of the minor. Required core course. Prerequisite: Sophomore standing.

Pre-requisite: (LG 201 Minimum Grade of C and LG 202 Minimum Grade of C) or (LG 211 Minimum Grade of C and LG 212 Minimum Grade of C) or (LG 231 Minimum Grade of C and LG 232 Minimum Grade of C) or (LG 241 Minimum Grade of C and LG 242 Minimum Grade of C) or (LG 251 Minimum Grade of C and LG 252 Minimum Grade of C) or (LG 271 Minimum Grade of C and LG 272 Minimum Grade of C) or (LGS 201 Minimum Grade of C and LGS 202 Minimum Grade of C) or (LGS 206 Minimum Grade of C and LGS 207 Minimum Grade of C) or (LGS 210 Minimum Grade of C and LGS 211 Minimum Grade of C) or (LGS 221 Minimum Grade of C and LGS 222 Minimum Grade of C) or (LGS 241 Minimum Grade of C and LGS 242 Minimum Grade of C) or (LGS 261 Minimum Grade of C and LGS 262 Minimum Grade of C) or (LGS 281 Minimum Grade of C and LGS 282 Minimum Grade of C)

**LNG 305 History of Euro Languages 3 cr**

LNG 305-History of European Languages is an elective class for the Applied Linguistics minor. It will introduce students to the emergence and development of the European Languages as we know them today, tracing their historical development from the beginning to the modern era. Elective course.

Pre-requisite: LNG 300 Minimum Grade of C

**LNG 306 Contemporary Poetry and Trans 3 cr**

In this course, students will broaden their knowledge of contemporary poetry in either the Chinese, French, German, Russian or Spanish language and become conversant with translation theory. They will also begin to work towards expertise in the translation of this poetry into English.

Pre-requisite: LG 212 Minimum Grade of C or LG 232 Minimum Grade of C or LG 252 Minimum Grade of C or LG 272 Minimum Grade of C or LG 273 Minimum Grade of C

**LNG 400 Applied Linguistics 3 cr**

LNG 400- Applied Linguistics is the second linguistics class for the Applied Linguistics minor. It will introduce Second Language Acquisition theory and concepts to the students and give them the theoretical foundation needed for the minor. This is the last required class of the Applied Linguistics minor. Required core course.

Pre-requisite: LG 300 Minimum Grade of C

## Linguistics (LNG)

**LNG 465 Foreign Lang Pedagogy 3 cr**

LNG 465-Foreign Language Pedagogy is an elective class for the Applied Linguistics minor. It will introduce students to the theories and methodologies of the surrounding second language instruction, tracing their historical development of these methodologies from the beginning to the modern era. Elective course. Special Permission of the Instructor required to enroll in course.

Pre-requisite: LNG 300 Minimum Grade of C and LNG 400 Minimum Grade of C

**LNG 490 Special Topics- 3 cr**

LNG 490-Special Topics is an elective class for the Applied Linguistics minor. A variety of topics can be covered in this class as determined by student interest and the discretion of the Director of Applied Linguistics Program. Elective course. LNG 300 and LNG 400 with a C or better.

Pre-requisite: LNG 300 Minimum Grade of C and LNG 400 Minimum Grade of C

**LNG 494 Directed Studies- 3 cr**

LNG 494 - Directed Studies is an elective class for the Applied Linguistics minor. A variety of topics can be covered in this class as determined by student interest and the discretion of the Director of Applied Linguistics Program. Elective courses.

Pre-requisite: LNG 300 Minimum Grade of C and LNG 400 Minimum Grade of C

**LNG 496 Intern. Applied Ling 3 cr**

LNG 496 - Internship in Applied Linguistics is an elective class for the Applied Linguistic minor. Allows Applied Linguistics students the opportunity for hands-on practice of the theories and methodologies learned as part of the Applied Linguistics minor. Elective course.

Pre-requisite: LNG 465 Minimum Grade of C

## Nursing (NU)

**NU 101 Freshman Seminar in Nursing 2 cr**

The purpose of this course is to introduce the unique requirements and opportunities of professional nursing to beginning students who have declared nursing as their major and are considering nursing as a major. The course focuses on the value of higher education as a base for a career in nursing and develops an awareness of activities and support services available within the University to enhance student success. Academic rules and regulations and policies related to admission, progression, and graduation in the University and College are discussed.

**NU 300 Foundations of Prof Nsg - W 5 cr**

The purpose of the course is to provide students the opportunity to appraise theories, concepts, evidence, issues and trends in promoting the health of an adult-geron population experiencing commonly occurring health care needs. Emphasis is on the use of the nursing process and other systematic approaches to assess, plan, implement, and evaluate health promotion and maintenance activities, illness care, and rehabilitation with adults in a variety of acute and community settings.

Co-requisite: NU 301

Pre-requisite: NU 325 Minimum Grade of C and NU 327 Minimum Grade of C and (HSC 243 Minimum Grade of C or HSC 343 Minimum Grade of C) and NU 311 Minimum Grade of C and HSC 342 Minimum Grade of C

**NU 301 Foundations of Prof Nsg Clin 3 cr**

Application of concepts and theories related to health promotion and maintenance, illness care, and rehabilitation with an adult-geron population experiencing commonly occurring health care needs. Emphasis is the role of the professional nurse and on the use of the nursing process with an adult-geron population in a variety of acute and community based settings.

Co-requisite: NU 300

Pre-requisite: NU 325 Minimum Grade of C and NU 327 Minimum Grade of C and (HSC 243 Minimum Grade of C or HSC 343 Minimum Grade of C) and NU 311 Minimum Grade of C and HSC 342 Minimum Grade of C

**NU 304 Evidence Based Practice in NU 3 cr**

This course surveys the research process. Its focus is on research, the methods for critiquing research, and ethical and legal implications. Emphasis is on the importance of research to nursing practice and the development of critical consumers of nursing research.

Co-requisite: MCN 347, MCN 348

Pre-requisite: (NU 211 Minimum Grade of C or NU 300 Minimum Grade of C) and (NU 221 Minimum Grade of C or NU 301 Minimum Grade of C) and (HSC 233 Minimum Grade of C and CMN 350 Minimum Grade of C and CMN 351 Minimum Grade of C)

**NU 311 Clinical Nursing Skills 3 cr**

The purpose of this course is to provide students the opportunity to acquire basic nursing care skills. The emphasis is on the responsibilities of the professional nurse in ensuring quality and safety. Students are introduced to simulation as an approach to sharpen clinical reasoning and communication skills in a safe environment. Prerequisites: Admission or special permission of instructor.

- NU 325 Health Assessment** 3 cr  
The purpose of the course is to provide students the opportunity to acquire basic nursing assessment skills. The emphasis is on the assessment skills of the whole person, including physical, psychological, sociocultural, and spiritual aspects of persons from all stages of life. Students will learn skills associated with obtaining a health history and performing health assessments across the lifespan. Prerequisite: Admission to professional component or special permission of instructor.
- NU 327 Patho Basis of Nursing** 3 cr  
The purpose of the course is to provide students the opportunity to acquire the theory and evidence applicable to the physiology and alterations in physiology of individuals across the lifespan. The emphasis of this course is alterations in cardiovascular, pulmonary, genitourinary, gastrointestinal, immune, neurological, musculoskeletal, and endocrine systems. Prerequisite: Admission to professional component or special permission of instructor.
- NU 390 Sp Top -** 1 TO 8 cr  
Study of a significant topic or problem in Nursing and the Health Professions. This course may be repeated for a total of four credits. Requires special permission.
- NU 394 Directed Study -** 1 TO 4 cr  
Individual study in a nursing area chosen in consultation with instructor. Requires special permission.
- NU 404 EBP & Informatics** 3 cr  
This course designed for Registered Nurse students to apply principles of research, evidence-based practice (EBP) and informatics to practice problems. The focus of the course is interpreting and incorporating research for the improvement of health care. Assignments relate EBP through practice integrated experiences. Emphasis is on critical appraisal of research and use of data in quality improvement.
- NU 410 Concepts of Prof Nursing - W** 6 cr  
A bridge course for the Registered Nurse student. Focuses on the philosophy of the College of Nursing and selected theories and concepts that are integrated throughout the curriculum. Emphasis is on professional nursing roles and strategies for health promotion and maintenance with individuals, families, and groups. Requires registered nurse licensure and admission to RN to BSN track. Requires special permission.
- NU 412 Decision Making & Delegation** 4 cr  
This course focuses on continuing the leadership development of the student within the context of providing professional nursing care to patients and families across the lifespan. Decision-making, delegation, and motivation competencies are emphasized. Co-requisite: NU 414, NU 460 Pre-requisite: CMN 420 Minimum Grade of C and CMN 421 Minimum Grade of C and (AHN 330 Minimum Grade of C or AHN 447 Minimum Grade of C) and (AHN 331 Minimum Grade of C or AHN 448 Minimum Grade of C)
- NU 413 Nursing Informatics** 3 cr  
NU 413, Nursing Informatics, provides the student an introduction to nursing informatics and the evolving importance of the application and evaluation of information technology in nursing and health care. The emphasis of the course is to provide the students the expertise and knowledge to function effectively in the modern healthcare IT environment. Co-requisite: CMN 420, NU 412, NU 460 Pre-requisite: NU 304 Minimum Grade of C and NU 409 Minimum Grade of C and (AHN 330 Minimum Grade of C or AHN 447 Minimum Grade of C) and (AHN 331 Minimum Grade of C or AHN 448 Minimum Grade of C)
- NU 414 Issues & Trends in Health Care** 3 cr  
The purpose of this web based course is to provide students the opportunity to integrate leadership roles and functions, management strategies, current issues and trends affecting nursing and health care and continued professional development, into a personal lifelong learning plan. Emphasis is on the professional nurse as a leader in improving patient care and cost effectiveness of health care and the development of a current nursing workforce. National interest areas such as patient safety, policy, patient centered care, and the process for quality improvement are primary focuses. Co-requisite: NU 412, NU 460 Pre-requisite: (AHN 447 Minimum Grade of C or AHN 330 Minimum Grade of C) and (AHN 448 Minimum Grade of C or AHN 331 Minimum Grade of C)
- NU 415 Seminar in Issues & Trends** 3 cr  
The purpose of this course is to introduce Registered Nurse students to a comprehensive array of current issues and trends affecting nursing and health care in society. Emphasis is on the development of professional nursing contributions to the healthcare environment. The focus is on comprehending factors affecting policy generation and implementation. Prerequisites: Completion of all non-nursing prerequisites.
- NU 422 Healthcare Leadership & Collab** 3 cr  
The purpose of this course is to continue the professional development of Registered Nurse students through initiation leadership and collaborative roles in healthcare or community settings. The course focuses on professionalism, leadership roles and functions, management strategies, and emerging trends in nursing and health care. The emphasis of the course is on the professional nurse as a leader in improving health care. Activities include a practice integrated experience application of quality improvement process to promote optimal health care delivery.

**NU 425 Healthcare Across the Lifespan 3 cr**

The purpose of the course is to provide Registered Nurse students the opportunity to validate and improve nursing assessment skills. Emphasis is on skill sets necessary for assessment of the whole person, including physical, psychological, sociocultural, and spiritual aspects across the lifespan. The emerging role of genomics as a primary element of health history will be explored. Students will demonstrate practice integrated skills of obtaining a health history, performing physical assessments, and completion of comprehensive health assessments for health promotion and maintenance.

**NU 427 Pathophysiology & Genomics 3 cr**

The purpose of the course is to provide Registered Nurse students the opportunity to acquire the theory and evidence applicable to the physiology and alterations in physiology of individuals across the lifespan. The emphasis of this course is alterations in cardiovascular, pulmonary, genitourinary, gastrointestinal, immune, neurological, musculoskeletal, and endocrine systems. Special attention is given to emerging evidence regarding genomics and its contribution to understanding of pathophysiology.

**NU 430 Nursing Care Critical Patient 3 cr**

Provides students the opportunity to analyze theories, concepts, research, issues and trends in caring for critically ill patients of all ages. Content includes internal and external environmental factors affecting the care of critically ill patients of all ages. Emphasis is on the role of the professional nurse in health promotion and maintenance, illness, care, and rehabilitation of the critically ill.  
Pre-requisite: (AHN 330 Minimum Grade of C or AHN 447 Minimum Grade of C) and (AHN 331 Minimum Grade of C or AHN 448 Minimum Grade of C)

**NU 440 Health Assessment Accel 1 cr**

The purpose of the course is to provide students the opportunity to acquire basic nursing assessment skills. The emphasis is on the assessment skills of the whole person, including physical, psychological, sociocultural, and spiritual aspects of persons from all stages of life. Students will learn skills associated with obtaining a health history and performing health assessments across the lifespan.  
Co-requisite: NU 441, NU 442, NU 540, NU 541, NU 542

**NU 441 Pathophysiology Accel 1 cr**

NU 441: The purpose of the course is to provide students the opportunity to acquire the theory and evidence applicable to the physiology and alterations in physiology of individuals across the lifespan. The emphasis of this course is alterations in cardiovascular, pulmonary, genitourinary, gastrointestinal, immune, neurological, musculoskeletal, and endocrine systems.  
Co-requisite: NU 440, NU 442, NU 540, NU 541, NU 542

**NU 442 Pharmacology Accel 1 cr**

NU 442: Clinical application of drug therapy and the concepts relating to the mechanisms of drug actions, interactions, and adverse reactions, including immunologic-idiosyncratic-allergic drug responses. Emphasis is on pharmacokinetics, dosage, methods of administration, and adverse effects of drugs according to major classifications. Current research in pharmacology is also incorporated in course content.

**NU 460 Practicum - W 5 cr**

Culminating clinical practice course to provide students an in-depth learning experience in a selected area of nursing practice. The leadership, management, and caregiver roles of the professional nurse with patients and their families in a selected area of nursing practice is emphasized. Students are assigned to nurse preceptors and with faculty guidance focus on leadership and management, and application of the nursing process theories, concepts, research, issues and trends in caring for patients in a variety of preceptorship placements in acute and community settings.

Co-requisite: NU 412, NU 414

Pre-requisite: CMN 420 Minimum Grade of C and CMN 421 Minimum Grade of C and (AHN 330 Minimum Grade of C or AHN 447 Minimum Grade of C) and (AHN 331 Minimum Grade of C or AHN 448 Minimum Grade of C)

**NU 461 Integration Prof Practice - W 4 cr**

The purpose of this course is to provide Registered Nurse students the opportunity to integrate professional role characteristics with a capstone practice integrated experience. This in-depth learning activity draws on prior work in evidence-based practice, nursing role development, scientific and humanistic foundations, and collaboration. The focus is on application of principles of leadership to create a substantive activity contributing to healthcare improvement. Emphasis is on implementation and evaluation of an initiative in a selected practice setting addressing a health need or problem.

**NU 490 Special Topics 0 TO 9 cr**

Study of a significant topic or problem in nursing and the health professions. This course may be repeated for a total of four credits. Requires special permission.

**NU 499 NU Honors Senior Project 1 TO 6 cr**

The purpose of the course is to provide students the opportunity to investigate scholarly undergraduate research, service-learning, or study abroad experiences resulting in development of the written honors thesis. Nursing Honors Program. Requires special permission.

Pre-requisite: HON 301 Minimum Grade of D

**NU 515 CNS Role I****2 cr**

Analysis and evaluation of advanced clinical concepts and the role of nursing in providing evidence based care to facilitate positive health outcomes. The focus of the course is on the role of the CNS in wellness, health promotion and disease prevention, risk assessment and reduction, individual and community screening measures, and alternative health practices across the life span for early adult to the frail elderly.

Pre-requisite: NU 545 Minimum Grade of C and NU 578 Minimum Grade of C and NU 518 Minimum Grade of C and NU 608 Minimum Grade of C

**NU 516 CNS Roles II****3 cr**

The purpose of this course is to provide a forum for the analysis, synthesis, and application of knowledge required for the CNS role in the management of acute health problems for the early adult to the frail elderly. The course focuses on the CNS's spheres of influence on health care incorporating the perspectives of social justice, fiscal stewardship, client advocacy, and evidence based practice. The emphasis is on maximizing the students' ability to identify problems, manage resources and fiscal outcomes, design and select therapeutic interventions, and evaluate products and devices for use with patients and health team members from diverse cultural and ethnic backgrounds. Potential for contributions and entrepreneurial opportunities within nursing will be addressed.

Co-requisite: AHN 517

Pre-requisite: NU 515 Minimum Grade of C and AHN 516 Minimum Grade of C

**NU 517 CNS Role III****3 cr**

The purpose of this course is to provide a forum for the analysis, synthesis, and application of knowledge required for the CNS role in the management of chronic problems as well as management and prevention of exacerbations of chronic health problems. The course focuses on the CNS's spheres of influence on health care incorporating the perspectives of social justice, fiscal stewardship, client advocacy, and evidence based practice. The emphasis is on maximizing the students' ability to identify problems, manage resources and fiscal outcomes, design and select therapeutic interventions, and evaluate products and devices for use with patients and health team members from diverse cultural and ethnic backgrounds. Potential for contributions and entrepreneurial opportunities within nursing will be addressed.

Co-requisite: AHN 518

Pre-requisite: NU 516 Minimum Grade of C and AHN 517 Minimum Grade of C and NU 607 Minimum Grade of C and NU 610 Minimum Grade of C and NU 613 Minimum Grade of C

**NU 518 Adv Nursing Assessment****3 cr**

This course is designed to further develop the student's advanced knowledge and skills for obtaining and recording a systematic health history and advanced physical examination of individuals and families across the lifespan. The course involves synthesis and application of nursing, biologic, psychologic, and socio-cultural knowledge and theories in comprehensive health assessment for the purposes of health promotion, differential diagnosis, and development of health records. The central objective is the development of cognitive and clinical skills needed to provide comprehensive care to individuals of all ages in primary, secondary, and tertiary care settings.

**NU 530 Bridge Adv Health Assessment****4 cr**

This course is a bridge course for the RN-BSN/MSN track. This course is designed to develop the student's advanced knowledge and skills for obtaining and recording a systematic health history and advanced physical examination of individuals and families across the lifespan. The course involves synthesis and application of nursing, biologic, psychological, and sociocultural knowledge and theories in comprehensive health assessment for the purposes of health promotion, differential diagnosis, and development of health records. The central objective is the development of cognitive and clinical skills needed to provide comprehensive care to individuals of all ages in primary, secondary, and tertiary care settings

**NU 531 Bridge Adv Pathophysiology****4 cr**

Bridge course for the accelerated track. Focuses on pathophysiology and cellular physiology theory and research of the cardiovascular, pulmonary, genitourinary, gastrointestinal, immune, neurological, integumentary, musculoskeletal, and endocrine systems. This course provides students with a foundation for providing nursing care to persons having acute, chronic and long-term health care problems.

**NU 532 Accel Adv Pharmacology****4 cr**

Bridge course for accelerated track. Advanced clinical application of drug therapy and concepts relating to the mechanisms of drug actions, interactions, and adverse reactions, including immunologic-idiosyncratic-allergic drug responses. Emphasis on pharmacokinetics, cultural/ethnic considerations, dosage, methods of administration, and adverse effects according to major classifications. Current research in pharmacology is also incorporated in course content.

**NU 533 Acc MSN Adv Research in Nsg****4 cr**

Bridge course for Accelerated MSN track. Evaluation of methods, designs, issues in nursing research; methods for critiquing research, data analysis methods, ethical and legal implications. Emphasis is on the importance of research and evidenced-based practice to nursing. Development of critical consumers of research and participants in the research process.

Pre-requisite: CMN 350 Minimum Grade of C and CMN 351 Minimum Grade of C

**NU 534 Acc MSN Adv Nsg Roles & Ldrshp 4 cr**

Bridge course for Accelerated MSN track. Socialization process of students as professional nurses, leadership roles and functions, management strategies, continued professional development, and issues and trends in nursing and health care, analysis of selected advanced nursing roles, frameworks which provide the basis for specialization and expansion of roles for advanced nursing practice.

Pre-requisite: CMN 420 Minimum Grade of C and CMN 421 Minimum Grade of C and (AHN 330 Minimum Grade of C or AHN 447 Minimum Grade of C) and (AHN 331 Minimum Grade of C or AHN 448 Minimum Grade of C)

**NU 535 Clin Ldr Role & Competencies 3 cr**

The purpose of this courses is to explore the role and function of the clinical nurse leader. The course focuses on the implementation of the role which will vary across settings and facilities. The emphasis is on evidenced-based practice and knowledge and skills that the CNL role requires for successful enactment of the role.

Co-requisite: NU 536

Pre-requisite: NU 506 Minimum Grade of C and NU 518 Minimum Grade of C and NU 545 Minimum Grade of C and NU 578 Minimum Grade of C

**NU 536 Clin Nurse Ldr Pract I 5 cr**

The purpose of this first of two capstone Clinical Nurse Leader courses is to provide students an in-depth preceptor-based clinical experience in a selected area of nursing practice. The focus of the course is on the CNL as caregiver, leader, and care manager. Emphasis is on the application of the nursing process, theories, concepts, research, issues and trends in providing care in complex patient situations and managing the care of a group of patients.

Co-requisite: NU 535

Pre-requisite: NU 607 Minimum Grade of C

**NU 537 Clin Nurse Leader Synthesis 3 cr**

The purpose of this culminating synthesis course for the CNL role is provide students an opportunity to analyze and evaluate actual CNL practice patterns. The course focuses on continuing to build the students competencies in clinical decision making, problem identification, resource management, and outcome measurement for a selected patient population at the point of care. The emphasis is on working with patients and health team members from diverse cultural and ethnic background, accountability for coordination, delegation and supervision of care within a multidisciplinary team.

Co-requisite: NU 538

Pre-requisite: (NU 535 Minimum Grade of C and NU 536 Minimum Grade of C) and NU 608 Minimum Grade of C and NU 610 Minimum Grade of C and NU 613 Minimum Grade of C and NU 607 Minimum Grade of C

**NU 538 Clinical Nrsr Ldr Prac II 4 cr**

The purpose of this second of two capstone Clinical Nurse Leader courses is to provide students an immersion experience in the CNL role in a selected area of nursing practice. The focus of the course is to further develop CNL competencies with emphasis on team leading and building, advocacy, communication, resource and outcomes management, and evidenced based practice.

Co-requisite: NU 537

Pre-requisite: NU 535 Minimum Grade of C and NU 536 Minimum Grade of C

**NU 539 Intro to Nursing Informatics 3 cr**

The purpose of this course is to provide the student an introduction to nursing informatics and the evolving importance of the application and evaluation of information technology in nursing and health care. The emphasis of the course is to provide the students the expertise and knowledge to function effectively in the modern health care information technology (IT) environment.

**NU 540 Adv Health Assessment Accel 3 cr**

Nu 540: Bridge course for the Accelerated MSN track. In conjunction with NU 440, this course is designed to develop the student's advanced knowledge and skills for obtaining and recording a systematic health history and physical examination of individuals and families across the lifespan. The course involves synthesis and application of nursing, biologic, psychological, and sociocultural, differential diagnosis, and development of health records. Emphasis is on the development of skill in obtaining and recording a comprehensive health history and performing a physical exam of individuals from diverse heritages across the lifespan.

Co-requisite: NU 440, NU 441, NU 442, NU 541, NU 542

**NU 541 Adv Pathophysiology Accel 3 cr**

NU 541: Bridge course for the Accelerated BSN/MSN track. In conjunction with NU 441, this course will provide the student with a foundation for building diagnostic reasoning skills related to underlying pathophysiological processes in order to provide nursing care to persons across the lifespan having acute, chronic and long-term health care problems. The course focuses on cellular physiology and pathophysiology theory and research applicable to cardiovascular, pulmonary, genitourinary, gastrointestinal, immune, neurological, musculoskeletal, and endocrine systems. Regulatory and compensatory functions in health and in pathophysiological conditions will be emphasized.

**NU 542 Adv Pharmacology Accel 3 cr**

NU 542: Bridge course for the Accelerated MSN track. In conjunction with NU 442, this course enables students to acquire pharmacological knowledge that can be integrated into treatment of various disease states in their future practice. The course will include content of clinical pharmacology of commonly encountered drug categories. Pharmacokinetics of drug therapy for commonly occurring pathophysiological processes managed by the advanced practice nurse will be analyzed. The mechanism of action, pharmacologic response, usual dose, adverse effects, indications, interactions, contraindications, and special routes of administration of drugs used throughout the lifespan will be emphasized. Economics, legislative, ethical, cultural, and ethnic considerations of drug therapy issues affecting pharmacological management will also be addressed.

**NU 545 Physio-Patho Basis of Adv Nsg 3 cr**

The purpose of this course is to provide the advanced practice nurse with knowledge of normal physiology and alterations in physiology in individuals across the life span. The focus is theory and research applicable to organ systems and cellular events. Emphasis is on regulatory and compensatory functions in health and in pathophysiological conditions.

**NU 556 Informatics & Qual Care Improv 3 cr**

The purpose of this course is to focus on quality improvement models and methods which will use client outcome measures across a broad range of health care settings. Emphasis will be placed on Continuous Quality Improvement (CQI) methods and their relationships with current health care systems.

Co-requisite: NU 557

Pre-requisite: ISC 555 Minimum Grade of C and NU 565 Minimum Grade of C and NU 539 Minimum Grade of C and ISC 550 Minimum Grade of C and NU 562 Minimum Grade of C

**NU 557 Clinical Informatics Pract I 2 cr**

This clinical course allows students to integrate concepts and theories in clinical informatics in selected health care settings. This practicum offers students an opportunity to work closely with a health care vendor and integrate concepts/theories in clinical informatics. Additionally students will begin to learn how to configure and customize operating systems. Students will also begin to identify their site for Clinical Informatics Practicum II.

Co-requisite: NU 556

**NU 558 Seminar in Nursing Informatics 3 cr**

This course will provide students the opportunity to discover the responsibilities of the Nursing Informatics Specialist's role by applying legal/ethical concepts to selected case studies in a variety of situations.

Co-requisite: NU 559

Pre-requisite: NU 607 Minimum Grade of C and NU 610 Minimum Grade of C and NU 613 Minimum Grade of C and NU 608 Minimum Grade of C

**NU 559 Clinical Informatics Pract II 2 cr**

This clinical course allows students to integrate and apply informatics competencies in the nurse informatics specialty role while working closely with a guided preceptor. This role may take place within a variety of health care settings.  
Co-requisite: NU 558

**NU 561 Nursing Admin Concepts-Theory 3 cr**

The purpose of this course is to introduce the role of the nurse executive. The course focuses on role expectations and professional competency requirements. Emphasis within the course is placed on the influential role of the nurse executive in improving patient care, improving health of populations, and reducing healthcare costs.  
Co-requisite: NU 566

**NU 562 Admin Concepts & Res Mgt FS 3 cr**

The purpose of this course is to examine concepts and methods of administration applying these concepts and methods in supervised field activities. The focus is identification of health goals and management of physical, financial, and human resources in healthcare systems. Emphasis is on organizational leadership, interdisciplinary team functioning, and political collaboration to meet health care needs of vulnerable populations in culturally diverse communities.

Pre-requisite: NU 607 Minimum Grade of C

**NU 565 Nursing Administration Finance 3 cr**

The purpose of this course is to introduce nurse administrators to healthcare financial management. The course focuses on reimbursement and expenditures for healthcare delivery. Emphasis within the course is placed on basic accounting, financial decision-making, statement analysis, & staffing plans.

Pre-requisite: NU 607 Minimum Grade of C

**NU 566 Nursing Admin Field Study 4 cr**

The purpose of this first practicum course is to provide the nurse executive student a faculty and preceptor facilitated clinical experience in a healthcare setting. The course focuses on the professional role and competencies of the nurse executive. Emphasis within the course is placed on the application and synthesis of knowledge and skills acquired in previous courses.

Co-requisite: NU 561

Pre-requisite: NU 565 Minimum Grade of C and NU 562 Minimum Grade of C and HSC 571 Minimum Grade of C

**NU 567 Nursing Admin Internship 3 cr**

The purpose of this culminating practicum course is to provide students a faculty and preceptor facilitated clinical experience in a healthcare setting. The course focuses on continued professional role and competencies development of the nurse executive. Emphasis within the course is placed on the application and synthesis of knowledge and skills acquired in previous courses.

Co-requisite: NU 568

Pre-requisite: NU 566 Minimum Grade of C and NU 539 Minimum Grade of C and NU 607 Minimum Grade of C and NU 608 Minimum Grade of C and NU 610 Minimum Grade of C and NU 613 Minimum Grade of C

**NU 568 Nursing Admin Seminar 3 cr**

The purpose of this course is to prepare students for the role of nurse executive. The course focuses on professional competency development. Emphasis within the course is placed on strategic planning, governance, regulations, politics, and current issues trend.

Co-requisite: NU 567

Pre-requisite: NU 539 Minimum Grade of C

**NU 578 Pharm Adv Practice Nurses 3 cr**

The purpose of this course is to expand the pharmacological knowledge of the advanced practice nurse. The focus is the selection and monitoring of drug therapy for persons throughout the lifespan. Emphasis is on pharmacokinetics and pharmacotherapeutics of major drug classifications.

Pre-requisite: NU 545 Minimum Grade of C

**NU 590 Special Topics - 0 TO 9 cr**

Study of significant topics or problems in nursing and the health professions. Content will vary. May be repeated.

**NU 594 Directed Studies 1 TO 11 cr**

Directed study under the direction of a member of the graduate faculty.

**NU 599 Thesis 1 TO 3 cr**

The purpose of this course is to provide an opportunity to complete a research study with the guidance of a graduate faculty committee. The focus is on research in advanced nursing practice.

Pre-requisite: NU 513 Minimum Grade of C

**NU 600 DNP PP&D 3 cr**

This course assists the DNP student to learn the processes embedded in developing doctoral synthesis project. The course will address all aspects of project planning and development as a preliminary step to the students selection of a topic or phenomenon of interest for the project and will incorporate well-built questions, search strategies and outcomes, identification of resources needed, plan for evaluation and dissemination.

Pre-requisite: NU 607 Minimum Grade of C and NU 608 Minimum Grade of C and NU 610 Minimum Grade of C and NU 613 Minimum Grade of C and NU 611 Minimum Grade of C

**NU 607 Scientif Underpinnings Adv Nsg 3 cr**

The purpose of this course is for the MSN/DNP student to explore the scientific underpinnings that define the nature of health and healthcare delivery and to provide the basis for practice at the highest level of nursing. The focus of this course is to explore the structure and nature of nursing science as it relates to advanced nursing practice. The course emphasis is on the exploration of a clinically relevant phenomena of interest that will be examined from the philosophical, theoretical, ethical, and conceptual context.

**NU 608 EBP & Quality Improvement HCS 3 cr**

The purpose of this course is to provide the MSN/DNP student with the foundational components required for effective utilization of evidence based practice within the scope of advanced nursing practice. The course focuses on the use of analytic methods to critically appraise existing literature and other evidence to determine and implement the best evidence for practice. The course emphasis is on the application of quantitative, qualitative, and quality improvement methodologies to promote safe, effective care within healthcare systems.

**NU 609 Biostatistics 3 cr**

This course explores biostatistical analysis as a base for evidence-based practice in nursing. It includes descriptive and inferential data analysis: basic demographic and epidemiologic statistics; measures of morbidity: rates and ratios; vital statistics; relative risk, odds ratio estimation; validity of clinical and statistical tests; survival analysis; confidence intervals: hypothesis testing; parametric and nonparametric tests; correlation, t-test, chi-square, ANOVA, MANOVA, linear regression; and multiple regression. While minor calculations (e.g., odds ratios, z-scores, and percent of variance explained) are required, the primary focus is on the correct interpretation and use of quantitative methods in advanced nursing practice. Particular emphasis is placed on probability; power; sample size; and reliability.

**NU 610 Healthcare Policy & Finance 3 cr**

The purpose of this course for the MSN/DNP student is to develop advanced nursing leaders who have the knowledge and skills to design, analyze, influence, and implement policies that frame health care financing, practice regulation, access, safety, quality, and efficacy. The course focuses on major contextual factors and policy triggers that influence health policy making at various levels. Principles of finance, business, and health care economics will be presented. The course emphasis is on developing essential competencies in health care policy advocacy and health care financing.

**NU 611 Translat Evidence Practice Sys 3 cr**

The purpose of this course for the DNP student is to provide the methodological basis for translating evidence into practice systems in a variety of healthcare settings. The course focuses on locating, evaluating, synthesizing, channeling, applying, and explaining appropriate findings from laboratory and experimental settings to improve the efficiency and effectiveness of nursing care. The course emphasis is on the use of applied techniques for evidence translation with an exploration of ethics and the protection of human research subjects.

Pre-requisite: NU 608 Minimum Grade of C and NU 607 Minimum Grade of C

**NU 612 Clincial Prev Population Hlth 3 cr**

The purpose of this course for the DNP student is to explore the multifaceted issues pertaining to population health and health promotion in the local, regional, national, and global populations across the lifespan. The course focuses on health issues and strategies to eliminate health disparities across all population groups. The course emphasizes the use of health surveillance measures and determinants of health to characterize geographical locations and population groups as well as effective health promotion and disease and accident prevention strategies.

Pre-requisite: NU 608 Minimum Grade of C and NU 607 Minimum Grade of C

**NU 613 Organizational & Sys Leadrshp 3 cr**

The purpose of this course for the MSN/DNP student is to synthesize leadership and organizational theory within the context of complex healthcare systems. The course focuses on the exploration and application of principles of advanced communication, collaboration, and team building to the process of systems change to prepare the student for advanced roles in leading change. Emphasis within the course is placed on assessment of organizational culture as a basis for improvement of individual and aggregate healthcare outcomes; models of quality improvement and project planning, implementation, and evaluation are also examined.

**NU 615 Qual Improv & Outcomes Assmnt 3 cr**

The purpose of this course is to build on the foundation established in NU 608 Evidence Based Practice and Quality Improvement in Healthcare Systems to provide the DNP student with additional knowledge and skills to develop, implement, and evaluate programs that improve health outcomes. The course focuses on the design, implementation, and evaluation of quality improvement methodologies. The course places emphasis on applying quality improvement processes to evaluate outcomes of practice against national benchmarks to determine variances in practice outcomes and population trends.

Pre-requisite: NU 607 Minimum Grade of C and NU 608 Minimum Grade of C and NU 611 Minimum Grade of C

**NU 616 Data & Dec Mknng Hlth Care Sys 3 cr**

The purpose of this course is to prepare the DNP student to be proficient in the evaluation and use of technology and information systems appropriate to specialized areas of advanced nursing practice. The course focuses on information systems and current technology in the management of healthcare outcomes. Within the course, emphasis is placed on the use of information systems and technology based resources to support clinical and administrative decision making.

**NU 620 ISD & Tech for Nurse Educators 3 cr**

The purpose of this course is to provide students the opportunity to design and implement instruction for diverse learners, and evaluate the quality and effectiveness of instruction, especially related to cultural sensitivity. Analysis and synthesis of theories and concepts related to instructional design in nursing practice and education is basic to the process. Emphasis is on integrating technology into the design, implementation, and evaluation of instruction that is based on the evidence that supports nursing education as well as the requirements of the institution, the program and accrediting agencies.

**NU 621 Curr & Outcomes Eval Nu Educ 3 cr**

Analysis and synthesis of theories and concepts related to curriculum development and evaluation in nursing. Emphasis is on institutional purposes, goals, nursing curricula, evaluation, and nursing education research.

**NU 622 Current Topics in Nu Education 2 cr**

The purpose of this course is to engage the student in an analysis of concepts and theories basic to the nurse educator role in academic and in practice settings. Emphasis is on current issues and trends in nursing education, the role of the DNP nurse educator, and professional, social, political, legal, cultural, and other issues related to nursing education.

**NU 623 Nsg Educ Synthesis Practicum 3 cr**

The purpose of this course is the synthesis of nursing education theory in practicum experience. Focus is on the application of nursing education theory in developing, teaching, and evaluating an education unit, exemplifying the nurse educator role, and adhering to institutional and legal guidelines.

Pre-requisite: NU 620 Minimum Grade of C and NU 621 Minimum Grade of C and NU 622 Minimum Grade of C

**NU 656 NU Informatics Proj Plan & Dev 3 cr**

This course assists the Nursing Informatics DNP student to learn the processes embedded in developing a doctoral synthesis project. The course will address all aspects of project planning and development as a preliminary step to the Nursing Informatics students' selection of a topic or phenomenon of interest for the project and will incorporate well-built questions, search strategies and outcomes, identification of resources needed, plan for evaluation and dissemination.

**NU 657 Nursing Informatic Residency I 3 TO 6 cr**

Theories of leadership, motivation, power, and change are used to influence change in health care organizations. This course will implement evidence-based clinical models and evaluate their effectiveness in health outcomes. The Nursing Informatics student will synthesize, critique, and apply evidence to support quality clinical or organizational practices. In this mentored and supervised experience, the Nursing Informatics student will work with the primary faculty advisor to complete projects and advance their selected practice area. The Nursing Informatics student will have access to and authority for expanded scope of practice to master the DNP competencies. Residency sites will depend upon the Nursing Informatics student's career trajectory and approval by collaborating faculty. During the residency semester, student must participate in scheduled scholarly seminars online.

Pre-requisite: NU 656 Minimum Grade of C

**NU 658 NU Informatics Residency II 3 TO 6 cr**

Provides Nursing Informatics students the opportunity to fully express all DNP competencies. The Nursing Informatics student, guided by the faculty facilitator, will implement the scholarly doctoral system's change project.

Pre-requisite: NU 657 Minimum Grade of C

**NU 659 NU Informatics Residency III 3 TO 6 cr**

Final course in residency series as Nursing Informatics student continues to implement and evaluate project plan. Provides Nursing Informatics student the opportunity to fully express all DNP competencies. The Nursing Informatics student, guided by the core faculty and advisor completes quality improvement evidence-based system's change project.

Pre-requisite: NU 568 Minimum Grade of C

**NU 661 Nurse Exec Admin PP&D 3 cr**

This course assists the Nurse Executive Administration DNP student to learn the processes embedded in developing a doctoral synthesis project. The course will address all aspects of project planning and development as a preliminary step to the Nurse Executive Administration students' selection of a topic or phenomenon of interest for the project and will incorporate well-built questions, search strategies and outcomes, identification of resources needed, plan for evaluation and dissemination.

**NU 662 Nurse Exec Admin Res I 3 TO 6 cr**

Theories of leadership, motivation, power, and change are used to influence change in health care organizations. This course will implement evidence-based clinical models and evaluate their effectiveness in health outcomes. The Nurse Executive Administration student will synthesize, critique, and apply evidence to support quality clinical or organizational practices. In this mentored and supervised experience, the Nurse Executive Administration student will work with the primary faculty advisor to complete projects and advance their selected practice area. The Nurse Executive Administration student will have access to and authority for expanded scope of practice to master the DNP competencies. Residency sites will depend upon the student's career trajectory and approval by collaborating faculty. During the residency semester, the Nurse Executive Administration student must participate in scheduled scholarly seminars online. Clinical hours of direct practice/management is required.

Pre-requisite: NU 661 Minimum Grade of C

**NU 663 Nurse Exec Admin Res II 3 TO 6 cr**

Provides Nurse Executive Administration students the opportunity to fully express all DNP competencies. The student, guided by the faculty facilitator, will implement the scholarly doctoral system's change project.

Pre-requisite: NU 662 Minimum Grade of C

**NU 664 Nurse Exec Admin Res III 3 TO 6 cr**

Final course in residency series as the Nurse Executive Administration student continues to implement and evaluate project plan. Provides the Nurse Executive Administration student the opportunity to fully express all DNP competencies. The student, guided by the core faculty and advisor, completes quality improvement evidence-based system's change project.

Pre-requisite: NU 663 Minimum Grade of C

**NU 682 Consultation in Nsg Practice 3 cr**

Focuses on the steps of the consulting process in advanced nursing practice with an emphasis on assessment, planning and the communication of findings. Theoretical frameworks and models for consultation are analyzed.

**NU 690 Sp Top - 1 TO 9 cr**

Selected topics in Nursing Science and/or Nursing Education. Requires special permission.

**NU 692 DNP Project Progression 3 cr**

Students will register for this course to complete residency course work under the supervision of faculty. Students must remain continuously enrolled until all residency requirements are completed.

**NU 694 Directed Study and Research 1 TO 6 cr**

Directed study and research facilitated by a member of the graduate faculty. Requires special permission.

## Occupational Therapy (OT)

- OT 201 Intro to Occupational Therapy** 3 cr  
An introduction to the occupational therapy profession and the scope of occupational therapy practice. Includes self assessment and development strategies to enhance students' readiness for the professional component of the occupational therapy curriculum. Familiarizes students with the functions, policies and services of the University, College and Department and includes an exploration of related allied health professions.
- OT 499 Senior Honors Project - H - W** 3 TO 6 cr  
Under the advice and guidance of a faculty mentor, honors students will identify and carry out a research project relevant to the field of Occupational Therapy study that will lead to a formal presentation at the annual Honors Student Colloquium. The senior project will be judged and graded by three faculty members chaired by the honors mentor. This course is required for Honors recognition and may be repeated for up to 6 credit hours.
- OT 500 Occupation in Context** 3 cr  
An in-depth, interdisciplinary study of the form, function and meaning of human occupation in a variety of environments including the therapeutic context. Includes an introduction to the occupational science literature and discussion of the impact of occupation on health and well-being. Special fee.
- OT 502 Occupational Development I** 3 cr  
Study of human occupational development, including developmentally appropriate roles, tasks and activities. Covers prenatal period through adolescence. Emphasis is on normal human development, with some consideration of abnormal development.
- OT 503 History and Philosophy of OT** 3 cr  
Explores the history and development of occupational therapy within the context of national and international events. Philosophies inherent to the field will be explored with an overview of the life span approach to "occupation". Includes discussion of official documents guiding the profession and legislative changes affecting the current and future practice of the profession. Students will be required to learn terminology utilized by occupational therapists and demonstrate a beginning awareness of occupational performance analysis.
- OT 504 Neurosci Basis of Occ Perform** 3 cr  
Study of the neural development, chemistry, structure, function and pathology of the nervous system. Emphasizes the application of basic science knowledge as it relates to human occupational performance.
- OT 505 Scientific Inquiry I** 2 cr  
An introduction to qualitative and quantitative research concepts and statistical methods with emphasis on evidence-based practice and outcomes research. Includes library search strategies, critical analysis of scientific literature, application of statistical methods and research designs, and scientific writing skills.
- OT 506 Research Design** 1 cr  
An introduction to writing a research design proposal. Students will work in small groups and be mentored by faculty to complete a research proposal.
- OT 510 Theoretical Found of OT-W** 3 cr  
Introduction to the prevalent theories and fundamental concepts guiding occupational therapy. Includes similarities and differences among major theories. Emphasizes application of these theories to professional practice in occupational therapy.
- OT 512 Occupational Development II-W** 3 cr  
Study of human occupational development, including developmentally appropriate roles, tasks and activities of young adulthood through senescence and death. Emphasis is on normal human development, with some consideration of abnormal development.
- OT 517 Occupational Evaluation I** 3 cr  
An overview of the evaluation process in occupational therapy. Includes the theoretical basis of evaluation, selection of appropriate data gathering methods, use of standardized and non-standardized assessment tools, interpretation of results and documentation of evaluation findings.
- OT 519 Prof Development Seminar** 2 cr  
Introduction to professional behavior and interpersonal dynamics in a seminar format. Emphasizes self-awareness, self-assessment, communication issues and the value of life-long learning. Also includes medical terminology.
- OT 520 OT Int I Lecture** 3 cr  
Occupational therapy intervention for persons with developmental and acquired impairments and disabilities affecting self care skills. A life span approach will be taken with emphasis on occupational performance components and context. Therapeutic interventions will emphasize problem-solving, clinical reasoning, and occupational performance synthesis to enhance occupational performance and adaptation.
- OT 521 Practicum I** 1 cr  
Observation and limited participation in clinical and community-based settings. Emphasis on assessment and intervention in performance of occupations related to self-care.
- OT 522 OT Int I Lab** 1 cr  
This course will consist of lab exercises and hands on practice focused on occupational therapy interventions for persons with developmental and acquired impairments and disabilities affecting self-care. This course will require students to synthesize information and apply evidence-based interventions to enhance occupational performance and adaptation.

- OT 523 OT Int I CBL** 1 cr  
This course will consist of case-based learning exercises focused on occupational therapy interventions for persons with developmental and acquired impairments and disabilities affecting self-care. This course will require students to synthesize information and apply evidence-based interventions to enhance occupational performance and adaptation.
- OT 524 Biomed-Phenom Perspect Disab I** 3 cr  
Biomedical etiology, diagnostic procedures, prognosis, and medical management including pharmacotherapies of selected disorders are presented and contrasted with phenomenological perspectives based on personal narratives. Includes the identification of the consequences of the disorders and their impact on occupational performance.
- OT 525 Documentation** 3 cr  
Overview of basic professional writing skills including: reporting evaluation data, intervention plans, progress notes, and discharge summaries. Includes understanding the varied purposes of documentation as well as legal and ethical issues in documentation.
- OT 527 Occupational Evaluation II** 3 cr  
Orientation to and practice in the use of both standardized and non-standardized assessment tools appropriate for evaluating persons with developmental and acquired impairments and disabilities affecting occupational performance. Special fee.
- OT 530 OT Int II Lecture** 3 cr  
Occupational therapy intervention for persons with developmental and acquired impairments and disabilities affecting play, leisure, social skills, and school-based practice. A life span approach will be taken with emphasis on occupational performance components, client factors, and context. Therapeutic interventions will emphasize problem-solving, clinical reasoning, and occupational performance synthesis to enhance occupational performance and adaptation. Special fee.
- OT 531 Practicum II** 1 cr  
Observation and limited participation in clinical and community-based settings. Emphasis on assessment and intervention in performance of occupations related to play/leisure.
- OT 532 OT Int II Lab** 1 cr  
This course will consist of lab-based practical occupational therapy interventions for persons with developmental and acquired impairments and disabilities affecting play, leisure, social skills, and school-based practice. A life span approach will be taken with emphasis on occupational performance components, client factors, and context. Therapeutic interventions will emphasize problem-solving, critical reasoning, and occupational performance synthesis to enhance occupational performance and adaptation.
- OT 533 OT Int II CBL** 1 cr  
This course will consist of case-based learning exercises focused on occupational therapy interventions for persons with developmental and acquired impairments and disabilities affecting play, leisure, social skills, and school-based practice. This course will require students to synthesize information and apply evidence-based interventions to enhance occupational performance and adaptation.
- OT 534 Biomed-Phenom Perspec Disab II** 3 cr  
Biomedical etiology, diagnostic procedures, prognosis, and medical management including pharmacotherapies of selected disorders are presented and contrasted with phenomenological perspectives based on personal narratives. Includes the identification of the consequences of the disorders and their impact on occupational performance.
- OT 536 Management** 3 cr  
Explores the application of the principles of organizational management to the development and administration of occupational therapy programs in the emerging health care environment.
- OT 538 Group Dynamics** 2 cr  
An analysis of group intervention theories, techniques and strategies. Includes discussion of therapeutic use of self, group dynamics, leadership and stages of group development. Students will learn how to design group interventions for a variety of populations.
- OT 539 Adv Prof Development Seminar** 2 cr  
Designed to facilitate students' transition from didactic and part-time fieldwork components of the curriculum to the required full-time fieldwork experience. Emphasizes professional behavior, clinical reasoning and ethical issues.
- OT 540 Occupational Intervention III** 3 cr  
Occupational therapy intervention for persons with developmental and acquired impairments and disabilities affecting work skills. A life span approach will be taken with emphasis on occupational performance components and context. Therapeutic interventions will emphasize problem-solving, clinical reasoning, and occupational performance synthesis to enhance occupational performance and adaptation. Special fee.
- OT 541 Practicum III** 1 cr  
Observation and limited participation in clinical and community-based settings. Emphasis on assessment and intervention in performance of occupations related to work.
- OT 542 OT Int III Lab** 1 cr  
This course is the lab companion to OT 540. Occupational therapy interventions for persons with developmental and acquired impairments and disabilities, with emphasis on UE impairments impacting daily life skills, work and I-adls. These labs will engage students in hands-on learning which emphasize selection and justification of evidence-based, occupation-based, client centered interventions.

- OT 543 OT Int III Lab CBL** 1 cr  
This course is the lab companion to OT 540. Occupational therapy interventions for persons with developmental and acquired impairments and disabilities, with emphasis on UE impairments impacting daily life skills, work and I-adls. Students will be engaged in case-based discussions which emphasize selection, justification, and grading of evidence-based, occupation-based, client centered interventions.
- OT 544 Musculoskeletal Assessment** 2 cr  
Study of structures and functions of the human body with an emphasis on the limbs and back. Instruction includes assessment of the biomechanical functions of the upper and lower extremities.
- OT 545 Scientific Inquiry II** 2 cr  
The application of qualitative and quantitative research concepts and statistical methods in the development and implementation of a scholarly project. Includes data collection and preliminary analysis.
- OT 546 Supervision** 2 cr  
Application of the principles of supervision with special emphasis on the appropriate roles and use of the certified Occupational Therapy Assistant (COTA), aides and non-OT personnel.
- OT 547 Research Implementation** 1 cr  
Students will work in small groups with faculty mentor to conduct research study and collect data. The focus will be seeking participants, obtaining informed consent, and conducting data collection. It will include creation of spreadsheets and conducting preliminary data analysis based on data collected to date.
- OT 550 Level II Fieldwork - A** 6 cr  
A directed experience in evaluation, planning and implementing occupational therapy services under the supervision of an experienced, certified occupational therapist. Designed to emphasize clinical reasoning, entry-level skill acquisition and integration of didactic knowledge with practice.
- OT 551 Pract. IV Psych/Soc** 1 cr  
Observation and limited participation in clinical and community-based settings serving clients with psychosocial and behavioral needs. Students will study evidence-based interventions that promote performance of various age appropriate and culturally relevant occupations. Emphasis will be placed on the behavioral, psychological and/or social factors promoting or hindering performance.
- OT 555 Level II Fieldwork - B** 6 cr  
A directed experience in evaluation, planning and implementing occupational therapy services under the supervision of an experienced, certified occupational therapist. Designed to emphasize clinical reasoning, entry-level skill acquisition and integration of didactic knowledge with practice.
- OT 558 Tech & Environ Interven in OT** 3 cr  
An introduction to technology and environmental intervention (TEI; including but not limited to assistive, electronic, information, and rehabilitative) strategies used to increase, maintain or improve functional capabilities of individuals with disabilities and/or to design and implement accessible environments to support full participation in life activities. This course is designed to meet the basic level of competency in TEI for the entry level occupational therapist.
- OT 559 Professional Leadership** 3 cr  
Explores concepts and theories of leadership and emphasizes the importance of leadership in context, interdisciplinary teaming and the nature of change processes and diffusion of innovations. Also includes a discussion of issues of professional concern including but not limited to: OT's role in emerging practice areas, health disparities, occupational justice, health care reform and current controversies in the field.
- OT 570 Community-Based Intervention** 3 cr  
Occupational therapy intervention for clients in community settings. A lifespan approach will be taken with emphasis on occupational performance areas and contexts. Community interventions will emphasize problem-solving, clinical reasoning and occupational analysis to enhance performance and adaptation. Includes health promotion and disease/disability prevention strategies, innovative program development, evaluation and funding strategies, and community health concepts. Special fee.
- OT 575 Advanced Professional Writing** 2 cr  
Covers a variety of types of professional writing useful to occupational therapists including: grant proposals; journal articles; books; client education materials; and presentation proposals and papers. Includes both the form and content of a range of technical documents as well as the processes of writing, peer review and critique.
- OT 576 Res Analysis and Presentation** 1 cr  
Students will work in small groups with faculty mentor to conduct research study and collect data. Students will complete the data analysis started in previous research classes and then complete a poster presentation of their research.
- OT 580 Level II Fieldwork - C** 4 cr  
A directed experience in evaluation, planning and implementing occupational therapy services under the supervision of an experienced, certified occupational therapist. Designed to emphasize clinical reasoning, entry-level skill acquisition and integration of didactic knowledge with practice.
- OT 585 Level II Fieldwork - D** 4 TO 12 cr  
A directed experience in evaluation, planning and implementing occupational therapy services under the supervision of an experienced, certified occupational therapist. Designed to emphasize clinical reasoning, entry-level skill acquisition and integration of didactic knowledge with practice.

**OT 590 Special Topics - 1 TO 6 cr**  
A variable topics course covering areas not available in other occupational therapy courses. A subtitle identifying the topic will be entered on the student's record.

**OT 598 Independent Study in OT 1 TO 6 cr**  
Special studies directly relevant to the practice of occupational therapy. The student will select an area of interest in which they wish to become more proficient. A faculty member will provide guided study, supervision and assistance in developing appropriate learning experiences.

## PE-Activity Courses (PE)

**PE 100 Concepts of Health and Fitness 3 cr**  
An introductory course designed to show students the contributions of physical activity, nutrition, weight control, stress control, environmental conditions, and injury prevention to preventive health. Students learn how to evaluate themselves, their physical and nutritional needs and how to design individual programs for healthy living.

**PE 101 PE Activity - 1 cr**  
Instruction and practice of basic sport and activity skills. A varying content course that gives students choices from designated semester offerings. May be repeated for credit.

**PE 102 Weight Training 1 cr**  
A progressive resistance training course designed to improve muscular strength and endurance. May be repeated for credit.

**PE 103 PE Activity - 1 cr**  
Instruction and practice of sport and activity skills. A varying content course that gives students choices from designated semester offerings. May be repeated for credit. An additional fee will be charged for these activities.

**PE 104 PE Activity - 1 cr**  
Instruction and practice of basic sport and activity skills. A varying content course that gives students choices from designated semester offerings. May be repeated for credit. An additional fee will be charged for these activities.

**PE 105 PE Activity - 1 cr**  
Instruction and practice of basic sport and activity skills. A varying content course that gives students choices from designated semester offerings. May be repeated for credit. An additional fee will be charged for these activities.

**PE 106 Gymnastics 1 cr**  
Instruction and practice in gymnastic skills. A varying content course treating different skill levels in gymnastics. May be repeated for credit.

**PE 107 PE Activity - 1 cr**  
Instruction and practice of basic sport and activity skills. A varying content course that gives students choices from designated semester offerings. May be repeated for credit. An additional fee will be charged for these activities.

**PE 108 Ballroom Dancing 1 cr**  
Knowledge, skills, and techniques associated with various forms of ballroom dancing through demonstration, practice and partnering.

**PE 109 Swing Dancing 1 cr**  
Knowledge, skills, and techniques associated with various forms of swing dancing through demonstration, practice, and partnering.

**PE 110 Dance - 1 cr**  
Instruction and practice in dance. A varying content course treating different types of dance such as but not limited to social, folk, square, and dance performance. May be repeated for credit.

**PE 112 Latin Dancing 1 cr**  
Knowledge, skills, and techniques associated with various forms of Latin dancing through demonstration, practice, and partnering.

**PE 113 Creative Dance 1 cr**  
An introduction to dance as an art form; the vocabulary for movement as a means of self-expression. May be repeated for credit.

**PE 114 Aerobics 1 cr**  
Aerobic exercise is a physical fitness program that offers complete and effective conditioning. It involves jogging, jumping, lunging, kicking, and stretching to music.

**PE 115 Ballroom and Swing Dancing 1 cr**  
Knowledge, skills, and techniques associated with various forms of ballroom and swing dancing through demonstration, practice and partnering.

**PE 116 Cajun and Swing Dancing 1 cr**  
Knowledge, skills, and techniques associated with various forms of Cajun and Swing dancing through demonstration, practice, and partnering.

**PE 117 Ballet 1 cr**  
Instruction and practice in ballet. A varying content course treating the different skill levels of ballet with emphasis on correct body placement through barre and centre exercises. May be repeated for credit.

**PE 118 Jazz Dancing 1 cr**  
Instruction and practice in jazz dancing. A varying content course treating the various skill levels of jazz with emphasis on correct body placement through isolation and locomotor techniques. May be repeated for credit.

**PE 119 Modern Dance 1 cr**  
Instruction and practice in modern dance. A varying content course with exposure to various skill levels and modern dance styles. May be repeated for credit.

**PE 120 Tennis - Basic 1 cr**  
Instruction and practice in beginning and intermediate tennis. May be repeated for credit.

- PE 121 Golf - Basic** 1 cr  
Instruction and practice in beginning golf. May be repeated for credit.
- PE 122 Bowling** 1 cr  
Instruction and practice in beginning bowling. Requires special fee. May be repeated for credit.
- PE 123 Archery** 1 cr  
Instruction and practice in beginning archery. May be repeated for credit.
- PE 124 Latin and Swing Dancing** 1 cr  
Knowledge, skills, and techniques associated with various forms of Latin and Swing dancing through demonstration, practice, and partnering.
- PE 125 Badminton** 1 cr  
Instruction and practice in beginning and intermediate badminton. May be repeated for credit.
- PE 126 Ballroom and Latin Dancing** 1 cr  
Knowledge, skills, and techniques associated with various forms of Ballroom and Latin dancing through demonstration, practice, and partnering.
- PE 127 Country West/Partner Dancing** 1 cr  
Knowledge, skills, and techniques associated with various forms of Country Western/Partner dancing through demonstration, practice, and partnering.
- PE 128 Dance Performance** 1 cr  
Knowledge, skills, and techniques associated with various forms of Dance Performance through demonstration and practice.
- PE 129 Folk and Square Dancing** 1 cr  
Knowledge, skills, and techniques associated with various forms of Folk and Square dancing through demonstration, practice, and partnering.
- PE 130 Beginning Swimming** 1 cr  
Instruction and practice in beginning swimming and water safety. Participation fee required. May be repeated for credit.
- PE 131 Intermediate Swimming** 1 cr  
Instruction and practice in intermediate swimming and water safety. Participation fee required. May be repeated for credit.
- PE 132 Step Aerobics** 1 cr  
A physical activity class which includes the instruction and practice of step aerobics. The course is designed to improve cardiovascular and muscular endurance and improve coordination.
- PE 133 Muscle Toning and Conditioning** 1 cr  
Muscle Toning and Conditioning is a physical activity course in which the student, through active participation, will develop knowledge and skills sufficient to tone the body and improve cardiorespiratory fitness using weights, body bars, resistance tubes, and other equipment.
- PE 134 Karate I** 1 cr  
A beginning course in Karate designed to develop physical fitness, self-discipline, the fundamentals and techniques of blocking, punching, striking, kicking, and stances.
- PE 135 Karate II** 1 cr  
An intermediate course in Karate designed as a continuation of Karate I with the introduction of additional blocks, kicks, and footwork. Self-discipline and physical fitness continue to be stressed.
- PE 136 Karate III** 1 cr  
An advanced course in Karate designed as a continuation of Karate II with the addition of more advanced and versatile concepts of speed, distance, timing, and footwork. Vigorous training methods are used and self-discipline is stressed.
- PE 138 Tai Chi** 1 cr  
Tai Chi training presents basic concepts and techniques to enhance physical fitness and develop mental discipline for stress reduction and personal wellness.
- PE 139 Yoga** 1 cr  
The purpose of this course is to introduce the basic concepts of yoga theory, to teach safe yoga posture, and to help participants in developing balance and fitness, as well as manage stress wisely.
- PE 141 Softball** 1 cr  
Instruction and practice in softball. May be repeated for credit.
- PE 142 Volleyball** 1 cr  
Instruction and practice in volleyball. May be repeated for credit.
- PE 143 Basketball** 1 cr  
Instruction and practice in basketball. May be repeated for credit.
- PE 144 Soccer** 1 cr  
Instruction and practice in soccer. May be repeated for credit.
- PE 145 Jogging** 1 cr  
Instruction and practice in the activity of jogging designed to improve cardiovascular endurance.
- PE 146 Bicycling** 1 cr  
An introductory course to bicycling for leisure and fitness emphasizing the selection and care of bicycles, safety concerns, apparel, route selection, bike handling skills, and development of a bicycle fitness program.

- PE 147 Racquetball** 1 cr  
Instruction and practice in racquetball. May be repeated for credit.
- PE 148 Intermediate Golf** 1 cr  
Instruction and practice in intermediate golf. Demonstrable beginner golf skills necessary.
- PE 149 Ultimate Frisbee** 1 cr  
Fundamental skills, rules, and strategies with frisbees with opportunities for participation.
- PE 155 Martial Arts -** 1 cr  
Instruction and practice in various forms of Martial Arts. A varying-content course treating different skill levels of karate, judo, kung-fu etc. Requires special fee. May be repeated for credit.
- PE 157 ICA - Varsity Sports** 1 cr  
Restricted to members of South Alabama intercollegiate athletic teams by special permission of the respective coaches. Includes but not limited to basketball, soccer, baseball, track, golf, tennis, and volleyball. May be repeated for credit with exception of Education majors.
- PE 158 Life Skills - Student Athletes** 0 TO 1 cr  
This course is designed to help the student acquire specific tools and life skills necessary to be a successful student-athlete on the field, in the classroom, and in life. Modeled after the NCAA Champs/Life Skills program, the course explores and develops proficiency in the areas of: academic excellence, athletic excellence, personal development, career development, and community service. The structure will be a combination of class lectures, group discussions, speakers, and activities. Prerequisites: Students enrolled in PE 158 must be an NCAA varsity student-athlete at the University of South Alabama.
- PE 166 Movement - Rhythms and Dev Act** 3 cr  
Movement exploration experiences, developmental games, rhythmic and dance activities are explained, developed and practiced. Clinical or field experience required.
- PE 201 Orientation to HPE** 3 cr  
An overview of the fields of Health, Physical Education, and Exercise Science. An introduction to the Department of HPELS followed by a survey of philosophical and historical aspects, and professional preparation standards of the specific fields.
- PE 231 ARC Lifeguard Training** 3 cr  
Prepares the student for American Red Cross Lifeguard, CPR for the professional rescuer, and first aid certification. Emphasis is placed on emergency action plans, lifeguarding techniques and all forms of victim rescue. Prerequisite: Strong swimmers ONLY. See department secretary for specific skill requirements.
- PE 278 Sport and Human Behavior** 3 cr  
A study of the psychological and sociological aspects of sport and the relationship to human behavior.
- PE 282 Intro Athletic Training** 3 cr  
Survey of the basic techniques and practices of athletic training. Study includes prevention, recognition, care, and treatment of athletic injuries. Development of basic athletic training skills in the use of preventive and protective techniques of adhesive tape application.
- PE 296 Observ Athletic Training I** 1 cr  
An opportunity to observe and gain practical skills required in athletic training or the broad field of sports medicine. A minimum of 30 hours of clinical work and observation during afternoon and evening hours and a weekly seminar is required.
- PE 297 Observ Athletic Training II** 1 cr  
A continuation of PE 296 providing students with additional opportunity to observe and master practical skills required in athletic training or the broad field of sports medicine. A minimum of 30 hours of clinical work and observation during the afternoon and evening hours and a weekly seminar is required.
- PE 351 Sports Skills** 3 cr  
The development of skills and the understanding of fundamentals and strategies in selected individual, dual, and team sports. Field experiences required. Proof of background check, fingerprinting and liability insurance is required. PE (P-12) majors only. Instructor permission is required.
- PE 370 Basic Motor Learning** 3 cr  
Study of the psychological, experimental, developmental, and social aspects of learning in the psychomotor domain.
- PE 372 Coaching Gymnastics** 3 cr  
History, theory, and fundamentals of coaching and officiating gymnastics.
- PE 373 Coaching Volleyball** 3 cr  
History, theory, and fundamentals of coaching and officiating volleyball.
- PE 374 Coaching Soccer** 3 cr  
History, theory, and fundamentals of coaching and officiating soccer.
- PE 375 Coaching Football** 3 cr  
History, theory, and fundamentals of coaching and officiating football.
- PE 376 Coaching Basketball** 3 cr  
History, theory, and fundamentals of coaching and officiating basketball.
- PE 377 Coaching Baseball** 3 cr  
History, theory, and fundamentals of coaching and officiating baseball.
- PE 378 Coaching Track and Field** 3 cr  
History, theory, and fundamentals of coaching and officiating track and field.

- PE 380 Kinesiology** 3 cr  
Theory and application of the mechanical and anatomical principles of human movement.  
Pre-requisite: (BMD 114 Minimum Grade of D or CLS 114 Minimum Grade of D or BLY 151 Minimum Grade of D) or BMD 334 Minimum Grade of D
- PE 381 Eval and Measurement in HPE** 3 cr  
Elementary statistical procedures, evaluation, and interpretation, and use of tests and other measurement devices in health and physical education.
- PE 385 Eval-Treatment Athl Injurie I** 3 cr  
A study of athletic injuries to the lower extremities and lumbar spine. Prevention, evaluation, and management of these injuries will be explored along with common surgical procedures associated with these sports related injuries and conditions.
- PE 386 Eval-Treatment Athl Injurie II** 3 cr  
Prevention, evaluation, and management of injuries to the head, neck, upper extremities, and the trunk will be discussed in detail. Field and clinical strategies for the identifications of signs and symptoms will be explored along with common surgical procedures used to treat upper extremity and axial injuries.
- PE 396 Practicum Athletic Training I** 1 cr  
A practical and clinical application of techniques utilized in the evaluation and treatment of athletic injuries to the lower extremities and lumbar spine. A minimum of 200 hours of clinical work during afternoon and evening hours and a weekly seminar is required.
- PE 397 Practicum Athletic Training II** 1 cr  
A practical and clinical application of techniques utilized in the evaluation and treatment of athletic injuries to the upper extremities, axial skeleton, thorax, and abdomen. A maximum of 200 hours of clinical work during afternoon and evening hours and a weekly seminar is required.
- PE 428 Portfolio Assessments** 0 cr  
Professional Portfolio Assessments will be collected and monitored.
- PE 429 School Lab Experience-PE** 0 TO 3 cr  
Professional laboratory experiences involving observation and participation at local public schools. Admission to teacher candidacy required.  
Co-requisite: PE 452
- PE 430 Student Teaching - Elem** 4 cr  
Observation and supervised teaching with opportunity for study and discussion of problems and issues encountered at the elementary level. Students will be placed with a person holding a valid teaching certificate in the appropriate field. Admission to teacher candidacy required.
- PE 450 Student Teaching-Health and PE** 9 cr  
Observation and supervised teaching with opportunity for study and discussion of problems and issues encountered in the 6-12 Health Education and P-12 Physical Education programs. Students will be placed with a person holding a valid teaching certificate in the appropriate field. Admission to teacher candidacy and completion of program and college prerequisites required.  
Pre-requisite: PRAXIS-Health Education 145 and PRAXIS-Phys Edu Cont Knowledge 141 and (HS 460 Minimum Grade of C and HS 429 Minimum Grade of S and HS 340 Minimum Grade of C and PE 351 Minimum Grade of C and PE 452 Minimum Grade of C and PE 429 Minimum Grade of S)
- PE 452 Methods of Teaching PE - W** 3 cr  
Organizing materials and developing methods of teaching physical education in elementary, middle, and high schools. Field experiences required. Practical mini-teaching experiences in peer labs and local schools. Prerequisite: Admission to teacher candidacy. Co-requisite: PE 429. Co-requisite: PE 429
- PE 460 Student Teaching - SED** 1 TO 9 cr  
Observation and supervised teaching with opportunity for study and discussion of problems encountered in secondary schools. Students will be placed with a person holding a valid teaching certificate in the appropriate field. Admission to teacher candidacy and completion of program and college prerequisites required.  
Pre-requisite: PRAXIS-Health Education 580( or PRAXIS-Health Education 145 and PRAXIS-Prin of Lrn/Teach 7-12 153 ) and HS 460 Minimum Grade of C and HS 340 Minimum Grade of C and HS 430 Minimum Grade of S
- PE 461 PE for Atypical Child-Youth** 3 cr  
Principles and techniques for adapting physical education activities for children with special needs. Field experience required.
- PE 470 Student Teaching P-12 Program** 1 TO 12 cr  
Observation and supervised teaching with opportunity for study and discussion of problems encountered in the P-12 program. Students will be placed with a person holding a valid teaching certificate in the appropriate field. Admission to teacher candidacy and completion of program and college prerequisites required.  
Pre-requisite: PRAXIS-Phys Edu Cont Knowledge 141( and PRAXIS-Prin of Learn/Teach K-6 145 or PRAXIS-Prin of Lrn/Teach 7-12 153 ) and PE 351 Minimum Grade of C and PE 452 Minimum Grade of C and HS 460 Minimum Grade of C
- PE 473 Problems in Health and PE** 3 cr  
Special problems in health and physical education are assigned to individuals and to groups of students.

- PE 474 Sport and Fitness Conditioning** 3 cr  
Study of the theory, principles, methods, and techniques in the development, implementation, and evaluation of various strength and conditioning programs designed to enhance athletic performance and improve physical fitness. The conditioning needs of various populations with disease and degenerative conditions will be examined.
- PE 475 Org-Admin Hlth and PE - W** 3 cr  
Planning, policies, administrative/management functions and duties in health and physical education programs.
- PE 476 Physiology of Exercise** 3 cr  
The study of the body's physiological responses and adaptations to exercise and training. .  
Pre-requisite: BMD 114 Minimum Grade of D
- PE 477 Water Safety Instructor** 3 cr  
Trains prospective candidates for American Red Cross Water Safety Instructor certification. Candidates will learn how to teach all levels of swimming and basic diving to students of all ages. How to organize classes, use lesson plans and practice teaching skills. Prerequisite: Proficient swimmer in all seven strokes. See Instructor for specific skill requirements.
- PE 478 Coaching Theory** 3 cr  
Introduction to the profession of coaching. Topics include: physical, mental and organizational preparation, teaching strategies (individual and team aspects), legal liability, officiating, and national guidelines.
- PE 479 Fit Assess-Exercise Prescript** 3 cr  
Through didactic study and laboratory participation, the student will develop the knowledge base and clinical skills needed to assess physical fitness and plan exercise prescriptions for apparently healthy individuals.
- PE 480 Therapeutic Exercise** 3 cr  
Theory, current research, principles, application and techniques of rehabilitation used to treat injuries to athletes and the physically active across the life span are studied. Psychological and physical parameters of rehabilitation and exercise conditioning are presented.
- PE 481 Therap Modal in Athletic Trng** 3 cr  
Theory, current research, principles, application and techniques of various therapeutic modalities used in treating athletes and the physically active are studied.
- PE 482 Advanced Athletic Training** 3 cr  
Advanced and contemporary topics, issues, and applications in athletic training. Admission to candidacy required.  
Pre-requisite: PE 380 Minimum Grade of D
- PE 484 Apps in Sports Conditioning** 3 cr  
Through didactic study and physical activity participation, the student will develop the knowledge base and skills in fundamental and advanced exercise theory and techniques in sport and fitness conditioning with application to program design and periodization of training.  
Pre-requisite: PE 474 Minimum Grade of D
- PE 490 Special Topics -** 3 cr  
A varying content course treating different aspects of health, physical education, and leisure studies. May be repeated for credit when course content varies.
- PE 494 Directed Studies -** 1 TO 3 cr  
Directed research. No more than two directed studies can be counted toward the bachelor's degree and Class B certification. HPELS advisor approval required.
- PE 495 Internship in HPELS** 1 TO 12 cr  
Observation and supervised practicum experiences in a professional setting. May be repeated for credit not to exceed 12 hours. HPELS advisor approval required.
- PE 496 Practicum in Athletic Trng III** 1 cr  
A practical and clinical experience to allow students to develop and master skills, methods, and techniques associated with various therapeutic exercise and rehabilitation/reconditioning programs commonly used by athletic trainers serving the physically active. A minimum of 200 hours of clinical work during afternoon and evening hours and a weekly seminar is required.
- PE 497 Practicum in Athletic Trng IV** 1 cr  
A practical and clinical experience to allow students to develop and master skills, methods, and techniques associated with various therapeutic modalities in rehabilitation/reconditioning programs commonly used by athletic trainers serving the physically active. A minimum of 200 hours of clinical work during afternoon and evening hours and a weekly seminar is required.
- PE 498 Senior Honors Project - H** 3 TO 6 cr  
Experiences in planning, conducting, and reporting a research project relevant to the fields of Health, Physical Education, and Leisure Studies. The project, mentored by HPELS faculty, is required for Honors recognition and may be repeated for up to six credit hours. Prerequisites: Participant in Honors Program and permission of Department Chair required.
- PE 499 Clin Intern in Athletic Trng** 1 TO 6 cr  
This course provides supervised clinical experience in a traditional athletic training setting. The student will serve as a team trainer for an athletic team for an entire sport season. A minimum of 300 hours of clinical work during afternoon and evening hours and a weekly seminar required.

## Pharmacology (PHA)

**PHA 546 Pharmacology Lit Reports 1 cr**

Students and faculty participate in a supervised reading of the current literature and meet periodically (usually once a week) to interact in a discussion of the selected article or topic. The goal of this course is to maintain the faculty's and students' level of information at a "state of the art" in both methods and theory in the discipline and to develop critical skills in reviewing the literature. Student presentation is required to receive credit.

**PHA 547 Dir St in Pharmacology 1 TO 6 cr**

Students participate in research under the direction of a graduate faculty member. The student may pursue independent research or participate in a literature project. This course should be taken by students who have completed their laboratory rotations, but have not yet submitted a formal research proposal.

**PHA 548 Physiological Pharmacology 6 cr**

This course covers both cellular and organ system physiology. It is designed to prepare graduate students for Medical Pharmacology (PHA 540), and for research in pharmacology.

**PHA 590 Sp Top - 1 TO 3 cr**

Each course provides in-depth tutorial exposure to specific areas in the discipline. Student and/or faculty presentations followed by group discussions (usually in the Socratic mode), examine the subject matter in an area of current interest either to one student or to a group of students. Credit and title are arranged with an individual faculty member.

**PHA 640 Molecular-Cellular Pharmacology 3 cr**

This course consists of presentations and literature discussions. The central themes of signal transduction from cellular receptor to amplified response, structure-activity relationships, and drug design are studied comprehensively. Specific topics include receptor-ligand interactions, receptor structure and coupling mechanisms, the biochemical and molecular aspects of G-proteins, protein phosphorylation mechanisms, molecular modeling and protein crystallography. A comprehensive course in biochemistry is prerequisite for this course.

**PHA 643 Molecular-Cellular Toxicology 3 cr**

This course is concerned with the mechanisms by which toxic substances exert their effects at the molecular and cellular level. Detailed analysis of the processes by which toxic materials are metabolized to toxic intermediates is addressed. The mode of action of how toxic compounds interact with structural proteins and other macromolecules, enzymes and receptors, and the genome is included. Examples of toxicity of the heart, liver, lung, pancreas, brain, including teratogenic, mutagenic and carcinogenic effects are discussed at the mechanistic level.

**PHA 646 Cell Signaling Seminar 1 cr**

Students present a research topic for discussion before members of the department. The presentations are usually on a rotational basis. The student may present research data for critique by the faculty.

**PHA 799 Research Dissertation 1 TO 6 cr**

Independent research by the student under the sponsorship of the graduate faculty in individual departments in the Basic Medical Sciences. Students are required to submit a research project description form before enrolling in this course. Progress reports of the work accomplished are required every six months.

## Philosophy (PHL)

**PHL 110 Introduction to Philosophy 3 cr**

An introduction to philosophical analysis and criticism through a survey of the major branches of philosophy. Topics may include, but are not limited to: the mind/body problem, theory of knowledge, skepticism, ethics, political philosophy, aesthetics, and philosophy of religion. Fulfills the General Education Requirement.

**PHL 120 Critical Thinking 3 cr**

This course will examine complex types of reasoning, including statistical judgment, decision making, and causal and analogical thinking. Emphasis will be placed on the analysis of concrete examples of reasoning in various fields, including science, religion and theology, politics, law as well as alternative medicine and other non-traditional disciplines. Students will be encouraged to improve their own judgment and decision making by learning how to evaluate arguments and by learning about fallacies, common errors and biases in reasoning and decision making. There will also be extensive discussion on the relation between how people do reason and how they ought to reason. Fulfills the General Education Requirement.

**PHL 121 Introduction to Logic 3 cr**

Studies arguments: what they are, how to identify them, and how to judge their quality; and examines inductive and deductive arguments in both their informal and formal aspects. Fulfills the General Education Requirement. MA 110 or equivalent is recommended.

**PHL 131 Introduction to Ethics 3 cr**

Examines ideas about good and bad, right and wrong, and moral obligation through a survey of major ethical systems in western philosophy. The course includes consideration of how these ideas apply to moral problems and issues. Fulfills the General Education Requirement.

**PHL 231 Social Ethics 3 cr**

Readings and analyses of ethical issues in society. Topics may include euthanasia, sexual equality, sexual morality, censorship, world hunger, animal rights, the environment, and capital punishment. Fulfills the General Education Requirement.

- PHL 240 Western Philosophy: Classical** 3 cr  
Survey of classical Greek philosophy. The philosophers surveyed may include Presocratic philosophers, Socrates, Plato, Aristotle, and Hellenistic philosophers. Fulfills the General Education Requirement. Identical with CLA 240. Credit cannot be received for both PHL 240 and CLA 240.
- PHL 242 Western Philosophy - Medieval** 3 cr  
A survey of Medieval Western Latin, Jewish and Islamic philosophers. Identical with REL 242. Credit cannot be received for both REL 242 and PHL 242.
- PHL 245 Renaissance-Enlightnmt - W** 3 cr  
Survey of Western philosophy from F. Bacon to Kant with emphasis on the empiricists, rationalists, and Kant. Pre-requisite: (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)
- PHL 251 Philosophy and Cognitive Sci** 3 cr  
A survey of central concepts and issues in cognitive science, including an informal introduction to automata theory, intelligent systems architecture, and the philosophical issues arising out of computational models of language and cognition.
- PHL 290 Special Topics -** 1 TO 3 cr  
Different themes and issues of philosophical significance will be studied as announced. May be repeated for a maximum of 9 hours.
- PHL 301 Skepticism in Media-Philosophy** 3 cr  
This course examines some of the most fundamental questions about human knowledge, belief and rationality and compares the treatment of such issues in philosophical discussions and contemporary media, especially film. Identical with CA 301. Credit cannot be received for both CA 301 and PHL 301. Pre-requisite: EH 102 Minimum Grade of D or EH 105 Minimum Grade of D
- PHL 310 Classical Mythology** 3 cr  
Through the disciplines of English and Philosophy, this course will provide an introduction to myths and to the literature that recounts the myths, legends, and folktales of ancient Greece and Rome. This course will also look at how different writers treat the material and why their treatments vary. Credit cannot be received for both PHL 310 and either EH 310 or REL 310 or CLA 310. Pre-requisite: ACT English 27( or SAT Critical Reading 550 or University - EH101 Exempt P or EH 101 Minimum Grade of C or EH 110 Minimum Grade of D or EH 190 Minimum Grade of D or USA 010 Minimum Grade of S) and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)
- PHL 311 Political Philosophy I** 3 cr  
An examination of the central themes of classical Western political philosophy through the reading and discussing of the primary works of such thinkers as Plato, Aristotle, Augustine, and Aquinas. Cross-listed as PSC 311 and CLA 311. Credit cannot be received for both PHL 311 and either PSC 311 or CLA 311.
- PHL 312 Political Philosophy II** 3 cr  
An examination of the central themes of classical Western political philosophy through the reading and discussing of the primary works of such thinkers as Machiavelli, Hobbes, Locke, and Rousseau. Cross-listed as PSC 312. Credit cannot be received for both PHL 312 and PSC 312. Pre-requisite: PSC 130 Minimum Grade of C
- PHL 313 Political Philosophy III - W** 3 cr  
An examination of the central themes of classical Western political philosophy through the reading and discussing of the primary works of such thinkers as Hegel, Mill, Marx, and Nietzsche. Cross-listed as PSC 313. Credit cannot be received for both PHL 313 and PSC 313. Pre-requisite: PSC 130 Minimum Grade of C
- PHL 321 Symbolic Logic** 3 cr  
A study of sentential and predicate logics and related topics.
- PHL 327 Philosophy of Science** 3 cr  
Studies such topics as method and explanation in the sciences; the demarcation between science and pseudoscience; realist and anti-realist views about scientific theories; the logic of scientific change; confirmation; reduction; laws of nature; underdetermination; and society, science, and values.
- PHL 331 Alienation** 3 cr  
Alienation, a fundamental element in human existence, is analyzed in the philosophy of Marx, Hegel, Dostoevsky, Nietzsche and Sartre, and then used to interpret characters and situations in selected novels and films.
- PHL 333 Biomedical Ethics - W** 3 cr  
Ethical analyses of problems and issues in the biomedical and health-related fields. Topics may include genetic research and technology, abortion, health care, experimentation, and death and dying. Pre-requisite: (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)
- PHL 334 Man and Technology** 3 cr  
Examines the most common impacts that technology is envisioned to have on both the spirit of the human person and the environment in which that person lives. Both the technologist and anti-technologist arguments will be explored.
- PHL 336 Legal Theory** 3 cr  
Explores theoretical issues and problems in the area of law, including theories about the nature of law, legal validity, the relation between morality and law, and our obligation to obey the law. Specific problems, such as legal moralism, are also examined. Cross-listed as CJ 336. Credit cannot be received for both PHL 336 and CJ 336.

- PHL 337 Liability and Punishment** 3 cr  
Explores theoretical issues and problems in the areas of law (especially criminal law) concerning liability and punishment. Topics to be examined include diminished capacity, theories of punishment, and capital punishment. Cross-listed as CJ 337. Credit cannot be received for both PHL 337 and CJ 337.
- PHL 339 Philosophy of Culture** 3 cr  
Acquaints students with Cassirer's philosophy of culture, with emphasis on the unity of human experience as ramified into myth, language, religion, art, history, science, and politico-social life.
- PHL 345 Post-Kant Anglo-American** 3 cr  
An examination of selected themes and issues in Anglo-American philosophy since 1800. Topics may include pragmatism, ideal language philosophy, and ordinary language philosophy.  
Pre-requisite: PHL 121 Minimum Grade of C or (PHL 321 Minimum Grade of C or PHL 324 Minimum Grade of C)
- PHL 348 19th C Contl Phil-Lit Theory** 3 cr  
An examination of selected themes and issues in 19th Century Continental Philosophy and Literary Theory. Topics may include Idealism, Romanticism, Existentialism, Marxism, Freudianism. Identical with EG 348 and LG 348. Credit cannot be received for both PHL 348 and either EH 348 or LG 348. (For LG credit, students will be required to do some coursework in their language of concentration.)
- PHL 349 20th C Cntl Phil-Lit Theory** 3 cr  
An examination of selected themes and issues in 20th Century Continental Philosophy and Literary theory. Topics may include Phenomenology, Existentialism, Hermeneutics, Structuralism, and Post-Structuralism. Identical with EH 349. Credit cannot be received for both PHL 349 and either EH 349 or LG 349. (For LG credit, students will be required to do some coursework in their language of concentration.)
- PHL 351 Philosophy of Religion - W** 3 cr  
Investigates the nature of religion, including religious experience, religious language, arguments for the existence of God, and the problems of evil. Identical with REL 351. Credit cannot be received for both PHL 351 and REL 351. Pre-requisite: (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)
- PHL 352 World Religions** 3 cr  
This course is an introduction to the religions of the world. It is divided into three basic units: Indigenous Religions (of Africa, North America, and Oceania); Eastern Religions (Hinduism, Buddhism, Daoism, Confucianism, Jainism) and Western Religions (Judaism, Christianity, Islam). The emphasis is on grasping the core principles of each tradition, seeing the ways in which religion meets basic human needs, and religion as a cultural artifact that borrows, adapts, and changes over time. Course is identical with REL 352 and SY 352. Credit cannot be received for both PHL 352 and REL 352 or SY 352.
- PHL 354 Philosophies of India** 3 cr  
Introduces the major religions and philosophies of India by way of the classical Realist/Anti-Realist debate in India. Study of the major religious doctrines of theistic and non-dualist Vedanta, Buddhism, and Jainism, and their philosophical articulation in the Nyaya, Advaita Vedanta, Madhyamaka, and other schools. Identical with REL 354. Credit cannot be received for both PHL 354 and REL 354.
- PHL 355 Chinese Philosophy** 3 cr  
Introduces the major classical religious and philosophical systems of China by way of an examination of early Confucianism, Mohism, Yangism, Legalism, Taoism, and Chinese Buddhism. Particular emphasis will be placed upon the role of these schools in the development of Chinese religion, morality, and political organization. Identical with REL 355. Credit cannot be received for both PHL 355 and REL 355.
- PHL 361 Philosophy of Mind** 3 cr  
A study of the concept of consciousness and related concepts (e.g., mind, self, thinking) as applied to man, other animals, non-terrestrials, and machines.
- PHL 370 Philosophy of Art** 3 cr  
Acquaints students with main issues in aesthetics. Includes such issues as the nature and function of art and the criteria of aesthetic judgment. Identical with ARH 370. Credit cannot be received for both PHL 370 and ARH 370.
- PHL 390 Special Topics -** 1 TO 3 cr  
Different figures or topics of philosophical significance will be studied as announced. May be repeated for a maximum of 9 hours.
- PHL 421 Literary Criticism to 1900 - W** 3 cr  
Classical, Neoclassical, Romantic, and Victorian literary theory. Identical with EH 421. Credit cannot be received for both PHL 421 and EH 421.  
Pre-requisite: (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)
- PHL 422 Literary Criticism Sn 1900 - W** 3 cr  
Modern and Contemporary Literary Theory. Identical with EH 422.  
Pre-requisite: (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)
- PHL 431 Advanced Ethical Theory** 3 cr  
Problems in traditional and recent value theory and ethics.
- PHL 441 Theory of Knowledge** 3 cr  
Examines knowledge, its scope and limits. Topics may include the conditions, criteria, and grounds for knowledge, and theories of truth and meaning.  
Pre-requisite: PHL 110 Minimum Grade of C or PHL 121 Minimum Grade of C

**PHL 461 Metaphysics - W 3 cr**

Studies philosophical theories about the nature of reality, including such topics as what is real, change, the nature of things, universals, and such views as monism, materialism, realism, and idealism. Capstone course for all philosophy concentrations.

Pre-requisite: (PHL 240 Minimum Grade of C or CLA 240 Minimum Grade of C or PHL 241 Minimum Grade of C) and (PHL 243 Minimum Grade of C or PHL 245 Minimum Grade of C) and (PHL 321 Minimum Grade of C or PHL 324 Minimum Grade of C)

**PHL 467 Mathematical Logic 3 cr**

An introduction to formal first-order logic, first-order metatheory, and its extensions. Topics include axiom systems and their models, completeness, compactness, and recursive sets and functions. Identical with MA 467. Credit cannot be received for both PHL 467 and MA 467.

Pre-requisite: (PHL 321 Minimum Grade of C or PHL 324 Minimum Grade of C) or MA 311 Minimum Grade of C or MA 316 Minimum Grade of C or MA 318 Minimum Grade of C or MA 320 Minimum Grade of C or MA 321 Minimum Grade of C or MA 332 Minimum Grade of C or MA 334 Minimum Grade of C or MA 335 Minimum Grade of C or MA 354 Minimum Grade of C or MA 367 Minimum Grade of C or MA 410 Minimum Grade of C or MA 413 Minimum Grade of C or MA 414 Minimum Grade of C or MA 434 Minimum Grade of C or MA 436 Minimum Grade of C or MA 437 Minimum Grade of C or MA 451 Minimum Grade of C or MA 458 Minimum Grade of C or MA 490 Minimum Grade of C or MA 537 Minimum Grade of C or MA 542 Minimum Grade of C or MA 550 Minimum Grade of C

**PHL 490 Special Topics - 3 cr**

An investigation of issues and concepts in philosophy for advanced undergraduates and graduate students. May be repeated, when content varies, for a total of six hours. Prerequisites: junior, senior, or graduate standing.

**PHL 492 Seminar - 1 TO 3 cr**

An investigation of issues and concepts in philosophy for advanced undergraduates and graduate students. May be repeated, when content varies, for a total of 6 hours.

**PHL 494 Directed Studies - 1 TO 3 cr**

Directed research in philosophy under the guidance of a member of the department. Credit according to the magnitude of the individual project. May be repeated, if content varies, for a total of 6 hours. Prerequisites: Junior or senior standing and approval of directing professor and department chair. Prerequisites: Junior, senior, or graduate standing.

**PHL 499 Honors Thesis - H (W) 3 TO 6 cr**

Extended research paper prepared under direction of thesis advisor plus two-person committee selected by advisor in consultation with student. Prerequisites: The student must have developed a proposal for the thesis in consultation with the advisor, and received permission for the work from the committee. In addition, the student must be a senior major or minor, have completed the logic and history of philosophy requirements, have at least two courses at the 300-level or higher, and have at least a 3.3 GPA in the Philosophy Concentration of the Philosophy major. Credit for this course is only given as an addition to the hours required for the major.

**PHL 590 Special Topics - 1 TO 3 cr**

Study of individuals or topics of philosophical significance. May be repeated for credit when content varies. Enrollment is limited to students in disciplines other than philosophy. May be repeated, if content varies, for a total of 6 hours.

**PHL 594 Directed Studies 3 cr**

Directed research in philosophy under the guidance of a member of the department. May be repeated, if content varies, for a total of six hours. Prerequisite: Graduate Student in Department conferring a Graduate Degree (hence not open to Philosophy majors in any Concentration in Philosophy).

## Physical Therapy (PT)

**PT 101 Orientation to PT 1 cr**

An orientation to the physical therapy profession, college life and the physical therapy department.

**PT 490 PT Special Topics 1 TO 3 cr**

Directed study of topics of interest related to human movement and physical therapy.

**PT 499 Senior Honors Project-H-W 3 TO 6 cr**

Under the advice and guidance of a faculty mentor, honors students will identify and carry out a research project relevant to the field of Physical Therapy study that will lead to a formal presentation at the annual Honors Student Colloquium. The senior project will be judged and graded by three faculty members chaired by the honors mentor. This course is requires permission of the department chair and completion of an approved project prospectus.

**PT 600 Human Anatomy I 3 cr**

A comprehensive study of human anatomy concentrating on the nervous, skeletal, arthrodial, muscular and circulatory systems of the superficial back, upper extremities, head, neck, and face. Lab consists of prosected material and dissection of aforementioned body parts. Skeletal models and diagnostic imaging will be introduced of each area of dissection. Labs also include surface palpation on live human subjects. Special fee.

- PT 601 Human Anatomy II** 3 cr  
A comprehensive study of human anatomy concentrating on the nervous, skeletal, arthrodial, muscular and circulatory systems of the deep back, trunk, pelvis, and lower extremity. Lab consists of prosected material and dissection of the aforementioned body parts. Skeletal models and diagnostic imaging will be introduced for each area of dissection. Labs also include surface palpation on live human subjects. Special fee.  
Pre-requisite: PT 600 Minimum Grade of C
- PT 602 Life Span Human Development** 2 cr  
A study of the process of typical human development and aging across the life span, including neuromotor development in childhood and changes associated with aging.  
Pre-requisite: PT 682 Minimum Grade of S
- PT 603 Neuroscience in Phys Therapy** 3 cr  
A survey of the structure and function of the nervous system, with emphasis on principles related to physical therapy practice. Includes laboratory study of anatomic specimens. Special fee.  
Pre-requisite: PT 601 Minimum Grade of C and PT 682 Minimum Grade of S
- PT 604 Pathophysiology I** 2 cr  
A physiological approach to the study of pathological changes in the human body brought about by trauma or disease, including cell injury, inflammation, immunopathology, neoplasia, infections, and the musculoskeletal and endocrine systems.  
Pre-requisite: PT 601 Minimum Grade of C
- PT 605 Human Learning** 1 cr  
This course incorporates application of the principles of human learning to patient/client management including patient, family/caregivers, and community education. Roles of the physical therapist as a clinical educator and academician are discussed as well as opportunities/responsibilities for lifelong learning and professional development.  
Pre-requisite: PT 673 Minimum Grade of C
- PT 606 Pharmacology in Rehabilitation** 2 cr  
A study of pharmacological principles in relation to rehabilitation, with emphasis on the possible benefits and side-effects of chemotherapeutic agents on patients receiving physical therapy treatment.  
Pre-requisite: PT 607 Minimum Grade of C and PT 682 Minimum Grade of S
- PT 607 Pathophysiology II** 2 cr  
A physiological approach to the study of pathological changes in the human body brought about by trauma or disease, including vascular, hematopoietic, nutritional, neurologic, urogenital, GI and hepatobiliary systems.  
Pre-requisite: PT 604 Minimum Grade of C
- PT 610 Principles of Research & EBP** 2 cr  
An introduction to evidence-based practice as it relates to physical therapy, including basic understanding of research designs and research statistics, formulating appropriate clinical questions based on patient/client, accessing current evidence using databases and other resources to answer clinical/practice issues, and summarizing evidence for clinical case application.
- PT 611 Research Proposal Development** 2 cr  
This course prepares students to achieve professional competence in critical appraisal of professional literature and in the design of a clinically relevant research proposal as an entry-level Doctor of Physical Therapy student. The course focuses on the foundational aspects of research methodology including research design, data analysis, and critical evaluation of research evidence.
- PT 612 Research Project** 2 cr  
This course focuses on implementation of the research proposal developed in PT 611. In addition, this course is designed for the student to contribute to the evidence for practice through the dissemination of clinical research outcomes, including professional reporting of the results to peers in written and oral platform presentation formats.  
Pre-requisite: PT 611 Minimum Grade of C
- PT 613 Clinical Case Report** 2 cr  
This course allows the student to develop a clinical case report based on a patient the student has treated during a full-time internship, an administrative/education process or a clinical risk management situation. An in-depth analysis of research from recent publications related to the case is required. The student will prepare a written case report and a presentation in seminar format.  
Pre-requisite: PT 612 Minimum Grade of C and PT 674 Minimum Grade of C
- PT 620 Clinical Kinesiology** 3 cr  
A study of human movement as it relates to clinical physical therapy practice with an emphasis on biomechanical principles of movement and normal gait. Includes laboratory study.  
Pre-requisite: PT 601 Minimum Grade of C and PT 622 Minimum Grade of C
- PT 621 Introductory PT Skills** 4 cr  
An introduction to the principles and techniques of patient care utilized in physical therapy practice. These basic therapeutic skills include, but are not limited to, positioning, draping, patient transfers, assistive gait devices, wheelchair use, and basic examination. Techniques including assessment of joint range of motion, muscle strength and length testing, massage, and soft tissue mobilization are presented. Includes laboratory study.

- PT 622 Exercise Physiology** 4 cr  
A study of the effect of physical activity on human physiology with an emphasis on the musculoskeletal, cardiovascular/pulmonary, and endocrine systems. Modes of exercise, environmental considerations, and selected clinical populations are also covered in this course. Includes laboratory study.
- PT 625 Therapeutic Intervention** 4 cr  
A study of specific techniques of therapeutic intervention in physical therapy practice including electrophysical agents and manual therapy techniques. The electrophysical agents unit will include the physical principles, physiological effects, therapeutic uses and clinical application of thermal, mechanical, electrical and photic energy. The manual intervention unit will include manual therapy techniques including soft tissue massage. Includes laboratory study. Special fee.  
Pre-requisite: PT 621 Minimum Grade of C and PT 622 Minimum Grade of C
- PT 626 Health Prom & Prev in PT** 2 cr  
A course to identify disablement risk factors and provide educational intervention to prevent certain diseases and facilitate a positive change in the health behavior of patients.  
Pre-requisite: PT 622 Minimum Grade of C
- PT 627 Medical Screening** 2 cr  
A course focusing on the use of screening tests and clinical tools to enhance the therapist's role as an independent practitioner with the ability to identify medical conditions of concern that require referral to an appropriate health care provider.  
Pre-requisite: PT 607 Minimum Grade of C
- PT 628 Mobility Ortho & Prosthetics** 2 cr  
The study of human functional mobility, including pathological aspects of locomotion. The course will also address related topics including prosthetics and orthotics.  
Pre-requisite: PT 620 Minimum Grade of C
- PT 631 Musculoskeletal Disorders I** 4 cr  
Etiology, diagnostic procedures and radiography, medical management, physical therapy examination, evaluation, and intervention of selected musculoskeletal disorders with an emphasis on the upper extremities. Additionally includes the fundamentals, principles, and practice of therapeutic exercise. Includes laboratory study.  
Pre-requisite: PT 601 Minimum Grade of C
- PT 632 Musculoskeletal Disorders II** 3 cr  
Etiology, diagnostic procedures and radiography, medical management, physical therapy examination, evaluation, and intervention of selected musculoskeletal disorders with emphasis on the lower extremities. Includes laboratory study.  
Pre-requisite: PT 631 Minimum Grade of C
- PT 633 Musculoskeletal Disorders III** 4 cr  
A continuation of PT 632 that includes etiology, diagnostic procedures and radiography, medical management, physical therapy examination, evaluation, and intervention of selected musculoskeletal disorders with an emphasis on the lumbar spine and pelvis. Includes laboratory study.  
Pre-requisite: PT 632 Minimum Grade of C
- PT 634 Musculoskeletal Disorders IV** 3 cr  
A continuation of PT 633 that includes etiology, diagnostic procedures and radiography, medical management, physical therapy examination, evaluation, and intervention of selected musculoskeletal disorders with an emphasis on the cervical and thoracic spine. Includes laboratory study.  
Pre-requisite: PT 633 Minimum Grade of C
- PT 635 Musculoskeletal Disorders V** 2 cr  
Special topics in the management of musculoskeletal conditions including, but not limited to, ergonomics, sports physical therapy, and musculoskeletal issues in obstetrics and gynecology. Includes laboratory study.  
Pre-requisite: PT 634 Minimum Grade of C
- PT 640 Neuromusc PT Exam/Eval** 4 cr  
This course includes study of the principles and concepts of normal human movement and PT examination/evaluation in patients with disorders of the neuromuscular systems across the lifespan. The course will focus on examination (patient/client history, systems review, tests and measurements), evaluation of examination data (clinical decision-making), with formulation of problem list, functional goals and PT plan of care. Includes laboratory study.  
Pre-requisite: PT 602 Minimum Grade of C and PT 603 Minimum Grade of C
- PT 641 Ped Neuromusc PT Exam/Eval** 2 cr  
This course prepares the student to provide services to children with special health care needs/disabilities and their families in a manner consistent with family-centered care; includes patient/family history, systems review, and tests and measures and opportunities for clinical decision-making and establishing a plan of care based on examination data with emphasis on prognosis for a wide variety of pediatric diseases, conditions, and syndromes impacting typical development. Review of pediatric practice settings and legislation, medical management, pharmacologic treatment, radiographic imaging and other diagnostic testing related to neuromuscular disorders and developmental delay are included. Includes laboratory study.
- PT 642 Neuromuscular PT Intervention** 4 cr  
A course to follow PT 640 and 641 with added emphasis on principles and concepts of physical therapy intervention in patients with disorders of the neuromuscular systems. Includes laboratory study.  
Pre-requisite: PT 641 Minimum Grade of C

- PT 650 PT in Integumentary Disorders** 4 cr  
A study of the practice of physical therapy in management of skin disorders and underlying disease with an emphasis on the patient with open wounds, including burns. Includes laboratory study.  
Pre-requisite: PT 604 Minimum Grade of C
- PT 660 PT Cardio/Pulmonary Disorders** 4 cr  
A study of the principles and practice of physical therapy for patients with cardiovascular and pulmonary disease, including radiography, and medical and surgical management. Includes laboratory study.  
Pre-requisite: PT 607 Minimum Grade of C and PT 622 Minimum Grade of C and PT 682 Minimum Grade of S
- PT 671 Clinical Case Studies I** 1 cr  
A case-based course providing opportunities to develop clinical judgment as part of patient management including establishment of differential diagnosis, patient prognosis, and development of a plan of care for patients with musculoskeletal disorders of peripheral joints. Students will also analyze cases involving ethical, legal and psychosocial concerns for which professional decisions and interprofessional practice or referrals are necessary.
- PT 672 Clinical Case Studies II** 1 cr  
A case-based seminar designed to provide opportunities to develop clinical reasoning and communication skills as part of patient management. Students will develop skills in communicating with the healthcare team, recognizing and ameliorating barriers to patient outcomes, and developing plans of care for patients with complex health and psychosocial issues.  
Pre-requisite: PT 671 Minimum Grade of C and PT 682 Minimum Grade of S
- PT 673 Clinical Case Studies III** 1 cr  
A case-based course to provide opportunities to apply clinical reasoning to promote evidence-based physical therapy practice by integrating best available evidence for patient management and to challenge the status quo of practice to raise it to the most effective level of care.  
Pre-requisite: PT 672 Minimum Grade of C
- PT 674 Clinical Synthesis & Pat Mgmt** 1 cr  
A review and synthesis of physical therapy examination, evaluation, and development of a plan of care in patient management for specific clinical disorders, emphasizing clinical decision-making based on clinical experience and evidence.  
Pre-requisite: PT 627 Minimum Grade of C and PT 635 Minimum Grade of C and PT 642 Minimum Grade of C
- PT 675 Comprehensive Capstone** 1 cr  
This course is a continuation of PT 674 that emphasizes comprehensive review and preparation for taking the National Physical Therapy Examination. All students must pass the final capstone exam to be awarded the DPT degree.  
Pre-requisite: PT 674 Minimum Grade of C and PT 683 Minimum Grade of C
- PT 676 Advanced Topics in PT** 1 cr  
This elective course involves advanced study (beyond entry level) of selected topics within physical practice, research, education and leadership. Topics vary from year to year.  
Pre-requisite: PT 673 Minimum Grade of S and PT 635 Minimum Grade of C and PT 642 Minimum Grade of C and PT 650 Minimum Grade of C and PT 660 Minimum Grade of C
- PT 680 Professional PT Practice - W** 2 cr  
A study of physical therapy as a profession with emphasis on the history of physical therapy; role and scope of practice; professional, ethical, and legal responsibilities; licensure; physical therapy education; contemporary practice issues; and the patient management model. Introductory information on psychiatric disorders and communication skills is also included.
- PT 681 Clinical Practice Issues - W** 2 cr  
This course is designed to prepare the student for clinical practice by incorporating the patient management model, clinical decision-making models, health care systems, patient documentation including electronic health records, cultural competence, universal precautions, and risk management.  
Pre-requisite: PT 680 Minimum Grade of C
- PT 682 PT Internship I** 6 cr  
A planned learning experience of clinical education designed to integrate previous didactic knowledge in a full time, supervised clinical internship in Physical Therapy practice settings.  
Pre-requisite: PT 620 Minimum Grade of C and PT 625 Minimum Grade of C and PT 632 Minimum Grade of C
- PT 683 PT Internship II** 8 cr  
A continuation of PT 682, providing another planned learning experience, designed to integrate previous knowledge in a full time, supervised clinical internship in Physical Therapy practice settings. Good Academic Standing with no required course retakes pending.  
Pre-requisite: PT 635 Minimum Grade of C and PT 642 Minimum Grade of C and PT 650 Minimum Grade of C and PT 660 Minimum Grade of C and PT 682 Minimum Grade of S
- PT 684 PT Internship III** 6 cr  
A continuation of PT 682 and 683, providing another planned learning experience, designed to integrate previous knowledge in a full time, supervised clinical internship in Physical Therapy practice settings. Good Academic Standing with no required course retakes pending.  
Pre-requisite: PT 683 Minimum Grade of C
- PT 685 Management of PT Practice** 3 cr  
A study of current organizational and management principles and issues related to health care delivery systems with special emphasis on the current and future roles of Physical Therapy.  
Pre-requisite: PT 687 Minimum Grade of C

**PT 686 PT Internship IV 6 cr**

A continuation of PT 682, 683 and 684, providing another planned learning experience, designed to integrate previous knowledge in a full time, supervised clinical internship in physical therapy practice settings. Good academic standing with no required retakes pending.

Pre-requisite: PT 684 Minimum Grade of P

**PT 687 Profess Topics in PT Practice 1 cr**

This course entails a continuation of professional practice issues including interprofessional education and practice, communication between patient/client and healthcare provider, patient-centered care, and cultural aspects of patient care which all relate to professional development as a competent healthcare provider.

Pre-requisite: PT 681 Minimum Grade of C

**PT 689 Evidence Library Skills 1 cr**

Discussion of evidence-based practice (EBP) and the importance of literature searching and information management skills.

**PT 690 Update in Exercise Physiology 1 cr**

This course reviews the effects of exercise intervention upon human physiology and the acute and chronic adaptations associated with physical activity.

**PT 691 Clinical Reasoning 2 cr**

This course should be one of the first courses taken and will include principles of evidence-based practice, access and evaluation of scientific literature, and application to clinical decision making in specific patient populations.

**PT 692 Applied Human Movement 2 cr**

This course will focus on recent advances in the understanding of human movement with particular emphasis on biomechanics, kinesiology and motor control.

**PT 693 Adv in Musculoskeletal PT 2 cr**

An interactive discussion and exploration of physical therapy practice for populations with orthopedic disorders, including examination, intervention and outcome. The focus will be on evidence-based clinical practice. Course topics will include updated research on operative and non-operative procedures for the peripheral joints and spine, spinal and peripheral joint diagnostic imaging (radiography), pharmacology, therapeutic exercise, clinical reasoning, and lifespan issues with a focus on geriatrics.

**PT 694 Adv in Neuromuscular PT 2 cr**

An interactive discussion and exploration of physical therapy practice for populations with neuromuscular disorders, including examination through intervention and outcomes. The focus will be on clinical practice in this population based on evidence. The course will include diagnostic imaging (radiography), pharmacology, therapeutic exercise, clinical reasoning, and lifespan issues with a focus on geriatrics.

**PT 695 Adv in Integumentary PT 2 cr**

An interactive discussion of new developments in skin and wound care with an emphasis on development of a plan of care that evolves over the episode of care, prevention of recurrence, and the interaction with the patient and other health care providers.

**PT 696 Adv in Cardiovasc/Pulmonary PT 2 cr**

An in-depth, interactive discussion of issues related to the examination, evaluation, and plan of care for patients/clients with primary and secondary cardiovascular and pulmonary disorders across the lifespan. Clinical reasoning, pharmacology and imaging techniques will be emphasized.

**PT 697 DPT Directed Study 1 TO 3 cr**

Directed research or comprehensive review of evidence-based literature completed in a clinical area of interest under the supervision of a faculty mentor. The student will document incorporation of course content into their current clinical practice. This course may be repeated up to two times with a different focus-topic each time.

**PT 698 Professional Issues/Ethics 2 cr**

Discussion of current professional issues including clinical practice, management, legal, ethical/moral and psychosocial topics embedded within the current health care market faced by health care providers. This course will include interactive discussions among students and instructor and will include literature to support discussion topics.

**PT 699 DPT Seminar - 1 TO 8 cr**

An elective seminar to update information in specific areas of study. Course number may be repeated three times.

## Physician Assistant Studies (PA)

**PA 510L CM I Lab 1 cr**

**PA 520L CM II Lab 1 cr**

**PA 530L CM II Lab 1 cr**

**PA 540L CM IV Lab 1 cr**

**PA 510 Clinical Medicine I****3 cr**

Clinical Medicine I (PA 510) is the introductory course in a four part series covering primary care clinical medicine. It is designed to incorporate and integrate topics and content both horizontally and vertically throughout the didactic and clinical curricula. The course is divided into lecture and lab sections that will be graded separately and will provide opportunities for the student to develop critical thinking skills essential to patient evaluation and management. The use of patient simulations is included. Introductory subject matter covered during this first course will include physical examination skills and use of medical instruments, patient history taking, patient counseling, patient education, interpersonal and communication skills, and epidemiology. Additional topics will include an introduction to behavioral medicine, professionalism, interprofessional education, medical research methods, introduction to medical literature, introduction to laboratory diagnosis and introduction to nutrition. Finally, medical and social topics addressed will include the primary care medical home, rural and medically underserved populations, social determinants of health, healthy people 2020, public health issues and community health.

**PA 511 Human Gross Anatomy****4 cr**

This is a course in gross anatomy of the human body systems utilizing human cadavers and prosections. Emphasis is placed on the relationships between structure and function.

**PA 512 Physiology****6 cr**

Physiology (PA 512) is the scientific basis of medicine. This course will provide the PA student with sufficient in-depth knowledge of cellular and organ physiology necessary for understanding of normal and abnormal human body function and for advancement to courses in pathophysiology, pharmacology, and clinical medicine. This course is divided into six sections which present the basic scientific concepts of human physiology with clinical applications and relevance to disease states: 1) cellular, neuromuscular, autonomic, and cardiac physiology; 2) circulatory physiology; 3) respiratory physiology; 4) renal, electrolyte, and acid-base physiology; 5) gastrointestinal and metabolic physiology; 6) endocrinology.

**PA 513 Iss Hlthcare & Pop Hlth I****2 cr**

Physician Assistant (PA) Issues I (PA 513) is the introductory course in a four part series covering commonly encountered issues and their impact on physician assistant practice. This series is designed to incorporate and integrate topics and content both horizontally and vertically throughout the didactic and clinical curricula. The course will utilize a variety of teaching strategies. Introductory subject matter covered during this first course will include factors affecting the development of the profession and the role of the PA in today's health care system, physician-PA team relationship, credentialing, political issues, policies and regulations governing the scope of PA practice; PA and other pertinent professional organizations; introduction to evidence-based medicine (EBM), introduction to the health insurance portability and accountability act (HIPPA); introduction to primary care medicine with a focus on rural and medically underserved areas (MUAs); introduction to interprofessional education and collaboration; introduction to principles and practice of medical ethics; introduction to blood borne pathogens and tuberculosis; and policies and procedures governing sexual harassment and harassment in the workplace.

**PA 514 Intro to Infectious Disease****1 cr**

This course is designed to provide PA students a solid foundation in basic immunology, microbial genetics, structure, nutrition and basic host-parasite relationships. The course will place particular emphasis on the role and application of these subject matters in disease manifestations as well as use/development of diagnostic and treatment modalities. Vulnerability of special populations and interactions between various environmental, social and behavioral factors with the human host in relationship to infection control and treatment will also be emphasized.

**PA 520 Clinical Medicine II****6 cr**

Clinical Medicine II (PA 520) is the second course in a four part series covering primary care clinical medicine and surgery topics. It is designed to incorporate and integrate topics and content both horizontally and vertically throughout the didactic and clinical curricula. The course is divided into lecture and lab sections that will be graded separately and will provide opportunities for the student to develop critical thinking skills essential to patient evaluation and management. The use of standardized patients, patient simulations and clinical experiences are included. Topics will include a continuation of physical examination skills, patient history taking, patient counseling, patient education, epidemiology, history of the PA Profession, professionalism, interpersonal and communication skills, interprofessional education, medical research methods, and researching medical literature, the primary care medical home, rural and medically underserved populations, social determinants of health, healthy people 2020, public health issues, and community health care. Specific topics covered in PA 520 include dermatology, ophthalmology, ENT, cardiovascular medicine, EKG, pulmonary medicine, nephrology, and GU medicine. Imbedded in this course will be topics in infectious disease and diagnostic data that will align with the subject matter covered during this semester.

**PA 521 Pathophysiology I****4 cr**

Pathophysiology I (PA 521) is the first course in a three-part series that covers the alterations in normal physiology that occur in human disease states. This course will provide the PA student with sufficient in-depth knowledge of pathophysiology necessary for understanding of abnormal human body function and for advancement to subsequent courses in pathophysiology, pharmacology, and clinical medicine. Topics will include an overview of cellular pathophysiology, followed by specific topics that align with the organization of the clinical medicine series: cardiovascular pathophysiology, EKG, pulmonary pathophysiology, and renal/GU pathophysiology.

**PA 522 Pharmacology I****4 cr**

Pharmacology I (PA 522) is the first course in a three-part series that covers the basic scientific concepts of drug classification, mechanism of action, toxicity, and clinical use of drugs. Introductory topics will include the laws and regulations governing the use of pharmaceuticals, prescriptive practices, basic science and properties of drug molecules, drug interactions, and clinical pharmacology of the autonomic nervous system. Specific topics will align with the organization of the clinical medicine series: cardiovascular drugs, pulmonary drugs, drug therapy of renal and genitourinary disease.

**PA 523 Diag Data and Interp I****2 cr**

(Previously PA 524) Interpretation of Diagnostic Data and Studies I, will introduce students to basic concepts of laboratory medicine including different methods of sample gathering and transport, basic phlebotomy, interpretation of blood counts and analysis of the differential blood counts, coagulation studies and anticoagulant monitoring, interpretation of metabolic panels, evaluating electrolyte abnormalities, and ordering and interpreting bacterial culture and susceptibilities. The course will focus on and correlate with laboratory assays and procedures taught during Clinical Medicine II. Syllabi and tentative schedules of lectures for the course are attached.

**PA 525 Iss in Hlthcare & Pop Hlth II****2 cr**

Physician Assistant (PA) Issues II (PA 525) is the second in a four part series covering commonly encountered issues and their impact on physician assistant practice. This series is designed to incorporate and integrate topics and content both horizontally and vertically throughout the didactic and clinical curricula. The course will utilize a variety of teaching strategies. Subject matter covered during this second course will include factors affecting diversity and inclusion; cultural competence; health care delivery systems; workforce shortage; health disparities; health literacy; public health, primary care medicine with a focus on veterans, rural and medically underserved medicine, evidence-based medicine, professionalism, social determinants of health, health promotion, disease prevention, health beliefs and patient expectations.

**PA 530 Clinical Medicine III****6 cr**

Clinical Medicine III (PA 530) is the third course in a four part series covering primary care clinical medicine and surgery topics. It is designed to incorporate and integrate topics and content both horizontally and vertically throughout the didactic and clinical curricula. The course is divided into lecture and lab sections that will be graded separately and will provide opportunities for the student to develop critical thinking skills essential to patient evaluation and management. The use of standardized patients, patient simulations and clinical experiences are included. Topics will include a continuation of complete and focused physical examination skills, patient history taking, patient counseling, patient education, epidemiology, normal and abnormal development, history of the PA Profession, professionalism, interpersonal and communication skills, interprofessional education, medical research methods, and researching medical literature, the primary care medical home, rural and medically underserved populations, social determinants of health, healthy people 2020, public health issues, and community health care. Specific topics covered in PA 530 include neurology, rheumatology, hematology/oncology, orthopedic medicine, gastrointestinal medicine, and psychiatric/behavioral medicine. Included in this course will be topics in infectious disease and diagnostic data that will align with the subject matter covered during this semester.

**PA 531 Pathophysiology II 4 cr**

Pathophysiology II (PA 531) is the second course in a three-part series that covers the alterations in normal physiology that occur in human disease states. This course will provide the PA student with sufficient in-depth knowledge of pathophysiology necessary for the understanding of abnormal human body function and for advancement to subsequent courses in pathophysiology, pharmacology, and clinical medicine. Topics will align with the subject matter in Clinical Medicine II (PA 530): neurology, rheumatology, endocrinology, hematology, oncology, gastrointestinal, and psychiatric disorders.

**PA 532 Pharmacology II 4 cr**

This course is the second of a proposed three part pharmacology series that used to be taught in two sections during the spring and summer semesters as PA 532 and PA 542. The course will continue to cover the basic scientific concepts of drug classification, mechanism of action, toxicity, and clinical use of drugs. Other topics will include drug interaction and the properties of drug molecules. Specific topics will align with the organization of the clinical medicine series.

**PA 533 Diag Data & Interp II 2 cr**

Interpretation of Diagnostic Data and Studies II, will focus on ordering and interpretation of laboratory tests and imaging studies associated with diseases of the urinary tract system including basic and advanced urinalysis and their interpretation, laboratory tests and imaging studies associated with diseases of the gastrointestinal tract to include liver, pancreas, small intestine and colorectal regions, basic and advanced immunohematology and imaging to investigate autoimmune disorders, and advanced genetic testing and procedures. This course will advance the students knowledge of laboratory medicine and will focus on those laboratory assays relevant to the topic covered in Clinical Medicine III.

**PA 534 Iss Hlthcare & Pop Hlth III 2 cr**

Physician Assistant (PA) Issues III (PA 534) is the third in a four part series covering commonly encountered issues and their impact on physician assistant practice. This series is designed to incorporate and integrate topics and content both horizontally and vertically throughout the didactic and clinical curricula. The course will utilize a variety of teaching strategies. Introductory subject matter covered during this third course will include topics on coding and billing, medical documentation, spirituality and health, epidemiology, transition from didactic to clinical year, health care cost, Advanced Directives End of Life Issues, interprofessional team-based patient-centered care, healthcare in various clinical settings (homelessness, migrant, correctional, inner city), and primary care medicine with a focus on veterans, rural and medically underserved medicine, evidence-based medicine, medical documentation and professionalism.

**PA 540 Clinical Medicine IV 6 cr**

Clinical Medicine IV (PA 540) is the final course in a four part series covering primary care clinical medicine and surgery topics. It is designed to incorporate and integrate topics and content both horizontally and vertically throughout the didactic and clinical curricula. The course is divided into lecture and lab sections that will be graded separately and will provide opportunities for the student to develop critical thinking skills essential to patient evaluation and management. The use of standardized patients, patient simulations and clinical experiences are included. Topics will include a continuation of complete and focused physical examination skills, patient history taking, patient counseling, patient education, interpersonal and communication skills, epidemiology, normal and abnormal development, history of the PA Profession, professionalism, interprofessional education, medical research methods, and researching medical literature, the primary care medical home, rural and medically underserved populations, social determinants of health, healthy people 2020, public health issues, and community health care. Specific topics covered in PA 540 include geriatric medicine, pediatric medicine, surgery, OB/GYN medicine, emergency medicine, ACLS, and clinical year transition. Included in this course will be topics in infectious disease and diagnostic data that will align with the subject matter covered during this semester.

**PA 541 Pathophysiology III 2 cr**

This course is the third of three sections of pathophysiology that used to be taught during the fall semester as a single course PA 523. The course will provide students with an understanding of abnormal body functions including an overview of cellular pathophysiology followed by specific topics that align with the organization of the clinical medicine series.

**PA 542 Pharmacology III 2 cr**

This course is the third of a proposed three part pharmacology series that used to be taught in two sections during the spring and summer semesters as PA 532 and PA 542. The course will continue to cover the basic scientific concepts of drug classification, mechanism of action, toxicity, clinical use of drugs, drug interaction and the properties of drug molecules. Specific topics will align with the organization of the clinical medicine series.

**PA 543 Iss Hlthcare & Pop Hlth IV 2 cr**

Physician Assistant (PA) Issues IV (PA 543) is the final course in a four part series covering commonly encountered issues and their impact on physician assistant practice. This series is designed to incorporate and integrate topics and content both horizontally and vertically throughout the didactic and clinical curricula. The course will utilize a variety of teaching strategies. Introductory subject matter covered during this final course series will introduce new topics and re-visit prior topics of discussion in other PA Issues courses. Topics will include interpersonal and communication skills, personal bias and stereotyping, patient compliance and health outcomes, violence identification and prevention, response to illness, injury and stress, patient safety, prevention of medical errors, palliative and rehabilitative care/death/dying and loss, patient education and counseling, and primary care medicine with a focus on veterans, rural and medically underserved medicine, evidence-based medicine, medical documentation and professionalism.

**PA 544 Diagn Data and Interp III 2 cr**

(Previously PA 541) Interpretation of Diagnostic Data and Studies III, will introduce students to basic radiology concepts by teaching fundamentals of radiology, basic imaging techniques (ultrasound, vascular imaging, advanced imaging techniques (CT Scan and MRI with and without contrast), and PET scan. The course will hone student knowledge of all diagnostic modalities through intensive case-based approach to the interpretation of laboratory assays.

**PA 550 Internal Medicine Preceptorshp 4 cr**

The student is assigned to a clinical setting, often in the inpatient setting, to obtain knowledge, skills and attitudinal/behavioral professional components pertaining to general internal medicine. These competencies are to be obtained while engaging in all aspects of patient care through: the medical interview, history and physical exam, critical thinking, knowledge base, diagnosis and treatment plan, patient education, as well as appropriate health maintenance and disease prevention measures.

**PA 555 Psychiatry Preceptorship 4 cr**

The student is assigned to a clinical setting, often in the inpatient setting, to obtain knowledge, skills and attitudinal/behavioral professional components pertaining to general internal medicine. These competencies are to be obtained while engaging in all aspects of patient care through: the medical interview, history and physical exam, critical thinking, knowledge base, diagnosis and treatment plan, and patient education. Students will also be expected to interact on an interdisciplinary team to provide care to patients with Psychiatric needs, including awareness of social and community services.

**PA 560 Pediatrics Preceptorship 8 cr**

The student is assigned to a pediatric setting in order to obtain knowledge, skills and attitudinal/behavioral professional components pertaining to general pediatric medicine. These competencies are to be obtained while engaging in all aspects of patient care through: the medical interview, history and physical exam, critical thinking, knowledge base, diagnosis and treatment plan, patient and family education, anticipatory-guidance, as well as appropriate health maintenance and disease prevention measures.

**PA 570 Primary Care-Family Pract Prcp 8 cr**

The student is assigned to a primary care setting in order to obtain knowledge, skills and attitudinal/behavioral professional components pertaining to general family practice medicine across the life span. These competencies are to be obtained while engaging in all aspects of patient care through: the medical interview, history and physical exam, critical thinking, knowledge base, diagnosis and treatment plan, patient education, appropriate health maintenance and disease prevention measures.

**PA 580 General Surgery Preceptorship 4 cr**

The student is assigned to a hospital-surgical setting in order to gain exposure to all realms of the general surgery experience. These experiences are to include: pre-operative, intra-operative, and post-operative care. Furthermore, students are expected to further develop patient care skills through: the medical interview, history and physical examination, critical thinking, enhancement of medical knowledge, patient and family counseling, and understanding the role of a PA within the hospital team.

**PA 590 OB-GYN Preceptorship 4 cr**

The student is assigned to hospital in-patient and out-patient ambulatory care settings in order to gain exposure to all realms of the women's health across the life span. These experiences are to include: pre-natal, post-natal, pre-operative, intra-operative, post-operative care, annual wellness exam, and emergent care exams. Furthermore, students are expected to further develop patient care skills through: the medical interview, history and physical examination, critical thinking, enhancement of medical knowledge, patient and family counseling, and understanding the role of a PA within the hospital team.

**PA 591 Emergency Medicine Preceptor 4 cr**

The student is assigned to an emergency department setting in order to gain exposure to patients requiring critical, emergent and non-emergent care. Furthermore, students are expected to further develop patient care skills through: the medical interview, history and physical examination, critical thinking, enhancement of medical knowledge, patient and family counseling, and understanding the role of a PA within the emergency department team.

**PA 592 Elective Clinical Precept I 4 cr**

The student will choose from a variety of available elective rotations in order to engage in all aspects of patient care including: the medical interview, history and physical exam, critical thinking, knowledge base, diagnosis and treatment plan, patient education, appropriate health maintenance and disease prevention measures. The goal of elective rotations is to provide the student the opportunity to explore areas of interest for further employment or increase knowledge in areas of weakness.

**PA 593 Elective Preceptorship II 8 cr**

The student will choose from a variety of available elective rotations in order to engage in all aspects of patient care including: the medical interview, history and physical exam, critical thinking, knowledge base, diagnosis and treatment plan, patient education, appropriate health maintenance and disease prevention measures. The goal of elective rotations is to provide the student the opportunity to explore areas of interest for further employment or increase knowledge in areas of weakness.

**PA 595 Summative Evaluation 3 cr**

PA 595 is designed to evaluate student learning at the end of the 27 month PA training program. The assessments used in this course will help determine the level at which students achieved the expectations for their learning as prescribed and to identify instructional areas that may need additional attention. The summative assessments include: 1) comprehensive examination, 2) OSCE with standardized patient, 3) on-line board review and 4) Capstone Project. A comprehensive written examination will be administered as a final evaluation of the student's progress. This test is also designed to prepare the graduate for the NCCPA exam.

## Physics (PH)

**PH 101L Introduction to Astronomy Lab 0 cr**

Laboratory course for the Introduction to Astronomy course. Student must pass this laboratory course to receive a passing grade in the PH 101 course. Students must take PH 101L concurrently with PH 101 and pass the lab. The PH 101L grade is a component of the PH 101 course grade. Co-requisite: PH 101

**PH 104L Concepts of Physics Laboratory 0 cr**

Laboratory course for the Concepts of Physics course. Student must pass this laboratory course to receive a passing grade in the PH 104 course. Students must take PH 104L concurrently with PH 104 and pass the lab. The PH 104L grade is a component of the PH 104 course grade. Co-requisite: PH 104

**PH 114L Alg-Trig Based Physics I Lab 0 cr**

Laboratory course for the first semester of a two-semester introductory sequence in algebra/trigonometry-based physics. Student must pass this laboratory course to receive a passing grade in the PH 114 course. Students must take PH 114L concurrently with PH 114 and pass the lab. The PH 114L grade is a component of the PH 114 course grade. Co-requisite: PH 114

**PH 115L Alg-Trig Based Physics II Lab 0 cr**

Laboratory course for the second semester of a two-semester introductory sequence in algebra/trigonometry-based physics. Student must pass this laboratory course to receive a passing grade in the PH 115 course. Students must take PH 115L concurrently with PH 115 and pass the lab. The PH 115L grade is a component of the PH 115 course grade. Co-requisite: PH 115

**PH 201L Calculus-Based Physics I Lab 0 cr**

Laboratory course for the first semester of a two-semester introductory sequence in calculus-based physics. Student must pass this laboratory course to receive a passing grade in the PH 201 course. Students must take PH 201L concurrently with PH 201 and pass the lab. The PH 201L grade is a component of the PH 201 course grade. Co-requisite: PH 201

**PH 202L Calculus-Based Physics II Lab 0 cr**

Laboratory course for the second semester of a two-semester introductory sequence in calculus-based physics. Student must pass this laboratory course to receive a passing grade in the PH 202 course. Students must take PH 202L concurrently with PH 202 and pass the lab. The PH 202L grade is a component of the PH 202 course grade. Co-requisite: PH 202

**PH 303L Modern Physics Lab 0 cr**

Laboratory course for the Modern Physics Course. Students must take PH 303L concurrently with PH 303 and pass the lab. The PH 303L grade is a component of the PH 303 course grade. Co-requisite: PH 303

**PH 385L Experimental Physics Lab 0 cr**

Laboratory course for the Experimental Physics course. Students must take PH 385L concurrently with PH 385 and pass the lab. The PH 385L grade is a component of the PH 385 course grade. Co-requisite: PH 385

**PH 101 Introduction to Astronomy 4 cr**

This is a descriptive survey course of elementary astronomy with laboratory intended for both non-science and science majors. Topics covered include a description of the celestial sphere, a tour of the Solar System, techniques for measuring and classifying stars, stellar evolution, white dwarfs, black holes, neutron stars, galaxies, and Big Bang cosmology. Students must take PH 101L concurrently and pass the lab. The PH 101L grade is a component of the PH 101 course grade. Fee. Core course.  
Co-requisite: PH 101L

**PH 104 Concepts of Physics 4 cr**

A descriptive overview of the entire field of physics with laboratory, including the concepts of scalars and vectors. Newton's law, momentum and energy conservation, rotational motion, fluids, heat and thermodynamics, sound, electricity and magnetism, optics, atomic and nuclear physics, relativity, and elementary particle physics. This course is intended to provide the non-scientist with substantial insight into the physical behavior of matter and energy. Extensive demonstrations accompany the presentation of material to illustrate key concepts. Fee. Students must take PH 104L concurrently and pass the lab. The PH 104L grade is a component of the PH 104 course grade. Core course.  
Co-requisite: PH 104L

**PH 107 Contemporary Topics in Physics 1 cr**

Intended for physics majors in their first year or others interested in physics as a possible major. This course will survey current "hot topics" in physics, basic useful techniques in physics problem-solving, physics as a career, and research in physics at USA. This course is not intended to satisfy the science requirements within the College of Arts & Sciences.

**PH 114 Physics with Algebra-Trig I 5 cr**

First semester of a two-semester introductory course in algebra/trigonometry-based physics with laboratory and recitation. This course covers mechanics and thermodynamics: one- and two-dimensional motion, vectors, Newton's laws of motion, work and energy, momentum and collisions, circular motion, rotational motion, properties of solids and fluids, the laws of thermodynamics, kinetic theory of matter, simple harmonic motion, and wave motion. The laboratory uses computerized data acquisition and analysis for most of the experiments. Students must take PH 114L concurrently and pass the lab. The PH 114L grade is a component of the PH 114 course grade. Fee. Core course.  
Co-requisite: PH 114L  
Pre-requisite: ACT Math 25 or MA 113 Minimum Grade of D or MA 115 Minimum Grade of D or MA 125 Minimum Grade of D or MA 120 Minimum Grade of D

**PH 115 Physics with Algebra -Trig II 5 cr**

Second semester of a two-semester introductory course in algebra/trigonometry-based physics with laboratory and recitation. This course covers electrostatics, DC circuits, RC circuits, magnetic fields and forces, Faraday's Law, AC circuits, geometrical optics, interference and diffraction of light, the special theory of relativity, quantum physics, and atomic and nuclear physics. The laboratory uses computerized data acquisition and analysis for most of the experiments. Students must take PH 115L concurrently and pass the lab. The PH 115L grade is a component of the PH 115 course grade. Fee. Core course.  
Co-requisite: PH 115L  
Pre-requisite: PH 114 Minimum Grade of D and PH 114L Minimum Grade of D

**PH 194 Dir St - Variable Content Lab 1 cr**

A directed studies course to substitute for a laboratory credit for students who have successfully completed an introduction to astronomy or concepts of physics course at another university without the laboratory. Students taking this course must get the approval of the Physics Department Chair. This course may be taken up to two times (once for each course). Fee.

**PH 201 Calculus-Based Physics I 4 cr**

First semester of a two-semester introductory course in calculus-based physics with recitation and laboratory. This course covers: one and two-dimensional motion, vectors, Newton's laws of motion and their applications, work and energy, momentum and collisions, circular motion, rotational motion, properties of materials, simple harmonic motion, wave motion and topics in thermodynamics. The laboratory uses computerized data and analysis for most of the experiments. Core course.  
Co-requisite: PH 201L  
Pre-requisite: MA 125 Minimum Grade of D and (EH 101 Minimum Grade of C or ACT English 27 or SAT Critical Reading 610 or ELPT 33 )

**PH 202 Calculus-Based Physics II 4 cr**

Second semester of a two-semester introductory course in calculus-based physics with laboratory. This course covers electrostatic fields and Gauss' law, electric potential, electric circuits, magnetic fields, Ampere's law, Faraday's law, inductance, Maxwell's equations, electromagnetic waves and optics. The laboratory uses computerized data acquisition and analysis for most of the experiments. Students must take PH 202L concurrently and pass the lab. The PH 202L grade is a component of the PH 202 course grade. Fee. Core course.  
Co-requisite: PH 202L  
Pre-requisite: PH 201 Minimum Grade of D and MA 126 Minimum Grade of D and (EH 101 Minimum Grade of C or ACT English 27 or SAT Critical Reading 610 or ELPT 33 )

**PH 290 Special Topics- 1 TO 4 cr**

Topics of current interest but not available in regularly scheduled sophomore level courses. This course may be repeated once for credit when the content varies and may be taken twice for up to eight hours.

**PH 294 Dir St - Variable Content Lab 1 cr**

A directed studies course to substitute for a laboratory credit for students who have successfully completed a calculus or algebra-based physics lecture course at another university without the laboratory. Students taking this course must get the approval of the Physics Department Chair. This course may be taken up to two times (once for each of the missing laboratories). Prerequisite: Permission of the Department Chair

Pre-requisite: EH 101 Minimum Grade of C

**PH 301 Introductory Astrophysics 3 cr**

Application of the principles of physics to the study of astronomical phenomena. Topics include celestial mechanics, stars and stellar evolution, the Milky Way and other galaxies, and cosmological models. Prior knowledge of astronomy is not required.

Pre-requisite: PH 115 Minimum Grade of D or PH 202 Minimum Grade of D and MA 125 Minimum Grade of D

**PH 303 Modern Physics 4 cr**

This course, with laboratory, surveys physics of the twentieth century. Topics covered include special relativity, wave-particle concepts, the Schrodinger equation and quantum theory of the hydrogen atom, atomic spectra and structure, molecular spectra, the solid state, nuclear structure, radioactivity, and elementary particles. The accompanying laboratory includes experimental investigations of important topics in the subject of Modern Physics. Computerized numerical and graphical analysis of data is extensively used in the laboratory. Laboratory reports are written with word processors and submitted in a format consistent with articles submitted to student research journals. Students must take PH 303L concurrently and pass the lab. The PH 303L grade is a component of the PH 303 course grade.

Co-requisite: PH 303L

Pre-requisite: PH 303L and MA 125 Minimum Grade of D and PH 202 Minimum Grade of D or PH 115 Minimum Grade of D

**PH 311 Condensed Matter Physics 3 cr**

This is an introductory course which covers modern condensed matter physics. Topics include crystal structure and properties; electronic structure of insulators, semiconductors and metals; and phenomena of current research interest and technological relevance. Methods used to measure and analyze these phenomena will also be discussed.

Pre-requisite: PH 303 Minimum Grade of D

**PH 346 Classical and Modern Optics 3 cr**

Wave motion, reflection, refraction, dispersion, diffraction, interference phenomena, Fourier spectroscopy, lasers and other modern applications of optics.

Pre-requisite: PH 202 Minimum Grade of D and MA 125 Minimum Grade of D

**PH 348 Electricity and Magnetism I 3 cr**

First of two-semester sequence in electromagnetism. Topics include a review of vector analysis, Coulomb's law, Gauss' law, calculation of the scalar potential, electric fields in matter, the Biot-Savart law, Ampere's law, the vector potential, magnetostatics in matter, electrodynamics, Faraday's law, inductance, Maxwell's correction to Ampere's law and Maxwell's equations.

Pre-requisite: MA 227 Minimum Grade of D and PH 202 Minimum Grade of D or PH 115 Minimum Grade of D

**PH 349 Electricity and Magnetism II 3 cr**

Second of two-semester sequence in electromagnetism. Topics include electromagnetic wave propagation in free space, electromagnetic wave propagation in materials, reflection and transmission at interfaces, wave guides, electromagnetic radiation, optical dispersion, and electrodynamics extended to the special theory of relativity

Pre-requisite: PH 348 Minimum Grade of D

**PH 354 Electronics 3 cr**

This course is intended to provide a theoretical and practical background in electronics. Topics include AC circuits, diode circuits, single-stage amplifiers, op-amps and feedback, and digital electronics. This course is not intended to satisfy the technical elective requirements for Electrical Engineering. The course will include periodic laboratory work.

Pre-requisite: MA 126 Minimum Grade of D and PH 202 Minimum Grade of D or PH 115 Minimum Grade of D

**PH 366 Physical Mechanics I 3 cr**

First course in a two-semester sequence in classical mechanics. Topics include motion of particles in one-dimension, one-dimensional motion theorems, harmonic oscillations, damped oscillations, forced oscillations, kinematics in multiple dimensions, momentum and energy theorems, the central force problem, motion under inverse square law forces, planetary orbital motion, Rutherford scattering, conservation theorems for multi-particle systems and their applications, collisions, coupled-harmonic oscillators, and rigid body rotation about a fixed axis.

Pre-requisite: MA 227 Minimum Grade of D and PH 202 Minimum Grade of D

**PH 367 Physical Mechanics II 3 cr**

Second course in a two-semester sequence in classical mechanics. Topics include: moving and rotating coordinate systems. Lagrange's equation and applications, Hamiltonian formulation, inertia and stress tensors, rotations of rigid bodies and the theory of small oscillations.

Pre-requisite: PH 366 Minimum Grade of D

**PH 385 Experimental Physics - W 3 cr**

A course in the methods and techniques of experimental physics. A number of experiments in the area of classical mechanics, atomic physics, molecular physics, and nuclear physics will be performed and analysis is required. Computerized numerical and graphical analysis of data is extensively used in the laboratory. Laboratory reports are written with word processors and submitted in a format consistent with articles submitted to a student research journal. Students must take PH 385L concurrently and pass the lab. The PH 385L grade is a component of the PH 385 course grade.

Co-requisite: PH 385L

Pre-requisite: PH 385L and PH 303 Minimum Grade of D

**PH 390 Special Topics - 1 TO 3 cr**

Topics of current interest not available in a regularly scheduled course. This course may be repeated once for credit and may be taken for up to six hours credit.

**PH 411 Computational Methods in Phys 3 cr**

Use of computers in physics research (industrial, applied, or basic) is now common. This course will introduce advanced undergraduate physics students to computer solutions of physics problems. Particular attention will be paid to problems that have no analytic solutions and may only be solved numerically. This course will introduce several numeric methods and apply them to specific problems from quantum mechanics, electrodynamics, and mechanics. Students will write a series of programs in the Fortran or the C programming language and use them to solve undergraduate level physics problems.

Pre-requisite: PH 303 Minimum Grade of D and MA 238 Minimum Grade of D and CIS 210 Minimum Grade of D or CIS 227 Minimum Grade of D

**PH 448 Elementary Quantum Mechanics I 3 cr**

The first course of a two-semester sequence in Quantum Mechanics. Topics include an introduction to Hilbert space and operators, the quantum state and observables, the Heisenberg uncertainty principle, time evolution of the quantum state, application of the Schrodinger equation to one-dimensional systems, and the solution of the hydrogen atom.

Pre-requisite: MA 238 Minimum Grade of D and PH 303 Minimum Grade of D or CH 302 Minimum Grade of D

**PH 449 Elementary Quantum Mechanic II 3 cr**

The second course of two-semester sequence in Quantum Mechanics. Topics include a continuation in the mathematical formulation of quantum mechanics, angular momentum, perturbation theory, identical particles and spin, collision theory, and the semi-classical treatment of radiation. This course is recommended for students anticipating graduate study in physics.

Pre-requisite: PH 448 Minimum Grade of D

**PH 463 Thermodynamics-Stat Mechanics 3 cr**

An in-depth course in thermodynamics and statistical mechanics. Topics include simple thermodynamics systems, work, heat and the first law of thermodynamics, ideal gases, the second law of thermodynamics, entropy, enthalpy, Helmholtz and Gibbs functions, TdS equations, heat capacity, partition function, equipartition of energy, statistical distribution of molecular speeds, thermal properties of solids, higher order phase transitions, chemical equilibrium, Thomson effect, Bose-Einstein statistics, Nuclear Magnetism, and the third law of thermodynamics. Pre-requisite: PH 202 Minimum Grade of D and MA 227 Minimum Grade of D

**PH 494 Directed Studies - 1 TO 3 cr**

PH 494 Directed Studies 1-3 cr Directed research under the supervision of a faculty member. Topics generally coincide with the research interest of the supervising faculty member. Pre-requisite: Permission of the Physics department chair. May be taken three times for up to 9 hours.

**PH 499 Senior Thesis-Honors - H 3 cr**

A written thesis that is part of the Honors Senior Project which is submitted to partially satisfy the requirements for a Degree in Physics with distinction. The Senior Thesis will be written on research done in collaboration with an Honors Physics Faculty member in the Junior/ Senior year. The Senior Thesis will be reviewed by a committee of Honors Physics Faculty. Upon approval by the committee the Senior Honors candidate will present the Senior Thesis at Honors Student Colloquium. This course may be repeated once for credit. Prerequisite: The Honors candidate must have developed in the last semester of the previous year a prospectus with the Physics Faculty Mentor and presented this prospectus at the Annual Honors Student Colloquium, also permission of the Department Chair.

## Physiology (PHS)

**PHS 556 Literature Reports 1 cr**

Students and faculty participate in a supervised reading of the current literature and meet periodically to interact in a discussion of selected article or topic. The goal of this course is to maintain the faculty's and students' level of information at a "state of the art" in both methods and theory in the discipline and to develop critical skills in reviewing the literature. Student presentation is required to receive credit.

**PHS 557 Dir St Physiology 1 TO 6 cr**

Students participate in research under the direction of a graduate faculty member. Student may pursue independent research or participate in a literature project. This course should be taken by students who have completed their lab rotations, but have not yet submitted a formal research project.

**PHS 590 Special Topics - 1 TO 3 cr**

Each course provides in-depth tutorial exposure to specific areas in the discipline. Student and/or faculty presentations followed by group discussions (usually in the Socratic mode), examine the subject matter in an area of current interest either to one student or to a group of students. Credit and title are arranged with an individual faculty member.

**PHS 651 Adv Cardiovascular Physiology 5 cr**

This is an advanced course covering cardiac function and metabolism, peripheral circulation, and microcirculation. The objective is to provide the student with a thorough understanding of cardiovascular physiology at both the organ and cellular level.

**PHS 654 Transport Physiology Barriers 2 cr**

This course is designed to present a detailed analysis of physiological membranes and the physical principles governing the movement of solute and water across these barriers.

**PHS 656 Cell Signaling Seminar 1 cr**

Students present a research topic for discussion before members of the department. The presentations are usually scheduled on a rotational basis. The student may present research data for critique by the faculty.

**PHS 799 Research-Dissertation 1 TO 6 cr**

Independent research by the student under the sponsorship of the graduate faculty in individual departments in the Basic Medical Sciences. Students are required to submit a research project description form before enrolling in this course. Progress reports of the work accomplished are required every six months.

## Political Science (PSC)

**PSC 101 Intro Pol Sci - Honors - H 3 cr**

This course is an intellectual investigation of the traditional and behavioral approaches to the five broad areas of sub-fields that constitute the academic study of political science, namely, political theory, American government, comparative politics, international relations, and public administration.

**PSC 130 Intro to US Government 3 cr**

Stresses formation and principles of the United States Constitution and roles of Congress, the President, and the Courts in the American system of government. Considers popular participation in politics, rights and responsibilities of citizens, and current public problems. Core Course. PSC and CJ majors must pass with a 'C' or better.

**PSC 230 Current Political Issues 3 cr**

An examination of the perennial political questions as they arise in current political issues and the arguments supporting different positions on the issues.

**PSC 232 State and Local Governments 3 cr**

An overview of state and local government systems. An analysis of administration and politics within states and localities and an examination of state and local governmental action.

**PSC 250 Comparative Politics 3 cr**

Introduction to the basic differences and similarities of the major political systems of the world. Emphasis is placed upon governmental structures and processes. PSC majors must pass with a 'C' or better.

**PSC 251 World Leaders 3 cr**

This course introduces students to the concept of leadership and focuses on the lives and achievements of a number of influential 20th century leaders.

**PSC 270 International Relations 3 cr**

A survey of theoretical and substantive aspects of international relations. Topics covered include power and alternative to power, war and peace, money and trade, international organization and law, North-South relations, environment and technology, human rights, and the like. PSC majors must pass with a 'C' or better.

**PSC 301 Public Policy 3 cr**

Examination of selected functions and policies of the U.S. government, with special emphasis on the relationship between politics and the socioeconomic environment. Emphasis is placed upon the political, economic, and historical variables as they affect contemporary public policy output.

Pre-requisite: PSC 130 Minimum Grade of C

**PSC 310 Research Methods 3 cr**

Examines the concepts and techniques of systematic political analyses and research methodology. (Identical to CJ 310). PSC and CJ majors must pass with a "C" or better.

**PSC 311 Political Philosophy I 3 cr**

An examination of the central themes of classical Western political philosophy through the reading and discussing of the primary works of such thinkers as Plato, Aristotle, Augustine, and Aquinas. Cross-listed as PHL 311. Credit cannot be received for both PSC 311 and either PHL 311 or CLA 311. PSC majors must pass with a 'C' or better.

**PSC 312 Political Philosophy II 3 cr**

An examination of the central themes of modern Western political philosophy through the reading and discussing of the primary works of such thinkers as Machiavelli, Hobbes, Locke, and Rousseau. Cross-listed as PHL 312. Credit cannot be received for both PSC 312 and PHL 312. PSC majors must pass with a 'C' or better.

- PSC 313 Political Philosophy III-W** 3 cr  
An examination of the central themes of modern Western political philosophy through the reading and discussing of the primary works of such thinkers as Hegel, Mill, Marx, and Nietzsche. Cross-listed as PHL 313. Credit cannot be received for both PSC 313 and PHL 313. PSC majors must pass with a 'C' or better.  
Pre-requisite: (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)
- PSC 330 Judicial Process** 3 cr  
The study of the American judicial process at the federal and state court levels. (Identical to CJ 330)
- PSC 331 Constitutional Law - W** 3 cr  
Principles of constitutional powers and liberties will be examined through an analysis of decisions and opinions by the U.S. Supreme Court. (Identical to CJ 331).  
Pre-requisite: (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)
- PSC 338 Parties-Political Particip** 3 cr  
Examines the nature of participation in the political process with special emphasis on political parties, interest groups and voting.
- PSC 340 Race, Gender, & Politics** 3 cr  
This course is designed to provide students with a critical examination of race and gender in the political system. From the founding to the present, politics and government reflect ideological judgments about who gets what, when, and how. As such, government has legitimized only certain individuals as political actors, certain identities as politically relevant, certain relationships as important, and certain practices as the means by which one might change political status.  
Prerequisite: Sophomore standing or above.
- PSC 345 Women and Politics** 3 cr  
The central premise of this course is that politics cannot be fully understood without including gender as an analytical construct. From the founding to the present, politics and government reflect ideological judgments about who gets what, when and how. As such, government has legitimized only certain individuals as political actors and certain identities as politically relevant. This course sets out to discover how gender "matters" in U.S. politics.
- PSC 347 Public Opinion and Polit Part** 3 cr  
The formation, composition, distribution, and measurement of public opinions and its effect upon public policy.
- PSC 360 Politics of Europe** 3 cr  
Comparative study of the political institutions and policies of the European countries, with a special focus on Great Britain, France, Germany, and Russia.
- PSC 363 Politics of Latin America** 3 cr  
Comparative study of the political institutions and policies of the Latin American countries.
- PSC 364 Politics of Africa -W** 3 cr  
Comparative study of the political institutions and policies of the countries of Sub-Sahara Africa.  
Pre-requisite: (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)
- PSC 365 Middle East Politics - W** 3 cr  
Comparative study of the political institutions and policies of the countries of North Africa and the Middle East.  
Pre-requisite: (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)
- PSC 368 Politics of South Asia - W** 3 cr  
Comparative study of the political institutions and policies of the South Asian countries.  
Pre-requisite: (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)
- PSC 372 American Foreign Policy** 3 cr  
The traditional features, the formulation, the instruments, and the general trends of American diplomacy.
- PSC 390 Special Topics -** 3 cr  
Study of a significant topic or problem in political science. May be repeated up to two times when content varies. Only 6 credit hours may be applied to the political science major.
- PSC 401 Public Administration - W** 3 cr  
National, state, and local administration, with special attention to the relationship between formal agency structure and policy execution.  
Pre-requisite: (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)
- PSC 411 Criminal Justice Admin** 3 cr  
This course applies classical and modern management and organization theories to a broad range of institutions, actors, and agencies, including police, courts, and corrections, as well as drug traffickers, sexual offender treatment centers, and homeland security agencies.
- PSC 421 Amer Pol Thought I - W** 3 cr  
An examination of the central themes of American political thought through the reading and discussing of the primary works of such thinkers as Roger Williams, Hamilton, Madison, Jefferson, Thoreau, Calhoun, and Lincoln.  
Pre-requisite: (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)
- PSC 422 Amer Pol Thought II - W** 3 cr  
An examination of the central themes of American political thought through the reading and discussing of the primary works of such thinkers as Tocqueville, Sumner, Veblen, Lippmann, Niebuhr, Martin Luther King, Jr., and Malcolm X.  
Pre-requisite: (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)
- PSC 436 Politics of Urban Govt** 3 cr  
A study of urban growth with an analysis of the major problems facing large cities in this country. Political, administrative, social, and economic aspects will be covered

- PSC 437 Legislative Process in U.S.** 3 cr  
Principles, procedures, and problems of law making, with special attention given to the U.S. Congress.
- PSC 438 The Amer Presidency - W** 3 cr  
A study of the presidency in its institutional context, with an emphasis on competing strategies of executive decision making and leadership.  
Pre-requisite: (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)
- PSC 440 Adv Studies in Pub Policy - W** 3 cr  
Advanced study of the trends in the sub-field of public policy, major themes, or more specialized treatment of a specific area. May be repeated for credit when content varies (Identical to CJ 440).
- PSC 450 Adv Studies Compar Politics-** 3 cr  
Advanced study in the area of comparative politics.  
Pre-requisite: PSC 250 Minimum Grade of C
- PSC 452 The Muslim World** 3 cr  
This course will introduce students to Islam and Islamism in the Muslim world. In doing so, the course will cover the politics, economics, and sociocultural environment in Muslim countries; discuss the meaning, characteristics, causes and consequences of Islamism; profile a few of the most prominent Islamic organizations; cover the biographies of the most prominent Muslim leaders and Islamists; and offer suggestions for ameliorating the relations between the Muslim world and the West in a way that promotes mutual understanding and peace, rather than misunderstanding and conflict.
- PSC 470 Adv Studies Intl Relations-** 3 cr  
Advanced study in the field of international relations.  
Pre-requisite: PSC 270 Minimum Grade of C
- PSC 481 Public Policy and Aging** 3 cr  
Examines government response to the growing number of older Americans. The course examines the policy process and focuses on such issues as retirement, pensions, health care, housing, social services, and intergenerational issues. Elder advocacy and the long term political consequences of demographic changes are also addressed.
- PSC 490 Special Topics -** 3 cr  
Study of a significant topic or problem in political science. May be repeated up to two times when the content varies. Only 6 credit hours may be applied to the political science major.
- PSC 492 Capstone Seminar in PSC-W** 3 cr  
Required course for all political science majors and serves as the comprehensive experience in political science. The course will be taught at the senior level and will focus on public policy issues at the national and international levels. In addition to the course requirement, including a major research paper, students must take the ETS field test in political science and receive a satisfactory score. Political Science majors must pass with a "C" or better. The course serves as a capstone course for political science majors. Taught in the fall semester.  
Pre-requisite: (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)
- PSC 494 Directed Studies -** 1 TO 3 cr  
Under the guidance of a faculty member, the student will pursue directed research or readings on an approved topic in political science. May be repeated for a maximum of 3 hours. Prerequisites: Senior standing, PSC major, and a minimum GPA of "B" in both PSC and overall.
- PSC 496 Prof Studies - Internship** 3 cr  
Relates the intern's classroom studies with occupational and professional experiences in an approved governmental or non-governmental agency. Written reports required.  
Prerequisites: Open only to junior or senior political science majors or minors. S/U grading only.
- PSC 499 Honors Thesis - H - W** 3 TO 6 cr  
The research and writing of a major paper in the field of political science. Prerequisite: USA Honors Program or permission of Department Chairman.
- PSC 500 Pub Admin-Org Theory Pub Mgmt** 3 cr  
A review and examination of the several principal, traditional, and contemporary theories of organization, policy, and administration. Field problems and case studies are stressed.
- PSC 501 Public Administration** 3 cr  
National, state, and local administration, with special attention to the relationship between formal agency structure and policy execution.
- PSC 510 Intergov-Interorg Relations** 3 cr  
A review of the political, fiscal, and administrative relationships between various levels of government in America. In addition, the emerging nexus to 3d sector non-profit organization will be examined.
- PSC 511 Crim. Justice Admin.** 3 cr  
This course applies classical and modern management and organization theories to a broad range of institutions, actors, and agencies, including police, courts, and corrections, as well as drug traffickers, sexual offender treatment centers, and homeland security agencies.

- PSC 520 Research Methods and Design** 3 cr  
Social science research methodologies will be used to help students develop skills for policy analysis and decision making in the public service. Stresses the understanding of research methods and data collection in a Public Administration setting. Theoretical development and elaboration, and an overview of the variety of research designs used in social science research will be included.
- PSC 530 Quantitative Analysis** 3 cr  
Focus is on application of statistical analysis techniques to Public Administration problems and issues. Computer analysis and interpretation of descriptive statistics will be emphasized. Topics will include fundamentals of probability, sampling, hypothesis testing, point estimation, association, correlation, and multi variate analysis.
- PSC 537 Legislative Process in the US** 3 cr  
Principles, procedures, and problems of law making, with special attention to the U.S. Congress.
- PSC 540 Public Hum Resource Mgt** 3 cr  
This course will cover contemporary topics in public administration, including public-employee unionization, relevance of the traditional civil-service approach, the challenge of employee productivity and motivation, equal opportunity, and public service ethics.
- PSC 541 Leadership Theory and Practice** 3 cr  
The course will provide the analytical and intellectual thought, careful examination and reflection of the core issues in the practice of leadership. Models and influence on leadership will be critically examined.
- PSC 550 Managing the Public Budget** 3 cr  
This course emphasizes the political management and public-policy implications of budget reform. The conceptual framework for program and performance budgeting will be explored, as well as the increasing congressional role in federal budget policy.
- PSC 560 Comparative Public Admin** 3 cr  
A study of the operation of government systems throughout the world-their history, features, similarities, and differences.
- PSC 570 Administrative Law** 3 cr  
This course emphasizes the relationship between administrative processes of government and the legal system. Attention is given not only to the administrative process involving formal adjudication, rule making, and judicial review, but also to those processes involving formal and unreviewed discretionary action. Students propose legal resolutions to contemporary administrative issues.
- PSC 572 Environmental Law** 3 cr  
This course will introduce the student to some of the fundamental concepts of environmental law. It will utilize the philosophy and history of environmental law as it has developed from the Common Law of England to provisions of a Municipal Code
- PSC 576 Adm Issues CJ Men Health** 3 cr  
An overview of the relevant federal and state laws, federal regulations, and court rulings that address the issues of criminal justice for preserving the rights of those citizens who suffer from mental illness.
- PSC 580 Public Pol Analysis and Eval** 3 cr  
A practical introduction to policy and program evaluation including a general overview of conceptual frameworks by which evaluation are conducted and an examination of the various qualitative and quantitative techniques by which policy outcomes and programs are analyzed. Designed to develop skills necessary for conducting evaluations and assessing the validity and credibility of evaluations conducted by others.  
Pre-requisite: PSC 520 Minimum Grade of B and PSC 530 Minimum Grade of B
- PSC 581 Public Policy and Aging** 3 cr  
Examines government response to the growing number of older Americans. The course examines the policy process and focuses on such issues as retirement, pensions, health care, housing, social services, and intergenerational issues. Elder advocacy and the long term political consequences of demographic changes are also addressed.
- PSC 585 Health Policy** 3 cr  
This course focuses on two distinct aspects of American Health Policy. First, the policy making process is examined in the context of health care and the major decision making powers (Congress, presidency, bureaucracy, and special interests). Second, existing health care policies are examined with an emphasis on the implications for access, financing, and quality of care. Finally, existing U.S. health policies are compared and contrasted with those of similar and dissimilar political systems.
- PSC 586 Health Administration** 3 cr  
Applications of management principles to health care organizations with a focus on governance and leadership, human resources, control systems, strategic planning, and accountability.
- PSC 587 Health Politics & The Elderly** 3 cr  
This course focuses on the health policy process and issues impacting the elderly with particular attention given to the politics of legislation, financing mechanisms, and strategies for reform.
- PSC 590 Special Topics -** 3 cr  
Study of a significant topic in Public Administration. May be repeated for credit when the content varies.
- PSC 594 Dir St -** 1 TO 6 cr  
Under the guidance of a faculty member, student will pursue directed study of approved topics in public administration. For non-thesis students.

**PSC 596 Prof St - Intern Publ Admin 3 TO 6 cr**

Relates the participants' classroom studies to occupational and professional experiences in an approved public agency. Written reports required. May be taken for a total of nine hours. (For further details, see section on Internship.)

**PSC 599 Thesis 3 TO 6 cr**

Completion and oral defense of a master's thesis based upon original research. May be repeated for up to six hours credit. A minimum of six hours credit is required to meet degree requirements. Prerequisite: Approval of research prospectus including IRB or Animal Use and Care Committee approval if applicable.

## Psychology (PSY)

**PSY 120 Introduction to Psychology 3 cr**

A survey of the basic theories, concepts, principles, and research findings in the field of Psychology. Core course.

**PSY 121 Honors Gen Psychology - H 3 cr**

This course will provide a survey of the basic theories, concepts, principles, and research findings in the field of Psychology. Along with the broad overview provided by the course, students will participate in a more in-depth examination of selected special topics (e.g. those topics generating controversy in the research community and in our society) as selected by the instructor. By contrast with the PSY 120 Introduction to Psychology course already being taught, the Honors General Psychology course will provide a more thorough coverage of selected topics. Prerequisite: Special permission.

**PSY 220 Res Design and Analysis I 3 cr**

Research methods in psychology with an emphasis on the experimental method.

Co-requisite: PSY 221

Pre-requisite: (PSY 120 Minimum Grade of D or PSY 121 Minimum Grade of D or PSY 210 Minimum Grade of D) and (EH 102 Minimum Grade of D or EH 105 Minimum Grade of D)

**PSY 221 Research Desgn/Analysis I-Apps 1 cr**

Laboratory in research methods in psychology with an emphasis on the experimental method. Fee.

Co-requisite: PSY 220

Pre-requisite: (PSY 120 Minimum Grade of D or PSY 210 Minimum Grade of D) or PSY 121 Minimum Grade of D and (EH 102 Minimum Grade of D or EH 105 Minimum Grade of D)

**PSY 250 Life Span Development 3 cr**

An overview of human development from conception to death. Special emphasis will be placed on cognitive and social development. Core course.

**PSY 270 Psy of Black Experience 3 cr**

Theories and principles of psychology pertaining to the experience of black Americans. Includes the development of the black psychological perspective, African-American historical developments and philosophy, identity development and the determinants of the black personality, and contemporary issues in the black community.

**PSY 290 Special Topics - 1 TO 3 cr**

Selected topics in psychology. May be repeated for credit when course content varies for a total of 12 credit hours.

Pre-requisite: (PSY 120 Minimum Grade of D or PSY 121 Minimum Grade of D or PSY 210 Minimum Grade of D)

**PSY 310 Biological Psychology I 3 cr**

An introductory survey of research and theory in neuroscience as it applies to the understanding of behavior. Focus will be on understanding basic mechanisms of neuron function and general coverage of topics such as sensory and motor systems, motivation and emotion, learning and memory, language and thinking, and mental disorders.

Pre-requisite: (PSY 120 Minimum Grade of D or PSY 121 Minimum Grade of D or PSY 210 Minimum Grade of D)

**PSY 317 Applied Behavior Analysis I 3 cr**

An introduction to the principles of behavior intended as a prerequisite to the specific strategies and procedures practiced by behavior analysts. This course will present the historical and scientific foundations of behavior analysis as applied in educational and other human service settings.

Pre-requisite: (PSY 120 Minimum Grade of C or PSY 121 Minimum Grade of C or PSY 210 Minimum Grade of C) and (PSY 220 Minimum Grade of C or PSY 222 Minimum Grade of C)

**PSY 320 Res Design-Analysis II-W 3 cr**

Experience in applying methodological and statistical concepts introduced in PSY 220 and ST 210, as well as instruction in additional topics such as research and analysis. The course will emphasize the use of computers in conducting behavioral research (e.g. literature searches, collecting data, analyzing data, writing reports).

Co-requisite: PSY 321

Pre-requisite: (PSY 120 Minimum Grade of D or PSY 121 Minimum Grade of D or PSY 210 Minimum Grade of D) and (PSY 220 Minimum Grade of D or PSY 222 Minimum Grade of D) and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**PSY 321 Research Desgn/Analysis II-App 1 cr**

Laboratory in research methods in psychology with an emphasis on applying methodological and statistical concepts introduced in PSY 220 and PSY 320. Fee.

Co-requisite: PSY 320

Pre-requisite: (PSY 120 Minimum Grade of D or PSY 210 Minimum Grade of D) or PSY 121 Minimum Grade of D and (PSY 220 Minimum Grade of D and PSY 222 Minimum Grade of D) and (EH 102 Minimum Grade of D and EH 105 Minimum Grade of D)

- PSY 340 Abnormal Psychology** 3 cr  
Nature and development of deviant behavior.  
Pre-requisite: (PSY 120 Minimum Grade of D or PSY 121 Minimum Grade of D or PSY 210 Minimum Grade of D)
- PSY 350 Child and Adolescent Dev** 3 cr  
The development and psychosocial aspects of childhood and adolescence.  
Pre-requisite: (PSY 120 Minimum Grade of D or PSY 121 Minimum Grade of D or PSY 210 Minimum Grade of D)
- PSY 394 Directed Study** 1 TO 3 cr  
Specific topics and research findings introduced through the reading of appropriate professional and scientific literature. Requires special permission. May be repeated for a total of 8 credit hours.  
Pre-requisite: (PSY 120 Minimum Grade of D or PSY 121 Minimum Grade of D or PSY 210 Minimum Grade of D)
- PSY 395 Psychology Practicum** 1 TO 6 cr  
Supervised experience in an area of psychology. May include supervised placement in an applied setting. May be repeated for a total of 12 credit hours.  
Pre-requisite: (PSY 120 Minimum Grade of C or PSY 121 Minimum Grade of C or PSY 210 Minimum Grade of C)
- PSY 412 History-Systems Psy - W** 3 cr  
The historical foundations of modern psychology and the development of major theories in psychology.  
Pre-requisite: (PSY 120 Minimum Grade of D or PSY 121 Minimum Grade of D or PSY 210 Minimum Grade of D) and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)
- PSY 416 Cognition** 3 cr  
An overview of psychological research and theory in cognitive psychology. The course will emphasize how people gather, process, represent, and use information to guide thought and action. This course is an approved elective for students seeking gerontology certification.  
Pre-requisite: (PSY 120 Minimum Grade of D or PSY 121 Minimum Grade of D or PSY 210 Minimum Grade of D) and (PSY 220 Minimum Grade of D or PSY 222 Minimum Grade of D)
- PSY 418 Applied Behav Analysis II-Meth** 3 cr  
Behavioral assessment techniques and operant and respondent methods for deceleration of inappropriate behavior will be covered. Operant methods for accelerating appropriate behaviors, teaching new behaviors, and maintaining behaviors will be covered. Data-based decision making strategies will be used in developing and altering individual programs.  
Pre-requisite: PSY 417 Minimum Grade of C
- PSY 419 App Behav Analysis III-Adv App** 3 cr  
Behavioral assessment techniques and experimental designs for the evaluation of behavior change programs will be covered. Data-based decision making strategies for formative program evaluation and modification are also included.  
Pre-requisite: PSY 417 Minimum Grade of C
- PSY 420 Psychology of Learning** 3 cr  
Theories, experimental findings, and methods of investigation in learning.  
Pre-requisite: (PSY 120 Minimum Grade of D or PSY 121 Minimum Grade of D or PSY 210 Minimum Grade of D) and (PSY 220 Minimum Grade of D or PSY 222 Minimum Grade of D)
- PSY 425 Mental Health and Law** 3 cr  
Selected topics in psychology and criminal Justice. An overview of the relevant federal and state laws, federal regulations and court rulings which address the issues of justice for preserving the rights of individuals with mental illness.  
Pre-requisite: PSY 120 Minimum Grade of D or PSY 121 Minimum Grade of D
- PSY 428 Perception** 3 cr  
A critical analysis of the main theories and research trends in sensation and perception. This course will include computer simulations and demonstrations, and will also emphasize computer applications for data collection, data analysis, and for reporting results. This course is an approved elective for students seeking gerontology certification. Fee.  
Pre-requisite: (PSY 120 Minimum Grade of D or PSY 121 Minimum Grade of D or PSY 210 Minimum Grade of D) and (PSY 220 Minimum Grade of D or PSY 222 Minimum Grade of D) and (PSY 310 Minimum Grade of D or PSY 380 Minimum Grade of D)
- PSY 435 Social Psychology** 3 cr  
A survey and analysis of major theoretical and experimental topics of interest in social psychology, such as how we perceive others. attitude, interpersonal attraction, aggression, prejudice and altruism.  
Pre-requisite: (PSY 120 Minimum Grade of D or PSY 121 Minimum Grade of D or PSY 210 Minimum Grade of D)
- PSY 440 Psychology of Personality** 3 cr  
A survey and critical analysis of major historical and current theories about personality. The course will also examine research relevant to the different approaches and consider various techniques of personality assessment.  
Pre-requisite: (PSY 120 Minimum Grade of D or PSY 121 Minimum Grade of D or PSY 210 Minimum Grade of D)
- PSY 456 Adult Development and Aging-** 3 cr  
The development and psychosocial aspects of adulthood and late life. This course is an approved elective for gerontology certification.  
Pre-requisite: (PSY 120 Minimum Grade of D or PSY 121 Minimum Grade of C or PSY 210 Minimum Grade of D)

- PSY 460 Industrial Psychology** 3 cr  
Application of psychological principles and techniques to business, industry, and government.  
Pre-requisite: PSY 120 Minimum Grade of D or PSY 121 Minimum Grade of D
- PSY 465 Intro to Measurements-Tests** 3 cr  
Theories and principles of psychological testing.  
Pre-requisite: (PSY 120 Minimum Grade of D or PSY 121 Minimum Grade of D or PSY 210 Minimum Grade of D) and (ST 175 Minimum Grade of D or ST 210 Minimum Grade of D)
- PSY 470 Intellectual Disabilities** 3 cr  
The study of theories and research in intellectual disabilities and related areas.  
Pre-requisite: (PSY 120 Minimum Grade of D or PSY 121 Minimum Grade of D or PSY 210 Minimum Grade of D)
- PSY 475 Comparative Evolutionary Psy** 3 cr  
A critical analysis of the main theories and research trends in comparative and evolutionary psychology. This course is an approved elective for students seeking gerontology certification.  
Pre-requisite: (PSY 120 Minimum Grade of D or PSY 121 Minimum Grade of D or PSY 210 Minimum Grade of D) and (PSY 220 Minimum Grade of D or PSY 222 Minimum Grade of D)
- PSY 480 Health Psychology - W** 3 cr  
Current theories, research and applications in health psychology.  
Pre-requisite: (PSY 120 Minimum Grade of D or PSY 121 Minimum Grade of D or PSY 210 Minimum Grade of D) and (PSY 220 Minimum Grade of D or PSY 222 Minimum Grade of D) and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)
- PSY 485 Psychology of Gender** 3 cr  
The study of psychological research on gender differences and theories regarding the origins of these differences.  
Pre-requisite: (PSY 120 Minimum Grade of D or PSY 121 Minimum Grade of D or PSY 210 Minimum Grade of D)
- PSY 490 Special Topics -** 1 TO 3 cr  
Selected topics in psychology. May be repeated for a total of 12 credit hours when course content varies.  
Pre-requisite: (PSY 120 Minimum Grade of D or PSY 121 Minimum Grade of D or PSY 210 Minimum Grade of D)
- PSY 492 Seminar -** 1 TO 3 cr  
A survey of basic theories, concepts, principles, and research findings in a particular focal topic in psychology. Students will study topics in depth by reading and presenting research reports, review papers and book chapters, and through active in-class discussion of the reading materials. Requires permission of department chair. May be repeated up to 2 times when content varies for a total of 6 credit hours.  
Pre-requisite: (PSY 120 Minimum Grade of D or PSY 121 Minimum Grade of D or PSY 210 Minimum Grade of D) and (PSY 220 Minimum Grade of D or PSY 222 Minimum Grade of D)
- PSY 494 Directed Studies -** 1 TO 3 cr  
Directed study and research. Requires special permission. May be repeated for a total of 8 hours.  
Pre-requisite: (PSY 120 Minimum Grade of D or PSY 121 Minimum Grade of D or PSY 210 Minimum Grade of D)
- PSY 499 Honors Senior Thesis-H** 3 TO 6 cr  
Student conducts an independent research project under the supervision of a faculty sponsor. Recommended for psychology majors planning graduate school. Permission of department chair is required prior to registration. Requires GPA of 3.3 or higher. May be repeated for a total of 6 credit hours.  
Pre-requisite: (PSY 120 Minimum Grade of D or PSY 121 Minimum Grade of D or PSY 210 Minimum Grade of D) and (PSY 220 Minimum Grade of D or PSY 222 Minimum Grade of D)
- PSY 500 Proseminar in Psychology** 1 cr  
Research presentations will be given by faculty and advanced graduate students. In addition, discussion of project and thesis requirements and procedures will take place. Required of all students registered for PSY 500 , 502, and 503.
- PSY 501 Research Design and Stats I** 3 cr  
Theories and principles of research design and elements of modern statistics. Introduction to computer programs for statistical analysis will be included. Fee.  
Co-requisite: PSY 500
- PSY 502 Research Design and Stats II** 3 cr  
Theories and principles of advanced research design and elements of modern statistics. The use of computer applications such as SPSS to analyze empirical data sets will be covered. Fee.  
Co-requisite: PSY 500  
Pre-requisite: PSY 501 Minimum Grade of B or PSY 521 Minimum Grade of B

**PSY 503 Quantitative Methods II 3 cr**

Elements of modern statistics with emphasis on application to psychological research. Multivariate statistical techniques to include multiple regression, multivariate analysis of variance, discriminant, canonical, and factor analysis will be discussed. Fee.

Co-requisite: PSY 500

Pre-requisite: (PSY 502 Minimum Grade of B or PSY 522 Minimum Grade of B)

**PSY 507 Professional Ethics Psychology 3 cr**

This course provides instruction through readings, lecture, and case studies in the application of ethics in the professional practice of psychology. In addition, the course focuses on the philosophical foundations, professional identity, and standards of practice found in both clinical psychology and counseling psychology.

**PSY 510 Physiological Psychology 3 cr**

This course provides a foundation in the techniques of advanced psychophysiological methods. The course covers the history of psychophysiology, including the electrical properties of cells, and major organ systems, with particular emphasis on the electroencephalogram (EEG) and neuroimaging techniques. Students are introduced to the principles of psychophysiological recording, common applications of psychophysiology, safety and ethics in psychophysiological research, instrumentation, and research design issues in psychophysiology. Relevant statistical treatment of psychophysiological data will be discussed, including multiple regression, complex ANOVA, scaling of data, and non-parametric alternatives such as boot-strapping.

**PSY 512 Adv History/Systems Psychology 3 cr**

An advanced course in the historical foundations of modern psychology and the development of major theories in psychology.

**PSY 514 Learning 3 cr**

A survey of research and theory in learning.

**PSY 516 Cognitive Psychology 3 cr**

An advanced survey of research and theory in cognitive psychology. Topics include pattern recognition, attention, memory, language processing, decision making, and problem solving. This course is an approved elective for students seeking gerontology certification.

**PSY 520 Personality Res and Theory 3 cr**

A critical analysis and evaluation of major theories and current research trends in personality.

**PSY 522 Soc & Personality Psychology 3 cr**

This course provides a foundation for conducting quantitative research in personality and social psychology. Topics covered will include (a) measurement of personality and individual differences (e.g., narcissism, self-esteem), (b) measurement of cognitive and behavioral outcomes in laboratory and non-laboratory settings (e.g. decision-making, implicit cognitions), and (c) data analytic techniques (e.g. testing for mediation/moderation, structural equation modeling).

**PSY 524 Lifespan Development 3 cr**

Analysis of theories, research methods, and major findings of sensory, perceptual, social, and cognitive changes across the lifespan, from infancy to late life. Research in social and cognitive development, including cognitive disabilities, the underlying mechanisms involved in thinking and learning processes, and age-related cognitive models are central to this course. \*\*This course is an approved elective for students seeking gerontology certification.

**PSY 528 Sensation and Perception 3 cr**

This course provides a multidisciplinary analysis of how the sensory systems analyze physical stimuli to support perception and successful actions. Consideration is given to how the anatomy and physiology of the major sensory systems extract information using low- and high-level mechanisms to create meaningful percepts. Other topics include psychophysics, comparative studies, communication, production and performance, face and object recognition, attention, and event perception.

**PSY 530 Intro Appl Psychology & Ethics 3 cr**

Theories, principles and techniques of interviewing, behavioral observation and classification of psychological disorders.

**PSY 532 Psychopathology 3 cr**

Current research and theoretical aspects of psychopathology in children and adults.

**PSY 540 Psychometrics 3 cr**

Theories and methods of test construction and principles of measurement and evaluation in the behavioral sciences.

**PSY 542 Cognitive Assessment 3 cr**

Principals and methods of individual intelligence testing, including the administration of the Wechsler and the Stanford-Binet tests. Practical experience in the administration, interpretation and report writing of a psychological evaluation using intelligence tests. Pre-requisite: PSY 530 Minimum Grade of B and (PSY 540 Minimum Grade of B or PSY 571 Minimum Grade of B)

**PSY 544 Practicum Assessment 3 cr**

Theory, development and interpretation of selected personality assessment instruments. Methods and procedures in administering and interpreting personality, aptitude and career interest tests.

Pre-requisite: (PSY 540 Minimum Grade of B or PSY 571 Minimum Grade of B) and (PSY 542 Minimum Grade of B or PSY 575 Minimum Grade of B)

**PSY 550 Evidenced Based Clin/Coun Prac 3 cr**

Study of the theoretical and empirical foundations of the major systems of psychotherapeutic change.

**PSY 552 Multicultural Issues in Psy 3 cr**

This course will focus on theoretical models, research, techniques, and interventions for working with culturally diverse populations in various settings. Specific issues to be addressed include world views, acculturation and acculturative stress, prejudice and prejudice-reduction techniques, racial/ethnic identity, culture and assessment, and the nature of multicultural competence in Psychology. Issues related to ethnic and racial identity will form the primary focus; however, other types of diversity (e.g., religion, gender, sexual orientation, physically challenged) will also be considered.

Pre-requisite: (PSY 550 Minimum Grade of B or PSY 589 Minimum Grade of B) and PSY 506 Minimum Grade of B and PSY 530 Minimum Grade of B and (PSY 532 Minimum Grade of B or PSY 561 Minimum Grade of B)

**PSY 554 Cognitive Behavior Therapy 3 cr**

A follow up course to PSY 550, this course will survey theory, research and application of cognitive behavior therapy. Focus will be on treatment strategies and application to a variety of psychological disorders of adults and children.

Pre-requisite: PSY 530 Minimum Grade of B and (PSY 532 Minimum Grade of B or PSY 561 Minimum Grade of B) and (PSY 550 Minimum Grade of B or PSY 589 Minimum Grade of B)

**PSY 556 Practicum 1 TO 3 cr**

Supervised experience with adult and children clients. Includes case conference and seminars. May include supervised placement in an applied setting. May be repeated up to five times for a total of 18 credit hours.

Pre-requisite: (PSY 532 Minimum Grade of B or PSY 561 Minimum Grade of B) and (PSY 550 Minimum Grade of B or PSY 589 Minimum Grade of B)

**PSY 558 External Practicum 3 TO 5 cr**

Supervised placement in an applied setting. May be repeated four times for a total of 15 credit hours.

Pre-requisite: PSY 552 Minimum Grade of B and PSY 554 Minimum Grade of B

**PSY 570 Intel Disable/Autism Spec Dis 3 cr**

A study of theories and research related to Intellectual Disabilities and Autism Spectrum Disorders.

**PSY 572 Child Psychopathology 3 cr**

The description and etiology of deviant behavior patterns in children and adolescents.

Pre-requisite: (PSY 532 Minimum Grade of B or PSY 561 Minimum Grade of B)

**PSY 575 Comparative Psychology 3 cr**

An in-depth analysis of the proximal and ultimate causes of animal and human behavior examined from the perspectives of comparative and evolutionary psychology, psychobiology and ethology. Relevant research in animal models of biological and cognitive systems, learning and motivation, lifespan development and related biopsychosocial factors will be included. \*\* This course is an approved elective for students seeking gerontology certification.

**PSY 590 Sp Top in Psychology - 1 TO 3 cr**

Selected topics in psychology. May be requested for credit when course content varies for a total of 12 credit hours.

**PSY 594 Dir Individual Study 1 TO 3 cr**

Individual study under the direction of a member of the graduate faculty. May be repeated for up to 9 hours credit.

**PSY 598 Project in Psychology 1 TO 6 cr**

Completion of a research project, program proposal, program evaluation, major literature review or other comparable experience under the direction of a member of the graduate faculty. IRB or Animal Use and Care Committee approval may be required for some projects. May be repeated for up to 6 hours credit. A minimum of 3 hours is required to meet degree requirements.

**PSY 599 Thesis Research 1 TO 6 cr**

Completion and oral defense of a master's thesis based upon original research. May be repeated for up to 9 hours credit. A minimum of 6 hours is required to meet degree requirements. Prerequisite: Approval of research prospectus including IRB or Animal Use and Care Committee approval if applicable.

## Radiologic Sciences (RAD)

**RAD 300 Clinical Education I 2 cr**

Hospital-based laboratory allowing the student additional clinical experience in RAD 312 and RAD 304.

**RAD 301 Clinical Education II 4 cr**

Hospital-based laboratory allowing the student to obtain clinical experience in those areas presented in RAD 307. Pre-requisite: (RAD 300 Minimum Grade of C or RAD 107 Minimum Grade of C) and (RAD 304 Minimum Grade of C or RAD 104 Minimum Grade of C) and (RAD 307 Minimum Grade of C or RAD 131 Minimum Grade of C) and (RAD 310 Minimum Grade of C or RAD 265 Minimum Grade of C) and (RAD 312 Minimum Grade of C or RAD 101 Minimum Grade of C)

- RAD 302 Clinical Ed III** 3 cr  
Hospital-based laboratory allowing the student additional clinical experience.
- RAD 304 Patient Care & Ethics** 3 cr  
Basic knowledge concerning patient care and ethical situations with which the radiologic technologist must be familiar. Class time is allotted for the student to practice certain techniques pertinent to obtaining vital signs, handling of patients, sterile technique, tray setup, first-aid measures, and general operating room and bedside radiography procedures.
- RAD 306 Clinical Education VI** 5 cr  
Hospital-based laboratory allowing the student to gain increased clinical experience in general radiographic procedures.
- RAD 307 Osseous I** 4 cr  
This course includes the demonstration and practice in positioning and phantom radiography of the chest, general abdomino-pelvic viscera, and the upper and lower extremities to include shoulder and pelvic girdles. Special Fee.
- RAD 308 Osseous II** 4 cr  
Continuation of RAD 307 to include the axial skeleton, sternum, sternoclavicular joints and introductory topics relating to special radiographic procedures. Special Fee. Pre-requisite: (RAD 300 Minimum Grade of C or RAD 107 Minimum Grade of C) and (RAD 304 Minimum Grade of C or RAD 104 Minimum Grade of C) and (RAD 307 Minimum Grade of C or RAD 131 Minimum Grade of C) and (RAD 310 Minimum Grade of C or RAD 265 Minimum Grade of C) and (RAD 312 Minimum Grade of C or RAD 101 Minimum Grade of C)
- RAD 309 Osseous III** 3 cr  
Continuation of RAD 308 to include demonstration and practice in positioning and phantom radiography of the cranium, facial bones, optic foramina, TMJs, orbits, overview of mastoids, stereoscopy, tomography, long bone measurements, foreign body localization and fetal imaging.
- RAD 310 Radiation Biology** 2 cr  
A study of health physics and methods used to reduce exposure to personnel and patients in diagnostic and therapeutic radiology. The biological effects of ionizing radiation are stressed along with applied mathematical principles.
- RAD 312 Princ of Radiographic Exposure** 4 cr  
A beginning study of the principles involved in image formation including exposure factors affecting image quality.
- RAD 315 Contrast Media** 2 cr  
A detailed study of contrast media, preparation and administration, radiographic positions, technique, and anatomy and physiology of the organs studied. Pre-requisite: (RAD 300 Minimum Grade of C or RAD 107 Minimum Grade of C) and (RAD 304 Minimum Grade of C or RAD 104 Minimum Grade of C) and (RAD 307 Minimum Grade of C or RAD 131 Minimum Grade of C) and (RAD 310 Minimum Grade of C or RAD 265 Minimum Grade of C) and (RAD 312 Minimum Grade of C or RAD 101 Minimum Grade of C)
- RAD 318 Radiologic Physics** 4 cr  
A study of the fundamentals of magnetism, basic electricity, x-ray machine circuitry, x-ray protection, and radiation physics, to give the student a basic understanding of the principles underlying the production of x-rays and their interaction with matter. Pre-requisite: (RAD 300 Minimum Grade of C or RAD 107 Minimum Grade of C) and (RAD 304 Minimum Grade of C or RAD 104 Minimum Grade of C) and (RAD 307 Minimum Grade of C or RAD 131 Minimum Grade of C) and (RAD 310 Minimum Grade of C or RAD 265 Minimum Grade of C) and (RAD 312 Minimum Grade of C or RAD 101 Minimum Grade of C)
- RAD 320 Cross-Sectional Anatomy** 2 cr  
A study of cross-sectional anatomy as imaged in MRI and CT.
- RAD 335 Pediatric-Geriatric Rad** 1 cr  
A detailed study of specialized equipment, accessories and positioning techniques used in pediatric and geriatric radiography.
- RAD 403 Clinical Education IV** 4 cr  
Hospital-based laboratory allowing the student to obtain clinical experience in those areas presented in RAD 308 and RAD 310. Pre-requisite: (RAD 300 Minimum Grade of C or RAD 107 Minimum Grade of C) and (RAD 304 Minimum Grade of C or RAD 104 Minimum Grade of C) and (RAD 307 Minimum Grade of C or RAD 131 Minimum Grade of C) and (RAD 310 Minimum Grade of C or RAD 265 Minimum Grade of C) and (RAD 312 Minimum Grade of C or RAD 101 Minimum Grade of C)
- RAD 404 Clinical Education V** 4 cr  
Hospital-based laboratory allowing the student to obtain clinical experience. Pre-requisite: (RAD 403 Minimum Grade of C or RAD 204 Minimum Grade of C) and (RAD 311 Minimum Grade of C or RAD 411 Minimum Grade of C) and RAD 415 Minimum Grade of C
- RAD 405 Clinical Education VI** 4 cr  
Hospital-based laboratory allowing the student to obtain clinical experience. Pre-requisite: RAD 404 Minimum Grade of C

**RAD 407 Clinical Education I - PPC 6 cr**

This is a hospital based laboratory allowing the student to gain additional clinical experience in general radiographic procedures. This course is designed for students who have previously completed the Radiologic Sciences program in Ultrasound or Radiation Therapy.

**RAD 408 Clinical Education II - PPC 6 cr**

This is a hospital based laboratory allowing the student to gain additional clinical experience in general radiographic procedures. This course is designed for students who have previously completed the Radiologic Sciences program in Ultrasound or Radiation Therapy. This course is a continuation of RAD 407.

Pre-requisite: RAD 407 Minimum Grade of C

**RAD 411 Survey of Pathology 4 cr**

A general survey of diseases designed to acquaint the student with certain changes that occur in disease and their application to radiologic sciences.

Pre-requisite: (RAD 300 Minimum Grade of C or RAD 107 Minimum Grade of C) and (RAD 304 Minimum Grade of C or RAD 104 Minimum Grade of C) and (RAD 307 Minimum Grade of C or RAD 131 Minimum Grade of C) and (RAD 310 Minimum Grade of C or RAD 265 Minimum Grade of C) and (RAD 312 Minimum Grade of C or RAD 101 Minimum Grade of C)

**RAD 415 Diagnostic Imaging II 4 cr**

This course will be a continuation course of RAD 324 to include principles and clinical applications of image intensification, computer applications in radiology, CR, DR, IDDR, PACS, AEC function, magnification radiography, thermography, diaphanography and bone densitometry.

Pre-requisite: (RAD 300 Minimum Grade of C or RAD 107 Minimum Grade of C) and (RAD 304 Minimum Grade of C or RAD 104 Minimum Grade of C) and (RAD 307 Minimum Grade of C or RAD 131 Minimum Grade of C) and (RAD 310 Minimum Grade of C or RAD 265 Minimum Grade of C) and (RAD 312 Minimum Grade of C or RAD 101 Minimum Grade of C)

**RAD 417 Ultrasound Anatomy & Scanning 4 cr**

This course is designed to provide the student with anatomy, pathology and scanning techniques of the abdomen, retroperitoneum and superficial structures. It includes clinical and laboratory demonstrations. Special Fee.

**RAD 418 Ultras Anat-Scan Tech-OB-GYN-W 3 cr**

This course is a continuation of RAD 417 and is designed to provide the student with anatomy, pathology and scanning techniques of obstetrics and gynecology. It includes clinical and laboratory demonstrations. Special fee.

Pre-requisite: RAD 417 Minimum Grade of C

**RAD 421 Ultras Physics-Instrumentation 3 cr**

A study of the basic physical principles and instrumentation of diagnostic ultrasound.

**RAD 423 Ultrasound Clinical Educ I 5 cr**

Hospital-based laboratory allowing the student to gain clinical experience in ultrasound procedures, with emphasis on abdominal exams.

**RAD 424 Ultrasound Clinical Educ II 5 cr**

Continuation of RAD 423 allowing the student to gain clinical experience in ultrasound procedures, with emphasis on OB/GYN exams.

Pre-requisite: RAD 423 Minimum Grade of C

**RAD 425 Ultrasound Clinical Educ III 5 cr**

A continuation of RAD 424 allowing the student to gain clinical experience in ultrasound procedures, with emphasis on superficial structures, pediatric scans, and ultrasound guided procedures.

Pre-requisite: RAD 424 Minimum Grade of C

**RAD 427 Proced Guide - Ultrasound - W 3 cr**

This course will include a review of guidelines for ultrasound exams, ethics in ultrasound and preparation for the ultrasound registry. Assigned student papers and oral presentations addressing ultrasound topics are required.

**RAD 430 Healthcare Communication 3 cr**

This course will provide knowledge of information technology and applications of IT in the healthcare setting. Topics of discussion will include how to foster interdisciplinary communication, development of action plans for areas that are compliant/non-compliant with organizational objectives, and utilization of electronic or manual systems.

Pre-requisite: (RAD 300 Minimum Grade of C or RAD 107 Minimum Grade of C) and (RAD 304 Minimum Grade of C or RAD 104 Minimum Grade of C) and (RAD 307 Minimum Grade of C or RAD 131 Minimum Grade of C) and (RAD 310 Minimum Grade of C or RAD 265 Minimum Grade of C) and (RAD 312 Minimum Grade of C or RAD 101 Minimum Grade of C)

**RAD 432 Healthcare Human Resource Mgmt 3 cr**

This course will enable students to develop an effective recruitment and staffing program, implement a retention program, conduct staff performance evaluations, establish and develop processes to expand employee competence, implement a leadership development program, develop a succession plan and create an employee recognition program.

Pre-requisite: (RAD 300 Minimum Grade of C or RAD 107 Minimum Grade of C) and (RAD 304 Minimum Grade of C or RAD 104 Minimum Grade of C) and (RAD 307 Minimum Grade of C or RAD 131 Minimum Grade of C) and (RAD 310 Minimum Grade of C or RAD 265 Minimum Grade of C) and (RAD 312 Minimum Grade of C or RAD 101 Minimum Grade of C)

- RAD 433 Health Care Financial Mgmt 3 cr**  
Course provides students with knowledge of both fiscal and asset management health care organization with tools and techniques to include health care accounting and financial statement, making major capital investments, determining cost and using cost information in decision making, and budgeting performance management.
- RAD 435 Health Care Operations Mgt - W 3 cr**  
Provide knowledge to use surveys, focus groups, and interviews, use quality improvement methods, develop industry partnerships and develop new opportunities, develop marketing and public relations plans, develop policies and procedures to follow federal, state, and other regulatory guidelines, enforce policies and procedures with monitoring techniques, and develop a quality management program.
- RAD 437 Image Analysis 3 cr**  
Student radiographs taken during the clinical periods will be viewed and critiqued within the classroom.  
Pre-requisite: (RAD 403 Minimum Grade of C or RAD 204 Minimum Grade of C) and (RAD 411 Minimum Grade of C or RAD 311 Minimum Grade of C) and RAD 415 Minimum Grade of C
- RAD 440 Radiology Management Preceptor 1 cr**  
To achieve the aims of the Radiology Management program, students require experience in a variety of settings, in addition to learning theory content in their management courses. This course will provide a valuable component of student development by providing an opportunity to work with professional radiology managers/supervisors/administrators in the field of Radiology.  
Pre-requisite: RAD 430 Minimum Grade of C and RAD 432 Minimum Grade of C and RAD 433 Minimum Grade of C and RAD 435 Minimum Grade of C
- RAD 441 Clinical Education I 5 cr**  
Through structured sequential assignments in clinical education settings, concepts of team practice, patient-centered clinical practice, and professional development are presented. Course designed to provide development, application, analysis, integration, synthesis, and evaluation of concepts and theories in radiation therapy.
- RAD 442 Clinical Education II 6 cr**  
A continuation of RAD 441. Through structured sequential assignments in clinical education settings, concepts of team practice, patient-centered clinical practice, and professional development are presented. Course designed to provide development, application, analysis, integration, synthesis, and evaluation of concepts and theories in radiation therapy.
- RAD 443 Clinical Education III 7 cr**  
A continuation of RAD 442. Through structured sequential assignments in clinical education settings, concepts of team practice, patient-centered clinical practice, and professional development are presented. Course designed to provide development, application, analysis, integration, synthesis and evaluation of concepts and theories in radiation therapy.
- RAD 446 Orientation to Oncology - W 3 cr**  
Examines Oncology terminology, concepts of diagnosis and treatment, orientation to equipment and procedures and the role of the radiation therapist. Ethical, legal and quality assurance concerns will also be discussed.
- RAD 448 Radiation Therapy Physics 3 cr**  
Processes in radiation production, interactions, detection, and measurement, units, calibration, are presented. Routine and emergency protection procedures for radiation-producing devices and radioactive sources are emphasized. Includes discussions on quality assurance methods, treatment unit calibration, dose monitoring, beam verification, and radiation protection for the patient, health-care worker, and the public.
- RAD 450 Patient Care in Oncology 1 cr**  
Fundamentals of oncology patient care with emphasis on physical and psycho-social needs assessment, treatment and disease side-effect management, nutritional care and pain management.
- RAD 452 Prin Pract of Rad Oncology I 3 cr**  
A study of techniques used for simulation and treatment delivery. Includes general and site-specific instruction, with attention given to technical details aimed at optimizing the dose delivery planned during simulation and accomplished during treatment. Time will be dedicated to demonstration of techniques.
- RAD 453 Prin Prac of Rad Oncology II 3 cr**  
A study of techniques used for simulation and treatment delivery. Includes general and site-specific instruction, with attention given to technical details aimed at optimizing the dose delivery planned during simulation and accomplished during treatment. Time will be dedicated to demonstration of techniques.
- RAD 454 Quality Mgt In Rad Oncology 1 cr**  
Components of quality management in Radiation Oncology will be studied, to include quality control and assurance checks for the clinical aspects of patient care, medical records, treatment delivery and localization equipment and treatment planning equipment. The role of various team members in continuous quality improvement will be discussed as well as legal and regulatory implications.  
Pre-requisite: RAD 441 Minimum Grade of C and RAD 448 Minimum Grade of C and RAD 446 Minimum Grade of C and RAD 450 Minimum Grade of C and RAD 452 Minimum Grade of C
- RAD 455 Dosimetry and Tx Planning I 3 cr**  
Content designed to examine factors that influence and govern clinical planning treatment. Encompasses isodose characteristics, contouring of relevant structures, dosimetric calculations, compensation, and clinical application of treatment beams. Optimal treatment planning is emphasized.

- RAD 456 Dosimetry and Tx Planning II** 2 cr  
A continuation of RAD 455. Content designed to examine factors that influence and govern clinical planning of patient treatment. Encompasses isodose characteristics, contouring of relevant structures, dosimetric calculations, compensation, and clinical application of treatment beams. Optimal treatment planning is emphasized.
- RAD 458 Cancer Mgt in Oncology - W** 3 cr  
This course examines special topics in Radiation Oncology and places emphasis on current literature related to various aspects of practice.
- RAD 460 Vascular Radiograph I** 4 cr  
Advanced practice in, and in-depth study of, the principles of vascular radiography.  
Pre-requisite: (RAD 300 Minimum Grade of C or RAD 107 Minimum Grade of C) and (RAD 304 Minimum Grade of C or RAD 104 Minimum Grade of C) and (RAD 307 Minimum Grade of C or RAD 131 Minimum Grade of C) and (RAD 310 Minimum Grade of C or RAD 265 Minimum Grade of C) and (RAD 312 Minimum Grade of C or RAD 101 Minimum Grade of C)
- RAD 461 Vascular Radiography II** 4 cr  
Advanced practice in, and in-depth study of, the principles of vascular radiography.  
Pre-requisite: (RAD 403 Minimum Grade of C or RAD 204 Minimum Grade of C) and (RAD 411 Minimum Grade of C or RAD 311 Minimum Grade of C) and RAD 415 Minimum Grade of C and (RAD 460 Minimum Grade of C or RAD 401 Minimum Grade of C)
- RAD 462 Vascular Radiography III-W** 4 cr  
Advanced practice in, and in-depth study of, the principles of vascular radiography.  
Pre-requisite: RAD 461 Minimum Grade of C
- RAD 464 Computerized Tomography I** 4 cr  
Advanced practice in, and in depth study of, computerized tomography.  
Pre-requisite: (RAD 300 Minimum Grade of C or RAD 107 Minimum Grade of C) and (RAD 304 Minimum Grade of C or RAD 104 Minimum Grade of C) and (RAD 307 Minimum Grade of C or RAD 131 Minimum Grade of C) and (RAD 310 Minimum Grade of C or RAD 265 Minimum Grade of C) and (RAD 312 Minimum Grade of C or RAD 101 Minimum Grade of C)
- RAD 465 Computerized Tomography II** 4 cr  
Advanced practice in, and in-depth study of, computerized tomography  
Pre-requisite: (RAD 403 Minimum Grade of C or RAD 204 Minimum Grade of C) and (RAD 411 Minimum Grade of C or RAD 311 Minimum Grade of C) and RAD 415 Minimum Grade of C and (RAD 460 Minimum Grade of C or RAD 401 Minimum Grade of C)
- RAD 466 Computerized Tomog III-W** 4 cr  
Advanced practice in, and in-depth study of, computerized tomography.  
Pre-requisite: RAD 464 Minimum Grade of C and RAD 465 Minimum Grade of C
- RAD 468 Magnetic Resonance Imaging I** 4 cr  
An in-depth study of the principles and clinical applications of MRI.  
Pre-requisite: (RAD 300 Minimum Grade of C or RAD 107 Minimum Grade of C) and (RAD 304 Minimum Grade of C or RAD 104 Minimum Grade of C) and (RAD 307 Minimum Grade of C or RAD 131 Minimum Grade of C) and (RAD 310 Minimum Grade of C or RAD 265 Minimum Grade of C) and (RAD 312 Minimum Grade of C or RAD 101 Minimum Grade of C)
- RAD 469 Magnetic Res Imaging II** 4 cr  
An in-depth study of the principles and clinical applications of MRI.  
Pre-requisite: (RAD 403 Minimum Grade of C or RAD 204 Minimum Grade of C) and (RAD 411 Minimum Grade of C or RAD 311 Minimum Grade of C) and RAD 415 Minimum Grade of C and (RAD 468 Minimum Grade of C or RAD 409 Minimum Grade of C)
- RAD 470 Magnetic Resonance Img III-W** 4 cr  
An in-depth study of the principles and clinical applications of MRI.  
Pre-requisite: RAD 468 Minimum Grade of C and RAD 469 Minimum Grade of C
- RAD 472 Mammography I** 4 cr  
Advanced practice and in-depth study of breast imaging techniques.  
Pre-requisite: (RAD 300 Minimum Grade of C or RAD 107 Minimum Grade of C) and (RAD 304 Minimum Grade of C or RAD 104 Minimum Grade of C) and (RAD 307 Minimum Grade of C or RAD 131 Minimum Grade of C) and (RAD 310 Minimum Grade of C or RAD 265 Minimum Grade of C) and (RAD 312 Minimum Grade of C or RAD 101 Minimum Grade of C)
- RAD 473 Mammography II** 4 cr  
Advanced practice and in-depth study of breast imaging techniques.  
Pre-requisite: (RAD 403 Minimum Grade of C or RAD 204 Minimum Grade of C) and (RAD 411 Minimum Grade of C or RAD 311 Minimum Grade of C) and RAD 415 Minimum Grade of C and (RAD 472 Minimum Grade of C or RAD 413 Minimum Grade of C)
- RAD 474 Mammography III-W** 4 cr  
Advanced practice and in-depth study, of breast imaging techniques.  
Pre-requisite: RAD 472 Minimum Grade of C and RAD 473 Minimum Grade of C

**RAD 490 Special Topics - 1 TO 3 cr**

Selected topics in Radiological Sciences. Students can increase knowledge in specific areas of radiological sciences, and also use this course to gain extra credit hours to complete their baccalaureate degree.

**RAD 491 Prof. Radiological Practice 6 cr**

A bridge course for certified radiographers to transition from Radiographer to BS program.

**RAD 494 Directed Independent Study-W 2 cr**

A comprehensive registry review to include written assignments and a presentation.

**RAD 496 Radiologic Science Research I 1 cr**

Prepare students to perform a research project in one of the imaging modalities.

Pre-requisite: RAD 403 Minimum Grade of C or RAD 423 Minimum Grade of C or RAD 441 Minimum Grade of C or RAD 460 Minimum Grade of C or RAD 464 Minimum Grade of C or RAD 468 Minimum Grade of C or RAD 472 Minimum Grade of C

**RAD 497 Rad Science Research II 1 cr**

Continuation of RAD 496. Students will design and perform a research project.

Pre-requisite: RAD 496 Minimum Grade of C

**RAD 499 Senior Honors Project - H - W 3 TO 6 cr**

Under the advice and guidance of a faculty mentor, honors students will identify and carry out a research project relevant to the field of Radiologic Sciences study that will lead to a formal presentation at the annual Honors Student Colloquium. The senior project will be judged and graded by three faculty members chaired by the honors mentor. This course is required for Honors recognition and may be repeated for up to 6 credit hours. Prerequisite: Permission of the department chair and completion of an approved project prospectus.

Pre-requisite: (RAD 403 Minimum Grade of C or RAD 204 Minimum Grade of C) or RAD 423 Minimum Grade of C or RAD 441 Minimum Grade of C or (RAD 460 Minimum Grade of C or RAD 401 Minimum Grade of C) or (RAD 464 Minimum Grade of C or RAD 405 Minimum Grade of C) or (RAD 468 Minimum Grade of C or RAD 409 Minimum Grade of C) or (RAD 472 Minimum Grade of C or RAD 413 Minimum Grade of C)

## Reading Instruction (RED)

**RED 110 Effect Read-Lang-Study Skills 3 cr**

A laboratory experience to increase facility in reading, language and study skills.

**RED 330 Found of Read Instruction - W 3 cr**

A course to orient the student to fundamentals in the teaching of reading and provides practice in basic skills.

**RED 331 Teaching Reading 3 cr**

A course focusing on methodology, materials, and techniques for developing systematic instruction and diagnosis appropriate for early childhood and elementary children. This course has a required field experience. Co-requisite: EEC 335, EEC 336, EEC 337, EEC 345 Pre-requisite: RED 330 Minimum Grade of C and EEC 346 Minimum Grade of C and RED 333 Minimum Grade of C and EEC 332 Minimum Grade of C

**RED 333 Literature for Children - W 3 cr**

A course for the selection and use of literature based on the interests, abilities, and needs of children from prekindergarten through the elementary school. Particular emphasis on creative ways of sharing books with children. This course has a required field experience. Co-requisite: RED 330

**RED 334 Lit for the Young Child - W 3 cr**

A survey course dealing with methods of writing literary materials with children in preschool through the primary grades. It is designed to assist those who wish to become widely acquainted with books and related materials for today's young children.

**RED 348 Lang Dev in Early Childhood - W 3 cr**

An introduction to speech and language development birth through the primary grades and teaching practices that support language and literacy development. Includes discussion of cultural and developmental factors that influence language development and appropriate methods for helping young children acquire language and literacy skills.

**RED 352 Literature for Adolescents 3 cr**

Discussion and evaluation of literature for students in grades 7 through 12 with extensive reading, listening, and viewing of materials.

**RED 451 Content Area Literacy - W 3 cr**

Methods and materials in the teaching of reading. Development of effective study and skills at the secondary level is stressed. Pre-requisite: SED 340 Minimum Grade of C and SED 341 Minimum Grade of C

**RED 458 Crit Read in Content Field - W 3 cr**

An examination of non-fiction (and some fiction) which emphasizes critical reading skills. Various types of prose will be considered including that found in textbooks, newspapers and other periodicals, popular fiction, and non-fiction.

**RED 530 Crnt Approach Read Writing Ins 3 cr**

Intensive training and modeling in the theories and practices in the teaching of reading and writing with an emphasis on writing theory and practice.

- RED 531 Trends-Practices Tchg Reading** 3 cr  
Begins with in-depth study of the nature of reading as a process and its place in the total school program and extends through assessments, methods, materials, and personalized procedures for pupils and teachers.
- RED 533 Diag-Corr Reading Disabilities** 3 cr  
First, an intensive study of steps in the diagnosis of reading disabilities; second, a survey of corrective and remedial techniques for eliminating the difficulties; the third, application of diagnostic and instructional techniques to specific type of disabilities.  
Pre-requisite: RED 531 Minimum Grade of B
- RED 534 Remed-Clinic Proced in Reading** 3 cr  
A practicum in remediating reading disabilities. Each student receives close supervision in work with actual cases at varying disabilities levels.  
Pre-requisite: RED 533 Minimum Grade of B
- RED 541 Literacy in the Content Area** 3 cr  
This course includes the methods and materials for literacy-based instruction in the content areas. The incorporation of literacy-based activities such as reading, writing, and thinking; and the use of strategies to promote student comprehension are emphasized. Prerequisite: Admission to teacher education program.
- RED 544 Wrtg Process Skls Read Writing** 3 cr  
Intensive writing applications with an emphasis on the writing process, action research, and the reading and discussion of reading and writing pedagogy and research.
- RED 545 Lit for Children - Adolescents** 3 cr  
Provides a comprehensive survey of books written for children and adolescents, and makes appropriate interspersions of periodicals and other media. Through varied class activities, with emphasis on techniques for encouraging literary enjoyment, the student will increase skills in making children's literature an integral part of the school curriculum.
- RED 547 Lit Early Childhood Classroom** 3 cr  
Provides a comprehensive survey of books written for children in the pre K-3 classroom, and incorporates periodicals, media and technology appropriate for teaching young children. A variety of class activities intended to motivate and encourage children to become lifelong readers is included.
- RED 548 Literacy Coaching** 3 cr  
Includes an in-depth study of coaching techniques, specifically the role of coaching in the school setting. This course includes strategies for encouraging teachers to engage in the coaching process, coaching teachers to meet the literacy needs of their students, as well as providing school-based professional development and maximizing moments with struggling readers.  
Pre-requisite: RED 531 Minimum Grade of B
- RED 557 Practicum in Reading Education** 1 TO 9 cr  
Experiences in working in the area of reading instruction and/or diagnosis under the supervision of a reading teacher or supervisor and a college supervisor.
- RED 560 Materials Workshop -** 3 cr  
A topical workshop in which participants have experiences in creating, designing, constructing and using instructional materials and activities. This work will emphasize reading and language arts. No more than 6 hours can be applied toward a degree program. Prerequisite: Permission of instructor.
- RED 590 Sp Top -** 3 TO 6 cr  
Guided investigation of topics in reading education, such as curriculum revision, course or program design, newly evolved trends in reading education, and implications of research in reading education. No more than 6 hours can be applied toward a degree program.
- RED 594 Dir St - Research** 1 TO 3 cr  
Students explore through directed study research problems and issues of special interest or significance in reading education. No more than 3 hours of any departmental 594 courses can be applied toward a degree program. Prerequisite: Permission of department chair.
- RED 595 Internship in Reading Educ** 1 TO 9 cr  
The internship is a supervised learning experience in a work setting similar to that in which an educator will eventually be employed. The internship provides students with an opportunity to apply the theories and concepts learned during the graduate program.  
Pre-requisite: PRAXIS-Reading Specialist 530 or PRAXIS-Reading Specialist 157 and RED 533 Minimum Grade of B and RED 534 Minimum Grade of B
- RED 599 Thesis** 1 TO 9 cr  
A student selects a project, study, or investigation which is related to reading education. The project will form the basis for the thesis. A thesis committee will provide direction during the investigation and during the writing of the thesis.
- RED 611 Theor Lang Dev Tchg Reading** 3 cr  
Emphasizes theories of language acquisition and development. Includes linguistics, language development of the culturally different child, and application of theory to classroom practices in reading and related areas. Requires special permission.
- RED 612 Socio Influences in Rdg Instr** 3 cr  
Focuses upon the history of reading instruction, sociological factors influencing reading, reading in relation to other media of communication, and ways of applying these findings in classroom and clinical practice. Requires special permission.

**RED 613 Admn and Supv the Rdg Program 3 cr**

Analyzes and interprets administrative and supervisory roles and functions as they relate to the total school program, elementary through high school. Stress is upon facilitating and enhancing all aspects of the program. Requires special permission.

**RED 615 Diag - Rem Severe Rdg Disab 3 cr**

Provides laboratory experiences in studying severe cases of reading disabilities and in developing plans and procedures for their remediation. Requires special permission.

**RED 630 Psy Factors in Tchg Reading 3 cr**

Relates pertinent psychological concepts and principles to (1) current definitions of the reading process, (2) methods of teaching, and (3) special procedures for reluctant and disabled readers. The student may apply these concepts and principles in regular or laboratory settings.

**RED 640 Research in Reading 3 cr**

A critical analysis and evaluation of the significant research studies in reading from which reading concepts emerge and from which implications for teaching and further research may be drawn.

**RED 648 Literacy Coaching Teacher/Ldrs 3 cr**

A purpose of this course is to prepare professional educators through teaching, research, and service to become committed to life-long learning and to facilitate the process of building better communities. Students will demonstrate best educational practices and professional dispositions and will learn how to create a positive, motivational learning environment in schools while recognizing, appreciating, and including diverse learners and perspectives. Additionally, students are expected to demonstrate satisfactory skills in curriculum leadership; to engage in action research related to schools; to engage in literacy coaching; to address current family, community, regional, and national issues related to scholastic achievement, and to use tenets of instructional leadership to guide teachers and other professionals toward improving student achievement.

**RED 690 Sp Top - 3 cr**

Guided investigation of topics in reading education such as curriculum revision, course or program design, newly evolved trends in reading education, and implications of research in reading education.

**RED 694 Dir St - Research 1 TO 3 cr**

Students explore through directed study problems and issues of special interest or significance in reading education. No more than 3 hours of any departmental 694 courses can be accepted toward a degree program. Prerequisite: Permission of department chair.

**RED 699 Research Project 1 TO 3 cr**

A supervised research project, study, or investigation in reading. Student will conduct an investigation, and apply concepts and skills learned during the sixth-year program. May be taken more than one semester. Prerequisite: Permission of department chair.  
Pre-requisite: IDE 692 Minimum Grade of B or EDU 692 Minimum Grade of B

## Religion (REL)

**REL 100 Intro to the Study of Religion 3 cr**

As a general introduction to the academic study of religion, REL 100 examines the function of religion in relation to human beliefs, social practices, and culture in general. The course surveys a broad number of important debates in the history of religious studies, such as the definition of religion, the insider/outsider problem, theories on the origins of religion, the comparison of religions, religion's psychological, sociological, and political functions, and the manner in which human communities authorize systems of behavior.

**REL 200 Old Testament/Hebrew Bible 3 cr**

An introduction or survey of the literature and social world of the Old Testament/Hebrew Bible. As a way of further illuminating these materials, attention will also be given to the history and religion of Israel as well as the other peoples of the ancient Near East. Fulfills the General Education Requirement.

**REL 201 Survey of the New Testament 3 cr**

This course is an introductory survey of the New Testament, including the life and ministry of Jesus Christ, apostolic history, related Greco-Roman history and archeology, principal critical issues, and the unity and diversity of New Testament theology. Fulfills the General Education Requirement.

**REL 242 Western Philosophy: Medieval 3 cr**

A survey of Medieval Western Latin, Jewish, and Islamic philosophers. Identical with PHL 242. Credit cannot be received for both REL 242 and PHL 242.

**REL 290 Special Topics - 3 cr**

Different themes and issues of significance in religion will be studied as announced.

- REL 310 Classical Mythology** 3 cr  
Through the disciplines of English and Philosophy, this course will provide an introduction to myths and to the literature that recounts the myths, legends, and folktales of ancient Greece and Rome. This course will also look at how different writers treat the material and why their treatments vary. Cross-listed with EH 310, PHL 310 and CLA 310. Credit cannot be received for both REL 310 and either EH 310 or PHL 310 or CLA 310.  
Pre-requisite: ACT English 27( or SAT Critical Reading 550 or University - EH101 Exempt P or EH 101 Minimum Grade of C or EH 110 Minimum Grade of D or EH 190 Minimum Grade of D or USA 010 Minimum Grade of S) and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)
- REL 331 History of England to 1603** 3 cr  
The history of England from the Roman occupation to the Age of Tudors. Identical with HY 331. Credit cannot be received for both REL 331 and HY 331.
- REL 343 Witchcraft and Magic** 3 cr  
The history of beliefs and practices concerning witches, magic, and witch-hunting in Medieval and Early Modern Europe. Identical with HY 343. Credit cannot be received for both REL 343 and HY 343.
- REL 347 The Holocaust** 3 cr  
The history of the systematic mass murder of Europe's Jews and other groups by Nazi Germany during World War II. Cross-listed with HY 347. Credit cannot be received for both REL 347 and HY 347.
- REL 351 Philosophy of Religion - W** 3 cr  
Investigates the nature of religion, including religious experience, religious language, arguments for the existence of God, and the problem of evil. Identical with PHL 351. Credit cannot be received for both REL 351 and PHL 351.  
Pre-requisite: (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)
- REL 352 World Religions** 3 cr  
This course is an introduction to the religions of the world. It is divided into three basic units: Indigenous Religions (of Africa, North America, and Oceania); Eastern Religions (Hinduism, Buddhism, Daoism, Confucianism, Jainism) and Western Religions (Judaism, Christianity, Islam). The emphasis is on grasping the core principles of each tradition, seeing the ways in which religion meets basic human needs, and religion as a cultural artifact that borrows, adapts, and changes over time. Course is identical with PHL 352 and SY 352. Credit cannot be received for both REL 352 and PHL 352 or SY 352.
- REL 353 Reformation Europe 1300-1520** 3 cr  
The role of religious change in the 16th and 17th centuries. Identical with HY 353. Credit cannot be received for both REL 353 and HY 353.
- REL 354 Philosophies of India** 3 cr  
Introduces the major religions and philosophies of India by way of the classical Realist/Antirealist debate in India. Study of the major religious doctrines of theistic and non-dualist Vedanta, Buddhism, and Jainism, and their philosophical articulation in the Nyaya, Advaita Vedanta, Madhyamaka, and other schools. Identical with PHL 354. Credit cannot be received for both REL 354 and PHL 354.
- REL 355 Chinese Philosophy** 3 cr  
Introduces the major classical religious and philosophical systems of China by way of an examination of early Confucianism, Mohism, Yangism, Legalism, Taoism, and Chinese Buddhism. Particular emphasis will be placed upon the role of these schools in the development of Chinese religion, morality, and political organization. Identical PHL 355. Credit cannot be received for both REL 355 and PHL 355.
- REL 364 Islamic Civilization to 1453** 3 cr  
This course will cover the political, economic, social, and cultural history of Islamic Civilization from its beginnings in the Arabian Peninsula in the sixth century to the Ottoman conquest of Constantinople in 1453. Cross-listed with HY 364. Credit cannot be received for both REL 364 and HY 364.
- REL 365 Islamic Civilization 1465 - W** 3 cr  
This course will cover specific topics in the history of Islamic civilization. Prerequisite: Junior or Senior status. Cross-listed with REL 365. Credit cannot be received for both HY 365 and REL 365.
- REL 373 Religion in American History** 3 cr  
Examines the role of religion in United States history from the colonial era to the present. Identical with HY 373. Credit cannot be received for both REL 373 and HY 373.  
Pre-requisite: (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)
- REL 390 Special Topics -** 3 cr  
Different figures or topics of significance in religion will be studied as announced. May be repeated, when content varies, for a total of six hours.
- REL 420 Sociology of Religions** 3 cr  
An analysis of religion as a social institution with emphasis on modern western societies. Topics include the functions of religion for society and individuals, changing patterns of religious belief and practice and the relationship between religion and other social institutions. Identical with SY 420. Credit cannot be received for both REL 420 and SY 420.  
Pre-requisite: SY 109 Minimum Grade of C
- REL 465 Studies of HY of Islamic Civ** 3 cr  
This course will cover specific topics in the history of Islamic civilization. May be repeated for credit when content varies. Prerequisite: Junior or Senior status. Cross-listed with HY 465. Credit cannot be received for both REL 465 and HY 465.

**REL 492 Seminar - 3 cr**  
An investigation of issues and concepts in religion for advanced undergraduates and graduate students. May be repeated, when content varies, for a total of six hours.

**REL 494 Directed Studies - 1 TO 3 cr**  
Directed research in religion under the guidance of a member of the department. Credit according to the magnitude of the individual project. May be repeated, if content varies, for a total of three hours. Prerequisites: Junior or senior standing and approval of directing professor and department chair.

**REL 499 Honors Thesis - H - W 3 TO 6 cr**  
Extended research paper prepared under the direction of thesis advisor plus two-person committee selected by advisor in consultation with student. Prerequisites: The student must have developed a proposal for the thesis in consultation with the advisor, and received permission for the work from the committee. In addition, the student must be a senior major or minor, have completed the Common Core, and have at least a 3.3 GPA in the Religion Concentration of the Philosophy major. Credit for this course is only given as an addition to the hours required for the major.

Pre-requisite: (PHL 120 Minimum Grade of D and PHL 240 Minimum Grade of D and PHL 245 Minimum Grade of D and PHL 321 Minimum Grade of D and PHL 461 Minimum Grade of D) and (PHL 310 Minimum Grade of D or REL 310 or CLA 310 Minimum Grade of D)

**REL 594 Directed Studies 3 cr**  
Directed research in philosophy under the guidance of a member of the department. May be repeated, if content varies, for a total of six hours. Prerequisite: Graduate Student in Department conferring a Graduate Degree (hence not open to Philosophy majors in any Concentration in Philosophy.)

## Secondary Education (SED)

**SED 340 Fundamentals of Teaching - W 3 cr**  
Theory and practice of planning for instruction. Conducted as a system for individually guided mastery.

**SED 341 Teaching Skills - W 3 cr**  
Study and practice of selected instructional skills and classroom management focusing on middle level education and the transition to secondary education. Prerequisites: Junior standing and admission to candidacy. Pre-requisite: SED 340 Minimum Grade of C and (RED 351 Minimum Grade of C or RED 451 Minimum Grade of C) and (EPY 455 Minimum Grade of C or EPY 355 Minimum Grade of C) and (SED 453 Minimum Grade of C or SED 454 Minimum Grade of C or SED 456 Minimum Grade of C or SED 457 Minimum Grade of C)

**SED 342 Secondary Field Experience 1 cr**  
Supervised practice in teaching curriculum areas in middle and high school classroom settings during the semester in which block courses are taken. Pre-requisite: SED 340 Minimum Grade of C

**SED 350 Intro to Teaching-Middle Sch 3 cr**  
A study of the concerns of pre-service middle school teachers, including program development, characteristics of the middlescent learners, nature of student-oriented instruction, and facilitation of learning of exceptional youth within the regular learning groups. Prerequisite: Junior standing.

**SED 453 Tch Lang Subj Sec Sch 3 cr**  
Assists the student in organizing materials and in developing methods of teaching language subjects in secondary schools. Offered in Fall Semester only. Prerequisites: Admission to candidacy, completion of two-thirds of teaching field(s), and SED 340 or SED 555. Pre-requisite: SED 340 Minimum Grade of C or SED 555 Minimum Grade of B

**SED 454 Tch Math Secondary Schools 3 cr**  
Assists the student in organizing materials and in developing methods of teaching mathematics in secondary schools. Offered in Fall Semester only. Prerequisites: Admission to candidacy, completion of two-thirds of teaching field, and SED 340 or SED 555. Pre-requisite: SED 340 Minimum Grade of C or SED 555 Minimum Grade of B

**SED 455 Tch Music in Secondary Sch 3 cr**  
Assists the student in organizing materials and in developing methods of teaching music in secondary schools. Offered in Fall Semester only. Prerequisites: Admission to candidacy, completion of two-thirds of teaching field, and SED 340 and 341 or SED 555 and 559. Pre-requisite: (SED 340 Minimum Grade of C and SED 341 Minimum Grade of C) or (SED 555 Minimum Grade of B and SED 559 Minimum Grade of B)

**SED 456 Tch Science in Secondary Sch 3 cr**  
Assists the student in organizing materials and in developing methods of teaching science in secondary schools. Offered in the Fall Semester only. Prerequisites: Admission to candidacy, completion of two-thirds of teaching field, and SED 340 or SED 555. Pre-requisite: SED 340 Minimum Grade of C or SED 555 Minimum Grade of B

**SED 457 Tch Social Studies in Sec Sch 3 cr**  
Assists the student in organizing materials and in developing methods of teaching social studies in secondary schools. Offered in Fall Semester only. Prerequisites: Admission to candidacy, completion of two-thirds of teaching field, and SED 340 or SED 555. Pre-requisite: SED 340 Minimum Grade of C or SED 555 Minimum Grade of B

**SED 459 Creative Exper in Oral Lang 3 cr**

Background in the theory and function of oral language, and techniques for developing oral and dramatic communicative skills. Emphasis will be on everyday oral language, rather than on formal speech or theater.

**SED 463 Stu Tchg Middle School 9 TO 12 cr**

Observation and supervised teaching in the middle schools with opportunity for study and discussion of the problems and issues encountered. Students will be placed with a person holding a valid teaching certificate in the appropriate field. Prerequisite: Appropriate methods course

**SED 464 Stu Tchg in High School - 9 TO 12 cr**

Observation and supervised teaching in high schools with opportunity for study and discussion of the problems and issues encountered. Students will be placed with person holding a valid teaching certificate in the appropriate field. Pre-requisite: SED 340 Minimum Grade of C and SED 341 Minimum Grade of C and (SED 453 Minimum Grade of C or SED 454 Minimum Grade of C or SED 456 Minimum Grade of C or SED 457 Minimum Grade of C)

**SED 465 Internship 3 cr**

Observation and supervised teaching with opportunity for study and discussion of problems and issues encountered in the N-12 program. Students will be placed with a person holding a valid teaching certificate in the appropriate field. Prerequisite: Appropriate methods course.

**SED 466 Stu Tchg Lang Arts in the HS 9 TO 12 cr**

Observation and supervised teaching with opportunity for study and discussion of problems and issues encountered in the N-12 program. Students will be placed with a person holding a valid teaching certificate in the appropriate field. Prerequisites: Admission to candidacy, SED 340 and SED 341, appropriate methods course(s), completion of three fourths of teaching field(s), and a PRAXIS II score of 151 or higher.

Pre-requisite: PRAXIS-Eng Lang, Lit and Comp 151 and SED 340 Minimum Grade of C and SED 341 Minimum Grade of C and SED 453 Minimum Grade of C

**SED 467 Stu Tchg Soc Studies in the HS 9 TO 12 cr**

Observation and supervised teaching with opportunity for study and discussion of problems and issues encountered in the N-12 program. Students will be placed with a person holding a valid teaching certificate in the appropriate field. Prerequisites: Admission to candidacy, SED 340 and SED 341, appropriate methods course(s), completion of three-fourths of teaching field(s), and a PRAXIS II score of 151 or higher.

Pre-requisite: PRAXIS-Soc St Cont Knowledge 153 and SED 340 Minimum Grade of C and SED 341 Minimum Grade of C and SED 457 Minimum Grade of C

**SED 468 Student Tchg Science in the HS 9 TO 12 cr**

Observation and supervised teaching with opportunity for study and discussion of problems and issues encountered in the N-12 program. Students will be placed with a person holding a valid teaching certificate in the appropriate field. Prerequisites: Admission to candidacy, SED 340 and SED 341, appropriate methods course(s), completion of three-fourths of teaching field(s), and a PRAXIS II score of 146 or higher.

Pre-requisite: PRAXIS-Gen Sci Cont Knowledge 147 and SED 340 Minimum Grade of C and SED 341 Minimum Grade of C and SED 456 Minimum Grade of C

**SED 469 Student Tchg Math in the HS 9 TO 12 cr**

Observation and supervised teaching with opportunity for study and discussion of problems and issues encountered in the N-12 program. Students will be placed with a person holding a valid teaching certificate in the appropriate field. Prerequisites: Admission to candidacy, SED 340 and SED 341, appropriate methods course(s), completion of three-fourths of teaching field(s), and a PRAXIS score of 118 or higher.

Pre-requisite: PRAXIS-Math Cont Knowledge 126 and SED 340 Minimum Grade of C and SED 341 Minimum Grade of C and SED 454 Minimum Grade of C

**SED 470 Stu Tchg N-12 Program 9 TO 12 cr**

Observation and supervised teaching with opportunity for study and discussion of problems and issues encountered in the N-12 program. Students will be placed with a person holding a valid teaching certificate in the appropriate field. Pre-requisite: AECTP Overall P and PRAXIS-Music Cont Knowledge 150( or PRAXIS-Music Cont Knowledge 150 )

**SED 490 Sp Top - 3 cr**

Current topics of special concern to secondary educators. Not more than 6 hours may be earned in Special Topics courses.

**SED 494 Dir St - 1 TO 3 cr**

Directed study. No more than 6 hours can be accepted for a Bachelor's Degree and Class B Certificate. Prerequisites: Permission of department chair.

**SED 499 Senior Honors Project - H 3 TO 6 cr**

Under the advice and guidance of a faculty mentor, honors students will identify and carry out a research project, relevant to the field of secondary study, that will lead to a formal presentation at the annual Honors Student Colloquium. The senior project will be judged and graded by three faculty chaired by the honors mentor. This course is required for Honors recognition and may be repeated for up to 6 credit hours. Prerequisite: Participant in honors program and junior level status.

**SED 529 Grad Field Experience 0 TO 3 cr**

Supervised practice in teaching curriculum areas in middle and high school classroom settings during the semester in which the corresponding methods course is taken.

- SED 544 Guiding Lrng in the Sec School 3 cr**  
Study of methods and techniques of teaching in the secondary schools. Assists students in organizing materials, developing strategies for teaching their discipline area in secondary school. Includes field experience.
- SED 547 Tchg Basic Writing Skills 3 cr**  
Background in theories of the writing process and techniques to help students develop writing skills. The main emphasis will be on teaching the process of writing: evaluation of writing and the issue of non-standard English will also be considered.
- SED 551 The Secondary School Student 3 cr**  
Study of the physical, mental, and social development of students at secondary school age levels. The objectives and procedures of American secondary education are related to the development of adolescents in our culture. Included are the level of significance of specific individual differences among students in the various fields, the relationship of student self-concept to learning, students study through use of records, a variety of diagnostic materials, and group study projects.
- SED 552 The High School Curriculum 3 cr**  
The study of the purpose of American secondary education and how these are reflected in the school curriculum. Curriculum organization, professional roles in curriculum development, and forces shaping the curriculum today are examined.
- SED 553 Tchg Lang Subj in Sec School 3 cr**  
Assists students in organizing materials and developing methods of teaching language subjects in secondary schools. Includes field component.  
Pre-requisite: SED 555 Minimum Grade of B
- SED 554 Tchng Math in Sec Schools 3 cr**  
Assists students in organizing materials and developing methods of teaching mathematics in secondary schools. Includes field component.  
Pre-requisite: SED 555 Minimum Grade of B
- SED 555 Curriculum-Tchg in Sec School 3 cr**  
This course provides an introduction to effective instructional practices in the secondary classroom. The focus is on planning for and delivering the type of instruction which promotes successful classroom management. This course has a required field experience.
- SED 556 Tchg Science in Sec Schools 3 cr**  
Assists students in organizing materials and developing methods of teaching science in secondary schools. Includes field component.  
Pre-requisite: SED 555 Minimum Grade of B
- SED 557 Tchg SS in Secondary Schools 3 cr**  
Assists students in organizing materials and developing methods of teaching social studies in secondary schools. Includes field component.  
Pre-requisite: SED 555 Minimum Grade of B
- SED 558 The Middle School Curriculum 3 cr**  
A study of the Middle School program in light of the characteristics and educational needs of youth in early adolescence.
- SED 559 Adv Teaching Techniques 3 cr**  
Study and practice of selected instructional strategies and classroom management for middle level education and secondary education.
- SED 560 Graduate Research Seminar 3 cr**  
Research in problems confronting American secondary education. Selected topics are explored by students which provide the basis for seminar discussions. A seminar paper is presented by each student. This course also includes a field-based practicum. Prerequisite: Permission of the department chair.  
Pre-requisite: IDE 510 Minimum Grade of C
- SED 561 Trends-Prac Tchg Lang Sec 3 cr**  
Current trends and practices in curriculum, instruction, selection of materials, and derivation of procedures for guiding learning in reading, listening, writing, and speaking.
- SED 562 Trends-Prac Tchg Soc St 3 cr**  
Current trends and practices in organizing and teaching social studies in the secondary school. The selection and use of content, materials, methods, and the development and appraisal of typical units are emphasized.
- SED 563 Trends-Prac Tchg Math Sec 3 cr**  
Current curriculum trends in teaching mathematics. Included are the selection of materials and a study of methods appropriate for teaching mathematics in the secondary school.
- SED 564 Trends-Prac Tchg Science 3 cr**  
Current curriculum trends in teaching science in the secondary school. Included are the selection of materials and an evaluation of those methods which are appropriate for teaching the biological and physical sciences.
- SED 565 Trends - Prac Tchg Foreign Lan 3 cr**  
Current trends and practices in curriculum, instruction, selection of materials, and derivation of procedures for guiding learning in reading, listening, writing, and speaking in Foreign Languages.  
Pre-requisite: SED 555 Minimum Grade of B
- SED 567 Multicultural Exper Sec School 3 cr**  
In an increasingly diverse society, teachers must be able to work with students from a variety of backgrounds, some quite different from teachers' own cultural backgrounds. This course responds to the growing need for better training for teachers in how to work with a diverse population, increase academic achievement, and prepare students for a global workplace.

**SED 590 Sp Top - 3 cr**

Current topics of special concern to secondary educators. A different topic will be used each time the course is offered. No more than 6 hours may be applied toward a degree program.

**SED 593 Intern in Sec Educ Forgn Lang 3 TO 6 cr**

The internship is a supervised learning experience in a work setting similar to that in which an educator will eventually be employed. The internship provides the student with an opportunity to apply the theories and concepts learned during the graduate secondary foreign language program. Not more than six hours may be taken. Prerequisite: An acceptable PRAXIS II test score.

Pre-requisite: EDU 453 Minimum Grade of C and SED 555 Minimum Grade of C and SED 559 Minimum Grade of C and SED 565 Minimum Grade of B and PRAXIS-French Cont Knowledge 148( or PRAXIS-French World Language 162 ) or PRAXIS-German Cont Knowledge 142( or PRAXIS-German World Language 161 ) or PRAXIS-Spanish Cont Knowledge 147( or PRAXIS-Spanish World Language 158 )

**SED 594 Dir St - Research 1 TO 3 cr**

Students explore through directed study problems and issues of special interest or significance in secondary education. No more than 3 hours of any departmental 594 courses can be applied toward degree program. Requires permission of department chair.

**SED 595 Intern in Sec Edu Lang Arts 3 OR 6 cr**

The internship is a supervised learning experience in a work setting similar to that in which an educator will eventually be employed. The internship provides the student with an opportunity to apply the theories and concepts learned during the graduate secondary language arts program. Not more than 6 hours may be taken. Prerequisite: PRAXIS II test score of 151 or higher.

Pre-requisite: (EDU 453 Minimum Grade of C or SED 553 Minimum Grade of B) and SED 555 Minimum Grade of C and SED 559 Minimum Grade of C and PRAXIS-Eng Lang Arts-Cont Know 147 or PRAXIS-Eng Lang, Lit and Comp 151( or PRAXIS-Eng Lang Lit-Cont Knowl 151 )

**SED 596 Intern in Sec Edu Soc Studies 3 OR 6 cr**

The internship is a supervised learning experience in a work setting similar to that in which an educator will eventually be employed. The internship provides the student with an opportunity to apply the theories and concepts learned during the graduate secondary social studies program. Not more than six hours may be taken. Prerequisite: PRAXIS II test score of 151 or higher.

Pre-requisite: (EDU 457 Minimum Grade of C or SED 557 Minimum Grade of B) and SED 555 Minimum Grade of C and SED 559 Minimum Grade of C and PRAXIS-Soc St Cont Knowledge 153( or PRAXIS-Soc Stud Cont Knowledge 153 )

**SED 597 Intern in Sec Educ Science 3 TO 6 cr**

The internship is a supervised learning experience in a work setting similar to that in which an educator will eventually be employed. The internship provides the student with an opportunity to apply the theories and concepts learned during the graduate secondary science program. Not more than six hours may be taken. Prerequisite: PRAXIS II test score of 146 or higher.

Pre-requisite: PRAXIS-Gen Sci Cont Knowledge 147( or PRAXIS-Gen Science Cont Knowl 147 ) and (EDU 456 Minimum Grade of C or SED 556 Minimum Grade of B) and SED 555 Minimum Grade of C and SED 559 Minimum Grade of C

**SED 598 Intern in Sec Educ Math 3 TO 6 cr**

The internship is a supervised learning experience in a work setting similar to that in which an educator will eventually be employed. The internship provides the student with as opportunity to apply the theories and concepts learned during the graduate secondary math program. Not more than six hours may be taken. Prerequisite: PRAXIS II test score of 118 or higher.

Pre-requisite: (EDU 454 Minimum Grade of C or SED 554 Minimum Grade of B) and SED 555 Minimum Grade of C and SED 559 Minimum Grade of C and PRAXIS-Math Cont Knowledge 126( or PRAXIS-Math Cont Knowledge 126 ) or PRAXIS-Math Cont Knowledge 145

**SED 599 Thesis 1 TO 9 cr**

A student selects a project, study, or investigation in secondary education related to his area of specialization. The project forms a basis for the thesis. The thesis committee will give guidance during the investigation and during the writing of the thesis.

**SED 699 Research Project 1 TO 3 cr**

The culminating experience which the candidate must synthesize and apply the various program components in a selected instructional setting. The student completes a research project in a public school setting under the guidance of a department faculty committee. May be taken more than one semester. Prerequisite: Permission of the department chair.

Pre-requisite: IDE 692 Minimum Grade of B or EDU 692 Minimum Grade of B

## Social Work (SW)

**SW 200 Intro to SocWork-SocWelfare 3 cr**

Introduction to the profession of social work. Topics include historical development, nature of profession, professional associations, practice theory, values and ethics.

**SW 201 Human Behav/Social Environ I 3 cr**

The Person-In-Environment model of human behavior. Course examines individual, family and group behavior in the social context.

Pre-requisite: (BLY 101 Minimum Grade of C and BLY 101L Minimum Grade of C) or (BLY 121 Minimum Grade of C and BLY 121L Minimum Grade of C)

**SW 214 SW Skills and Field Experience 3 cr**

Service learning experience in social work. Forty hours of agency-based experience is required. Students must attend two hour weekly skills development lecture.

Pre-requisite: SY 109 Minimum Grade of C or SY 112 Minimum Grade of C

**SW 220 Power, Privilege & Oppression 3 cr**

This course is designed as an introduction to the field of social work with diverse populations. The purpose is to prepare students to work with diverse groups of people locally and globally. This course examines issues related to the creation of race in America, the oppression of people on the basis of their gender, ethnicity, race, culture, sexual orientation, physical or mental ability, age, religion and national origin.

**SW 300 Ethical Decision-Making 3 cr**

This course provides a more in-depth analysis of the Social Work Code of Ethics and overviews frameworks for ethical decision-making. The emphasis is on improving students' ability to more readily identify ethical problems and thoughtfully work through these issues through the use of case studies.

**SW 301 Social Welfare Policy 3 cr**

Social Policy in relation to Social Work Practice. Course addresses social policy analysis, social advocacy, diversity and social and economic justice.

Pre-requisite: SW 212 Minimum Grade of C

**SW 302 Human Behav/Social Environ II 3 cr**

The Person-In-Environment Model of human behavior. Course examines task groups, organizations, and community systems in the social context.

Pre-requisite: SY 109 Minimum Grade of C

**SW 310 Community Context 3 cr**

The rural and urban contexts of social work practice. Emphasis of the course is placed on how these contexts affect human behavior and the practice of social work.

**SW 340 Family Violence 3 cr**

Study of the social problems of family violence including domestic violence, intimate partner violence, child abuse, and elder abuse. The role of the social worker, social services, and social policy will be examined.

Pre-requisite: SY 109 Minimum Grade of C

**SW 350 Child Welfare Services 3 cr**

General survey of the Social Work field of child welfare services with a focus on child protective services.

**SW 360 SW Practice in Mental Health 3 cr**

This course is designed to provide the student with an overview of the mental health system and focuses specifically on issues related to the role of a social worker in a mental health setting.

Pre-requisite: SW 200 Minimum Grade of C

**SW 401 Generalist Practice I 3 cr**

The Generalist Model of social work applied to individuals, families, and groups. Emphasis is placed on diversity, social work values and ethics, and evidence based practice.

Pre-requisite: (SW 302 Minimum Grade of C or SW 202 Minimum Grade of C)

**SW 402 Generalist Practice II 3 cr**

The Generalist Model of social work applied to organizations, communities and task groups. Emphasis is placed on diversity, social work values and ethics and social justice.

**SW 412 Field Instruction 3 TO 12 cr**

Field Instruction in social work. Four hundred thirty-six hours of supervised experience in social work setting. SW 412 can be taken during a single semester or over multiple semesters.

Co-requisite: SW 414

Pre-requisite: SW 401 Minimum Grade of C and SW 402 Minimum Grade of C and SY 382 Minimum Grade of C

**SW 414 Senior Seminar - W 3 cr**

This is the capstone senior level course in social work. Class discussion and assignments are designed to facilitate integration between field instruction experience and curriculum content. SW 412 must be taken concurrently. Fee.

Co-requisite: SW 412

Pre-requisite: SW 401 Minimum Grade of C and SW 402 Minimum Grade of C and SY 382 Minimum Grade of C

**SW 420 Social Work in Health Care 3 cr**

Study of the practice of social work in the health care field. Major social policy issues, service delivery systems, relationships with other health care professionals, and practice issues related to social work will be covered.

**SW 460 Rural Social Services 3 cr**

This elective course in rural social services provides a survey of professional services with rural and small communities. It is open to all majors. Included are topics related to services, social policy, rural culture and behavior, professional values and ethics, diversity, and services.

Pre-requisite: EH 102 Minimum Grade of C

**SW 490 Special Topics - 3 cr**

Advanced topics in Social Work. May be repeated twice for elective content when topic varies.

## Sociology (SY)

**SY 109 Introductory Sociology 3 cr**

Sociology is the scientific study of social behavior and social phenomena. This course is a survey intended to introduce students to the major concepts, issues, theory, methods and substantive findings of the discipline. Topics may include the impact of social structures on behavior and opportunity, inequalities, socialization, culture, religion, crime and deviance, the family, modernity, and globalization. Core Course.

**SY 112 Social Problems 3 cr**

A study of persistent and recurring social conditions and individual and group behaviors that are contrary to the expressed norms of community members and that community members strive to control through collective action. Core Course.

**SY 200 Soc Factors in Sexual Behavior 3 cr**

An analysis of social patterns in sexual behavior including theories of sexuality and gender, gender similarities and differences in sexual behavior, sexual orientation, sexual violence, teen pregnancy and sexually transmitted diseases. Pre-requisite: SY 109 Minimum Grade of D

**SY 220 Marriage and the Family 3 cr**

The organization, function, and present status of the family, primarily in the United States. Problems of mate selection, marital adjustment, and parent-child relations treated on the basis of recent and current social change. Pre-requisite: SY 109 Minimum Grade of D

**SY 241 Criminology 3 cr**

The nature and causation of criminal behavior. Evaluation of theories and research. Pre-requisite: SY 109 Minimum Grade of D

**SY 242 Corrections 3 cr**

Administration of criminal justice in American society. Federal state and local prison systems; management and treatment of criminals; history of punishment; jail detention, probation and parole; prison activities; rehabilitation. Pre-requisite: SY 109 Minimum Grade of D

**SY 290 Special Topics - 3 cr**

Selected topics in sociology. May be taken for a maximum of nine hours credit when the subject matter varies. Pre-requisite: SY 109 Minimum Grade of D

**SY 315 African American Families 3 cr**

The study of family structure, mate selection, marital and other romantic interaction, parenting and kinship among African Americans. Pre-requisite: SY 109 Minimum Grade of D

**SY 319 Sociology of Drugs 3 cr**

This course examines social, historical, cultural, and political factors that shape ideas about drugs and views on drug use, drug treatment, and drug policy. Pre-requisite: SY 109 Minimum Grade of D

**SY 340 Juvenile Delinquency 3 cr**

A study of the nature, extent, treatment, and prevention of delinquent behavior among youth in the United States and other urban industrial societies. Pre-requisite: SY 109 Minimum Grade of D

**SY 350 Evolutionary Sociology 3 cr**

This course considers social behavior and social phenomena as manifestations of the observable properties of the organisms that make up societies (i.e. 'human nature'). The core of the course will involve constructing a brief but sound model of human behavior and then seeing how well that model can help explain a spectrum of behavior and phenomena. In addition, we will consider different religious, cultural, and scientific views on human nature, as well as some of the classic philosophical debates (e.g. nature/nurture) that revolve around questions of human nature.

**SY 352 World Religions 3 cr**

This course is an introduction to the religions of the world. It is divided into three basic units: Indigenous Religions (of Africa, North America, and Oceania); Eastern Religions (Hinduism, Buddhism, Daoism, Confucianism, Jainism) and Western Religions (Judaism, Christianity, Islam). The emphasis is on grasping the core principles of each tradition, seeing the ways in which religion meets basic human needs, and religion as a cultural artifact that borrows, adapts, and changes over time. Course is identical with PHL 352 and REL 352. Credit cannot be received for both SY 352 and PHL 352 or REL 352.

**SY 360 Soc of Work and Occupations 3 cr**

Examines work, occupations and careers in modern societies. Course topics include: the evolution of work, the meaning of work, the demography of work, unions, jobs, occupations, professions, industries, classes, unions, technology and alienation, labor market segmentation, nonstandard and contingent work, work and the family, work and economic inequality, job satisfaction and organizational commitment. Pre-requisite: SY 109 Minimum Grade of D

**SY 372 Social Gerontology - W 3 cr**

Sociological aspects of aging in contemporary American society. Within its parameters are related problems of economics, health, and social contacts. Pre-requisite: SY 109 Minimum Grade of D

**SY 376 Modern Sociological Theory 3 cr**

The major schools of sociological theory after 1920's as well as recent challenges to these schools. Pre-requisite: SY 109 Minimum Grade of D

**SY 381 Social Research Design (C) 3 cr**

The goal of this course is to provide you with a foundation in social science research methods. The course will cover basic concepts used in social science research, sampling, survey instrument construction, observational and experimental research designs, and qualitative research. In addition to providing you with a foundation in research methods, SY 381 and SY 382 will give you the computing skills needed to create and analyze quantitative data using SPSS and EXCEL.

Pre-requisite: SY 109 Minimum Grade of D

**SY 382 Social Research Analysis (C) 3 cr**

This course, along with SY 381, provides a foundation in social research methods and statistics. In this course you will develop a mastery of descriptive and inferential statistics, basic probability theory, and significance testing. The computer lab portion of this course will continue to build upon the research and skills you acquired in SY 381.

Pre-requisite: SY 109 Minimum Grade of D

**SY 394 Directed Studies 1 TO 3 cr**

Field or library pursuits through which special interests or needs of the student may be pursued on an individual, supervised, or tutorial basis. No more than six hours may be used in the degree. Arrangements must be made with the instructor prior to registration. Requires permission of Department Chair.

**SY 401 Disasters and Society 3 cr**

The Sociological examination of natural, technological, and human-initiated disasters. The social impacts of disasters will be reviewed through case-studies of major twenty-first century catastrophes and issues of community vulnerability, resiliency and recovery will be addressed.

Pre-requisite: SY 109 Minimum Grade of C

**SY 412 Applied Sociology - W 3 cr**

A survey of the specialties and techniques of professional sociologists, including the kinds of social problems and how these problems are addressed.

Pre-requisite: SY 109 Minimum Grade of C and SY 381 Minimum Grade of D and SY 382 Minimum Grade of D and SY 376 Minimum Grade of D

**SY 415 Soc of Mental Health-Illness 3 cr**

A sociological analysis of mental health and illness including social epidemiology, effects of social integration and support, labeling mechanisms, social evolution of treatment systems, and cultural factors in the recognition and diagnosis of disorders.

Pre-requisite: SY 109 Minimum Grade of D

**SY 418 Adv Family Studies 3 cr**

This course examines interaction patterns in different types of family structure, with emphasis on marital adjustment, parent-child interaction, and sibling interactions.

Pre-requisite: SY 109 Minimum Grade of D and SY 220 Minimum Grade of D

**SY 420 Sociology of Religion 3 cr**

The study of religion is at or near the core of sociology. This course is an exploration of the sociological dimensions of religion within the classical theoretical traditions of Durkheim, Weber and Marx, augmented with more recent theory and research. We consider the definition, functions and origins of religion, the role of beliefs and rituals in it, the interaction of religion with other aspects of society, and secularization of the future of religion, among other topics.

Pre-requisite: SY 109 Minimum Grade of D

**SY 421 Social Stratification - W 3 cr**

This course introduces students to the patterns and processes of inequality in its major forms. It includes discussions of social class, sex, race, ethnicity, and policy. Additionally, this course satisfies the University's writing requirement. As such, students will acquire knowledge through writing assignments and will demonstrate mastery of new information in written form.

Pre-requisite: SY 109 Minimum Grade of D

**SY 426 Social and Cultural Change 3 cr**

This course is designed to familiarize students with major theories and processes of social and cultural change, the factors influencing social and cultural change, diffusion of innovations, and adoption of new ideas and practices.

Pre-requisite: SY 109 Minimum Grade of D

**SY 428 Gender and Society 3 cr**

Description and analysis of gender roles and inequality in contemporary Western societies in cross-cultural and historical context.

Pre-requisite: SY 109 Minimum Grade of D

**SY 430 Sociology of Culture 3 cr**

Examines the major perspectives in the sociology of culture, with emphasis on the problems of culture in modern and post-modern societies.

Pre-requisite: SY 109 Minimum Grade of B

**SY 435 Health Disparities Life Span 3 cr**

This course examines differences in health status across the life span. The course will focus heavily on racial/ethnic and socioeconomic disparities in health applying a social determinants' of health framework. Issues that will be considered include how income, education, neighborhood conditions, access to health care, and other community factors shape opportunities to be healthy. The course is cross-listed as SY 435 and GRN 435 and has been approved as an elective for the Undergraduate Certificate in Gerontology and the interdisciplinary minor in Gerontology.

Pre-requisite: SY 109 Minimum Grade of D

**SY 440 Deviance and Social Control 3 cr**

The study of societal norms and their violation. Focus on social construction, control, condemnation and accommodation of deviant behavior.

Pre-requisite: SY 109 Minimum Grade of D

**SY 445 Majority-Minority Relations-W 3 cr**

The study of relationships between 'majorities' and 'minorities' in society. This course will explore the macro-social forces that bring these relationships about and the institutional setting where different group members come into contact with each other. A variety of key concepts and theories surrounding majority and minority relations will be defined and analyzed. Historical and current case studies will be examined to illustrate the development of these relations.

Pre-requisite: SY 109 Minimum Grade of D

**SY 455 Self and Certainty 3 cr**

This course explores the complex relationship between the individual and the groups they are a part of, with a special emphasis on the challenges of identity and knowledge in modern society. Draws primarily upon the work of classical social psychologists like Mead, Berger & Luckman, Foggman and Simmel, as well as modern extensions of their work.

Pre-requisite: SY 109 Minimum Grade of D

**SY 458 Crowds Riots Soc Movements - W 3 cr**

A survey of the theoretical and historical foundations of collective behavior, riots, and social movements. A variety of situations and behaviors will be analyzed including social movement participation; growth and organization; strategies, tactics, and consequences for participants and society.

Pre-requisite: SY 109 Minimum Grade of D

**SY 459 Medicine and Society 3 cr**

The sociological study of medical care, with topics ranging from the micropolitics of doctor-patient communication through macro-level investigation of comparative health care systems.

Pre-requisite: SY 109 Minimum Grade of D

**SY 460 Social Organization - W 3 cr**

This course provides the student with a comprehensive behavioral science approach to understanding modern social organizational trends.

Pre-requisite: SY 109 Minimum Grade of D

**SY 467 Environmental Sociology 3 cr**

This course will cover topics such as public awareness and the social construction of environmental issues, especially acid rain, biodiversity, biotechnology and technological disasters.

Pre-requisite: SY 109 Minimum Grade of D

**SY 472 Sociology of Aging and Family 3 cr**

The class focuses on sociological theories of family and aging and the linkages of families and their aging members with organizations that deliver services, including: government agencies, healthcare organizations, legal services, corporations/businesses, and religious organizations.

Pre-requisite: SY 109 Minimum Grade of D

**SY 475 Dev of Sociological Theory 3 cr**

The development of theories in sociology, as related to social thought, institutions, and theories of social progress.

Pre-requisite: SY 109 Minimum Grade of D

**SY 490 Sp Top - 1 TO 3 cr**

A sociological examination of advanced topics. This course may be taken for a maximum of 9 hours credit when the subject matter varies. Prerequisite: Upper division status.

Pre-requisite: SY 109 Minimum Grade of D

**SY 492 Seminar - W - 3 cr**

Selected topics in sociology for students with junior or senior standing. Note: SY 492 is not intended for graduate students.

**SY 494 Directed Studies - 1 TO 3 cr**

Designing a study, carrying out the research, and writing the result of a thesis. No more than six hours credit may be applied to major. Prerequisites: Requires upper division status and permission of department chair.

**SY 496 Sociology Internship 3 TO 6 cr**

Provides an opportunity to combine academic principles with practical experience in an agency dealing with human relationships. Specifics of the assignment result from a mutual agreement among student, faculty supervisor and agency. Course may be repeated for a maximum of six hours of credit. The 3-hour internship requires 100 contact hours; the 6-hour internship requires 200 contact hours. Requires permission of Faculty Supervisor and Department Chair. Fee.

**SY 500 Orientation 1 TO 3 cr**

Introduces students to graduate study in sociology by providing information about applicable academic degrees, career opportunities, and professional activities in the discipline.

**SY 501 Disasters and Society 3 cr**

The sociological examination of natural, technological, and human-initiated disasters. The social impacts of disasters will be reviewed through the case-studies of major twenty-first century catastrophes and issues of community vulnerability, resiliency, and recovery will be addressed.

**SY 505 Adv Principles of Sociology 3 cr**

Systematic review and integration of major propositions, concepts, and research data from various fields of sociology. Development of a comprehensive orientation for the description and explanation of social phenomena.

**SY 506 Contemp Sociological Theory 3 cr**

Critical examination of major theoretical schools after 1920 and their classical predecessors; also examination of recent challenges to and syntheses of these schools.

- SY 508 Research Design** 3 cr  
Advanced treatment of topics in sociological methodology, including: logic of scientific explanation; experimental, quasi-experimental, survey and qualitative research designs; and research ethics.
- SY 509 Research Analysis** 4 cr  
This is an applied course in the application of data analysis and statistical methods in social research. The course covers basic regression models with limited and categorical independent variables. It assumes knowledge of basic and inferential statistics. The course includes weekly instruction in data analysis and statistical computer use. This course is usually taught in the Spring semester.
- SY 510 Qualitative Inquiry** 3 cr  
This course introduces students to methods of qualitative inquiry in sociology, focusing on ethnography and participant observation.
- SY 511 Introduction to Population** 3 cr  
An introduction to the study of human populations: population growth and decline, fertility, mortality and migration: characteristics of populations: population, food and economic development: demographic analysis: population policies. Students will be able to substantively analyze in any discussion of past and future population problems and its related factors that affect different societies.
- SY 512 Applied Sociology** 3 cr  
A survey of the specialties and techniques of professional sociologists and the conditions under which sociological knowledge is applied to social problems, the kinds of problems addressed, and the degree of effectiveness of applications. A variety of methods will be discussed including social impact analysis, program evaluation, needs assessment, and social indicators. Requires SY 508 and SY 509 or instructor's permission.  
Pre-requisite: SY 508 Minimum Grade of B and SY 509 Minimum Grade of B
- SY 515 Soc of Ment Health and Illness** 3 cr  
A sociological analysis of mental health and illness including social epidemiology, effects of social integration and support, labeling mechanisms, social evolution of treatment systems, and cultural factors in the recognition and diagnosis of disorders.
- SY 518 Advanced Family Studies** 3 cr  
This course examines interaction patterns in different types of family structure, with emphasis on marital adjustment, parent-child interaction, and sibling interactions.
- SY 520 Sociology of Religion** 3 cr  
An analysis of religion as a social institution with emphasis on modern western societies. Topics include the function of religion for societies and individuals, changing patterns of religious belief and practice, and the relationship between religion and other social institutions.
- SY 521 Poverty, Inequal/Social Stat** 3 cr  
A sociological approach to the study of class, status, power and poverty with a particular emphasis on American society. Students will present material in the classroom and conduct an advanced research project in the area of social inequality.
- SY 523 Aging in American Society** 3 cr  
The role of the elderly in today's society, problems, adaptability, crises, functions. Comparisons with youth and working adults. Survey of social programs and resources in formal and informal support networks.
- SY 528 Gender and Society** 3 cr  
Description and analysis of gender roles and inequality in contemporary Western societies in cross-cultural and historical context.
- SY 530 Sociology of Culture** 3 cr  
This course will introduce students to the major perspectives in the field of the sociology of culture. Particular attention will be given to each perspective's diagnosis of the problems of culture in modern and postmodern capitalist societies.
- SY 535 Health Disparities Life Span** 3 cr  
The main purpose of this seminar is to provide students with an understanding of how social factors contribute to racial/ethnic, socioeconomic and gender disparities in health and health care. We will examine how dyadic relationships such as interpersonal forms of discrimination, marriage, and social ties may contribute to health disparities. We will also examine the ways in which neighborhood and community context, as well as inequalities in socioeconomic status materially shape health and access to health care services. The course is cross-listed as SY 535 and GRN 435/535 and has been approved as an elective for the Undergraduate/ Graduate Certificate in Gerontology and the interdisciplinary minor in Gerontology.
- SY 540 Deviance and Social Control-** 3 cr  
Deviance includes acts that violate norms. Social control is the groups' efforts to induce people to conform to these norms. This course includes discussions of what actually is deviance, how things become deviant, and how sociologists explain deviance. Several weeks are devoted to talking about specific forms of deviance, ranging from alcohol and drugs to mental illness. The last part of the course is spent discussing elite deviance.
- SY 547 Sociology of Law** 3 cr  
Overview of predominant theoretical approaches, classical and contemporary in legal sociology, and their application in empirical studies engaging legal phenomena.
- SY 550 The Community** 3 cr  
An advanced consideration of the concept of community.

**SY 555 Self and Certainty 3 cr**

This course explores the complicated relationship between individuals and the groups they are part of, with a special emphasis on the challenges of identity and knowledge in modern society. Draws primarily upon the work of classical social psychologists like Mead, Berger, Luckmann, Foggman and Simmel as well as modern extensions of their work.

**SY 559 Medicine and Society 3 cr**

The sociological study of medical care, with topics ranging from the micropolitics of doctor-patient communication through macro-level investigation of comparative health care systems. Explores extant research methods and theories of medical sociology to prepare graduate students to do sociological research in health care settings.

**SY 567 Environmental Sociology 3 cr**

This course will cover topics such as public awareness and the social construction of environmental issues, especially acid rain, biodiversity, biotechnology, and technological disasters.

**SY 572 Sociology of Aging-Family 3 cr**

The class focuses on sociological theories of family and aging, and the linkages of families and their aging members with organizations that deliver medical and social services, with government bureaucracies, the legal system, corporations and businesses, and religious organizations.

**SY 590 Sp Top - 3 cr**

Selected topics in graduate sociology. Course may be repeated for different topics.

**SY 591 Papers & Presentations Seminar 1 TO 2 cr**

A self-directed studies course, guided by graduate faculty mentors, to develop and enhance the career and scholarly interests, and professional socialization, of advanced master's students through written work and presentation opportunities.

Pre-requisite: MASY Comprehensive Exam Score P

**SY 592 MA Practicum Report Proposal 3 cr**

Based on student work in a local agency (in conjunction with course co-requisite SY 596, Sociology Internship) to generate a practicum report proposal (directed by a member of the sociology graduate faculty) that the student must formally defend.

Pre-requisite: SY 596

**SY 593 Master's Practicum Report 3 cr**

Course in which students prepare and defend a formal report based on work in course pre-requisite SY 596 and SY 592.

Pre-requisite: SY 596 Minimum Grade of B and SY 592 Minimum Grade of B

**SY 594 Directed Studies - 1 TO 3 cr**

Field or library projects through which special interests of the student may be pursued on a tutorial basis with a graduate faculty member. Arrangements must be made with the professor prior to registration. Permission of the Department Chair is required.

**SY 595 SY Research Apprenticeship 1 TO 3 cr**

Students pursue research-related interests as directed by, and with prior approval from, a member of the graduate faculty.

**SY 596 Sociology Internship 3 TO 6 cr**

Relates the student's classroom studies to occupational and professional experiences in an approved community agency that culminates with a written report. Requires permission of the Graduate Coordinator and Department Chair as well as proof of insurance. The 3 hour internship requires 100 contact hours; the 6 hour internship requires 200 contact hours.

**SY 597 Sociology Teaching Apprentice 1 TO 3 cr**

The student will work directly with a member of the Sociology faculty to learn pedagogy, innovation in teaching, and course content that will equip the student for future teaching assignments.

**SY 598 Master's Thesis Proposal 3 cr**

Focused on a specialized subject area of research interest in sociology (directed by a member of the sociology graduate faculty) to generate a thesis proposal that the student must formally defend.

**SY 599 Master's Thesis 1 TO 6 cr**

Focused on a specialized subject area of research interest in sociology to generate a master's-level thesis that the student must formally defend. (Pre-requisite: SY 598, Master's Thesis Proposal).

Pre-requisite: SY 598 Minimum Grade of B

## Special Education (SPE)

**SPE 200 Field Exp in SPE Settings 1 cr**

A series of in-field opportunities for students in Special Education. A variety of appropriate placements will be employed depending on each student's interest and needs. May be repeated for credit.

**SPE 201 Field Exp in Sp Ed Setting 1 cr**

A series of in-field opportunities in special education. A variety of appropriate placements will be employed depending on each student's interests and needs. To be taken with SPE 312.

- SPE 202 Field Exp in Sp Ed Setting** 1 cr  
A series of in-field opportunities in special education. A variety of appropriate placements will be employed depending on each student's interests and needs. To be taken with SPE 410.  
Co-requisite: SPE 410
- SPE 203 Field Exp in Sp Ed Setting** 1 cr  
A series of in-field opportunities in special education. A variety of appropriate placements will be employed depending on each student's interests and needs. To be taken with SPE 410.  
Co-requisite: SPE 410
- SPE 205 Init Field Exp in SPE Setting** 1 cr  
An in-field opportunity for early field-based practicum in a variety of placements. To be taken with SPE 400 by Special Education majors.
- SPE 311 Intro to Partnerships in SPE** 3 cr  
Emphasis is on the special problems found in the home, community, and school of the exceptional child, the teacher, the family, and community resource agencies. Ways for the teacher to form teamships to work collaboratively with all human resources involved in the child's life are explored and ethical and moral standards examined.
- SPE 312 Intellect and Phys Disabs** 3 cr  
A study of the intellectual and physical disability which usually require substantial curriculum adaptations or ecological accommodation. Historical perspectives, etiology, definitions, classification, treatment, social aspects and interdisciplinary team work will be explored.  
Co-requisite: SPE 201
- SPE 313 Lrng and Behavrl Disorders** 3 cr  
An examination of the definitions, characteristics, and prevalence of children with learning and/or behavioral disabilities. Emphasis is placed on the causes of problems in motor, perceptual, social, academic, affective, and behavioral development. Students will be introduced to current service delivery models and the programming options for individuals with learning and behavioral disabilities.
- SPE 342 Dev-Tchg Ecological Curriculum** 3 cr  
An ecological systems view which emphasizes curricular design as a multisystem interaction involving the individual, family, school, occupational setting, and society.
- SPE 362 Behav Mgt of Except Child - W** 3 cr  
Presentation of the principles and applications of behavioral modification, data collection procedures, and single-subject research designs as related to exceptional children and youth in special education environments.  
Pre-requisite: SPE 313 Minimum Grade of C and SPE 342 Minimum Grade of C and SPE 454 Minimum Grade of C
- SPE 363 Tch Adpt Curr Spec Nds Lrn** 3 cr  
An examination of regular and special education K-12 curricula, materials, and procedures. Specific emphasis will be placed on the selection modification, and adaptation of curricula, materials, and procedures to meet the needs of individuals with learning and behavioral disabilities.  
Pre-requisite: SPE 313 Minimum Grade of C and SPE 342 Minimum Grade of C and SPE 454 Minimum Grade of C
- SPE 373 Teaching Reading to Stu Dis** 3 cr  
Introduces the student to the curriculum, teaching the methodologies and instructional activities and materials associated with effective and appropriate developmental and functional reading instruction for students with disabilities.  
Pre-requisite: SPE 313 Minimum Grade of C and SPE 342 Minimum Grade of C and SPE 454 Minimum Grade of C
- SPE 400 Edu for Except Child and Youth** 3 cr  
Introduction to the field of exceptional children and youth, involving the study of various areas of exceptionality.
- SPE 410 Formal-Informal Assessment** 3 cr  
Assesses developmental levels, academic, and non-academic performance of exceptional individuals through the administration and interpretation of criterion-referenced, formal and informal measures. Evaluation of classroom teaching and special education programs is also emphasized.  
Co-requisite: SPE 202, SPE 203  
Pre-requisite: SPE 313 Minimum Grade of C and SPE 342 Minimum Grade of C and SPE 454 Minimum Grade of C
- SPE 432 Impact Typ and Atp Dev on Edu** 3 cr  
An examination of typical child development and developmental characteristics of infants, toddlers, and young children with disabilities from the prenatal period through age 8. Characteristics of disabling conditions and their impact upon development are also discussed.
- SPE 433 Iss in Edu Young Child W-Dis** 3 cr  
This course prepares students to work with infants, toddlers, and young children with disabilities and their families. Topics covered include specific teaching and intervention techniques, special education laws and regulations, and service delivery models.
- SPE 443 Voc Ed-Career Dev Dis Indiv** 3 cr  
Issues and practices involved in the vocational preparation and training of students with disabilities, including career awareness, exploration, preparation, and use of vocational resources. Vocationally related programs and services, both within and outside the special education environment are included.  
Pre-requisite: SPE 313 Minimum Grade of C and SPE 342 Minimum Grade of C and SPE 454 Minimum Grade of C
- SPE 444 Senior Seminar - W** 3 cr  
Topics based upon students' experiences in internship. Students develop personal growth plans to enhance professional functioning.

- SPE 454 Curric Meth Develop Young** 3 cr  
Curriculum and methods of instruction for individuals who function in the lower levels of cognitive, motor, self care, communicative, and/or social behaviors. Emphasis is on physical management, class/individual scheduling, adapted aids and equipment, task analysis, and functional life skills.
- SPE 484 General Education Curriculum** 3 cr  
A Curriculum course designed to emphasize general education and special education K-12 curriculum. Students learn content of general education curricula through study of scope and sequence charts and strategies for adapting the curricula for students with exceptionalities, especially in inclusionary settings.  
Pre-requisite: SPE 313 Minimum Grade of C and SPE 342 Minimum Grade of C and SPE 454 Minimum Grade of C
- SPE 489 Pre-Practicum** 3 cr  
Supervised experience in the teaching field which allows the teacher's performance to be evaluated qualitatively.
- SPE 490 Sp Top -** 3 cr  
Varies in content and deals with issues, trends, and topics of current interest in the field of educating exceptional individuals. May be repeated for credit when course content varies.
- SPE 494 Dir St -** 3 cr  
Directed Study. No more than two directed studies may be applied to programs at the undergraduate level or for certification.
- SPE 495 Internship K-6** 9 cr  
Observation and supervised K-6 classroom teaching experience providing the opportunity to synthesize all previous instruction. This culminating activity provides opportunity for study and discussion of problems and issues encountered in the practicum situation.  
Pre-requisite: PRAXIS-Elem Ed Cont Knowledge 137 and SPE 363 Minimum Grade of C and SPE 410 Minimum Grade of C
- SPE 496 Internship 6-12** 9 cr  
Observation and supervised 6-12 classroom teaching experiences providing the opportunity to synthesize all previous instruction. This culminating activity provides opportunity for study and discussion of problems and issues encountered in the practicum situation.  
Pre-requisite: SPE 363 Minimum Grade of C and SPE 410 Minimum Grade of C
- SPE 497 Internship ECSE** 9 cr  
Observation and supervised ECSE classroom teaching experiences providing the opportunity to synthesize all previous instruction. This culminating activity provides opportunity for study and discussion of problems and issues encountered in the practicum situation.  
Pre-requisite: PRAXIS-Elem Ed Cont Knowledge 137 and SPE 363 Minimum Grade of C and SPE 433 Minimum Grade of C
- SPE 499 Senior Honors Project-H** 3 TO 6 cr  
Under the advice and guidance of a faculty mentor, honors students will identify and carry out a research project, relevant to the field of study in Special Education, that will lead to a formal presentation at the annual Honors Student Colloquium. The senior project will be judged and graded by three faculty chaired by the honors mentor. This course is required for Honors recognition and may be repeated for up to 6 credit hours. Prerequisite: Participate in honors program and junior level status.
- SPE 500 Nat-Needs of Exc Chld and Yth** 3 cr  
Introduction to the field of special education involving the study of all exceptionality areas. Developmental and maturational sequences of exceptional children/youth are included.
- SPE 504 Seminar in Spec Educ** 3 cr  
Designed to allow students an indepth exploration of topics of special concern to them related to children with disabilities or high potential.
- SPE 505 Admn and Supv of SPE** 3 cr  
Establishing, maintaining, supervising, and evaluating special education programs in school districts and systems. Legislation and litigation, budgeting and finance, trends and issues in special education are included.
- SPE 510 Intro to Lrng Char Tchg in SPE** 3 cr  
An examination of the definitions, characteristics, and prevalence of children with learning disabilities, emotional and/or behavioral disabilities, mental retardation and multiple disabilities. Emphasis is placed on the environmental and biological causes of problems in motor, perceptual, social academic, affective, and behavioral development. Students will be introduced to current service delivery models and the programming for individuals with disabilities.
- SPE 511 Curr - Reg Class and Adapt** 3 cr  
Examination of all curricula as represented by various state course of study documents. Students will study and develop relevant adaptations of curricula to meet needs of various exceptional children.
- SPE 512 Ecological Curr and Method** 3 cr  
From an ecological systems view, methods of individually deriving a functional, life-centered curriculum for students with mild to severe disabilities as well as educational strategies for teaching and training within such a framework.
- SPE 514 Teaming and Collaboration** 3 cr  
An intensive study of the nature of teaming and collaborative practices with an emphasis on developing skills to organize and participate in a variety of such situations.  
Pre-requisite: SPE 512 Minimum Grade of B and SPE 516 Minimum Grade of B and SPE 589 Minimum Grade of B

- SPE 515 Data and Behav Mgmt** 3 cr  
Behavioral assessment techniques and experimental designs for the evaluation of behavior change programs. Operant and respondent methods for deceleration of inappropriate behavior. Operant methods for accelerating appropriate behaviors, teaching new behaviors and maintaining behaviors. Data-Based decision making strategies for formative program evaluation and modifications.
- SPE 516 Methods Spec Needs Learners** 3 cr  
An examination of the methodologies employed in teaching special needs learners. The course covers the theoretical underpinnings and practical application of techniques with media, and materials.
- SPE 517 Communication - Lang and Read** 3 cr  
Major topics include the nature of language, language development and language problems in exceptional students; and remedial procedures. Informal and formal language and reading assessment. Relationship of reading to writing, phonetic, sight and combination means of reading instruction.
- SPE 518 Assessment** 3 cr  
Advanced assessment of developmental levels, academic and non-academic performance of exceptional individuals through the administration and interpretation of standardized tests, criterion-referenced instruments, and informal measures.
- SPE 521 Children W-High Potential** 3 cr  
Study of the intellectual, creative, emotional, and other psychological facets of gifted and talented children. Attention will be paid both to those individuals whose potential is realized and those who are considered underachievers.
- SPE 522 Creative and Prod Thinking** 3 cr  
Geared to understanding the creative process, personality, and product of gifted and talented children as well as how to foster creativity and productive thought in the classroom.
- SPE 523 Tchg Children W-High Potential** 3 cr  
Various curricular emphases and program approaches employed for gifted, creative, and talented children are studied. Insights are offered into articulating educational efforts.
- SPE 524 Atyp Children W-High Potential** 3 cr  
This course is an in-depth study of the unique needs of atypical populations of gifted students. Attention will be directed to the culturally diverse gifted, economically disadvantaged gifted, underachieving gifted, gifted in rural areas, gifted females, highly/profound gifted, gifted handicapped, gifted with ADD/ADHD/SLD, and gifted preschoolers.
- SPE 532 Impact of Typical Atypical Dev** 3 cr  
An examination of typical child development and developmental characteristics of infants, toddlers, and young children with disabilities from the prenatal period through age eight. Characteristics of disabling conditions and their impact upon development are also discussed.
- SPE 533 Issue Edu Young Child Disabil** 3 cr  
This course prepares students to work with infants, toddlers, and young children with disabilities and their families. Topics covered include specific teaching and intervention techniques, special education laws and regulations, and service delivery models.
- SPE 534 Assessment Devel Young** 3 cr  
This course contains information on basic psychometric qualities of screening, evaluations, and assessments, tools for use with infants, toddlers, and young children with disabilities, conducting family assessments, adapting measures for children with disabilities and using screening assessment, and evaluation in individualized programming.
- SPE 535 Collaborating with Families** 3 cr  
This course prepares students to work with families of children with special needs. It contains information on understanding families, working with traditional and non-traditional families, and providing family-centered services.
- SPE 588 Advanced Practicum Experience** 3 cr  
The purpose of this course is to provide a field experience focusing on evaluation and program improvement n academic and behavioral assessment, program planning, and experiences in implementation of special education programming.  
Pre-requisite: EDM 510 Minimum Grade of C
- SPE 589 Pre-Practicum Experience** 3 OR 6 cr  
Supervised experience in the teaching field which allows the teacher's performance to be evaluated qualitatively.
- SPE 590 Sp Top -** 3 cr  
A course with varying content dealing with issues, trends, and topics of current interest in the field of education exceptional individuals. May be repeated for credit when course content varies. Composition of activity. Total credit cannot exceed 6 hours.
- SPE 591 Multicategory Prac Seminar** 3 cr  
Combines field experiences and technology-based simulations and learning experiences with an ongoing seminar to address a wide-range of disabilities and educational implications. Course content will be individualized according to the students educational and professional background.
- SPE 592 Collaborative Pract-Seminar** 3 cr  
A seminar which enables students to discuss controversial issues related to the role and function of the collaborative teacher. Students lead and respond to discussion on topics which include teaming, inclusion, and collaboration.

**SPE 593 Classroom Exp Prac - 3 cr**  
Supervised experience in the teaching field which allow the teacher's performance to be evaluated qualitatively.

**SPE 594 Dir St - Research 3 cr**  
Students explore through directed individual study and research, problems and issue of special interest or significance in Special Education.

**SPE 595 Intern/Prac SPE Coll Tch K-6 3 OR 6 cr**  
Supervised experiences in Collaborative Teaching K-6 in the teaching field which allow the teacher's performance to be evaluated qualitatively.

Pre-requisite: PRAXIS-Elem Ed Cont Knowledge 137 or PRAXIS-Elem Ed Cont Knowledge 137 or PRAXIS-Elem Ed-Read/Lang Arts 165 or PRAXIS-Elem Ed-Math Sub 157 or PRAXIS-Elem Ed-Soc Stu- Sub 142 or PRAXIS-Elem Ed-Science- Sub 144 or PRAXIS-Read/Lang Arts Subtest 154 or PRAXIS-Mathematics Subtest 143 or PRAXIS-Social Studies Subtest 142 or PRAXIS-Science Subtest 144

**SPE 596 Intern/Prac SPE Coll Tch 6-12 3 OR 6 cr**  
Supervised experiences in Collaborative Teaching 6-12 in the teaching field which allow the teacher's performance to be evaluated qualitatively.

Pre-requisite: PRAXIS-Elem Ed Cont Knowledge 137 or PRAXIS-Elem Ed Cont Knowledge 137 or PRAXIS-Elem Ed-Read/Lang Arts 165 or PRAXIS-Elem Ed-Math Sub 157 or PRAXIS-Elem Ed-Soc Stu- Sub 142 or PRAXIS-Elem Ed-Science- Sub 144 or PRAXIS-Read/Lang Arts Subtest 154 or PRAXIS-Mathematics Subtest 143 or PRAXIS-Social Studies Subtest 142 or PRAXIS-Science Subtest 144

**SPE 597 Intern/Prac SPE ECSE 3 cr**  
Supervised experiences in Collaborative Teaching ECSE in the teaching field which allow the teacher's performance to be evaluated qualitatively  
Pre-requisite: PRAXIS-Elem Ed Cont Knowledge 137

**SPE 598 Intern/Prac SPE G/T 3 cr**  
Supervised experiences in Collaborative Teaching Gifted/Talented in the teaching field which allows the teacher's performance to be evaluated qualitatively.

**SPE 599 Thesis 3 cr**  
A student selects a project, study, or investigation in Special Education related to the student's area of specialization. The project forms a basis for the thesis. A thesis committee will give guidance during the investigation and during the writing of the thesis.

**SPE 601 Advanced Eval in SPE 3 cr**  
Methods and procedures for developing criterion-referenced instruments and assessment batteries for classroom use in evaluating exceptional children and youth.

**SPE 609 Adv Study of Excep Children 3 cr**  
Comparison of the normal development progress and that usually seen in the various exceptionality categories of special education especially cognitive, communication, motor, social and emotional development.

**SPE 641 Seminar Behav Disorders 3 cr**  
Advanced study and review of the state of present knowledge in areas relevant to the psycho-pathological disorders of childhood including etiology, assessment, treatment and education.

**SPE 642 Clinical Teaching I 3 cr**  
A study of the principles of behavioral theory upon which strategies for change in cognitive and social behavior rest and the evaluative designs used to monitor behavioral change and validate strategies.

**SPE 643 Clinical Teaching II 3 cr**  
A study and review of clinical research relevant to the curriculum requirements in the education and treatment of exceptional children and the identification of research needs in the various areas of exceptionality.

**SPE 651 Seminar in LD 3 cr**  
Current trends and issues in the education of learning disabled individuals are discussed, various theoretical approaches and current empirical evidence provide the basis for discussion.

**SPE 671 Seminar in MR Educ 3 cr**  
Current trends and issues in the education of mentally retarded individuals. Classic and recent professional literature are the basis for developing perspectives.

**SPE 690 Sp Top - 3 cr**  
A course with varying content dealing with issues, trends, and topics of current interest in the field of education exceptional individuals. May be repeated for credit when course content varies.

**SPE 694 Dir St - Research 3 cr**  
Students explore through directed study problems and issues of special interest or significance in Special Education.

**SPE 699 Research Project 1 TO 3 cr**  
The Research Project, as the culminating experience in the Specialist Program, provides an opportunity for the candidate to synthesize and apply the various program components in a selected instructional setting. Suitable agreements are reached with the appropriate public school system by the candidate. MR majors may not take more than 8 hours.  
Pre-requisite: IDE 692 Minimum Grade of B or EDU 692 Minimum Grade of B

## Speech Language Pathology (SLP)

**SLP 510 Intro to Research Design 3 cr**  
A general presentation of research procedures. The student will learn to read and evaluate professional literature and develop a research prospectus.

**SLP 521 Advanced Speech Science 2 cr**

The study of physical and acoustic concepts involved in speech production and perception including instrumental measurement and analysis.

**SLP 532 Clinical Linguistics 3 cr**

This course gives the student an overview of the linguistic theories and approaches that are relevant to the field of speech sciences. There will be a particular emphasis on those areas of linguistics that underpin the diagnostic and assessment procedures used in Speech Pathology. The course will focus on development and language use in normal populations and will show how knowledge of the pattern of typically developing language users can be applied to clinical contexts.

**SLP 533 Pediatric Language Disorders 3 cr**

Clinical assessment and management of language problems in infants, toddlers, and preschoolers, including language disorders associated with other developmental disorders and AAC.

**SLP 534 School-Aged Language Disorders 2 cr**

This course covers assessment and intervention approaches for school-age language disorders, children beyond age 5 years. Topics include speech-language services at the discourse level; the relationship between language and literacy; service delivery models including integration; educational laws and policies.

**SLP 541 Adv Articulation Disorders 3 cr**

Advanced study of disordered speech-sound production including these: development, assessment and intervention of articulation and phonological disorders in children.

**SLP 551 Voice and Resonance Disorders 3 cr**

Advanced study of pathology, symptomatology, etiology, and treatment of voice and resonance disorders in children and adults.

**SLP 561 Fluency Disorders 3 cr**

Study of theories, research, and contemporary treatment procedures in the area of fluency disorders.

**SLP 565 Neuromotor Disorders of Commun 3 cr**

Review of neuroanatomy and physiology, nature of neuromuscular pathologies, methods of assessment and rehabilitation of neuromotor disorders of speech production.

**SLP 566 Aphasia & Neuro Lang Disorders 3 cr**

Study of the nature, characteristics, and clinical management of acquired neurogenic language disorders associated with focal lesions to the left or right hemisphere, including aphasia and right hemisphere syndrome.

**SLP 567 Acq Cognitive Comm Disorders 2 cr**

Study of the nature, characteristics, and clinical management of cognitive-communication disorders associated with diffuse brain lesion, including traumatic brain injury and dementia.

**SLP 568 Dysphagia 3 cr**

Study of evaluation and treatment of swallowing in adults and children.

**SLP 588 Audiology for Speech-Lang Path 2 cr**

Audiometric testing; audiogram interpretation and clinical and educational management of the hearing impaired. Not available for audiology majors.

**SLP 590 Dir Independent Research - 1 TO 3 cr**

Independent research under the direction of a graduate faculty member. May be repeated. Requires permission of the instructor and the Graduate Advisor.

**SLP 592 Seminar in Comm Disorders - 1 TO 3 cr**

This course is designed to provide the opportunity for in-depth study of special interests. Requires permission of the Graduate Advisor.

**SLP 594 Independent Study 1 TO 3 cr**

Independent study under the direction of a graduate faculty member. May be repeated. Requires permission of instructor and Graduate Advisor.

**SLP 596 Clin Pract Speech-Lang Pathol 1 TO 3 cr**

Supervised clinical experience in speech-language pathology. May be repeated.

**SLP 598 Clinical Externship 6 TO 8 cr**

Supervised clinical experience in a professional service facility. Requires special permission.

**SLP 599 Thesis 1 TO 3 cr**

One to three credits per semester with a maximum of three hours credit. Regular standing required. Requires permission of the Graduate Advisor.

## Speech And Hearing Sci (SHS)

**SHS 290 Speech Improvement Classroom 3 cr**

Survey of minor speech problems in children and adults through application of speech improvement technique.

**SHS 301 Intro to Comm Disorders 3 cr**

Overview of major disorders of human communication and the role of the Audiologist and Speech-Pathologist in assessing and treating them.

**SHS 302 Audiology and Hearing Sciences 3 cr**

This course addresses basic principles of hearing science, including the physical properties of sound, sound generation, transmission, and measurement, anatomy and physiology of the hearing mechanisms; an introduction to the profession of audiology.

**SHS 315 Fundamentals of Speech Science 3 cr**

An introduction to the anatomy and physiology of speech production and the acoustic properties of speech.

**SHS 331 Normal Language Acquisition-W 4 cr**

Acquisition of communicative behavior in normal children during the first decade of life; development of syntax, semantics, pragmatics, cognition; clinical laboratory experience with children.

Pre-requisite: SHS 341 Minimum Grade of C or SPA 341 Minimum Grade of C

**SHS 341 Clinical Phonetics 4 cr**

Transcription techniques for the analysis of speech. Includes a study of the dynamics of speech sound production. Must have CLS 114. SHS 341 may be taken concurrently with SHS 291, SHS 290, and CLS 115. Special permission is needed from Instructor to take course.

Pre-requisite: SHS 301 Minimum Grade of C or SPA 341 Minimum Grade of C

**SHS 414 Neurobiol Bases Human Comm 3 cr**

Introduction to neuroscience and clinical neurology as they apply to the processes of normal and disordered communication. Topics include neurophysiology, neuroanatomy, and neuropathologies.

Pre-requisite: (SHS 331 Minimum Grade of C or SPA 331 Minimum Grade of C) and (SHS 341 Minimum Grade of C or SPA 341 Minimum Grade of C) and SHS 315 Minimum Grade of C

**SHS 431 Intro to Language Disorders 3 cr**

A survey of language disorders in preschool and school-age children; assessment and intervention.

Pre-requisite: SHS 331 Minimum Grade of C or SPA 331 Minimum Grade of C

**SHS 453 Intro to Speech Disorders 3 cr**

An introduction to disorders of articulation, voice, and fluency. Theoretical and etiological foundations will be surveyed as well as philosophical orientations to therapy.

Pre-requisite: SHS 341 Minimum Grade of C or SPA 341 Minimum Grade of C and SHS 315 Minimum Grade of C

**SHS 473 Audiology I 3 cr**

This course is an introduction to the following topics - disorders of hearing, etiologies of auditory and vestibular disorders found in populations of all ages and evaluation techniques used by audiologists.

Pre-requisite: SHS 302 Minimum Grade of C

**SHS 474 Audiology II 3 cr**

This course is a study of the principles of the management of hearing loss in children and adults; relevant legislation; and treatment and education options.

Pre-requisite: SHS 473 Minimum Grade of C

**SHS 480 Issues in Clinical Pract - W 4 cr**

Introduction to the clinical setting; organizations and statutes that govern professional service; instrumentation, procedures and approaches to remediation. Observation of therapy and indirect participation as a clinical aide are also a major part of this course. Special permission is required from instructor to take course.

Pre-requisite: (SHS 331 Minimum Grade of C or SPA 331 Minimum Grade of C) and (SHS 341 Minimum Grade of C or SPA 341 Minimum Grade of C) and (SHS 431 Minimum Grade of C or SPA 431 Minimum Grade of C)

**SHS 490 Special Topics - 1 TO 3 cr**

Topics to be determined by student need and interest.

Content will vary. A subtitle identifying the topic will be entered on the student's record. May be repeated for a total of 6 hours. Requires permission of the department chair.

**SHS 494 Directed Independent Study 1 TO 3 cr**

Independent study under the direction of a faculty member.

Requires permission of the department chair.

**SHS 499 Senior Honors Project - H - W 3 TO 6 cr**

Under the advice and guidance of a faculty mentor, honors students will identify and carry out a research project relevant to the field of Speech and Hearing Sciences study that will lead to a formal presentation at the annual Honors Student Colloquium. The senior project will be judged and graded by three faculty members chaired by the honors mentor. This course is required for Honors recognition and may be repeated for up to 6 credit hours. Requires permission of department chair and completion of an approved project prospectus.

## Statistics (ST)

**ST 150 Contemporary Math-Stat Seminar 1 cr**

This course gives an overview of modern mathematics and statistics from the point of view of the practitioners. The course is designed for majors in mathematics and statistics at all levels as well as those students who are considering mathematics and statistics as a major or minor area of study. Topics usually included are elements of geometry, algebra, analysis, methods of statistical inference, the role of the computer in the analytical sciences; these topics vary from semester to semester. This course cannot be taken for credit simultaneously with MA 150, but may be repeated in different semesters. NOTE: May be offered for Honors Credit.

**ST 210 Stat Reason and Application 3 cr**

An introduction to modern statistics designed to provide the student with a solid foundation in statistical concepts, reasoning and applications. Emphasis given to problem identification, methodology selection and interpretation of results. Analysis of data accomplished by extensive use of statistical computer software, thereby minimizing manual computation. Coverage includes descriptive statistics, probability models, estimation, and hypothesis testing. High School level algebra is recommended. Computer Lab fee. NOTE: ST 210 is intended for students in all disciplines except Engineering and Computer Science. Credit for both ST 210 and ST 315 not allowed. May be offered for Honors Credit.

**ST 305 Applied Stat Health Sciences 3 cr**

An introduction to statistical reasoning and data analysis for the health sciences. Coverage includes descriptive statistics, methods of data collection, estimation, hypothesis testing, non-parametric statistics, ANOVA, repeated measures, correlation and other measures of association, modeling data with linear and logistic regression. Critique of selected research articles and case studies incorporating research and evidence-based practice will be adopted to connect statistics to daily work in healthcare field. Statistical computer software (e.g. Minitab) will be extensively used for data analysis. Computer Lab fee. Note: This course is offered only as a fully online course and only for health sciences students.

Pre-requisite: MA 110 Minimum Grade of C

**ST 310 Stat Research Techniques 3 cr**

This course is a continuation of ST 210. Coverage includes analysis of experimental designs such as completely randomized design, randomized block design, and factorial design using analysis of variance (ANOVA), correlation, simple and multiple regression analysis, model building, nonparametric techniques, contingency table analysis, sampling and survey methods. Time permitting topics such as time series analysis and statistical simulations will be covered. Statistical computer software will be extensively used for data analysis. Computer Lab fee. NOTE: Credit for only ONE course from ST 310, ST 315 and ST 320 is allowed.

Pre-requisite: ST 210 Minimum Grade of C

**ST 315 Applied Probability-Statistics 3 cr**

Concepts of probability theory, discrete and continuous probability distributions including gamma, beta, exponential and Weibull, descriptive statistics, sampling, estimation, confidence intervals, testing of hypothesis, ANOVA and multiple comparisons, linear and multiple regression, correlation, nonparametric analysis, contingency table analysis, computer-assisted data analysis using appropriate statistical software. Computer Lab fee.

Pre-requisite: MA 125 Minimum Grade of C

**ST 320 Applied Stat Analysis 3 cr**

Descriptive statistics, probability distributions, sampling, estimation, confidence intervals and hypothesis testing, experimental designs, ANOVA and multiple comparisons, linear and multiple regression, correlation, nonparametric analysis, goodness of fit, contingency table analysis, quality control, acceptance sampling, computer-assisted data analysis using appropriate statistical software.

Computer Lab fee. NOTE: ST 315 and ST 320 are intended for students in Engineering, Computer Science, and Mathematics. ST 315 covers additional probability distributions while ST 320 additionally covers concepts of quality control and acceptance sampling. Students in these disciplines should consult with their academic advisor for appropriate choice between ST 315 and ST 320. Computer Lab fee. NOTE: Credit for only ONE course from ST 310, ST 315, and ST 320 is allowed.

Pre-requisite: MA 125 Minimum Grade of D

**ST 335 Applied Regression Analysis 3 cr**

Simple, polynomial and multiple linear regression; residual and lack-of-fit analysis; simple, multiple, partial and multiple-partial correlation analysis; model building algorithms; dummy variables; analysis of covariance; model comparisons; analysis of experimental designs including messy data; nonlinear regression models; computer-assisted data analysis using appropriate statistical software. Computer Lab fee. NOTE: Satisfies the Technology Proficiency Requirement for Math/Stat majors.

Pre-requisite: ST 210 Minimum Grade of C or ST 315 Minimum Grade of C or ST 320 Minimum Grade of C

**ST 340 Design-Analysis of Experiments 3 cr**

Principles, constructions, and analysis of experimental designs to include completely randomized, randomized complete block, Latin square and split plot designs, factorial experiments, designs with nested and/or crossed factors, multifactor experiments with randomization restrictions, transformations, incomplete block designs, multiple comparisons including contrasts, confounding, fractional replication, computer-assisted data analysis. Computer Lab fee.

Pre-requisite: ST 210 Minimum Grade of C or ST 310 Minimum Grade of C or ST 315 Minimum Grade of C or ST 320 Minimum Grade of C

**ST 345 Sampling-Survey Techniques 3 cr**

Sampling concepts and designs for survey investigations; sampling methodologies including applications of simple random, stratified, one-and-two stage cluster, and systematic sampling; sample size determination; ratio and regression estimation; population size estimation; random response modeling; acceptance sampling including applications of single and multiple 2-class attribute sampling plans; computer-assisted data analysis using appropriate statistical software. Computer Lab fee.

Pre-requisite: ST 210 Minimum Grade of C or ST 310 Minimum Grade of C or ST 315 Minimum Grade of C or ST 320 Minimum Grade of C

**ST 350 Applied Time Series Analysis 3 cr**

Fundamental concepts; classical regression models as forecasting models, exponential smoothings, stationary and nonstationary models, additive and multiplicative decompositions, moving average, autoregressive, ARMA and ARIMA processes, estimation in MA, AR ARMA, and ARIMA processes. Box-Jenkins methodology, computer aided modeling, applications. Computer Lab fee.  
Pre-requisite: ST 210 Minimum Grade of D or ST 315 Minimum Grade of D or ST 320 Minimum Grade of D or ST 335 Minimum Grade of D

**ST 355 Nonparametric Stat Methods 3 cr**

Distribution-free analysis of location and scale measures, nonparametric treatment of fundamental statistical designs, nonparametric comparison procedures, association and contingency table analysis, nonparametric goodness-of-fit procedures, and tests for randomness, nonparametric regression and other measures of association, computer intensive statistical methods. Computer Lab fee.  
Pre-requisite: ST 210 Minimum Grade of D or ST 315 Minimum Grade of D or ST 320 Minimum Grade of D

**ST 415 Stat Qual Control Reliability 3 cr**

Probability distributions in quality control, inferences about process quality, control charts for attributes and variables, process capability analysis, economic design of control charts, custom charts, acceptance sampling by attributes and variables, six sigma concepts, reliability concepts, censoring, definitions and properties of survival distributions, methods of estimating and comparing reliability distributions, Kaplan-Meier estimation, burn-in models with a major emphasis on computer-assisted data analysis. Computer Lab fee.

**ST 425 Applied Linear Models 3 cr**

Some results of matrix algebra, multivariate normal distributions, distributions of quadratic forms, general linear models, design models with one factor and two factors including interaction, component-of-variance models, and computing techniques. Computer Lab fee.  
Pre-requisite: MA 237 Minimum Grade of D and ST 335 Minimum Grade of D or ST 340 Minimum Grade of D

**ST 450 Categorical Data Analysis 3 cr**

Analysis of two-way, three-way and higher dimension contingency tables using log-linear models, measures of association for nominal and ordinal tables, multiple-factor models, multiple response models, logistic regression, and weighted least squares. Computer Lab fee.

**ST 460 Multivariate Stat Analysis 3 cr**

Multivariate normal distribution, sampling distribution, hypothesis testing, principal components and introduction to factor analysis, canonical correlation analysis, discriminant and classification analysis, and MANOVA. Computer Lab fee.

**ST 470 Theory of Statistics 3 cr**

A comprehensive introduction to the mathematical foundations of statistics. Sufficient statistics and information. Parameter estimation, maximum likelihood and moment estimation, optimality properties of estimators and confidence intervals. Hypothesis testing, likelihood ratio tests and power functions. Credit for both ST 470 and MA 551 is not allowed.  
Pre-requisite: MA 451 Minimum Grade of D or MA 550 Minimum Grade of D

**ST 475 Stat Computing and Graphics 3 cr**

Introduction to computer-assisted data analysis with statistical computer software, including SAS, R/S-Plus. Coverage includes basics of SAS, common SAS statistical procedures, high-dimensional data visualization, some elements of statistical computing such as numerical computation, semi-numerical computation, symbolic and graphical computation, and special topics selected by instructor. (Credit for ST 475 and ST 575 is not allowed. Computer Lab fee.  
Pre-requisite: ST 210 Minimum Grade of C or ST 315 Minimum Grade of C or ST 540 Minimum Grade of C

**ST 480 Statistical Practicum - W 1 cr**

Relates to the student's classroom studies with actual statistical problems encountered in practice. Working with the departmental statistical consultant, the student will participate in providing statistical assistance to research faculty in applied fields. Computer Lab fee.  
Pre-requisite: and ST 335 Minimum Grade of C and ST 340 Minimum Grade of C )

**ST 490 Sp Top - 1 TO 3 cr**

Selected topics in advanced undergraduate applied statistics This course may be repeated for a maximum of six credits.

**ST 494 Directed Studies - 1 TO 3 cr**

Directed Study. May be repeated for a maximum of six credits. Prerequisite: Permission of Department Chair.

**ST 499 Honor Senior Project - H 3 TO 6 cr**

With the guidance and advice of a faculty mentor, Honors Students will identify, and carry out a research project in Statistics. The outcome of the research project will include a formal presentation at the annual Honors Student Colloquium. The senior project will be judged and graded by three members of the faculty, chaired by the faculty mentor.

**ST 525 Appl Stat for Clinical Trials 3 cr**

This course introduces the fundamental concepts of clinical trials and statistical methods in clinical trials with examples. Topics include clinical trial design and development, randomization, blindness, sample size and power calculation, data collection and management, missing data, survival analysis, association and reproducibility, crossover trials, Bayesian adaptive methods, and others. Most of the statistical methods will be implemented using R. Procedures or subroutines from other statistical software packages, such as SAS and SPSS, will also be introduced as needed.

Pre-requisite: ST 210 Minimum Grade of C or ST 305 Minimum Grade of C or ST 315 Minimum Grade of C or ST 540 Minimum Grade of C

**ST 540 Stat in Research I 3 cr**

A service course for graduate students in disciplines other than mathematics and statistics. A non-calculus exposition in support of application. Coverage includes descriptive statistics, probability and probability distributions, sampling, estimation, tests of significance, analysis of variance, correlation, linear, polynomial, and multiple linear regression including residual and lack of fit analysis, nonparametric procedures, contingency table analysis, and computer-assisted data analysis using appropriate computer software. Computer Lab fee.

**ST 545 Stat in Research II 3 cr**

Continuation of ST 540. Coverage includes regression analysis through matrices, multiple, partial and multiple-partial correlation analysis, model building algorithms, non-linear regression, analysis of covariance, completely randomized, randomized complete block, and factorial experimentation for equal and unequal cell replication, logistic regression, resampling, basic multivariate techniques, and computer-assisted data analysis. Computer Lab fee.

Pre-requisite: ST 540 Minimum Grade of C

**ST 550 Environmental Statistics 3 cr**

Sampling environmental populations; parametric and nonparametric and estimation; applications of lognormal, Weibull, gamma and beta distributions; locating hot spots; censored data; outlier detection; trend analysis, seasonality; estimation of animal abundance. Computer Lab fee.

**ST 555 Categorical Data 3 cr**

Introduction to categorical response data, probability distributions for categorical data, statistical inference for proportions, contingency tables and measures of association, logistic regression, log-linear models for contingency tables, multi-category response models, models for matched pairs categorical response variables. Credit for both ST 450 and ST 555 is not allowed.

Pre-requisite: ST 540 Minimum Grade of C or ST 315 Minimum Grade of C or ST 335 Minimum Grade of C

**ST 560 Appl Desgn & Analysis of Exper 3 cr**

A software aided introduction to the design and analysis of experiments for univariate and multivariate data. The coverage includes designs such as block designs, factorial designs, repeated measurement designs, hierarchical designs, response surface methods, and Taguchi methods along with various ANOVA techniques for univariate data, ANCOVA for the correlated data, and MANOVA for multivariate data. Analysis of data will be accomplished by extensive use of statistical software. Computer lab fee. Pre-requisite: ST 540 Minimum Grade of B

**ST 575 Stat Computing and Graphics 3 cr**

Introduction to computer assisted data analysis with statistical computer software, including SAS, R/S-Plus. Coverage includes basics of SAS, common SAS statistical procedures, high-dimensional data visualization, some elements of statistical computing such as numerical computation, semi-numerical computation, symbolic and graphical computation, and special topics selected by instructor. (Credit for both ST 475 and ST 575 is not allowed. Computer Lab fee.

Pre-requisite: (ST 540 Minimum Grade of C or ST 315 Minimum Grade of C or ST 210 Minimum Grade of C)

**ST 580 Stat Learning Tech in Data Sc 3 cr**

Statistical learning refers to a set of tools for modeling and understanding complex datasets. It is a recently developed area in statistics and blends with parallel developments in computer science and, in particular, machine learning. The purpose of this course is to provide the student with a foundation in modern (non-traditional) statistical learning techniques to deal with small to large complex datasets. Analysis of data is accomplished by extensive use of statistical software thereby minimizing manual computation. Coverage includes introduction to statistical learning, classification or supervised learning methods, resampling methods, linear and non-linear model selection techniques, support vector machines and tree-based methods.

Pre-requisite: ST 540 Minimum Grade of C

**ST 585 Nonparametric Modeling 3 cr**

This course is designed to introduce an alternative set of methodologies to existing and non-existing statistical methods with emphasis on distribution-free and robust procedures. The coverage includes distribution-free analysis of location and scale measures. Nonparametric treatment of fundamental statistical designs, nonparametric multiple comparison procedures, association and contingency table analysis, goodness-of-fit procedures. Nonparametric regression and other measures of association and computer intensive methods. Statistical computer software is intended to enhance the facility with applications of various techniques covered in this course.

Pre-requisite: ST 335 Minimum Grade of C and ST 540 Minimum Grade of C

**ST 590 Sp Topic: 1 TO 3 cr**

Selected topics in advanced applied statistics. This course may be repeated for a maximum of six credits.

## Systems Engineering (SE)

### SE 500 Engr Probability & Statistics 3 cr

Probability and statistical concepts; discrete, continuous, and joint distributions; point and interval estimation; hypothesis testing; regression and correlation analysis; analysis of variance.

### SE 501 Engr Operations Research 3 cr

Model construction, linear programming, network models, dynamic models, stochastic models, queuing theory, and decision theory.

Pre-requisite: SE 500 Minimum Grade of B

### SE 601 Systems Eng Fundamentals 3 cr

Fundamentals of systems engineering, structure of complex systems, system development process, systems engineering management and documentation, needs analysis, requirements development, engineering design and development, integration and test, change management, process improvement. Fee.

### SE 602 Risk and Failure Analysis 3 cr

Risk Analysis needs, risk analysis methods, performance requirement analysis, trade studies, failure analysis needs, failure analysis tracking, and failure analysis methods.

Pre-requisites: Requires a background in calculus-based statistics and permission of instructor. Fee.

Pre-requisite: SE 500 Minimum Grade of C

### SE 603 Integration, Test & Evaluation 3 cr

Interface control documents, design reviews, requirements management, allocation of test methods to requirements, test plans, test procedures, test execution, and failure tracking and resolution. FEE

Pre-requisite: SE 601 Minimum Grade of C

### SE 604 Software Systems Engineering 3 cr

Software development methodologies, software development tools, change management, software concept development, software requirements development and allocation, coding and unit test, program technical interfaces, software engineering management. Fee.

Pre-requisite: SE 601 Minimum Grade of C

### SE 605 SE Project Management 3 cr

Management of system design, development and risk, work breakdown, structure, systems engineering management plan, design reviews, budget and schedule analyses, negotiation and conflict resolution, contracts, customer interactions, team selection, failure resolution. Fee.

### SE 606 Systems Architecture 3 cr

The systems architecture is that foundational structure of a system, capturing the core capability and structure of the system. This course will cover principles of systems architecting, system architecture drivers, relationship of systems architecture to system requirements, common tools and techniques to include design structure matrices, IDEF0, SysML, and simulation.

Pre-requisite: SE 601 Minimum Grade of C

### SE 607 Systems Simulation 3 cr

This course rigorously examines system modeling and simulation methodologies, emphasizing statistical analysis and discrete-event simulation via simulation software.

Pre-requisite: SE 500 Minimum Grade of C

### SE 608 Reliability Engineering 3 cr

This course rigorously examines reliability. and maintainability methodologies, emphasizing mathematical constructs, design concepts, and data analysis employed to quantify reliability, availability, and maintainability measures for operational readiness, support system design, and system effectiveness.

Pre-requisite: SE 500 Minimum Grade of C

### SE 609 Engineering Research Methods 1 TO 3 cr

This course is a fast tracked course examining quantitative and qualitative methods for conducting meaningful inquiry and research. Topics include research ethics, intent, design, methodologies, techniques, formatting, data management, analysis, publication, and presentation utilizing common statistical approaches.

Pre-requisite: SE 601 Minimum Grade of C

### SE 610 Systems Thinking 3 cr

The act of systems thinking is taking a step back from the details considered during engineering design, and looking at the whole picture. This class exposes the student to a conceptual framework to allow them to properly define complex systems and enterprises drawing from synthesizing techniques from systems science, soft systems methodologies, and systems engineering. The class demonstrates the ability to leverage the simultaneity of perspectives, the role of paradox, and the centrality of soft issues in resolving complexity.

### SE 611 Socio-Technical Systems 3 cr

Socio-Technical systems are those systems which contain and/or are strongly influenced by human, social and institutional elements. Because of those influences, they quickly become dependent on community partnerships, infrastructure constraints, and government-aspects that are not traditionally part of the engineering equation. This course considers the systems engineering approach as it relates to the challenges of socio-technical systems.

Pre-requisite: SE 601 Minimum Grade of C

**SE 612 Production System Engineering 1 TO 3 cr**

This course rigorously examines principles, design, models and techniques for operational planning and analysis of production and distribution systems emphasizing quantitative methods.

**SE 690 Special Topics in SE 3 cr**

Topics of current interest in Systems Engineering. Fee.

**SE 692 Directed Study in SE 3 cr**

Directed study, under the guidance of a faculty advisor, of a topic from the field of Systems Engineering not offered in a regularly scheduled course. Prerequisite: Instructor's permission.

**SE 699 Dissertation in SE 1 TO 6 cr**

An investigation of an original problem in Systems Engineering under the guidance of the student's major professor. Prerequisite: Approval of the dissertation prospectus by the student's Advisory Committee, the Graduate School, and consent of the Director of Engineering Graduate Studies.

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# Departments Of Instruction

Departments of Instruction	Department Codes
Accounting	ACC
Adult Health Nursing	AHN
African American Studies	AFR
Air Force Studies	AS
Art and Art History	ART
Biology	BLY
Biochemistry-Molecular Biology	BCH
Biomedical Sciences	BMD
Business	BUS
Cardiorespiratory Sciences	CRC
Cell Biology - Neuroscience	CBN
Chemical-Biomolecular Engineering	CHE
Chemistry	CH
Civil, Coastal, and Environmental Engineering	CE
Clinical and Counseling Psychology	CCP
Communication Arts	CA
Community Mental Health Nursing	CMN
Computer Sciences	CIS
Computing PhD	CIS & CIST
Counseling and Instructional Sciences	PS
Developmental Studies	DS
Earth Sciences	ES
Economics-Finance	ECFN
Electrical-Computer Engineering	EE
Emergency Medical Services	EMS
English	EH
Environmental Toxicology	EXT
Gender Studies	GS
General Engineering	EG
Gerontology	GRN
Graduate Interdisciplinary Studies	GIS
Health, Kinesiology, and Sport	HPE
Health Sciences	HSC

History	HY
Honors Interdisciplinary Studies	HON
Hospitality and Tourism Management	HTM
Information Systems and Technology	CIST
Interdepartmental Studies	IDL
Interdisciplinary Programs	IDS
Integrative Studies	IST
International Studies	IS
Leadership and Teacher Education	LTE
Management	MGT
Marine Sciences	MAS
Marketing and Transportation	MKT
Maternal Child Nursing	MCN
Mathematics and Statistics	MA
Mechanical Engineering	ME
Microbiology/Immunology	MIC
Military Science	MS
Modern and Classical Languages and Literature	MLL
Museum Studies	MUM
Music	MUS
Nursing	NU
Occupational Therapy	OT
Pharmacology	PHA
Philosophy	PHL
Physical Therapy	PT
Physician Assistant Studies	PA
Physics	PH
Physiology	PHS
Political Science and Criminal Justice	PSC
Psychology	PSY
Radiologic Sciences	RAD
Sociology, Anthropology and Social Work	SY
Speech Pathology and Audiology	SPA
Systems Engineering	SE
Theatre and Dance	DRA
Visual Arts	ART

# Departments Of Instruction By College

## Pat Capps Covey College of Allied Health Professions

Biomedical Sciences

Emergency Medical Services

Speech Pathology and Audiology

Occupational Therapy

Physical Therapy

Physician Assistant Studies

Professional Health Sciences

Radiologic Sciences

Cardiorespiratory Care

## College of Arts and Sciences

Air Force Studies

Biology

Chemistry

Communication

Earth Sciences - Geography, Geology, Meteorology

English

Forensic Science

Interdisciplinary Programs - African-American Studies, Gender Studies, Gerontology, International Studies

Marine Sciences

Mathematics and Statistics

Military Science

Modern and Classical Languages and Literature

Museum Studies

Music

Philosophy

Physics

Political Science and Criminal Justice

Psychology

Public Administration

Sociology, Anthropology and Social Work

Theatre and Dance

Visual Arts

**Mitchell College of Business**

---

Accounting

---

Economics and Finance

---

Management

---

Marketing

---

**College of Education and Professional Studies**

---

Counseling and Instructional Sciences

---

Health, Physical Education and Leisure Studies

---

Hospitality and Tourism Management

---

Integrative Studies

---

Leadership and Teacher Education

---

**College of Engineering**

---

Chemical Engineering

---

Civil, Coastal, and Environmental Engineering

---

Electrical and Computer Engineering

---

Mechanical Engineering

---

Systems Engineering

---

**Graduate School Interdisciplinary Programs**

---

Master of Science in Environmental Toxicology

---

Doctor of Philosophy in Clinical and Counseling Psychology

---

**College of Medicine**

---

Biochemistry and Molecular Biology

---

Cancer Biology

---

Cell Biology and Neuroscience

---

Comparative Medicine

---

Microbiology and Immunology

---

Pharmacology

---

Physiology

---

(For Doctor of Medicine see separate Bulletin)

---

**College of Nursing**

---

Adult Health Nursing

---

Community/Mental Health Nursing

---

Maternal/Child Health Nursing

---

**School of Computing**

---

Computer and Information Sciences

---

Computer Science

---

Computing PhD

---

Health Informatics

---

Information Systems

---

Information Technology

---

## Degrees Conferred

**Pat Capps Covey College of Allied Health Professions**

---

Bachelor of Science in Biomedical Sciences

---

Bachelor of Science in Cardiorespiratory Sciences

---

Bachelor of Science in Emergency Medical Services

---

Bachelor of Science in Professional Health Sciences

---

Bachelor of Science in Radiologic Sciences

---

Bachelor of Science in Speech and Hearing Sciences

---

Master of Science in Occupational Therapy

---

Master of Health Science (Physician Assistant Studies)

---

Master of Science in Speech - Language Pathology

---

Doctor of Audiology

---

Doctor of Philosophy (Communication Sciences and Disorders)

---

Doctor of Physical Therapy

---

**College of Arts and Sciences**

---

Bachelor of Arts

---

Bachelor of Fine Arts

---

Bachelor of Music

---

Bachelor of Science

---

Bachelor of Social Work

---

---

Master of Arts (Communication) (English) (History) (Sociology)

---

Master of Public Administration

---

Master of Science (Biological Sciences) (Marine Sciences) (Mathematics) (Psychology)

---

Doctor of Philosophy (Marine Sciences)

---

#### **Mitchell College of Business**

---

Bachelor of Science in Business Administration

---

Master of Accounting

---

Master of Business Administration

---

#### **School of Computing**

---

Bachelor of Science in Computer Science

---

Bachelor of Science in Information Systems

---

Bachelor of Science in Information Technology

---

Master of Science in Computer and Information Sciences

---

Doctor of Philosophy in Computing

---

#### **College of Education and Professional Studies**

---

Master of Education

---

Master of Science

---

Educational Specialist

---

Doctor of Philosophy (Instructional Design and Development)

---

#### **College of Engineering**

---

Bachelor of Science in Chemical Engineering

---

Bachelor of Science in Civil Engineering

---

Bachelor of Science in Computer Engineering

---

Bachelor of Science in Electrical Engineering

---

Bachelor of Science in Mechanical Engineering

---

Master of Science in Chemical Engineering

---

Master of Science in Civil Engineering

---

Master of Science in Electrical Engineering

---

Master of Science in Mechanical Engineering

---

Doctor of Science in Systems Engineering

---

**Graduate School**

Interdisciplinary Master of Science in Environmental Toxicology

Interdisciplinary Doctor of Philosophy in Clinical and Counseling Psychology

**College of Medicine**

Doctor of Philosophy (Basic Medical Sciences)

**College of Nursing**

Bachelor of Science in Nursing

Master of Science in Nursing

Doctor of Nursing Practice

All degrees are conferred at the commencement exercises in May and December.

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