Accreditation

Frostburg State University is accredited by the Middle States Commission on Higher Education, 3624 Market Street, Philadelphia, PA 19104 (267.284.5000). The Middle States Commission on Higher Education is an institutional accrediting agency recognized by the U.S. Secretary of Education and the Council for Higher Education Accreditation.

Accreditors Approved by the U.S. Secretary of Education:
• BSN in Nursing and MS in Nursing: Commission on Collegiate Nursing Education (CCNE)
• MS in Nursing: Administration and Education Accredited by the Commission on Collegiate Nursing Education (CCNE)
• Teacher Education Programs: Council for the Accreditation of Educator Preparation (CAEP), formerly National Council for the Accreditation of Teacher Education (NCATE)

Professional / Program Accreditors:
• BS in Athletic Training: Commission on Accreditation of Athletic Training Education (CAATE)
• College of Business Programs: AACSB International
• MS in Counseling Psychology: Master’s in Psychology and Counseling Accreditation Council (MPCAC)
• BS in Exercise and Sport Science: Accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP) upon the recommendation of the Committee on Accreditation for the Exercise Sciences.
• BA/BS Program in Mechanical Engineering, in collaboration with the University of Maryland College Park: Engineering Accreditation Commission of ABET, Inc.
• BS Engineering Program Concentrations in Materials Engineering and Electrical Engineering, accredited by Engineering Accreditation Commission of ABET, Inc., through September 2020.
• MS in Physician Assistant Studies (accreditation-provisional): Accreditation Review Commission on Education for the Physician Assistant, Inc. (ARC-PA).*
• BS in Recreation and Parks Management: Council on Accreditation of Parks, Recreation, Tourism and Related Professions (COAPRT)
• BA/BS in Social Work: Council on Social Work Education (CSWE)
• Teacher Education Programs: Also approved by the Maryland State Department of Education (MSDE).
• Brady Health Center: Accreditation Association for Ambulatory Health Care (AAAHC)
• Counseling and Psychological Services: International Association of Counseling Services: International Accreditation of Counseling Services

* The Accreditation Review Commission on Education for the Physician Assistant, Inc. (ARC-PA) has granted Accreditation-Provisional status to the Frostburg State University Master of Medical Science in Physician Assistant Studies Program sponsored by Frostburg State University.

Accreditation-Provisional is an accreditation status granted when the plans and resource allocation, if fully implemented as planned, of a proposed program that has not yet enrolled students appear to demonstrate the program’s ability to meet the ARC-PA Standards or when a program holding Accreditation-Provisional status appears to demonstrate continued progress in complying with the Standards as it prepares for the graduation of the first class (cohort) of students.

Accreditation-Provisional does not ensure any subsequent accreditation status. It is limited to no more than five years from matriculation of the first class.
The provisions of this catalog are not to be regarded as an irrevocable contract between the University and the student. The University reserves the right to change any provisions of requirement at any time, but its practice is to not make changes in degree and admission requirements retroactive. Other regulations and procedures and course offerings may change during the period of your enrollment. Whenever possible, such changes will be published in official University publications such as the Undergraduate Catalog and Registration Guidelines, and on the University website, with prior notice of changes provided. However, if circumstances require, such changes may be made without notice.

NOTE: Notwithstanding any other provision of this or any other University publication, the University reserves the right to make changes in tuition, fees and other charges at any time such changes are deemed necessary by the University and the University System of Maryland Board of Regents.

Frostburg State University is committed to making all of its programs, services and activities accessible to persons with disabilities. To request accommodation through the ADA Compliance Office, call 301.687.4102 or use a Voice Relay Operator at 1.800.735.2258.

Frostburg State University is an Equal Opportunity institution. Admission as well as all policies, programs, and activities of the University are determined without regard to race, color, national origin, ethnic, background, gender, sexual orientation, age, genetic information, creed, political or religious opinion or affiliation, disability, veteran status or marital status, in conformity with all pertinent Federal and State laws on non-discrimination and equal opportunity.

FSU is a smoke-free campus.
Welcome to Frostburg State University

This catalog is designed to be a road map to your future at Frostburg State University. It will direct you to valuable information regarding the College of Liberal Arts and Sciences, the College of Education and the College of Business. It will lead you through our many programs of study, giving details about every course available at the time of publication, and it will guide you to the best opportunities for financial aid. It will give you useful information about our academic policies and procedures. In short, this catalog will provide a description of what we offer, and how you can become a part of Frostburg State University.

Like any map, what it cannot provide is the experience of Frostburg State University. It cannot describe the quality of our faculty and our support personnel. You may note that more than 80 percent of our faculty have Ph.D.’s, but it is important to know that they publish in the most prestigious books and journals in the world, while still giving their full support and attention to their students. They pride themselves on the close and personal connections they form with students. It doesn’t tell you that we employ one faculty member for every 16 students and that you will never sit in a lecture hall with hundreds of students. It also cannot express the importance we place on providing support through our Center for Academic Advising and Retention, our Orientation Program or our Learning Connections in which incoming first-year students join a group of students with similar interests, then take several courses with those same students. Enduring friendships are often born of these communities.

This catalog cannot give you a true sense of this beautiful, uncrowded campus in the mountains of Western Maryland, nor can it convey the environment that so many students say enhances both their learning and their development as human beings. These qualities can only be realized from experiencing this campus and allowing us the privilege of providing you an education.

We are glad you have chosen Frostburg and look forward to your becoming an engaged member of our community who will remember mentors, friends, and intellectual challenges when you think of Frostburg State University in years to come.

Dr. Ronald Nowaczyk, President
The University

The Mission of the University

Summary Mission Statement
Frostburg State University is a student-centered teaching and learning institution featuring experiential opportunities. The University offers students a distinctive and distinguished baccalaureate education along with a select set of applied master’s and doctoral programs. Frostburg serves regional and statewide economic and workforce development; promotes cultural enrichment, civic responsibility and sustainability; and prepares future leaders to meet the challenges of a complex and changing global society.

Approved by the Board of Regents of the University System of Maryland. Approval of the Maryland Higher Education Commission.

Statement on Liberal Education
We believe that liberal education empowers students and frees them from ignorance by informing them about the world, its histories, methods of inquiry, and values. Liberal education develops students’ intellects and enhances their love of learning and awareness of individual and social responsibility by encouraging them to learn and apply knowledge to solve important problems.

Diversity and Equal Opportunity
Frostburg State University affirms its commitment to a campus environment which values human diversity and respects individuals who represent that diversity. Fostering diversity and respect for difference is a fundamental goal of higher education, ranking among the highest priorities of this institution.

In this spirit, Frostburg State University is committed to a policy of equal opportunity and to the elimination of discrimination in both education and employment on the basis of race, color, national origin, ethnic background, sex, gender identity, sexual orientation, age, genetic information, creed, political or religious opinion or affiliation, disability, veteran’s status or marital status, in conformity with all pertinent Federal and State laws on non-discrimination and equal opportunity.

The following policies guide the University in meeting its aims of diversity and equal opportunity. Copies of these policies are available in the ADA/EEO Office (301.687.3035) and Office of Gender Equity (301.687.3035).

- Affirmative Action/Equal Employment Opportunity (PN 1.002)
- Policy on Diversity (PN 1.006)
- Policy of Non-Discrimination/Equal Opportunity (PN 1.008)
- Policy on Compliance with Disability Discrimination Laws (PN 3.073)
- Policy on Reasonable Accommodations for Disabilities Due to Pregnancy (PN 3.119)

Americans With Disabilities Act
Frostburg State University does not discriminate on the basis of disability in admissions or in access to any of its programs or activities.

It is committed to full compliance with the Americans with Disabilities Act (ADA). The ADA requires that all University programs, services, and activities be accessible to qualified individuals with disabilities. If a program or service is inaccessible to disabled persons, the University maintains responsibility for providing reasonable accommodation to ensure accessibility. This includes, but is not limited to, access to classes, lectures and all campus-sponsored events, on-campus housing, and all facilities used by students and visitors. To request accommodation through the ADA Compliance Office, call 301.687.3035 or use a Voice Relay Operator at 1.800.735.2258.
Undergraduate Institutional Learning Goals

Frostburg State University’s Institutional Learning Goals reflect the mission of the University through a focus on five specific areas of student learning. Individual departments, programs, and services will provide opportunities, where appropriate, for you to attain the skills and dispositions identified by the University as essential to education.

1. Liberal knowledge and skills of inquiry, critical thinking and synthesis

You will acquire knowledge in the humanities, the natural sciences, the social sciences, and the arts, which collectively embody the human cultural heritage. You will develop your abilities to practice higher-level critical thinking.

You will
a. apply different methods of inquiry from various perspectives and disciplines to gather information;
b. comprehend and apply various research methods to evaluate information critically;
c. analyze complex issues and construct logical conclusions;
d. use problem-defining and problem-solving skills by synthesizing ideas within and across disciplines;
e. demonstrate sustained intellectual curiosity.

2. Core skills

You will become proficient in reading, writing, speaking and listening. You will also develop quantitative literacy and technological fluency.

You will
a. comprehend and critically interpret information in written and oral forms;
b. communicate information and ideas effectively;
c. understand and apply mathematical reasoning to solve quantitative problems and to evaluate quantitative information and arguments;
d. use technological resources to access and communicate relevant information.

3. Acquisition and application of specialized knowledge

You will gain knowledge and skills appropriate both for your field of study and to enter into the professional sector and/ or graduate school.

You will
a. demonstrate technical and analytic skills that are appropriate to your field of study and applicable to future careers;
b. acquire research skills and specialized vocabulary for critical discourse;
c. demonstrate competencies and achievements appropriate to your field of study;
d. apply classroom learning in a combination of reflective practice and experiential education.

4. Values & social responsibility

You will critically explore, evaluate, and define your values and become a responsible citizen in a complex and changing society.

You will
a. demonstrate respect and tolerance for other cultures and societies;
b. make professional and personal judgments based on ethical considerations and societal values;
c. exhibit civic responsibility and leadership;
d. understand the purpose and value of community service in advancing society;
e. demonstrate an awareness of and appreciation for the natural environment.

5. Appreciation of cultural identities

You will gain insight into the ways cultural identities and experiences shape individual perspectives of the world and influence interactions with people from different backgrounds.

You will
a. demonstrate the knowledge, skills, and attitudes essential for communicating and cooperating effectively with people of diverse backgrounds;
b. understand the cultural and social exercise of power;
c. recognize and appreciate arguments supporting perspectives different from your own.
Academic Programs

You can make the most of your undergraduate education by fully exploring the options open to you. Selecting your major is only one step. The University offers many special areas of study within and outside your major which can enhance your learning and future job possibilities.

College of Business

Accounting
Business Administration
- finance
- general management
- global business
- hospitality management
- human resource management
- marketing
- small business/entrepreneurship

Economics
- business economics
- public policy economics
- quantitative economics

College of Education

Adventure Sports Management
Early Childhood/Elementary Education
Elementary Education
- integrated arts
- language and literacy
- social science and civics
- STEM
Elementary/Middle School Dual Certification
Exercise & Sport Science
Combined BS in Exercise & Sport Science/MS in Athletic Training
Health & Wellness Education
Recreation & Parks Management
- adventure sports
- community program delivery
- hospitality management & tourism
- sport promotion & communication

College of Liberal Arts & Sciences

Art and Design+
- seven studio focuses
Biology
- molecular biology
- environmental science
Chemistry
- biochemistry
- pre-pharmacy
- professional chemistry

Communication Studies
- strategic communication leadership
- strategic social media

Computer Information Systems

Computer Science
- networks

Earth Sciences
- environmental science

Engineering
- electrical engineering
- materials engineering

English+
- creative writing
- literature
- professional writing

Foreign Languages & Literature+
- Spanish

Geography
- global systems analysis
- mapping and geospatial sciences

Health Science

History
- international history
- history of the Americas

Information Technology
- accounting
- business information technology
- computer security
- graphic arts
- mass communication

International Studies
- international business
- international development
- international economics
- international politics

Interpretive Biology & Natural History

Law & Society
- criminal justice
- legal studies

Liberal Studies

Life-Cycle Facilities Management

Mass Communication
- digital video production
- digital media production

Majors

Frostburg State University offers 48 undergraduate majors, many of which allow you to choose a specialization within a broader field of study. In addition, a major in mechanical engineering is offered in collaboration with the University of Maryland, College Park. These programs are taught by faculty assigned to one of three colleges: the College of Business, the College of Education and the College of Liberal Arts and Sciences.

- digital audio production
- digital media strategies

Mechanical Engineering
(in collaboration w/UMCP)

Music+
- instrumental performance
- music industry
- vocal performance

Nursing: RN to BSN (collaborative)

Philosophy

Physics
- engineering physics
- traditional physics

Political Science

Psychology

Secure Computing & Information Assurance

Social Science+

Social Work

Sociology

Theatre
- acting
- design and technology
- theatrical studies

Wildlife & Fisheries

- = concentration
- = track
+ = Secondary/P12 Teaching Certification Option
Minors
You may also select from a variety of minors. Minors require a minimum of 18 credit hours in an area of study outside your major. Minors are offered in most of the major fields. Distinctive minors (no similar majors offered) include:

**College of Business**
- Accounting
- Business Administration
- Economics
- Finance
- Financial Services
- Human Resource Management
- Management
- Marketing
- Small Business/Entrepreneurship

**College of Education**
- Coaching
- Recreation and Parks Management

**College of Liberal Arts & Sciences**
- African American Studies
- Animal Behavior
- Art History
- Climate Science
- Communication Studies
- Cultural Anthropology
- Dance
- Film Studies
- Fine Arts
- Forestry
- French
- Graphic Design
- Industrial & Organizational Psychology
- Jazz Studies
- Journalism
- Leadership Studies
- Mass Communication
- Musical Theatre
- Public Relations
- Social Media
- Sustainability Studies
- Women’s Studies

**Distinctive Areas of Study and Emphases**
The University offers a number of special course groupings that prepare you for different professions or graduate programs, or give you academic distinction. Each of these areas of study is fully described in each College’s section of this catalog.

**College of Business**
- B.S. Accounting/MBA Dual Degree

**College of Liberal Arts & Sciences**
- Addictions Counseling
- Child and Family Counseling
- Computer Print Graphics
- Law: Law School Preparation, Bachelors/Juris Doctor Dual Degree Program
- Leadership in Psychology
- Mathematical Sciences (Focus)
- Professional Writing
- Public Administration
- Teaching of Writing

**Choosing a Major**
There are many campus resources that can help you find a major that’s a good fit for you:

- The Center for Academic Advising and Retention (CAAR) is here to assist you if you have not declared a major or are considering changing your major.
- The Career and Professional Development Center publishes a guide to declaring your major, provides resources to help explore academic areas and offers individual counseling to assist your search.
- Majors Fair: annually in the fall semester
- Career Expo: annually in October
- CAREER BEAM: an online career assessment program
- FSU Connections: learning communities
- Faculty in departments offering majors which interest you
- ORIE 101: Introduction to Higher Education
- Office of Student Affairs
- Counseling and Psychological Services
- Programs Advancing Student Success (PASS)

**Declaring a Major**
You may declare your major at the time of admission. If you are a transfer student, you will be assigned a departmental mentor (advisor) at registration. If you are a first-year student, you will be initially advised by your ORIE 101 – Introduction to Higher Education instructor and may be assigned a departmental mentor during your second semester after confirming your major choice with your ORIE advisor and meeting with the chair of the department that offers the program. Also, if you are a first-time college student, you will be assigned a University Academic Advisor who will serve as a primary advising resource and contact until graduation. You are expected to declare a major by the time you have completed 45 credit hours. You may change your major at any time by speaking with your advisor and chair of the department of the new major.
The University System of Maryland at Hagerstown

The University System of Maryland at Hagerstown (USMH) is a regional higher-education center in downtown Hagerstown that offers upper-division undergraduate, graduate, and post-graduate academic programs of the universities within the University System of Maryland at a state-of-the-art facility. While Frostburg State University is the coordinating institution for USMH, six institutions offer degrees at USMH: Frostburg State University; Towson University; University of Maryland Eastern Shore; University of Maryland University College (Global Campus) and Salisbury University. USMH undergraduate, graduate and post-graduate programs are premier offerings of the USM educational institutions, chosen because they meet the needs of the Washington County business community and of prospective students from Hagerstown and Frederick community colleges and the wider tri-state region.

USM institutions currently offer 12 undergraduate, 10 master’s and one doctoral degree on site. Baccalaureate programs offered by FSU include: business administration, early childhood/elementary education, psychology and liberal studies. Graduate programs include master’s programs in elementary education (initial Maryland Teacher Certification), education (specialization programs for certified teachers and/or public school personnel), physician assistant studies, and an Ed.D. in educational leadership. USMH offers access to on-site academic advising, computer labs and a full-service library to meet student needs.

USMH is open Monday through Thursday, 8:30 a.m. to 9:00 p.m.; Friday, 8:30 a.m. to 5:00 p.m.; and Saturday, 9:00 a.m. to 2:00 p.m. For further information, contact the USMH at 240.527.2060, or the FSU office at USMH at 240.527.2741.

Other Instructional Sites

The electrical engineering concentration in the BS in engineering may be completed at the Anne Arundel Community College Regional Higher Education Center at Arundel Mills. The BS in engineering with a concentration in materials engineering may be completed at Cecil College.
Gaining Admission

The University encourages applications from students prepared to join in the life of an intellectual community. First-year college students are granted admission on the basis of high school grade point average, completion of a college preparatory program, as well as optional performance on the SAT or ACT, optional letters of recommendation, and an optional admissions essay. The University’s admissions policies are governed by the Policy on Undergraduate Admissions (III-4.00) of the Board of Regents of the University System of Maryland.

First-Year Admissions Procedures

Applications for admission are available online at www.GoBobcats.frostburg.edu. Paper applications are available through your high school guidance office or by contacting the Admissions Office at FSUadmissions@frostburg.edu or 301.687.4201.

If you attended a post-secondary institution after graduating from high school, you are considered a transfer student. You should review the transfer student application procedures and admission requirements listed in a separate section on the next page.

A non-refundable application fee is also required and can be paid online or with a check or money order.

As part of your application, you must provide the Admissions Office with an official copy of your academic records. The University does not assume responsibility for requesting this information from your high school or any college you have attended.

Either the SAT or the ACT is optional for admission. You should take the SAT or ACT in your junior or senior year of high school. Frostburg State University’s SAT identification code is 5402. Frostburg’s ACT identification code is 1714.

Application Dates

Beginning on August 1, the Admissions Office will start accepting applications for the fall semester of the following year. The University may have to close admissions when no further space for students is available. Consequently, applicants from high school are encouraged to apply in the fall or early winter of the senior year.

The University accepts applications from first-year students who would like to begin in the spring semester, and admission is granted on a space-available basis.

High School GPA

First-year college applicants are granted admission on a rolling basis. Many admission decisions are made, consequently, on grades you have earned only through the end of the junior year. However, the first semester of your senior year can be pivotal in gaining admission and your remaining high school work must be successfully completed.

Performance on the SAT/ACT

Your performance on the SAT/ACT should be in the range that would normally predict success in college.

College Preparatory Program in High School

Entering first-year students must have 4 units of English; 3 units of social science/history; 3 units of biological and physical science in at least two different subject areas (with 2 of the units including a laboratory experience); 4 units of mathematics, including Algebra I, Algebra II and Geometry; and 2 units of a foreign language or, in Maryland, 2 units of advanced technology. Students who complete Algebra II prior to their final year must complete the four-year mathematics requirement by taking a course or courses that utilize non-trivial algebra.

Through advanced placement, applicants may have completed advanced courses before high school and opted out of certain required courses in high school. If you have taken advanced courses, the University assumes minimum requirements have been met.

Admission for Mature Adults

Entering students who have not attended college and are not entering immediately following high school graduation should submit a high school transcript of your academic work that includes the graduation conferral date of a high school diploma. Students who have not earned a high school diploma can be considered for admission with a General Education Diploma (GED).

Diagnostic Placement Tests

All entering first-time students and any transfer students not transferring Freshman Composition and/or a college-level math course, will take diagnostic placement tests in reading, writing and mathematics to determine appropriate placement.

If you score below predetermined standards on these examinations, you will be required to enroll in specified courses your first semester to develop your skills to a level necessary to be successful at the University.

Special Standards

Admission to specific University degree programs may require higher standards or be limited by opportunities to complete the courses required for that program.

Right to Refuse Applications

The Director of Admissions reserves the right to deny or revoke applications for admission or readmission of any applicant whose former record(s) and/or observed conduct is incongruent with the established guidelines for student behavior and academic responsibility at Frostburg State University.

Admission for GED Recipients

For admission purposes, the General Education Development examination scores can be used as an alternative to high school graduation. Please forward an official copy of your GED scores.

Admission of International Students

The University welcomes applications from undergraduate international students who demonstrate university-level language proficiency in English. Students with international credentials, those who have completed part or all of their secondary and/or tertiary level education outside the United States, must follow the guidelines below in preparing their application. More detailed information about F-1 and J-1 visa category requirements may be found on the University’s website.

Students who are already studying in the U.S. on an F-1 visa must provide all admissions documents and complete a “Transfer Eligibility” form in order to receive a new I-20. Exchange students
who plan to study at FSU for only one or two semesters should contact the Center for International Education directly for application materials (301.687.4714).

1) An application for admission can be submitted online at www.GoBobcats.frostburg.edu. The non-refundable application fee can be paid online (U.S. currency only).

2) If your native language is not English, you are required to demonstrate English language proficiency. The University requires a minimum TOEFL score of 61 or a minimum IELTS score of 5.5 for undergraduate students. Additional options for English language proficiency can be found on the FSU website.

3) Provide official or EducationUSA notarized secondary school academic records which show grades earned, annual mark sheets, examination sheets and leaving certificates as they apply in your home country (provide both original language and English translated academic records).

4) Have transcripts for institutions other than American institutions translated and evaluated by an approved evaluation service. No final action will be taken on your application for admission until the evaluation has been received.

5) Complete the Certification of Financial Support form and submit it, along with your original bank documents, to the Center for International Education. This form attests that either you or your sponsor is aware of the educational and living expenses and is prepared to provide the necessary funds. You must pay all educational costs for the semester in full at registration.

6) International students on F-1 and J-1 visas are required to purchase health insurance for the time they are in the United States. Cost of health insurance will be included on the student’s bill each term. The Center for International Education enrolls students in the insurance program.

7) All required documents should be on file by June 1 for Fall admission, or October 15 for Spring admission. You cannot be granted admission or issued an I-20 until all required information has been received by the Office of Admissions and the Center for International Education. If you are an international student residing outside the United States, you should not attempt to come to Frostburg State University before receiving a formal letter of admission and an I-20 issued by Frostburg State University.

More detailed information about F-1 and J-1 visa category requirements may be found on the University’s website.

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Admission for Transfer Students

If you attended a post-secondary institution after graduating from high school, you are considered a transfer student. Applications for admission are available online at www.GoBobcats.frostburg.edu. In addition to completing an application for admission and paying the non-refundable application fee, you must also provide the Office of Admissions with official transcripts from each institution of higher education you have attended. Official transcripts are those that are sent directly from the sending institution to Frostburg State University.

Your academic records will be evaluated by the Admissions Office following the guidelines listed below. Review your transfer credit evaluation carefully and bring any questions or concerns to the attention of the Transfer Coordinator and your advisor within your first semester of enrollment at FSU. If you still have questions about the evaluation of transferable credits or the appeals process for this audit, please contact the Director of Admissions.

1) Ordinarily, you must have a 2.0 cumulative average on a 4.0 scale and must have earned a minimum of 24 transferable semester hours of credit.

- If you have attended more than one institution, the cumulative GPA will be computed on grades received in courses from all institutions attended.
- If you are a transfer student with fewer than 24 transferable credits, you must have a 2.5 minimum cumulative average and provide an official high school transcript and SAT scores to the Admissions Office prior to admission.
- However, if you would have been admitted to the University as a high school senior and have achieved a 2.0 cumulative grade point average at a Maryland community college, you are eligible for transfer regardless of the number of credits you have earned.
- If you have fewer than 30 transferable credits, you must provide an official high school transcript and SAT scores to the Admissions Office prior to admission.

2) You may not transfer more than 70 credits from a community or junior college. These credits are normally limited to the first two years at the undergraduate level and half the baccalaureate degree program requirements.

3) You are limited to a maximum of 90 credits when transferring from other four-year colleges and universities.

4) You are required to complete at least half your academic major requirements at FSU. Additional requirements to complete a degree are listed in the Academic Program chapter.

5) When you transfer, grades earned at other institutions are not included in your FSU grade point average. The credits you earned transfer but the grades do not.

6) You must meet the graduation requirements of the Frostburg State University catalog in effect when you were enrolled as a first-year student at the sending institution.

If you had more than two sequential years of non-enrollment since enrolling in an institution of higher education, you must meet the graduation requirements of the FSU catalog in effect at the time you first enroll at Frostburg State University.

7) If you are admitted to degree candidacy while still enrolled at another institution, you must maintain the required cumulative grade point average and remain in good academic standing during your most recent semester at that institution. Failure to meet this requirement will result in cancellation of the University’s original offer of admission.

Transfer Policies

The Maryland Higher Education Commission has set policies for students transferring within the public higher education system in our state. These policies allow students in other state colleges and universities to plan a total degree program and make uninterrupted progress toward finishing that program if they transfer.

The complete text of the Maryland Higher Education Commission General Education and Transfer Policy is reprinted in the Policies chapter at the end of this catalog. To summarize, when you first transfer to Frostburg State University, if you have earned credit for a course that meets the general education requirements at a Maryland public higher education institution, you will receive general education credit at Frostburg State University, up to a maximum of 36 credits (from a two-year institution). Once you are a degree-seeking student at FSU, you can only transfer equivalents...
of the specific courses in the FSU general education program for general education credit.

If you are an undergraduate student applying for readmission after an absence of at least five calendar years, and you have earned credit for general education courses at a Maryland public higher education institution during your absence, you might receive general education credit at FSU. The evaluation of transfer credits occurs at the time of readmission; therefore, you must provide official transcripts before the start of the semester in which you’re being readmitted.

This general education transfer policy does not apply to students transferring from private institutions in Maryland or from non-Maryland institutions. Courses transferred from these institutions will be evaluated on a course equivalency basis.

If you have completed an associate’s degree or have completed 60 semester hours of credit at a Maryland public institution with a cumulative grade point average of 2.0 or higher on a scale of 4.0, you may not be denied direct transfer.

If you have taken courses at a Maryland community college as part of a recommended transfer program leading to a baccalaureate degree, those courses will be applied to a related degree program at FSU.

Acceptance of Transfer Credit
Transfer credit may be awarded for successful completion of course work compatible with the Frostburg State University curriculum, as documented by official transcripts forwarded directly by the sending institution to the FSU Office of Admissions. Such credit normally will be transferred only from regionally accredited institutions or institutions that are candidates for regional accreditation and for course work completed during military service that has been evaluated in the American Council on Education’s Guide to the Evaluation of Educational Experiences in the Armed Services.

Credit earned at degree-granting higher education institutions that are not regionally accredited but that hold national or specialized accreditation recognized by the U.S. Department of Education; and at non-degree-granting institutions that are approved by the Maryland State Department of Education, the Maryland Higher Education Commission, or a state or local government agency authorized to approve curricula, will be considered for transfer only if an articulation agreement exists between Frostburg State University and the other institution or, at student request, on a case-by-case basis. If an individual review is requested, the student must provide the FSU Admissions Office a copy of the institutional catalog or program of study, and copies of course syllabi for those courses for which transfer credit is desired. The Admissions Office will evaluate this transfer credit in consultation with the FSU departments offering the courses.

Readmission
If you previously were admitted and attended the University but did not earn a degree and have been absent for one semester or more, you must submit an application for readmission. Contact the Admissions Office for a readmission application form. (See section on Leave of Absence in the Academic Regulations chapter of this catalog).

Restricted Grade Forgiveness Policy for Returning Students
If you are an undergraduate student applying for readmission after an absence of at least five calendar years, you may petition the Admissions Office to remove up to 16 credits and their corresponding course grades from the calculation of your cumulative grade point average. To earn this grade forgiveness, you must (1) consult with the chair of the department in which you are majoring and (2) file a petition specifying the course credits to be deleted. This petition must be filed at the time of readmission and before you register for classes.

To be eligible for this restricted grade forgiveness policy, you must re-enroll in course work at Frostburg State University. You may only use the restricted grade forgiveness policy for returning students once in your undergraduate career.

Residency
Students enrolling at Frostburg State will be classified as in-state or out-of-state based on guidelines set by the Board of Regents of the University System of Maryland. This residency classification influences admission, tuition and other charges. Resident status is granted to students who have established permanent residency in Maryland based upon factors like living quarters, Maryland income tax payments, voter registration and a valid driver’s license. The complete Board of Regents’ Policy on Student Residency Classification, which fully explains the policy and the procedures for establishing in-state residency, is reprinted in this catalog’s chapter on policies and is available on the Board of Regents website: www.ums.edu/regs/bylaws/SectionVIII/. Scroll to “Policy on Student Classification for Admission and Tuition Purposes VIII-2.70 (R).”

Residency status is determined for first-time entering students by the Office of Admissions. Students seeking a review of their residency status will be required to respond to a petition available through the Office of Admissions.

Once you are enrolled at the University, residency status is determined by the Registrar’s Office. Students desiring a review of their residency status after enrollment can obtain the petition from the Registrar’s Office.

Academic Common Market
Frostburg State University participates in the Academic Common Market (ACM) of the Southern Regional Education Board (SREB). For more than 35 years, ACM has enabled students to pursue out-of-state degrees in specialized fields at discounted tuition rates, through agreements among the states, colleges and universities. Students may participate if their chosen degree program is approved for inclusion by SREB and eligible for residents of their home state.

To qualify, students must be a resident of one of the 15 SREB states, select a program eligible for residents of their home state, complete the admission process at the institution offering the eligible ACM program and be certified as a resident of their home state by contacting the coordinator for their state of residence.

As of January 2021, the following FSU programs have been approved for inclusion:
- BA/BS in Recreation and Parks Management with Adventure Sports Concentration (DE, SC, WV)
- BA/BS in Recreation and Parks Management with Sport Promotion and Communication Concentration (eligible states to be determined)
- BA/BS in Theatre with Acting, Design & Technology, and Theatrical Studies Concentration (DE)
- BS in Interpretive Biology and Natural History (eligible states to be determined)
• MS in Recreation, Parks and Sport Management with Recreation and Parks Management, and Sport Management Concentrations (DE)
• BS in Wildlife and Fisheries (DE)
• MS in Wildlife/Fisheries Biology (DE)

Programs may be added to or deleted from the inventory at any time. Check the SREB website for the most current list of programs available at FSU: www.srebulacademic-common-market. Currently enrolled students continue to study at resident rates if a program is deleted during their academic careers.

For further information, visit the FSU Academic Common Market Website at www.frostburg.edu/academic-common-market. You may also contact your state’s higher education agency, the Southern Regional Education Board, (404.875.9211), the Maryland Higher Education Commission (410.260.4585, toll-free 800.974.0203), or the Associate Provost and FSU Academic Common Market Coordinator (301.687.4212).

**Maryland Senior Citizen Tuition Waiver**

Senior citizens may qualify for special privileges, which allow you to register each semester for up to three courses for credit without paying tuition. You may enroll only during late registration and on a space-available basis. Although the late registration fee is waived for senior citizens, you must pay all other fees.

To qualify, you must be

• A resident of Maryland
• A US citizen or able to show a Resident Alien card
• Sixty years of age by the beginning of the term for which you are applying
• Employed no more than 25 hours a week.

If you qualify, contact the Admissions Office for a Senior Citizen Application Form for Tuition Waiver.
Expenses, Financial Aid & Scholarships

Expenses

This information applies to the academic year 2020-2021 only. Please see appropriate Academic Schedule Booklets for 2021-2022 rates. Notwithstanding any other provision of this or any other University Publication, the University reserves the right to make changes in tuition, fees, and other changes at any time such changes are deemed necessary by the University and the University System of Maryland Board of Regents. For the most current tuition & fee rates, go to: https://www.frostburg.edu/admissions-and-cost/tuition-and-fees/index.php. The most current room & board rates are located at https://www.frostburg.edu/student-life/residence-life/residence-life-office/room-and-board-charges.php.

Tuition

Tuition for a full-time students (12 or more credits) is a flat rate based on residency. A student is classed as in-state, out-of-state, or regional rate (discount for residents of Pa., Va., W.Va., and Ohio living within 120 miles of Frostburg).

Part-time tuition

Students enrolled for less than 12 credit hours are charged per credit hour based on residency.

Students taking courses for audit or pass/fail or courses without credit designation will receive assigned equivalency credit hours for tuition and fee purposes.

Tuition and Fees for Collaborative Engineering Programs

Students enrolled in the electrical or mechanical engineering programs offered by FSU in collaboration with University of Maryland, College Park are subject to a different tuition and fee arrangement due to the unique nature of the program. During the first-year and sophomore years, students pay FSU tuition and fees. After completing 45 credits of designated course work, students will apply for formal acceptance into UMCP’s Clark School of Engineering and will be considered UMCP students for the remainder of the program. Students will then pay both UMCP tuition rates and FSU fees to the FSU University and Student Billing Office.

Room and Board

The cost for room and board for each University residence hall student varies based on the room type, residence hall, and meal plan selected. Room contracts are binding for one academic year (fall and spring semesters). There is also a nonrefundable room damage deposit of $25 per semester or $50 per year. Additional damages are billed to the student. All students living in the residence halls are required to purchase a meal plan for the University dining hall. See the Residence Life page for room and board rates https://www.frostburg.edu/student-life/residence-life/residence-life-office/room-and-board-charges.php.

Mandatory Fees

The following paragraphs explain how the University uses the mandatory fees which students pay. For information on other fees and expenses related to summer and graduate programs, refer to the respective catalogs and bulletins.

Activities Fee: An activities fee is charged at the full-time rate for full-time students or a rate for part-time students is collected to support student publications, the campus radio station, social activities, student government and a balanced program of cultural events.

Athletic Fee: An athletic fee is charged at a full-time rate for full-time students or a per credit hour fee for part-time students is used to support the University’s program in intercollegiate and intramural athletics.

Auxiliary Facilities Fee: An auxiliary facilities fee is charged at a full-time rate for full-time students or a per credit hour rate for part-time students is assessed for construction expenses of the auxiliary facilities.

Student Union Operating Fee: A Student Union operating fee is charged at a full-time rate for full-time students or a per credit hour for part-time students is charged for operating expenses of the Lane University Center.

Sustainability Fee: A fee is charged at a full-time rate for full-time students or a per credit hour for part-time students is assessed to fund green initiative projects and programs on campus. Projects will be recommended by the President’s Advisory Council for Sustainability that includes faculty, staff and student representatives.

Transportation Fee: A Transportation fee is charged at a full-time rate for full-time students or a per credit hour for part-time students is charged, allowing students to ride Allegany Transit Authority buses by showing a student ID.

Technology Fee: A Technology fee is charged at a full-time rate for full-time students or a per credit hour for part-time students is assessed to fund technology initiatives for student enhancement.

Other Fees & Expenses

Tuition Pay Plans ................................................................. $ 45/term
Application Fee, one time only ........................................... $ 45
Career Services Credential Fee ........................................ $ 20
Directed Practice Fee ........................................................ $200
Duplicate Copy ................................................................. $ 3
Late Payment Fee .............................................................. $ 30
Lost ID Card ................................................................. $ 20
Physician Assistant Program Fee ......................................... $100 per semester
Private Music Fee .......................................................... $200 per credit
Returned Check Fee ......................................................... $ 30
Reissue Check Fee ........................................................ $ 30
Study Abroad Admin. Fee.................................................. $150
Vehicle Registration- day ................................................ $ 40 per year
Additional Late Fee ........................................................ $100

Special Course Work Fees

Accounting (ACCT 305) .............................................................. $25
Art (ART 110) ................................................................. $10
Art (ART 207, 209, 212, 216, 240, 412, 416) ......................... $25
Art (ART 236, 307, 336, 407, 414) ......................................... $30
Art (ART 221, 232) .............................................................. $35
Art (ART 202, 235, 435, 635) .............................................. $45
Art (ART 402, 421, 432, 440, 621, 622, 632, 640) .............. $50
Art (ART 452) ................................................................. $60
Business Admin. (BMIS 320) ................................................... $25
Chemistry (CHEM 100, 113, 201) ........................................... $20
Chemistry (CHEM 202, 304, 305, 311, 312, 320, 321, 322, 411, 420, 421, 445, 446, 456, 493, 499) ........................................................................ $25
Voluntary Meal Plans
(non-residential students)

<table>
<thead>
<tr>
<th>Meal Plan</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Just-a-Nibble (45 meals/semester &amp; $200 bonus dollars)</td>
<td>$734/semester</td>
</tr>
<tr>
<td>Snack Size (60 meals/semester &amp; $150 bonus dollars)</td>
<td>$761/semester</td>
</tr>
<tr>
<td>Quick Bite (75 meals/semester &amp; $350 bonus dollars)</td>
<td>$1,101/semester</td>
</tr>
<tr>
<td>Full Meal Deal (100 meals/semester &amp; $225 bonus dollars)</td>
<td>$1,111/semester</td>
</tr>
</tbody>
</table>

Other Fees and Expenses

Late Payment Fee: A late payment fee of $30 is charged for payments received after the established fees payment deadline.

Payment Plans are available through a partnership with CashNet. A 4-month plan is available for each semester with a $45/term enrollment fee.

Check Reissue Fee: A $30 stop payment check fee is assessed for checks the Bursar's Office needs to reissue.

Career Services Credential Fee: A $20 fee allows the student to establish a credential file through the Office of Career Services. This is a one-time optional fee.

Duplicate Copies: A $3 fee is charged for each duplicate statement of fees (or other receipt) requested. A $20 fee is charged for each duplicate ID Card.

Returned Payment Fee: A $30 fee is charged whenever a payment of any obligation is returned for any reason. Article 27, Section 142 of the Annotated Code of Maryland states that anyone who obtains money, etc., by bad check is subject to prosecution. All payments returned to the University by the bank as “unpaid” (this includes payments in dispute or uncollected funds) must be paid within seven days of the University’s notification to the student.

Motor Vehicle Registration: A $40 annual motor vehicle registration fee is charged for students registering a vehicle.

Physician Assistant Program Fee: $100 per semester.

Study Abroad Administrative Fee: A non-refundable administrative fee that covers all study abroad administrative costs of $150 (check with the CIE website for specific information on costs).

Balance Due Fee: Students with a balance due after 10 business days will be charged an additional $100 late payment fee.

Special Course Work Fees

The following special fees for course work are non-refundable at the end of the fee drop-add period:

Private Music Fee: Music students desiring private study of organ, piano, other instruments, or voice are charged $200 per credit hour.

Additional Course Fees: Course fees and studio fees range from $10-$300 for costs of the course.

Special Instruction Fees: Fees of $10 - $300 for students enrolled in GEP science laboratory courses and courses utilizing the Academic Computing facility are collected to cover laboratory supplies, equipment, or software. Fees are also charged to cover art supplies in certain studio courses, course materials or field trips.

Student Teaching Internship Fee: A student teaching internship fee of $350 will be charged for each quarter or semester at the beginning of the semester during which student teaching is scheduled.

Advance Fees and Tuition Deposit

Applicants pay a $45 non-refundable application fee when they apply to the University. This fee is sent directly to University and Student Billing at the same time the application is mailed to the Admissions Office.

If you are accepted for admission, you will be asked to pay a non-refundable tuition deposit of $150. Your letter of acceptance will contain a bill for this fee, which must be paid within thirty days and acts as a binding agreement for admission. This $150 tuition deposit is non-refundable; but when you enroll as a student, it will be deducted from tuition owed to the University.
You will be charged a $25 damage deposit each semester. It is non-refundable. Money will be deducted from this deposit for the following:
(1) damages to your room and room furnishings;
(2) damages to common areas within your residence hall if these damages are unreported and/or unclaimed. These damages will be charged collectively to the residents.
If the funds are exhausted, you are billed for additional items or damages as needed.

Payment of Fees
Make all checks or money orders payable to Frostburg State University for the exact amount on the bill you receive. All fees must be paid prior to the beginning of each semester or before the date shown on the statement of fees. Students will not be allowed to register for the next semester. Failure to meet the due date may result in the cancellation of the student’s schedule. A previous balance results in the grades and transcripts of the student being withheld until full payment is made.

Deferred Payment Plans
The TuitionPay Plan from CashNet
TuitionPay is the interest-free, debt-free way to spread tuition payments over a number of months. The TuitionPay Plan is not a loan, so there are no interest payments, only a low annual enrollment fee.
The Plan allows you to break down your education expenses into easy-to-manage installments, rather than one lump-sum payment. It’s simple and convenient.

How to Get Started
Just log in to your PAWS student center and click “make a payment.” You may set up the payment plan as user-determined (amount due less anticipated financial aid) or imported (current amount due). Your account can be managed through this portal. If you need assistance, please call the Billing Office 301.687.4321 or CASHNet 877.821.0625.

*No check processing fees when you pay online or on or before the due date.

Charges for Collection of Unpaid Bills
If a student’s account is not promptly paid, the University will turn it over to the Maryland State Central Collection Unit and a 17-percent collection fee will be added to the bill. If further collection action is needed, an outside agency will be retained and those charges will also be billed to the student. The state may also withhold any refund due to the student from the Maryland State Income Tax and apply it to the overdue account.

Refund Policy
The following regulations govern refunds available upon withdrawal from the University or when other changes of status take place. To withdraw from the University, you must complete an official withdrawal through the Registrar’s Office before you are entitled to any refund. Because refund amounts change depending upon when you file, the date used to determine refunds will be the date on which you submit the final filing or change of status to the Registrar’s Office.
If you register for a full schedule (12 credits or more) and you drop courses to 11 credits or fewer after the end of the registration period, you are not entitled to a refund based on a credit-hour charge.

FSU Refund Policy – Title IV (Federal Funds) Recipients –
Students dismissed for disciplinary reasons are not entitled to any tuition or fee refund.

Refunds from Financial Aid
FSU processes refunds through the University’s Student Billing office after it posts to the student account from Financial Aid. Refunds are processed after the University’s charges have been cleared. If you have a Parent PLUS Loan, these funds are applied to your student account first. If there is a credit balance from the PLUS loan after the entire bill is paid, the parent may elect to have the funds refunded to you.
State funds, scholarships, third party payments, and personal overpayments require that any U.S. citizen have a social security number in the PAWS system before the funds may be issued.
Overpayments due to a credit card transaction are refunded to the credit card whenever possible.

Student Refund Policy for Title IV Recipients
Federal regulations mandate a student refund policy for Title IV recipients. The policy requires institutions to provide a pro-rata refund to any new student withdrawing before 60% of the enrollment period has elapsed. Information in regard to the calculation process or details of the policy may be obtained from the Financial Aid website at www.frostburg.edu/admissions-and-cost/financial-aid/current-students/withdraw-policy.php.

Personal Funds
If your balance reflects a credit of personal funds, you must write a request for a refund.

Military Tuition Assistance Refund Policy
If you are using Tuition Assistance (TA) to pay for your education and drop or withdraw from a course prior to completing 60 percent of the course, the Department of Defense requires that FSU return any unearned TA funds to the department based on how much of the course you completed and that you pay a portion of those returned funds. You may owe a portion of your tuition to FSU and a portion to your military branch.
Before dropping or withdrawing from a course, please contact your military education counselor or education services officer to determine how it could impact your military Tuition Assistance and potential repayment obligations.
If you withdrew due to a military service obligation, you may be eligible for an exception. Contact the Veterans Services Office and provide a copy of the military orders to complete a withdrawal form. If it is approved, you will not be responsible for the FSU portion of the returned funds.
Your earned TA is determined based on the following formula: The Percentage of TA Earned equals the Days Completed Before Drop, Withdrawal, or Last Participation divided by the Total Number of Days in the Course.
Please note: If you officially or unofficially withdraw from a course and did not complete at least 60 percent of the course, you may not be eligible for the total amount initially awarded through Tuition Assistance. In cases where some or all of the Tuition Assistance must be returned to the military, you will be responsible for all balances on your PAWS student account. Please refer to the FSU Course Withdrawal Policy

FSU Withdrawal Policy -
Refund Schedules

**Fall and Spring Semester (15 weeks) & Physician Assistant Program**

<table>
<thead>
<tr>
<th>Event</th>
<th>Percentage Refunded</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before the end of each registration period</td>
<td>100% tuition refunded</td>
</tr>
<tr>
<td>Before the 15th calendar day after the official start of classes for that session</td>
<td>80% tuition refunded</td>
</tr>
<tr>
<td>From the 15th day until the end of third week after the official start of classes</td>
<td>60% tuition refunded</td>
</tr>
<tr>
<td>During the 4th week after the official start of classes</td>
<td>40% tuition refunded</td>
</tr>
<tr>
<td>During the 5th week after the official start of classes</td>
<td>20% tuition refunded</td>
</tr>
<tr>
<td>At the end of the 5th week after the official start of classes</td>
<td>0% tuition refunded</td>
</tr>
</tbody>
</table>

**Refund schedule for 7-week session within fall and spring semesters**

<table>
<thead>
<tr>
<th>Event</th>
<th>Percentage Refunded</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before the end of each registration period for that session</td>
<td>100% tuition refunded</td>
</tr>
<tr>
<td>Before the 8th calendar day after the official start of classes for that session</td>
<td>80% tuition refunded</td>
</tr>
<tr>
<td>Before the 11th calendar day after the official start of classes for that session</td>
<td>60% tuition refunded</td>
</tr>
<tr>
<td>Before the 14th calendar day after the official start of classes for that session</td>
<td>40% tuition refunded</td>
</tr>
<tr>
<td>Before the 17th calendar day after the official start of classes for that session</td>
<td>20% tuition refunded</td>
</tr>
<tr>
<td>Beginning the 17th calendar day after the official start of classes</td>
<td>0% tuition refunded</td>
</tr>
</tbody>
</table>

**Fee Refund Schedule (including summer session)**

<table>
<thead>
<tr>
<th>Fee Type</th>
<th>Refund Schedule</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application fee</td>
<td>0% refund</td>
</tr>
<tr>
<td>Board fee</td>
<td>Up to mid-semester: prorated on a weekly basis plus one week</td>
</tr>
<tr>
<td></td>
<td>After mid-semester: 0% refund</td>
</tr>
</tbody>
</table>

**Summer Sessions**

<table>
<thead>
<tr>
<th>Event</th>
<th>Percentage Refunded</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before the end of the summer registration period</td>
<td>100% tuition refunded</td>
</tr>
<tr>
<td>Before the end of one-fifth of the length of the session, but in no case beyond the 7th calendar day of the session</td>
<td>80% tuition refunded</td>
</tr>
<tr>
<td>Before the end of two-fifths of the length of the session</td>
<td>40% tuition refunded</td>
</tr>
<tr>
<td>At the end of two-fifths of the length of the session, but in all cases beginning with at least the 15th calendar day of the session</td>
<td>0% tuition refunded</td>
</tr>
</tbody>
</table>

*In the case of special courses of short duration (i.e., one week or less), this policy will be applied on a pro-rata basis in a manner consistent with the policy.*

**Non-refundable Fees**

The following fees are non-refundable after the end of each registration period, including the Summer Session:

<table>
<thead>
<tr>
<th>Fee Type</th>
<th>Fee Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Room fee</td>
<td>Auxiliary Facilities fee</td>
</tr>
<tr>
<td>Activities fee</td>
<td>Private Music fee</td>
</tr>
<tr>
<td>Athletic fee</td>
<td>Student Union Operating fee</td>
</tr>
<tr>
<td>Special Instruction Fee</td>
<td>Course/class fees</td>
</tr>
<tr>
<td>Residential meal plans are prorated weekly through 10 weeks</td>
<td></td>
</tr>
<tr>
<td>Directed Practice fee</td>
<td>University fee</td>
</tr>
<tr>
<td>Vehicle Registration fee</td>
<td>Voluntary meal plans</td>
</tr>
</tbody>
</table>

**Financial Aid**

The University Financial Aid Office helps students who have limited financial resources. We make every effort to aid qualified students in need of financial assistance through loans, grants, scholarships, and part-time employment.

Our Financial Aid Office operates with an open-door policy. We provide financial aid information to students and their families and assist them with the application process.

**Application Process**

When applying for financial aid through the University, you must complete the Free Application for Federal Student Aid (FAFSA). This is the application necessary for Federal and general State aid. The Free Application for Federal Student Aid includes detailed instructions and is available online at [studentaid.ed.gov/sa/fafsa](http://studentaid.ed.gov/sa/fafsa).

In order for Frostburg State University to offer you financial aid, you will need to include FSU on your FAFSA using our school code (002072).

- You must reapply for financial aid each year.
- The FAFSA is available beginning October 1 each year.
Types of Financial Aid

The major federal and state financial aid programs administered by Frostburg State University are described on the following pages. For more detailed descriptions of the programs, see the Financial Aid and Scholarship website: www.frostburg.edu/aid.

Federal Aid

Grants
- Grant money does not have to be repaid.

Federal Pell Grant Program
This program provides financial aid to all eligible undergraduates and is intended to be the base of a student's total financial aid package. Apply for the Federal Pell Grant by completing a Free Application for Federal Student Aid. The applicant will receive a Student Aid Report via email indicating eligibility after submitting the FAFSA.

Federal Supplemental Work Program (SEOG)
Criteria established by the Federal Government states that you must be eligible for a Federal Pell Grant in order to receive Federal SEOG funds. You must submit the Free Application for Federal Student Aid (FAFSA) by March 1 to be eligible.

Teacher Education Assistance for College and Higher Education (TEACH) Grant Program
The TEACH Grant program provides funds for students who want to teach in a high need field in a high need area. There are a number of additional tasks you must complete to obtain the TEACH grant; therefore, you are required to meet with a financial aid counselor.

Work

Federal Work Study Program
This federally-funded program provides recipients with a paid work experience as part of the financial aid package. Employment may not exceed 20 hours per week while classes are in session, and 40 hours per week during other periods. Most students work 5-8 hours per week in jobs that, in many cases, are related directly to their fields of study. Minimum wage laws apply. You must submit the Free Application for Federal Student Aid (FAFSA) by March 1 to be eligible.

In addition, the University offers students an opportunity to be employed in community service positions through this program.

Federal Loans

A word of caution at the outset: a loan is money borrowed and MUST be repaid at a specified time in the future, under the terms specified in the promissory note that is signed before you receive your first loan disbursement. Before signing the promissory note, be sure you thoroughly understand your rights and responsibilities relative to any loan received.

Federal Direct Loans
NOTE: In order to borrow through any of the following Direct Loan Programs, you must be enrolled for at least 6 credits (and those credits must be leading toward your degree).

Federal Subsidized Direct Loan
The Federal Subsidized Direct Loan program enables you to borrow directly through the federal government. The interest rate is fixed, is set by the federal government, and changes every July 1. Qualifying for a Federal Subsidized Direct Loan means that the federal government will pay the interest on your loan while you are enrolled at least half-time. Six months after you terminate your education or cease to be enrolled half-time, repayment of your loan(s) begins. Repayment, in most cases, must be completed within 10 years.

Freshmen may borrow $3,500 per year, sophomores, $4,500; and for those who have attained junior class standing, $5,500 per year. However, the amount you may borrow in any given year may not exceed the educational costs as certified by the Financial Aid Office. The aggregate amount one may borrow as an undergraduate cannot exceed $31,000.

To apply for a Federal Subsidized Direct Loan, you must complete a Free Application for Federal Student Aid and other forms as required.

All first-time Federal Subsidized Direct Loan borrowers must complete an entrance interview and a Master Promissory Note, which can be completed at www.studentloans.gov/myDirectLoan/index.action. In addition, all Federal Subsidized Direct Loan borrowers must complete an exit interview before graduation, withdrawal or leaving FSU, even though they may plan to return at some time in the future.

Repaying your student loan is an obligation. Failure to repay your student loan(s) on the required repayment schedule will result in default. One of the many consequences of being in default is that FSU has the right to, and will, withhold the processing of all academic transcripts.

Federal Unsubsidized Direct Loans
The terms and conditions for the Federal Unsubsidized Direct Loan program are the same as the Federal Subsidized Direct Loan program, except that the borrower is responsible for interest that accrues while he/she is in school. This loan program is open to students who may not qualify for Federal Subsidized Direct Loans or may qualify for only partial Subsidized Direct Loans. To apply for a Federal Unsubsidized Direct Loan, you must first complete the Free Application for Federal Student Aid (FAFSA) and other forms as required.

The borrowing limit for dependent students is $2,000 per year. For independent students, additional borrowing levels exist.

Note: Eligibility for borrowing through both Subsidized and Unsubsidized loan programs during the summer is limited. If eligible to apply, an applicant must be enrolled for at least six credits per session and the credits taken must be leading toward a degree. Check with the Financial Aid Office regarding loan availability during summer sessions.

Note: The Department of Education requires that student loan borrowers be provided with information on the availability of the Department’s Office of the Ombudsman for student loans. This office provides information to students who have had problems resolving issues related to a student loan. FSU recommends that borrowers try contacting the Student Financial Assistance Ombudsman if this occurs. The U.S. Department of Education’s Ombudsman Office can propose solutions that may help you and other parties (such as lenders, guaranty agencies, etc.) come to a final agreement. For additional information, contact this office at 202.401.4498 or toll-free at 1.877.557.2575. Their website is http://ombudsman.ed.gov.

Federal Direct PLUS Loans
(Parent Loan for Undergraduate Students)

The Federal PLUS Loan is a federal loan program that allows parents of dependent, undergraduate students to borrow an amount equal to the cost of education minus other aid. Parents can apply for the Direct PLUS loan at www.studentloans.gov/myDirectLoan/index.action.

Special Note:
Federal regulations require your written permission to deduct miscellaneous institutional charges such as library fees from your annual financial aid. You must sign and complete a permission form. If at all possible, you should submit this permission form prior to billing. If you choose not to complete the permission
form, you will be responsible for paying any miscellaneous obligation(s) from personal funds by the bill payment date. The University may not apply your loan funds to any charge(s) assessed to you in a prior award year.

FSU reserves the right to withhold academic transcripts from students who have defaulted on their student loans.

State Aid

Maryland State Scholarships
The State of Maryland provides funding for the following major state scholarships:

- Howard Rawlings Educational Assistance Grant
- Howard Rawlings Guaranteed Access Grant
- Senatorial Scholarship
- Delegate Scholarship

Applicants for these awards must:

1. Be a Maryland resident
2. Most require that you file a Free Application for Federal Student Aid by March 1.

For requirements and applications specific to a particular scholarship, contact the FSU Financial Aid Office or the Maryland Higher Education Commission (410.260.4565).

FSU Grants

Criteria:

- You must be a U.S. citizen or eligible non-citizen.
- You must demonstrate financial need through the federal application process.
- You must file the FAFSA as soon after October 1 as possible. FAFSA results must be received by the Financial Aid Office by March 1.
- You must meet academic standards to be considered for this award.

State Student Work

This program provides a limited number of jobs on campus for students who are not eligible for the Federal Work-Study Program. These positions are available in every academic, administrative and auxiliary area. Interested students should contact the Financial Aid Office during the first two weeks of classes.

Financial Aid for Collaborative Engineering Programs

Students enrolled in the mechanical engineering program offered by FSU in collaboration with University of Maryland, College Park are subject to a different financial aid arrangement due to the unique nature of the program. During the first-year and sophomore years, students are eligible to apply for financial aid through FSU. After completing 45 credits of designated course work, students formally apply for admission into UMCP’s Clark School of Engineering and are considered UMCP students at that time. At that point, a student must reapply for federal or state aid through UMCP’s Office of Student Financial Aid. For assistance in the application process, contact FSU’s Engineering Program Coordinator, Dr. Yi-Zun Julie Wang, at 301.687.3208.

Refund/Repayment Policy

See Title IV Refund Policy in the Fees section of this chapter.

Implications of Withdrawal From the University

All students who withdraw or are dismissed from the university (including unofficial withdrawals) and attend less than 60% of the enrollment period (semester), will have their Title IV federal financial aid prorated based on the actual days of attendance. Therefore, before a student considers withdrawal, he/she should meet with a financial aid counselor to determine the financial impact on his/her federal financial aid. Title IV Federal aid includes Pell Grant, Supplemental Educational Opportunity Grant (SEOG), Teacher Education Assistance for College and Higher Education (TEACH) Grant, Direct Loans (Subsidized and Unsubsidized), and Parent Loan to Undergraduate Students (PLUS).

Under this policy, the Financial Aid Office will determine the percentage of Title IV aid earned based on the length of enrollment. Once determined, the student may have to repay a portion or all of his/her refund as a result of withdrawing before 60% of the enrollment period elapses. After the unearned portion of financial aid has been established, the funds will be returned to the federal programs in the following order: Unsubsidized Direct Loans, Subsidized Direct Loans, Federal Perkins Loans, Federal PLUS Loans, Federal Pell Grants, Teacher Education Assistance for College and Higher Education (TEACH) Grant and Federal Supplemental Educational Opportunity Grants. In cases where a student is receiving institutional funds, he/she should check with the Financial Aid Office for policies concerning these awards.

Satisfactory Progress Standards (SAP)

The United States Department of Education mandates that Frostburg State University has an established Satisfactory Academic Progress policy for financial aid recipients. The policy must be qualitative and quantitative. The policy must be at least as strict as the academic policy governing students not receiving financial aid. If a student completes the Free Application for Federal Student Aid (FAFSA), he or she is subject to these regulations.

Qualitative Requirement

FSU requires students to have a 2.0 cumulative grade point average to graduate. The graduated standard for the minimum GPA throughout the academic program is as follows:

<table>
<thead>
<tr>
<th>Total Credits Earned (including transfer credits)</th>
<th>Minimum GPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-14</td>
<td>1.00</td>
</tr>
<tr>
<td>15-29</td>
<td>1.40</td>
</tr>
<tr>
<td>30-44</td>
<td>1.60</td>
</tr>
<tr>
<td>45-59</td>
<td>1.80</td>
</tr>
<tr>
<td>60-above</td>
<td>2.00</td>
</tr>
</tbody>
</table>

Students need to be aware that they could be required to appeal to both the Provost’s Office to remain in school and to the Financial Aid Office to maintain financial aid eligibility.
Quantitative Standards

Minimum Passing Requirement

Students must complete 67% of all courses attempted including courses transferred to FSU in order to meet SAP regulations. To determine the completed average, a student needs to add all attempted hours (including credits transferred to FSU) then divide the completed credit hours by the attempted credit hours.

\[
\text{Completion Rate} = \frac{\text{6 completed credit hours}}{\text{12 attempted credit hours}} = 50\%
\]

Maximum time to completion

FSU students cannot attempt more than 180 credits for a first bachelor’s degree and no more than 240 for a second bachelor’s degree.

Attempted credits include the following grades:

Completed credits include the following grades:
A, B, C, D, P, AP, CE, CL, IB, PT and all transfer credits.

All students will be evaluated at the end of each semester (Summer, Fall, Intersession and Spring). Students will need to review the progress rules and their transcript when making enrollment decisions.

Frostburg will now be required to evaluate and measure students by standards established in the federal law. Each student will have one of four statuses:

1. Meets all components of the SAP standards (eligible to receive financial aid)
2. Academic Warning (explanation below)
3. Probation (explanation below)
4. Does not Meet Standards (not eligible to receive financial aid)

Academic Warning

Students who do not meet standards for the first time in their academic career will be placed on academic warning. A warning is assigned to a student who fails to meet SAP but is allowed to continue to receive Title IV aid for one additional payment period (semester).

Probation

Students who do not meet SAP standards after one payment period on Academic Warning will be denied financial aid. However, students will then have the right to appeal. If the appeal is granted, the student will be placed on probation and continue to receive Title IV aid for one additional payment period.

Appeals will be granted for the following circumstances:

1. Students who demonstrate the following extenuating circumstances: death of a relative, injury or illness of the student, or other special circumstances;
2. The school has determined that the student will be able to meet SAP standards after the subsequent payment period or;
3. An academic plan had been established by the student and/or his or her advisor to meet graduation requirements and the student continues to follow the academic plan.
Scholarships

Frostburg State University is firmly committed to academic excellence and we strive to recognize outstanding students. A number of institutional scholarships have been established through the auspices of the Frostburg State University Foundation to reward academic achievement, as well as service in the community. Funds for these scholarships are provided by private and institutional sources.

In addition, nearly every academic department at FSU offers departmental scholarships. The eligibility criteria for these scholarships vary. Many are based on academic performance, others on need, still others on the program of study or a combination of requirements. Scholarships are awarded on an annual basis. Students must meet satisfactory progress standards and scholarship selection requirements each semester as defined in the scholarship brochure or in the information provided with your award notification.

The Financial Aid Office publishes a list of scholarships that describes all of the scholarships and the criteria to be considered, as well as the contact person and deadline date for each award. Contact the Financial Aid Office at 301.687.4301 for information or review online at www.frostburg.edu/scholarships.

In addition, Frostburg State University offers academic scholarships which are screened by our Admissions Office. These scholarships are for entering first-year and transfer students who demonstrate outstanding academic ability. The academic scholarships will be part of the published list of scholarships or you may contact the Admissions Office at 301.687.4201.

Financial Responsibility Policy

Registering for courses at Frostburg State University is a contractual agreement, whereby you agree to comply with all laws, rules and regulations applicable to your registration, payment of fees, enrollment and attendance. The rules and regulations that comprise the terms and conditions of this contract are contained in the FSU catalog in effect during the years of your enrollment.

In addition to reading, agreeing with and accepting all of the terms and conditions set forth in the FSU catalog, you must specifically acknowledge the following:

1. All fees and other University expenses are due on the date listed in the written registration materials and on the FSU website for each semester. A late payment fee is assessed for all students who have not completed the payment or made payment arrangements by the due date. Students may enroll in a payment plan through FSU’s third party provider or the FSU in-house payment plan for summer and inter session. More information about payment plans is available on the FSU website and in the Office of the Bursar.

2. It is the student’s responsibility to cancel their registration by dropping all courses before the end of the registration period if proper financial arrangements have not been made. The student is responsible for ensuring that he or she is no longer enrolled.

3. It is the student’s responsibility to complete all of the requirements for the Office of Financial Aid to disburse, provide third-party documentation, enroll in an approved payment plan, or submit payment, by the billing due date each semester. Any student who has not completed payment or joined a payment plan by the 10th business day of the semester will be charged a fee and placed into a payment plan that splits the amount due into two payments. Additionally, the student will be assessed a late payment and a late registration fee. Each subsequent late payment will result in an additional fee.

4. It is the student’s responsibility to review their bill and submit payment in a timely manner. Students are notified each semester through their Frostburg account email that the e-bill is available for viewing. The student must then enroll in the E-bill system via their PAWS account. The student may also add another payer to the E-bill. Both the student and the additional payer will receive an email each time a bill is generated.

5. FSU reserves the right to withhold future services (registration, transcript request, diploma, etc.) to persons who have any outstanding obligations with the University or who has an account that was submitted to the Maryland State Central Collection Unit.

6. In the event that financial aid is reduced or cancelled, or in the event the student has not met the specified requirements for receiving such aid, the student will become responsible for the full balance of outstanding charges.

7. If payment is in the form of a check (or E-Check) and the check is returned by the bank for any reason, a $30 fee will be charged to the account. If payment is not made, the student’s account may be submitted to the Maryland State Central Collection Unit.

8. Students leaving FSU prior to the 60% point in the semester, officially or unofficially, are obligated to return the federal aid received for that semester in accordance with the University’s Return of Title IV Funds Policy. Failure to return that portion of federal aid received may result in the amount owed being transferred to the Maryland State Central Collection.

9. Any debt owed to FSU as a result of the student’s failure to make required payments or failure to comply with the terms of the applicable program as governed by the FSU catalog will be a breach of the terms and conditions of this contract. Failure to respond to demands for payment made by FSU may result in such debts being transferred to the Maryland State Central Collection Unit.

10. Any debts transferred to the Maryland State Central Collection Unit will be assessed a 17% collection fee at the time of transfer and this information will become part of a student’s credit report.

ONCE YOU REGISTER FOR COURSES, YOU ARE AFFILIATING WITH FROSTBURG STATE UNIVERSITY (FSU), AND THAT YOU ARE A PARTY TO A CONTRACT WITH FSU AND TO THE TERMS AND CONDITIONS DESCRIBED ABOVE.

If you have any question regarding this Financial Responsibility Policy, please e-mail the Bursar’s Office at billingoffice@frostburg.edu or call the Bursar’s Office at 301.687.4321.
The Academic Program

The University offers courses of study in the Liberal Arts and Sciences, Business, and Education leading to the following degrees: Bachelor of Science, Bachelor of Arts, Bachelor of Fine Arts, and Bachelor of Science in Nursing.

We also offer the degrees of Master of Business Administration, Master of Education, Master of Arts in Teaching, and Master of Science in a variety of fields, and the Ed.D. in Educational Leadership. See the Graduate Catalog for full information.

Undergraduate Degree Requirements

Bachelor of Science Degree
Candidates for the Bachelor of Science degree must meet all of the following requirements:

1. Completion of at least 120 semester hours of college credit.
2. Completion of the General Education Program.
3. Completion of all course work taken at FSU with a cumulative GPA of at least 2.0.
4. Completion of a major with a cumulative grade point average of at least 2.0 in all courses taken in the major department (unless specifically excluded). Interdisciplinary majors count all courses specifically listed as meeting the requirements of the major to determine the major GPA.
5. Completion at Frostburg State University, through course work or special departmental exams, of at least one-half the credit hours required in the student’s major department (unless specifically excluded or specified differently in the catalog description of the major). Interdisciplinary majors count all hours earned in courses specifically listed as meeting the requirements of the major.
6. Completion of a minimum of 30 semester hours of credit, of which at least 15 semester hours are upper division credit, towards the degree at Frostburg State University.
7. Completion of one of the following:
   (a) 15 elective credits outside of General Education requirements and course work in the major department.
   (b) An "interdisciplinary" major (one for which there is no "major department").
   (c) A minor.
   (d) A second major.
   (e) Secondary or P-12 teacher education certification.
8. Completion of at least 39 credits at the upper division (300-400) level.
9. Demonstration of technology fluency, defined as proficiency in the University-identified ten Basic Technology Skills, by completing one of the following:
   (a) Passing the Test of Basic Information Technology Skills (meets requirement but you do not earn credit).
   (b) Successfully completing COSC100/110 with a grade of C or better.
   (c) Successfully completing other Frostburg State University courses that provide instruction in the basic technology skills with a grade of C or better. Courses approved for students following this catalog include:
      • ART 207 Graphic Design
      • CHEM 304 Computational Techniques in Chemistry
      • COSC 101 The Discipline of Computer Science
      • COSC 220 Introduction to Software Applications
      • EDUC 325 Educational Technology
      • ENES 100 Introduction to Engineering Design
      • ENGL 438 Applied Digital Writing
      • GEOG 275 Fundamentals of Geographic Data Handling
      • HPED 310 Technology in Health and Physical Education
      • MUSC 103 Tonal Analysis
      • NURS 404 Nursing Informatics
10. You must meet all prerequisites for the course(s) selected
11. Completion of all semester credit hours beyond 90 credits offered by Frostburg State University, except for up to seven credit hours following the stipulations in the policies concerning attendance at another institution.
12. Completion of all required professional education courses and requirements for students in teacher education programs.
13. Completion of all approved student outcomes assessment activities required by the University and the academic programs.
14. Completion of an application for diploma and graduation when student completes 70 credit hours (forms available in PAWS online).
15. In addition to these requirements, students are strongly encouraged to take advantage of alternative means of earning academic credit outside of the traditional classroom to enhance the quality of the educational experience and to ensure timely progress towards a degree. Options available to students include: online courses; registration in intersession or the summer sessions; independent study or undergraduate research; study abroad; service learning; internships, field experiences, and practica; credit by exam; and advanced placement credits.

Bachelor of Arts Degree
Candidates for the Bachelor of Arts degree must complete all requirements listed above for the Bachelor of Science degree and, in addition, complete or test out of the 250-level course in one foreign language offered at the University or transferred from another college or university.

Bachelor of Fine Arts Degree
The Bachelor of Fine Arts degree is a professional degree currently awarded only to students who major in Art and Design.

Candidates for the Bachelor of Fine Arts degree must complete all requirements listed above for the Bachelor of Science degree.

In the event that a student completes more than one major as an undergraduate student, and one of the majors would culminate in a BFA degree, an additional diploma will be issued by the Registrar’s Office. You must declare your request for an additional diploma at the time of application for graduation and comply with the procedures established by the Registrar’s Office to administer this policy.
Bachelor of Science in Nursing

The Bachelor of Science in Nursing is a professional degree awarded only to students who complete the RN to BSN degree program. Candidates for the degree must complete all requirements listed for the Bachelor of Science degree as well as successfully complete the BSN degree’s specialized, professional coursework.

Orientation Requirement

Frostburg State University offers ORIE 101, Introduction to Higher Education, to provide new students with a complete introduction to all dimensions of college life. This one-credit course is required of all first-time students, including transfer students with fewer than 13 semester hours of transfer credit, and may be elected by any student who is new to FSU. You may not withdraw from this course unless you are withdrawing from the University. You will find a complete description of ORIE 101 in the course description section of this catalog.

Fall ORIE students may enroll in an FSU Connection, which allows you to take at least one other course with your ORIE 101 peers. As a part of an FSU Connection, you may study a shared theme across a group of courses, enroll with others who share your interest in a potential major or career, or get to know students who are interested in using certain support services.

Majors and Minors

A major consists of a minimum of 30 semester hours of credit in a particular field. A minor consists of a minimum of 18 semester hours of credit in a particular field.

For majors, at least one-half the credit hours required in the student’s major department must be completed through course work or special departmental exams offered by Frostburg State University. For interdisciplinary majors and all minors, at least one-half of all the credit hours required for the completion of the major or minor must be earned at Frostburg State University.

To qualify for a specific major or minor, you must achieve, at a minimum, a 2.00 GPA in that field of study. (See sections on calculating GPA in major/minor.) Requirements for specific majors and minors appear under the Courses of Study section of this catalog.

You are responsible for planning your major in consultation with the chair of the major department and with your academic advisor. You should officially declare a major prior to the completion of 45 semester hours of credit. If you are a transfer student entering with 45 hours of transfer credit, you must declare a major during your first semester. If you declare two majors and/or a minor, you must consult with your advisor and with the chairs of all departments involved. To be recorded on your transcript, a second major and/or a minor must be officially declared at least one semester prior to graduation. You are responsible for following departmental requirements, course sequences and prerequisites.

Majors Offered at USM at Hagerstown

Upper division course work required for the majors in business administration, early childhood/elementary education (early childhood specialization), liberal studies and psychology is offered at the USM-Hagerstown.

Capstone Experience

A capstone experience is defined as a course, project, or presentation with variable credits that can be used as the locus for assessment of your learning in your selected major(s). Every academic program at FSU requires that you complete as a component of your major a capstone experience that allows your faculty to evaluate your overall proficiencies and competencies prior to your graduation. Capstone experiences can take various forms: a specific course, a senior thesis, an internship, a written and/or oral report, undergraduate research, etc., as determined by faculty who teach in your major(s).

Interdisciplinary Studies

Interdisciplinary courses and programs enable you to explore human knowledge and experience beyond the limits of a single discipline. Interdisciplinary majors currently offered include Earth Science, International Studies, Law and Society, Liberal Studies and Social Science.

You may also elect to complete an interdisciplinary minor such as African-American Studies, Film Studies, International Studies, Journalism, Leadership Studies, Public Relations, Sustainability Studies or Women's Studies.

The Honors Program encourages interaction among good students engaged in the study of diverse disciplines and offers the interdisciplinary Honors Seminar (see IDIS courses in the course description section). FSU Connections also foster the development of interdisciplinary insights by grouping students, faculty and courses to look at a common theme from different perspectives.

Finally, every student will have the opportunity for interdisciplinary study in the First-Year FSU Colloquium and/or the Advanced FSU Colloquium in the General Education Program.

Experiential Learning and Internships

Every program at FSU offers you the opportunity to apply your knowledge to real-world situations through internships, field experiences, service learning, special problems courses, applied research, competitions, simulations or use of actual case studies.

As you advance in your major, you will have increasing opportunities to apply your new knowledge and skills, culminating for some students in a full-time supervised internship for academic credit. See the 400 series in the course descriptions for application course offerings, though you will note that many other courses also include use of simulations and case studies.

You are strongly encouraged to participate in courses that provide an opportunity for you to apply your knowledge prior to graduation and employment.
General Education Program (GEP)

Minimum of 40 credit hours required of all students

Goals of the General Education Program

Frostburg State University’s Goals for General Education reflect the mission of the University and its Undergraduate Institutional Learning Goals through a focus on four specific areas of learning.

1. Core skills
   You will become proficient in reading, writing, speaking, and listening skills necessary for effective communication. You also will develop quantitative literacy, technology literacy, and information literacy.
   
   You will
   • demonstrate foundational skills in the comprehension and interpretation of information in written and oral forms;
   • communicate information and ideas effectively;
   • understand and apply mathematical reasoning to solve quantitative problems and to evaluate quantitative information and arguments;
   • use technological resources as appropriate to access and communicate relevant information.

2. Liberal knowledge and skills of inquiry, critical thinking, and synthesis
   You will develop the foundational skills necessary to acquire knowledge in the humanities, the natural sciences, the social sciences, and the arts, which collectively embody the human cultural heritage. You will be introduced to critical thinking.
   
   You will
   • demonstrate foundational abilities to apply different methods of inquiry from various perspectives and disciplines to gather information;
   • comprehend and use various fundamental research methods to evaluate information critically;
   • use problem-defining and problem-solving skills by synthesizing core concepts within and across disciplines;
   • demonstrate sustained intellectual curiosity through exploration of emerging issues.

3. Values and social responsibility
   You will develop the foundational skills necessary to critically explore, evaluate, and define your values and become responsible citizens in a complex and changing society.
   
   You will
   • demonstrate respect and tolerance for other cultures and societies;
   • make personal judgments based on ethical considerations and societal values;
   • exhibit civic responsibility and leadership;
   • understand the purpose and value of community service in advancing society.

4. Appreciation of cultural identities
   You will gain insight into the ways cultural identities and experiences shape individual perspectives of the world and influence interactions with people from different backgrounds.
   
   You will
   • demonstrate the fundamental knowledge, skills, and attitudes essential for communicating and cooperating effectively with people of diverse backgrounds;
   • demonstrate an awareness of the cultural and social exercise of power;
   • recognize and appreciate arguments supporting perspectives different from your own.

GEP Grading Policy

• The P/F grading option is not permitted in the General Education Program.
• The grading policy for all Core Skills is as follows:
  o A-F grades will be assigned, with a CS possible for students who have met the CS criteria stipulated in the course syllabus.
  o The grade of CS may be earned only once per course; any CS assigned thereafter will revert to an F. Exceptions to this policy will be made only with the recommendation of the instructor.
  o A grade of C or better is necessary to satisfy each Core Skill.

Double-counting GEP Courses

• A particular course may be counted to meet only one General Education requirement.
• Courses that count for both the General Education Program and major/minor requirements are noted in the major/minor descriptions. You can complete your degree in a shorter time by choosing GEP courses that match the requirements of the majors/minors that interest you.

Core Skills

• All Core Skills may be satisfied by examination.
• You are expected to take these courses during your first 24 hours, with the exception of the advanced composition course requirement.
• If you are placed in a required section of ENGL 101, ENGL 107 (English Praxis), or DVMT 095 (Pre-Algebra Mathematics) based on your scores on University placement tests, you may not withdraw unless you are withdrawing from the University.
• Once you are enrolled in ENGL 101, Freshman Composition, you may drop the course only during the drop/add period of one week at the beginning of the semester (except for required developmental courses, which may not be dropped). Under unusual circumstances, the chair of the English department may approve exceptions. Poor performance would not normally constitute a basis for an exception.
• You must continue taking a course which satisfies the requirement each semester until you have passed it with a grade of C or better.

Modes of Inquiry

• In Group E, IDIS 150 (First-Year FSU colloquium) or IDIS/SUST 155 (Introduction to Sustainability Studies) is required. The selected course should be completed prior to earning 45 hours or soon after transfer, if applicable.
• Other modes of Inquiry courses should ordinarily be completed in the first 90 hours.
### General Education Program (GEP)  
**Minimum of 40 credit hours required of all students**

#### CORE SKILLS - Minimum of 9 credit hours of coursework or credit by exam

**1. Introductory Composition (3 hours)**  
ENGL 101/111*  
**Freshman Composition**

**2. Advanced Writing: One of the following (3 hours each): 3 hours**

- **Art**: ART 100/111* Art Appreciation or ART 110 Visual Imagery  
- **Dance**: DANIC 110 Dance Appreciation  
- **Music**: MUSC 106 History of Rock or MUSC 110 Music Appreciation or MUSC 117 Music of Africa, Asia & the Americas  
- **Theatre**: THEA 106 Intro. to Theatre or THEA 107 Introduction to Theatrical Vision  

**3. Mathematics: One of the following (3-4 hours each): 3-4 hours**

- MATH 104  
  Intro to Mathematical Problem Solving
- MATH 109/110*  
  Elements of Applied Probability & Statistics
- MATH 119  
  College Algebra
- MATH 120  
  Pre-Calculus
- MATH 236  
  Calculus I

**Total hours: minimum of 9**

#### MODES OF INQUIRY - Totaling 31-32 credit hours

- You may not count more than one course or option where there are alternatives listed (as designated by OR) to meet Modes of Inquiry requirements in Groups A, B, C, D, and E.

**A. The Fine and Performing Arts: At least one of the following (3 hours each)**  
- **Art**: ART 100/111* Art Appreciation or ART 110 Visual Imagery  
- **Dance**: DANIC 110 Dance Appreciation  
- **Music**: MUSC 106 History of Rock or MUSC 110 Music Appreciation or MUSC 117 Music of Africa, Asia & the Americas  
- **Theatre**: THEA 106 Intro. to Theatre or THEA 107 Introduction to Theatrical Vision

**B. The Humanities: At least two of the following (3-4 hours each)**  
- **History**: HIST 100/111* The Contemporary World in Historical Perspective  
- **Languages**: FREN 101 Basic Elements of French I or SPAN 101 Basic Elements of Spanish I  
- **Literature**: ENGL 150/250* or ENGL 221 Intro. to Literature/Intermed. Composition  
- **Philosophy**: PHIL 101/111* Intro. to Philosophy or PHIL 102/112* Contemporary Ethical Problems

**C. The Natural Sciences: At least two of the following (3-4 hours each)**  
- **Biology**: BIOL 109 Human Biology and the Environment or BIOL 149/159 General Biology I  
- **Chemistry**: CHEM 100/113* Chemistry & Society or CHEM 150 General, Organic & Biochemistry or CHEM 201 General Chemistry I  
- **Geography**: GEOG 104/GEOG 114* Human Geography or GEOG 110 World Regional Geography: Cultural Diversity  
- **Physical Science**: PHYS 215 General Physics I or PHYS 261 Principles of Physics I: Mechanics

**Interdisciplinary**: IDS 160 Science, Technology, and Society (3cr) or EXSS 200 Nutrition

**D. The Social Sciences: At least two of the following (3-4 hours each)**

- **Economics**: ECON 200 Basic Economics or ECON 201/211* Principles of Economics (Macro)  
- **Geography**: GEOG 104/GEOG 114* Human Geography or GEOG 110 World Regional Geography: Cultural Diversity  
- **Political Science**: POSC 101/112* Intro. to American Politics or POSC 113/114* Intro. to World Politics or POSC 131 Introduction to Comparative Politics  
- **Psychology**: PSYC 150/151* General Psychology  
- **Sociology**: SOCI 100/111* Introduction to Sociology

**E. The FSU Colloquia: Two courses (3-4 hours each)**

- IDIS150/151* First-Year FSU Colloquium or IDS/SUST 155 Intro. to Sustainability Studies (required)†  
- select one course from:  
  - IDS 350/351* Advanced FSU Colloquium or one additional Modes of Inquiry course from Groups A–D.

**F. Identity and Difference: One of the following (3 hours each)**  
- AAST 200 Intro. to African American Studies  
- AAST 400 Africans of the Diaspora  
- ART 301 Artistic Traditions: Asia  
- ART 302 Artistic Traditions: Africa & the Americas  
- CMST 350 Intercultural Communication  
- ENGL 231 African American Literature  
- GEOG 104/114* Human Geography  
- GEOG 110 World Regional Geography; Cultural Diversity  
- GEOG 427 Geography of Languages & Religions  
- HIST 100/111* Contemp, World in Historical Perspective

**Minimum of 9 credit hours of coursework or credit by exam**

**Total hours: minimum of 31.**

*Honors course equivalent

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*A particular course may be counted to meet only one General Education requirement.

†Complete prior to earning 45 credit hours or soon after transfer, if applicable

‡Complete after earning 45 credit hours.

- Minimum of 9 credit hours of coursework or credit by exam
- Totaling 31-32 credit hours
- You may not count more than one course or option where there are alternatives listed (as designated by OR) to meet Modes of Inquiry requirements in Groups A, B, C, D, and E.

**Total hours:**

- Minimum of 9 credit hours of coursework or credit by exam
- Totaling 31-32 credit hours
- You may not count more than one course or option where there are alternatives listed (as designated by OR) to meet Modes of Inquiry requirements in Groups A, B, C, D, and E.

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**A particular course may be counted to meet only one General Education requirement.

†Complete prior to earning 45 credit hours or soon after transfer, if applicable

‡Complete after earning 45 credit hours.
Majors Offered at FSU Career Cluster**

<table>
<thead>
<tr>
<th>Major</th>
<th>Career Cluster</th>
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<tr>
<td>Accounting*</td>
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<tr>
<td>Adventure Sports Management</td>
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<tr>
<td>Art and Design</td>
<td>6</td>
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<tr>
<td>Biology*</td>
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<tr>
<td>Business Administration*</td>
<td>1, 2, 8</td>
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<tr>
<td>Chemistry*</td>
<td>3, 4, 5</td>
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<tr>
<td>Communication Studies*</td>
<td>6</td>
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<tr>
<td>Computer Information Systems*</td>
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<tr>
<td>Computer Science*</td>
<td>10</td>
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<tr>
<td>Earth Science</td>
<td>4</td>
</tr>
<tr>
<td>Economics*</td>
<td>2</td>
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<tr>
<td>Elementary/Early Childhood</td>
<td>8</td>
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<tr>
<td>Elementary/Middle School Dual Cert.</td>
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<tr>
<td>Elementary Education</td>
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<td>Engineering</td>
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<tr>
<td>English*</td>
<td>3, 6</td>
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<tr>
<td>Exercise and Sport Science</td>
<td>1, 5, 8</td>
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<tr>
<td>Combined BS in Exercise &amp; Sport Science</td>
<td>1, 5, 8</td>
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<tr>
<td>Foreign Languages &amp; Literature*</td>
<td>1, 6</td>
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<tr>
<td>Geography*</td>
<td>1, 4, 7, 9</td>
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<tr>
<td>Health &amp; Wellness Education</td>
<td>5, 8</td>
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<tr>
<td>Health Science</td>
<td>5, 8</td>
</tr>
<tr>
<td>History*</td>
<td>6</td>
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<tr>
<td>Information Technology*</td>
<td>10</td>
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<tr>
<td>International Studies*</td>
<td>1, 2, 8</td>
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<tr>
<td>Interpretive Biology &amp; Natural History</td>
<td>1, 4</td>
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<tr>
<td>Law and Society</td>
<td>8</td>
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<td>Liberal Studies</td>
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<tr>
<td>Life-Cycle Facilities Management</td>
<td>3</td>
</tr>
<tr>
<td>Mass Communication*</td>
<td>6</td>
</tr>
<tr>
<td>Mathematics*</td>
<td>3</td>
</tr>
<tr>
<td>Music*</td>
<td>6</td>
</tr>
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<td>Nursing</td>
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<tr>
<td>Philosophy*</td>
<td>6</td>
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<td>Physics*</td>
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<td>Political Science*</td>
<td>8</td>
</tr>
<tr>
<td>Psychology*</td>
<td>5, 8</td>
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<tr>
<td>Recreation &amp; Parks Mgmt.*</td>
<td>1, 4, 5, 8</td>
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<tr>
<td>Secure Computing &amp; Info. Assurance</td>
<td>10</td>
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<tr>
<td>Social Science</td>
<td>8</td>
</tr>
<tr>
<td>Social Work</td>
<td>5, 8</td>
</tr>
<tr>
<td>Sociology*</td>
<td>8</td>
</tr>
<tr>
<td>Theatre*</td>
<td>6</td>
</tr>
<tr>
<td>Wildlife &amp; Fisheries</td>
<td>4</td>
</tr>
</tbody>
</table>

Minors

*Minors are offered in the fields starred above, as well as in African American Studies, Animal Behavior, Art History, Coaching, Cultural Anthropology, Dance, Film Studies, Finance, Financial Services, Fine Arts, Forestry, Graphic Design, Health Promotion, Industrial & Organizational Psychology, Jazz Studies, Journalism, Leadership Studies, Management, Marketing, Musical Theatre, Public Relations, Small Business/Entrepreneurship, Sustainability Studies and Women's Studies.

**Career Connections

Frostburg State University is an active partner in the Career Connections initiative (also known as School-to-Careers or School-to-Work). In the list on this page, the majors offered at FSU are keyed to ten career clusters chosen for emphasis by the State of Maryland. Students whose regions or states use a different cluster framework can overlay that rubric and find majors that match your interests and abilities.

As part of Career Connections, Frostburg State faculty have participated in workshops on how to blend disciplinary and career instruction, developed new curricula in partnership with local schools and community colleges, and updated curricula to ensure what you learn matches current industry standards. In addition, teacher education students will learn how to blend career awareness into instruction at all levels.

The 10 Maryland career clusters are:

1. Consumer Service, Hospitality & Tourism
2. Business Management & Finance
3. Manufacturing & Engineering Technology
4. Environmental, Agricultural & Natural Resources
5. Health & Biosciences
6. Arts, Media & Communication
7. Transportation Technologies
8. Human Resource Services
9. Construction & Development
10. Information Technology

Catalog Governing Graduation Requirements

Please note that you are responsible for knowing and meeting graduation requirements as stated in the catalog you are following. Graduation requirements include the basic requirements to earn a bachelor's degree, the General Education Program, and major and minor requirements. The following provisions apply to part-time as well as full-time students.

1. If you begin your college course work at Frostburg State University, you must meet the graduation requirements of the catalog in effect when you first enroll.
2. If you transfer to Frostburg State University after having begun your college course work at another institution, you must meet the graduation requirements of the Frostburg State University catalog in effect when you first enrolled at the other institution. Or, you may choose to meet the requirements of a later Frostburg State University catalog, provided that you indicate your choice when you are admitted to this university and that you meet all the requirements of the later catalog chosen.
If you had more than two sequential years of non-enrollment since enrolling in an institution of higher education, you must meet the graduation requirements of the Frostburg State University catalog in effect at the time you first enroll at Frostburg State University.

3. If you re-enter Frostburg State University after an absence of one semester or more, regardless of whether you have attended another institution in the meantime, you must meet the graduation requirements of your previous Frostburg State University catalog. Or, you may choose to meet the requirements of a later Frostburg State University catalog, provided that you indicate your choice when you are readmitted to this university and that you meet all the requirements stated in the later catalog chosen.

4. The following qualifications apply to the provisions stated in 1-3 above:
   a. If the University changes a program in a way that prevents your meeting any graduation requirement as stated in your catalog, the change may necessitate substitutions but will not result in any increase in your requirements.
   b. Any substitution of a major or minor requirement must be approved by your department chair; all other exceptions to graduation requirements must be approved by the Academic Standards Subcommittee. Significant departures from stated major requirements (e.g., substitution of more than one course) must also be approved by the Academic Standards Subcommittee. Substitutions must be reported with written rationale to the Registrar’s Office.
   c. If a major/minor program undergoes revision after the year in which you enroll, you may choose to substitute the new requirements in full for those which appear in the catalog of your entry year. In order to select a particular set of major/minor requirements, you must enroll in and complete course work at Frostburg State University during a term when the new requirements are in effect. The catalog under which you first enrolled at Frostburg State University shall continue to govern general education and graduation requirements other than those which apply to the major/minor program. At the time you apply for graduation you must declare in writing your intention to follow a revised program.
   d. If more than seven years have passed since you were last enrolled in college course work, you will have to meet the requirements of the catalog current when you re-enroll. Also, if you take longer than seven years to complete a degree, you may, after the seventh year, be subject to the catalog current at that time.
Additional Academic Opportunities

FSU Connections
FSU Connections introduce first-year students to the concept of critical thinking and offer the opportunity to engage in an in-depth exploration of a theme, a career or selected majors offered at FSU. FSU Connections provide an environment which fosters the development of support networks with faculty and other students, relationships that are important contributors to academic success.

Every FSU Connection includes ORIE 101 Introduction to Higher Education (an orientation seminar required of all new first-year students) and may have an additional one to three classes linked by theme. FSU Connection students take their courses together as a group during the fall semester with a maximum enrollment of 20-25 students in each Connection. An FSU Connection may comprise four to nine credit hours of an average first-semester credit hour load of 12-15 hours.

A vast majority of FSU Connections courses fulfill FSU’s requirements in general education. The faculty who teach in FSU Connections also arrange supplemental learning activities, through special “Connections Seminars,” that highlight the themes of the community. Enrollment is limited to entering first-year students.

For further information, contact the Office of the Provost.

The Honors Program
In the University Honors Program, you will immerse yourself in the excitement of higher education and personal discovery. You will explore your favorite subjects in engaging seminar-style classes that emphasize active learning principles with students from diverse backgrounds and dedicated professors who possess strong mentoring skills. Honors Program classes ask big questions and dig deep for answers, allowing you to uncover real understanding and lasting personal fulfillment. Upon graduation, honors students will have developed important critical thinking and problem-solving skills as they successfully progress to their new careers or graduate school. They also take with them a great respect for varying perspectives, effective communication skills, the ability to work independently, and close relationships with fellow students and faculty.

Most Honors classes are variants of courses that are regularly offered in the University’s General Education Program. In addition to academics, the Honors Program offers a range of co-curricular activities, including the opportunity to reside in Honors Housing in Frost Hall and Brownsville Hall.

Ultimately, the Honors Program seeks to foster within students a strong sense of dignity, intellectual curiosity, and knowledge of their own potential, as well as real personal, academic, and professional skills as students and graduates.

Admission Requirements
Incoming first-semester students are invited to join the Honors Program if they have a high school GPA of 3.5.

Students who do not meet the GPA requirement may apply for admission to the Honors Program based on high SAT/ACT test scores. Normally, students will not be admitted without at least a 3.25 GPA or a minimum 1100 on the combined SAT (or 23 on the ACT). Exceptions are made on a case-by-case basis.

Those who have completed at least one semester of coursework at Frostburg State University or at another institution may apply to the Honors Program if they have a 3.5 GPA or above.

Students demonstrating considerable creative ability – as evidenced by essays, art projects, creative writing, musical composition, or musical performance – may also be admitted on a case-by-case basis.

Summary of Requirements
Students in the Honors Program are pursuing the distinction of “Honors in General Education” upon graduation. This is awarded to those who complete the following requirements:

1. ENGL 111, 300 or 312
2. 15-17 credit hours of Honors variants from an approved list
3. 6 credit hours from the following:
   - IDIS 351 Honors Advanced Colloquium
   - IDIS 491 Honors Seminar
   - IDIS 493 Honors Thesis

Experiential Learning Option (ELO)
An approved study abroad course, research project, internship, recital or other in-depth experiential learning activity. In terms of honors credits, one ELO takes the place of one Honors Seminar or Advanced Colloquium. May be repeated once; pre-approval by the Honors director is necessary.

1. Honors students must earn a 3.0 GPA in all honors and general education courses to meet Honors requirements and to graduate with the distinction of “Honors in General Education.”
2. ENGL 111 is required of all first-year Honors students in their first semester. Students who join the Honors Program after their first semester or those who have earned Advanced Placement (AP) credit for ENGL 101/111 are required to take ENGL 312 as juniors.
3. Honors ELO, IDIS 493 Honors Thesis, and IDIS 491 Honors Seminar may, with departmental approval, count towards requirements in the major. IDIS 491 may, with the approval of the Honors Program, substitute for portions of the Modes of Inquiry section of the GEP.
Transfer Student Option for Honors
Students who transfer to FSU after a 2-year course of study that did not have credit-bearing honors courses may be eligible for the Transfer Student Option for the completion of Honors credits. All transfer students seeking honors should ask their Honors director about their eligibility for this option:

a) ENGL 300 or 312
b) 6 credit hours from the following:
   • IDIS 351 Honors Advanced Colloquium
   • IDIS 491 Honors Seminar
c) 6 credit hours in Honors electives

Grade Repeat Option
Students who receive a grade of D, F, FX or WF in an Honors variant course may choose to take the non-Honors equivalent for grade repeat. However, the use of the grade repeat authorization in this manner constitutes withdrawal from the Honors Program.

Part-time Study
Regularly scheduled classes are available to part-time students wishing to earn college credit or to improve their professional or vocational competence. Information regarding part-time study may be obtained from the Office of Admissions.

Like full-time students, part-time students will be required to complete testing requirements upon entrance and will be required to complete remedial programs in the basic skills of composition, reading, and mathematics if they do not achieve scores at or above prescribed levels.

Summer Session and Intersession
The principal mission of Frostburg State University’s Summer Session and Intersession is to provide FSU undergraduate and graduate students opportunities to enroll in a variety of high quality traditional classroom, online, internship and distance education courses that will help to ensure or accelerate your degree completion.

As part of this mission, the University provides a wide variety of online classes and more specialized courses during Summer Session and Intersession that are not as available to nontraditional or part-time FSU students during the regular academic year.

Intersession
Each January the University offers a compressed semester allowing you to pursue course work both online and in the classroom in the General Education program, in your major (either through regular courses or via special-topics courses), or through participation in international studies courses. The semester is usually 18 to 20 days long and requires intensive study due to its shortened format.

Enrollment in one three-credit course is recommended, although you can register for two courses and up to six credits. All courses offered carry the same level of credit as that applied during regular semesters. To register for Intersession, you may not be on academic probation during the fall semester. In addition, athletes who are involved in competition during Intersession should seriously discuss with their coach the feasibility of taking courses. For full information, visit the Intersession website or contact Special Academic Services.

Summer Session
From May to August each year, the University offers a program of courses during six different sessions designed to meet almost every student’s needs. There is no reason for learning to stop when the weather gets hot. Summer Session is a great time to take undergraduate and graduate courses to keep your academic program on track, lighten your schedule for the next year and accelerate your progress toward a degree. You can earn college credits by registering for on-campus and online courses at both the undergraduate and graduate levels in many subject areas. Summer Session provides specialized courses for FSU students, students from other higher education institutions, high school students and adults from the general public who seek higher education as a means for professional and personal development. For additional information, visit the Summer Session website or contact Special Academic Services.

USM Inter-institutional Registration
Full time, undergraduate degree-seeking students may enroll in course work that enriches and augments their programs of study at other institutions in the University System of Maryland. Participants must have at least sophomore standing and a 2.0 cumulative GPA or above. Additional information is available in the Registrar’s Office.

International Education
Center for International Education
The Center for International Education (CIE) promotes, coordinates and supports FSU’s study abroad and international student programs and sponsors international co-curricular programs on campus. The Center’s Director is advised by the International Education Advisory Council consisting of students, faculty and administrators. The CIE houses information on the many study abroad opportunities available to FSU students. The CIE offers program materials, guides to study abroad programs and financial aid information. The Center also hosts pre-departure orientation sessions for FSU students participating in study abroad programs. The Center serves the FSU international student community by providing orientation programs for new international students, advice concerning F-1 and J-1 VISA immigration regulations and procedures and extracurricular programming.

Study Abroad Programs at Frostburg State University
Currently, you may choose from a wide range of study abroad programs that are designed to suit a variety of academic and financial needs. Most students study abroad during their junior year, although it is possible to arrange programs during the sophomore or senior year as well. Programs vary in length, academic focus, and degree level (undergraduate and graduate). Participation in an FSU-approved study abroad program assures that CIE will assist you with the transfer of academic credit to FSU upon your return. Interested students are advised to attend the bi-annual study abroad fairs in October and March, visit the CIE Office for individual guidance in choosing a program, or attend a CIE study abroad information session. For further information, either phone the CIE Office at 301.687.4714 or visit the CIE webpage at www.frostburg.edu/studyabroad.

Other Opportunities Abroad
In addition to the traditional study abroad programs mentioned above, you may participate in programs that allow students to travel abroad, work abroad, participate in volunteer projects or service learning projects abroad or complete internships abroad. Some of these programs may offer academic credit. Programs are offered by other universities, government and non-governmental organizations and international education organizations. The CIE
website provides students with resources to identify programs of interest, and help students apply to participate.

**Study Abroad Scholarships**

Most FSU-sponsored or -affiliated semester or year-long study abroad programs allow students to use their financial aid packages. In addition, the Center for International Education awards scholarships to students who meet specific eligibility requirements. Scholarships in the amount of $500 and $1,000 per semester or session are awarded twice a year for programs taking place during the fall and spring semesters, the academic year, the intersession and the summer session. The Harold R. Rowe and Alan and Jane Wickert Scholarships of the FSU Foundation are available to support study abroad. The CIE also provides information on state, federal and other international scholarships, such as the Gilman Scholarship (for Pell Grant recipients), and scholarships through Rotary, NSEP and FSU-affiliated study abroad program providers. CIE is the campus support center for Fulbright awards for graduate study abroad. Students may apply at the CIE office.

**International Student Services at FSU**

Each semester Frostburg State University hosts a number of international students from all over the world. Faculty and scholars from international universities also join the FSU teaching faculty. In addition to providing services in dealing with immigration and visa regulations, employment, academic counseling, and orientation programs, the CIE organizes social events and weekend excursions for international students. The CIE also administers the Harold R. Rowe Scholarship program which awards funding to a number of international students each semester. Awards are available both to incoming and returning degree-seeking international students. For further information, call the Center for International Education at 301.687.4714 or visit the CIE website at www.frostburg.edu/cie.

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**Enrollment of Undergraduates in Graduate Courses**

Undergraduates may take no more than 7 credits in graduate courses for graduate credit prior to completion of the bachelor's degree requirements. To enroll in a graduate course, you must be a senior with at least a 2.5 grade point average and must have the recommendation of your advisor and approval of the Graduate Office.

If you are a full-time undergraduate student taking a graduate course during the academic year, you will not be required to pay tuition for the graduate course since you will pay tuition and fees as a full-time undergraduate.

Credit earned in a graduate course may be considered only as graduate credit and may not be used as undergraduate credit for the baccalaureate degree. The credit, although technically graduate credit, may not be used for a graduate degree at Frostburg State University unless it later becomes part of your graduate requirement and meets time limitation policies.

Exceptions to these policies are made only for students who are admitted to a combined baccalaureate-master's program or who are part of an approved pathway across programs at Frostburg State University.

An approved combined bachelor's/ master's program is an articulated curriculum combining an existing undergraduate program and an existing master's program, usually resulting in shorter time to degree and decreased total credit hours (no less than 150 total). An approved pathway allows students to take a specified number of graduate credits that can be double-counted toward the undergraduate requirements for a bachelor's degree and toward the master's degree. A pathway may not necessarily provide shorter time to degree or a decrease in total credits. In both cases, usually 9 credits are shared unless the master's program requires substantially more than 30 credit hours. All requirements of the bachelor's program and of the master's program must be completed to receive the two degrees. See the degree program listings for descriptions and selection criteria of currently approved combined programs.

**Graduate Studies**

You may pursue such degree programs as M.B.A., M.Ed., M.A.T., M.S., Ph.D., or the Ed.D. in Educational Leadership. Many students study part-time in the evening. The Master of Arts in Teaching is offered as an intensive, 12-18 month, full-time program. Most programs are offered at the Frostburg campus. Selected programs are located at the University System of Maryland at Hagerstown (USMH) site.

See the Graduate Catalog or website for further information.

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**Post-Baccalaureate Study at the Undergraduate Level**

In addition to its graduate programs, FSU also offers undergraduate opportunities for bachelor's degree holders who wish to extend their baccalaureate education. Please note the limitations on transfer credit described elsewhere in this catalog.

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**Additional Bachelor's Degree Program**

If you have already earned a bachelor's degree from an accredited institution, other than FSU, you may earn an additional bachelor's degree from FSU by meeting the following requirements:

1. Be admitted (contact the Admissions Office for information).
2. Complete an academic major at FSU under the provisions of the catalog in effect at the time of that admission (a period of seven years is allowed for completion).
3. Complete at FSU, through coursework or special departmental exams, at least one-half the credit hours required in your major department. For interdisciplinary majors, at least one-half of all the credit hours required for completion of the major must be earned at FSU.
4. Complete a major with a cumulative grade point average of at least 2.0 in all courses taken in the major department (unless specifically excluded). Interdisciplinary majors count all courses specifically listed as meeting the requirements of the major to determine the major GPA.
5. Maintain a grade point average of 2.0 overall.
6. Complete at least 30 credits of course work at FSU.
7. Submit to the Registrar's Office an application for graduation at least one semester prior to your intended graduation date.
8. Fulfill all financial obligations to the University.
If you are a graduate of FSU, you may add another major to your record by meeting the following requirements:

1. Be admitted (contact the Admissions Office for information).
2. Complete an academic major at FSU under the provisions of the catalog in effect at the time of that admission (a period of seven years is allowed for completion).
3. Complete at FSU, through course work or special departmental exams, at least one-half of the credit hours required in your major department. For interdisciplinary majors, at least one-half of all the credit hours required for completion of the major must be earned at FSU.
4. Complete a major with a cumulative grade point average of at least 2.0 in all courses taken in the major department (unless specifically excluded). Interdisciplinary majors count all courses specifically listed as meeting the requirements of the major to determine the major GPA.
5. Maintain a grade-point average of 2.0 overall.
6. Inform the Registrar's Office in writing at least one semester prior to the time you expect to finish the major and wish it to be recorded.
7. Fulfill all financial obligations to the University.
8. In the event that the additional major would culminate in a degree other than the first degree earned by the student, a second diploma will be issued by the Registrar's Office. For details, check with the Registrar's Office one semester before the anticipated completion of the additional major.

Teaching Certification
If you already have a bachelor's degree and wish to pursue teaching certification at Frostburg State University, your options are to:

1. Complete all the requirements of a Maryland state approved program in teacher education as a teacher certification option (FSU graduates) or a second baccalaureate degree (graduates of other institutions).
2. Complete the Master of Arts in Teaching-Elementary or Master of Arts in Teaching-Secondary, including any undergraduate course work deficiencies. Information about the Master of Arts in Teaching is available from the Department of Educational Professions and in the FSU Graduate Catalog.
3. If you wish to teach in a state other than Maryland, it is your responsibility to ascertain if a Maryland state approved program will meet certification requirements.

General Course Work
Bachelor's degree holders, like any other academically qualified students, may take general course work at FSU provided that they have the proper prerequisites, have been duly admitted to the university, and have paid the requisite fees. Interested students should apply through the Admissions Office.

Pre-Baccalaureate Programs
Get a head start on your college career! In addition to accepting AP and IB credit (see section on credit-by-exam), Frostburg State University welcomes talented high school students who want to take advantage of opportunities to complete college courses while in high school or the summer after graduation.

Frostburg State University offers a limited number of college-level courses in Allegany County high schools. You take the same course and must meet the same standards as you would on campus. If you are an area high school student, you also may be admitted as a non-degree seeking student to take courses on the FSU campus. You must have the recommendation of your high school to participate in either of these programs. Credit is recorded on an official FSU transcript for application to an FSU degree or for transfer.

The SOFI Program (Summer Online Freshman Initiative) allows incoming first-year students to take popular introductory courses before the start of the fall semester. You register for SOFI courses during your scheduled summer orientation experience in early summer as you plan your fall class schedule with the assistance of faculty advisors. SOFI courses take place during Frostburg State University's second six-week summer session. You may participate wherever you are because SOFI courses are all online.
Academic Regulations and Procedures

Student Academic Responsibility

- You, the student, are responsible for planning your academic program and for meeting the requirements of the University and of departments.
- This responsibility includes developing a complete understanding of, and following all degree requirements, academic regulations, and procedures.
- You must obtain, retain, and consult regularly the sections from the applicable catalog that govern your graduation requirements.
- The degree requirements specified in the catalog assigned to you at the time of admission or readmission serve as a two-way contract between you and the University. The contract specifies that the basic requirements to earn a bachelor’s degree, the General Education Program, and major and minor requirements will not be changed as long as you complete a degree within seven years of the time of your initial enrollment in college. In turn, you are responsible for meeting these requirements.
- The academic regulations and procedures described in this chapter may change during the period of your enrollment, and it is your responsibility to be aware of, and follow the academic regulations and procedures currently in effect.
- All changes in regulations and procedures will be published in official University publications such as the Undergraduate Catalog and Registration Guide, with prior notice of changes provided.
- You are assigned an academic advisor, whose role is to assist you in planning the academic program and in interpreting degree requirements and academic regulations. It is your responsibility to confer regularly with your advisor. The advisor will provide the best, most current information possible, but, ultimately, it is your responsibility to request and use this advice wisely and to meet graduation requirements and academic regulations.
- It is your responsibility to promptly declare or change your major.

Academic Advising, Policies and Procedures

Frostburg State University engages every student in collaborative, learner-centered advising, focusing on academic, professional, and personal development.

Frostburg State University:

- fosters a campus culture where advising is a shared responsibility essential to the education experience and student success;
- empowers students, faculty, and staff to utilize university and professional resources to promote students’ ability to navigate the university and achieve their goals; and
- offers a university experience where holistic engagement prepares students to meet the challenges of a diverse, complex, and changing global society.

You will need to see your mentor and/or advisor at least once per semester prior to registration to plan your schedule for the next term. Your advisor will activate your registration status in PAWS so you can register and drop/add on the web. You can call or email your mentor and advisor to make an appointment. Plan ahead to make your advising experience successful.

If you enter FSU as a first-time college student, you should plan to participate in our summer orientation experience. As part of the orientation experience, you will work with a faculty advisor who is specially trained to work with first-time students. During your career at FSU, you will have two advisors: a faculty mentor (advisor) and a professional academic advisor. For your first semester, your faculty mentor will be the instructor of your ORIE 101, Introduction to Higher Education class. ORIE instructors/mentors will assist you with your transition to college. Advising and planning are a major component of the ORIE 101 curriculum. You will meet your ORIE instructor/mentor twice a week and your professional advisor will reach out to you for periodic meetings, as well, and you are welcome to contact them at any point with questions or to request a meeting. Please take advantage of these contacts to help you stay on track academically. You may transition to academic departmental mentoring during your second semester after meeting with their ORIE mentor or your academic advisor to discuss first semester outcomes and to confirm your choice of major. If you aren’t ready to move to a departmental mentor or to declare your major, your ORIE instructor will continue to mentor you until you are.

If you enter FSU as a transfer student, and know what major you want to pursue, you will be advised by the department chair or a designated faculty member during transfer orientation or initial registration. You will then be assigned your regular faculty advisor. If you aren’t sure about your major, you will work with staff in the Center for Academic Advising and Retention who have experience working with exploratory students until you are ready to declare your major.

Your major advisor will work with you throughout your academic career. But always remember that you can change your major or request a change of advisor, at any time. Talk to the chair of the department that offers your major if you want to make a change.

Registration

The Academic Calendar lists the registration schedule for each semester and summer session. You may change your schedule within the period prescribed in the Calendar. You must satisfy your financial obligations to the University to complete registration.

Class Standing

Students achieve class standing according to the following table:

<table>
<thead>
<tr>
<th>Class</th>
<th>Hours Earned</th>
</tr>
</thead>
<tbody>
<tr>
<td>First-Year</td>
<td>0-29 semester hours earned</td>
</tr>
<tr>
<td>Sophomore</td>
<td>30-59 semester hours earned</td>
</tr>
<tr>
<td>Junior</td>
<td>60-89 semester hours earned</td>
</tr>
<tr>
<td>Senior</td>
<td>90+ semester hours earned</td>
</tr>
</tbody>
</table>

Course Load

The unit of course work is the semester hour, defined as the normal amount of work done in one 50-minute class period and two hours of outside preparation a week for one semester.
The normal full-time load is 15-18 semester hours of credit. The minimum load for a full-time student is 12 semester hours of credit; the maximum, 18 hours. If you carry fewer than 12 semester hours of credit you will be classified as a part-time student.

To enroll for more than 18 semester hours of credit, you must have earned an FSU cumulative G.P.A. of 3.0 or above, have completed at least one semester of course work at FSU, and have the written permission of your advisor. Exceptions to these overload guidelines shall be made only upon recommendation of the advisor and the approval of the department chair (or Associate Provost if the student has not declared a major). Forms for requesting an overload must be submitted prior to registration. You will not be able to register for an overload without permission.

**Course Changes**

(Drop/add/withdrawal)

You may change your registration (add or drop a course or change sections or credits) using PAWS from the time of registration through the first week of classes (or the equivalent proportion of class days in a session that is shorter than a semester) if the course or section added has openings. If the course is closed, you must request an override from the department chair involved. You may not add courses after the first week of classes (or equivalent).

You are responsible for dropping/adding courses/sections at all times. Failure to do so will result in a grade of FX in the course or section “dropped” and no credit in the course or section “added.” However, if you are enrolled in a class and miss the first class meeting without notifying the instructor/department, the department chair at his/her discretion has the authority to drop you from the course if other students are waiting for space in the class. All other drops must be initiated by you.

After the first week of classes, to withdraw from a class, you can use PAWS. If you withdraw from a course during the first 60 percent of a term (beginning with the first day of classes), you will receive a WF. Exact dates governing withdrawal from a course without penalty appear in the Academic Calendar. After this period if you drop a course, the WF and W described below will apply. See the section “Withdrawal from the University” for a description of the process for withdrawing from all of your classes.

**WF** – withdrew-failing – for official withdrawal from a course after the first 60 percent of a term. (USED in computation of average.)

**W** – withdrew – with approval of the Dean of the College offering the course, who will grant approval only under exceptional circumstances (e.g. serious illness) documented by the student, after consultation with the instructor of the course. The Dean will notify the academic advisor if a W is approved. A W will not be considered after the last day of classes. (NOT used in computation of average.)

**Class Attendance**

Each faculty member sets his/her own policy on class attendance. Such policy is to be indicated to the student in writing at the beginning of the term and should not be changed during the term. It is the responsibility of the student to understand clearly the attendance policy of each of his/her instructors and to act accordingly.

The student is responsible for explaining the reason for any absence to the instructor. If at all possible, the student is expected to contact the instructor prior to the absence. No administrative officer of the University issues class absence excuses for any reason.

**Absences for Health Issues, Bereavement and Other Emergencies**

The Health Center does not issue verification notices for routine treatment to instructors. In cases of significant or prolonged impairment, the center will provide appropriate written verification of treatment at a student’s request.

The faculty recognizes that students may experience serious medical issues, the death of a loved one, or other significant and unexpected life events during the course of an academic term that may lead to extended absences. Instructors must permit student absences for a reasonable number of days based on the severity of the situation and considering any travel that may be necessary. To minimize the impact of serious life events on students’ academic progress, students must contact their instructor(s) within five days of returning to develop an accommodation plan to allow the student to make up any missed assignments, find alternative assignments or excuse some assignments, in whatever manner the faculty member believes is fair and appropriate. In the event that an experience cannot be replaced, the final grade will be computed in a manner determined by the instructor to be fair and reasonable, including assigning a grade of Incomplete if applicable. Faculty are not obligated to accommodate a student who has, even for legitimate reasons, missed so much of the critical components of a course that arrangements for makeup work would not be reasonable. Students who believe their final course grade has been determined in an unfair (arbitrary and/or capricious) manner should follow the Grade Grievance process found in the Undergraduate and Graduate catalogs.

If forced by an emergency to be absent from classes, a student should notify the Office of the Vice President for Student Affairs, which will keep such information on file should instructors wish to confirm the absence. Instructors may request students to provide documentation to verify the absence. In cases where it is unlikely or impossible for the student to be successful in one or more classes because of emergency absences, the student should contact the Office of Student Affairs to facilitate a regular or medical withdrawal subject to University policies and procedures on withdrawals (e.g., financial aid, refund policies). Students must consult financial aid or Office of the Registrar websites for withdrawal and refund policies and procedures. The goal is to balance support for students in achieving their educational goals with the academic integrity of the curriculum and the principles of faculty academic freedom.

**Absences for Religious Observances**

It is the policy of Frostburg State University that the academic programs and services of the University shall be available to all qualified students who have been admitted to its programs, regardless of their religious beliefs. Students shall not be penalized because of observance of their religious holidays and shall be given an opportunity to make up, within a reasonable time period, any academic assignment that is missed due to individual participation in religious observances. It is the responsibility of the student to notify his or her instructor of conflicts between religious observances and scheduled course activities.
Absences for Activities
The faculty recognizes the value to the student of such activities as attendance at meetings of regional and national scholastic and professional organizations, participation in university-sponsored dramatic or musical events, and varsity athletics. Students participating in such activities, and who incur class absences because of them, are responsible for notifying their instructors in advance of such absences. Should an instructor have any question regarding the student's absence for such activities, she or he may call the faculty member of other persons responsible for the activity.

Undergraduate students on academic probation may not incur class absences for non-credit activities without prior permission of their instructors. Since field trips connected with activities offered for academic credit are a part of the academic program, students are eligible regardless of grade average.

Roster Verification and Final Date of Attendance
To comply with financial aid regulations, instructors need to do the following regardless of attendance policy:

1. Verify that class attendance matches official rosters at the end of the add/drop period and make record of students on the roster who have not attended.
2. Record a date of last attendance for each student receiving a grade of FX at the end of the term.

Attendance at Another Institution
Once you enroll as a degree candidate at Frostburg State University, you must request prior permission to pursue course work at another institution and transfer it into your program at Frostburg State. This procedure is for your protection to ensure that course work is transferable, is equivalent to the course for which you seek credit, and meets the requirement you want to fulfill. Once you are a degree-seeking student at FSU, you can only transfer equivalents of the specific courses in the FSU general education program for general education credit and equivalents of the specific courses in your major or minor for program credit.

If you are an undergraduate student applying for readmission after an absence of at least five calendar years, and you have earned credit for general education courses at a Maryland public higher education institution during your absence, you might receive general education credit if the evaluation of transfer credits occurs at the time of readmission; therefore, you must provide official transcripts before the start of the semester in which you’re being readmitted.

If you have 0-89 total credits earned (including previous transfer credit, credits in which you currently are enrolled at FSU or elsewhere, and the requested credits off-campus), you must follow these procedures:

1. Obtain a list of course offerings and catalog descriptions for the course(s) you want to take at another institution.
2. Complete the Authorization to Attend Another Institution Form in the Registrar’s Office.
3. Have course equivalencies determined by the Transfer Credit Officer in the Admissions Office.
4. Return the form to the Registrar’s Office for official signature.
5. Take the approval form to registration at the other institution.
6. After completion of the course work, have an official transcript forwarded from the other institution to Frostburg State University.

In addition to the steps noted above, the following special rules apply:

If you have 90 or more total credits (including previous transfer credits and credits in which you currently are enrolled at FSU or elsewhere), you may transfer a maximum of seven (7) additional credits of general education or general elective course work, provided that you still earn a minimum of 30 credits towards the degree at Frostburg State University. These credits may include courses that count toward the major or minor only if you will earn half of your major or minor credits at Frostburg State University. After you have a total of 90 or more credits, and you wish to participate in an organized academic program approved by the Provost (including those programs taking place at another academic institution):

1. Your academic advisor (or department chair/coordinator) must give prior approval for additional transferred credits of general education or general elective course work.
2. Your department chair or coordinator must give prior approval for additional transferred course work that counts toward the major or minor.
3. The Provost, or designee, must give prior approval for additional transferred credits that count toward the major or minor and are earned through participation in Study Abroad Programs.
4. The Provost, or designee, must give prior approval for additional transferred credits that count toward the major or minor and are earned through the National Student Exchange Program.

Note: Exceptions to all the rules specified above require an advance written appeal to the Academic Standards Subcommittee at least one month prior to the term in which you wish to study at another institution.

Auditors
To be an auditor (one enrolled for non-credit instruction in a course), ordinarily you must have earned a place on the Dean’s List (at least a 3.40 average) the preceding semester. You also may request to audit a class in which you previously have received credit if a period of time has elapsed since you enrolled in the course and you wish to refresh your knowledge prior to enrolling in a sequence course. Finally, if you are a non-degree student enrolling in a course for personal enrichment you may enroll as an auditor. You are charged the same tuition and fees for audit courses as for credit courses. You may be an auditor only if you have the consent of the instructor, ordinarily your advisor, and the Associate Provost and if space is available. If the space is needed, registrants for credit may supplant auditors.

As an auditor, you are expected to attend regularly but do not participate in class discussion except upon request. You are not required to write papers or take quizzes, tests, or examinations. No credit or grade will be earned, but the audited course when completed will carry the symbol AU (Audited).
You are not eligible for credit by examination to cover a course you have audited. Courses which have been audited may not be taken for credit.

To be admitted to class as an auditor, you must be officially registered. You may secure approval to audit through the drop/add period.

**Testing**

The University provides testing programs designed to help students through their academic careers. As a result of these measurements of aptitude and achievement, students with varied personal and educational backgrounds can evaluate their relative strengths and weaknesses. Because other colleges throughout the country administer these same tests, it is possible to compare FSU students with other college students objectively. The University makes use of this knowledge in planning the curriculum and in advising students about their programs.

**Testing for First-year Students**

**A. SAT:**

To enroll in the University, you are required to submit the results from the College Board SAT. Take these tests at any convenient center on one of the dates assigned by the College Entrance Examination Board. Get detailed information at local high schools. If you take the American College Tests, it is recommended that you request a transcript of the results be sent to the University. Individual departments may also require achievement tests in their areas to be taken after you have been accepted to the University.

**B. Testing Policies of FSU:**

1. All entering first-time students will be administered diagnostic placement tests in reading, writing and mathematics to determine their strengths and weaknesses in those areas. Transfer students with more than 12 credits who have not transferred Freshman Composition and/or a college-level mathematics course will also be required to take the appropriate diagnostic placement test(s).

2. If you earn below a predetermined standard on these examinations, you will be required to participate in specified courses in your first semester to develop your skills to a level which is expected of all entering students. You may not withdraw from these courses unless you are withdrawing from the University. If you are unsuccessful, you must re-enroll in the relevant course(s) in your second semester, and in each subsequent semester until you receive a P or C grade in the course.

**Senior Testing**

Some graduate schools and advanced professional programs may require aptitude or achievement test scores for admission. Most of the commonly needed tests such as the Graduate Record Exam and Graduate Management Admissions Test are given on campus. The PRAXIS exam, which is required for Maryland certification as well as for certification in several other states, is also offered.

Dates for these tests are publicized on campus. Further information about these and other tests is available in Counseling and Psychological Services.

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**Non-Graded Assessment Requirements**

Assessment is the evaluation of learning used to improve teaching and academic programs. It is designed to identify patterns of strengths and weaknesses in student learning so that changes can be made that will benefit students. Some non-graded assessment activities may be voluntary, others may be required for graduation.

**Credit by Examination**

In addition to earning credit at FSU or transferring course credit from other accredited institutions, you may acquire credits through examination. Examinations accepted include: Advanced Placement Examinations, College Level Examination Programs (CLEP), the International Baccalaureate Programme and special departmental examinations. Students who believe they may qualify for credit by exam must take the examination prior to signing up for the course. See the Policies section of this catalog for details on credit by exam procedures.

**Transcripts of Records**

To obtain an official transcript, file a request online through your PAWS account. Official transcripts will be forwarded to designated parties or may be picked up in person.

**Withdrawal From the University**

To leave the University, you must withdraw officially by completing the following procedure. Failure to follow this procedure may jeopardize the right to withdrawal without penalty and to any refunds (see Refunds Policy in the catalog section on Expenses).

To withdraw from the University prior to the end of the drop/add period for the semester in which you are enrolled, you must notify the Registrar’s Office in writing. That office will remove you from your classes and notify the University & Student Billing Office that you will not be attending the current semester. You must contact the University & Student Billing Office to arrange any refund that may be due to you.

If you withdraw after the end of the drop/add period for a semester in which you are enrolled, your permanent academic record will always carry one of the following notations, as well as the date on which withdrawal procedures were completed. You will receive a W in each class if you withdraw within the first 60 percent of a term; W or WF depending on the circumstances surrounding your withdrawal after the first 60 percent of a term.

To be eligible for the W after the first 60 percent of a term, you must provide written documentation of extenuating circumstances (such as medical problems) to the Office of the Vice President for Student Affairs. With approval of the Office of the Provost, the Registrar’s Office will post a W for all courses and notify all other relevant campus offices of your withdrawal.

If you officially withdraw from the University near the end of a semester because of academic difficulty and receive W/Fs in courses for which you were registered, you may, as a result of your new cumulative grade point average, be academically dismissed from the University.
Once you withdraw, particularly for reasons other than medical, the University is not obliged to readmit you. Readmission especially will not be approved if you withdraw to circumvent regulations.

**Call to Active Military Duty**

A student called to active military duty during a national or international crisis or conflict should inform the University of the reason for his/her withdrawal prior to leaving, including presentation of copies of appropriate military orders, in order to benefit from special policies and procedures governing interruption of one’s academic career for such military service. Please contact any one of the following offices. The designated contact person in each office will assist in facilitating your withdrawal and will contact other offices to ensure that special exemptions concerning refunds and W or I grades are applied:

**Veterans Services**
150 Park Avenue
Phone: 301.687.4409   Fax: 301.687.4509

**Office of the Registrar**
Pullen 144
Phone: 301.687.4347   Fax: 301.687.4597

**Student Affairs**
Hitchins 116
Phone: 301.687.4311   Fax: 301.687.4937

**Leave of Absence**

If you withdraw from Frostburg State University with the intent to return within a semester or a year, you may request a leave of absence. If you are on an official leave of absence, you will continue to receive communications from the University, will not have to submit a readmission application or admissions deposit, and will be able to participate at the same time as continuing students in such activities as registration and the housing lottery. You must notify the Financial Aid Office that you are on leave, and file financial aid and scholarship applications by the regular deadlines.

To be eligible for a leave of absence, you must have no judicial system penalties or charges pending. You may obtain an application for a leave of absence at the Registrar’s Office. The application requests information about the reasons you are requesting a leave, what activities you plan during the leave, and for how long you are requesting a leave (one calendar year maximum). Your advisor will need to sign off on your application, which you then must return to the Registrar’s Office no later than the last day of the drop/add (late registration) period in your first semester of leave.

If you are planning study at another college during your leave, you must complete an Authorization to Attend Another Institution form (available in the Registrar’s Office) and obtain the required approvals. See the section of this catalog on Attendance at Another Institution concerning the rules for transfer of credit for students seeking a degree at FSU. If you plan study abroad during your leave, you must use the procedures currently in place for international study, administered by the Center for International Education.

You must keep the University informed of your permanent and local addresses during your leave in order to receive the privileges specified. If you do not enroll at the University at the end of the time period specified in your leave request, you will need to go through the readmission process whenever you return.

**Graduation**

To graduate with a baccalaureate degree, you must earn a minimum of 120 semester hours of credit and fulfill all degree requirements. Carrying a normal load of 15 semester hours of credit each semester, you can complete a degree program in eight semesters. You may graduate in fewer than eight semesters by attending summer sessions and/or Intersession, or by carrying more than 15 semester hours per semester. To accelerate, you should plan your program well in advance with your advisor.

You may enroll as a part-time student, carrying as many as 11 semester hours in the regular program.

To graduate on a given date, you must make application on a form furnished by the Registrar’s Office (also available online in PAWS). Submit the application to the Registrar’s Office when you complete 70 credit hours, or at least one year prior to your proposed graduation date.

To participate in commencement, you must have successfully completed, or be enrolled in the semester prior to the ceremony, in all course work required for you to complete your degree. If you complete your degree requirements in January or May, you are eligible to participate in the May commencement ceremony. If you complete your degree requirements in July, August, or December, you are eligible to participate in the December ceremony.

Students who have completed all course work other than an internship, field experience, capstone, or practicum that by design or circumstance must be completed during the summer term or the January Intersession can request an exception to these rules by making a written request to the Registrar’s Office at least four weeks prior to the commencement ceremony. You must have a 2.0 cumulative FSU grade point average and a 2.0 cumulative FSU grade point average in your major at the time of request, as determined by the official degree audit performed by the Registrar. Evidence must also be provided that you have enrolled in, and paid tuition for, the internship, field experience, capstone, or practicum that will meet the remaining requirements during the summer session immediately following May commencement or the January Intersession immediately following December commencement.

Participation in commencement does not confer a degree. Your degree will be posted on your official transcript and you will receive a diploma only after you have documented that you have met all degree requirements.

**Graduation with Honors**

If you have completed at least 50 credits at this University with a high cumulative grade point average, your scholastic achievement is recognized in the honors degree, awarded as follows:

- **Cum Laude** from 3.400 to 3.649
- **Magna Cum Laude** from 3.650 to 3.899
- **Summa Cum Laude** from 3.900 and above

**Academic Standards**

**Grades**

Your progress as a student is evaluated and officially reported at the end of each semester. Letter grades are used to record achievement.
Generally, grades represent standards of comprehension of knowledge and the ability to communicate knowledge, and are recorded on your permanent record at the end of each semester.

The grading symbols used at Frostburg State University are as follows:

- **A** Superior
- **B** Above average
- **C** Average
- **D** Passing, but below average
- **F** Failure
- **P** Pass
- **W** Withdrew
- **WF** Withdrew after the withdrawal deadline (counts as an F, failure)
- **FX** Failure for non-attendance (if you never attended class or stopped attending during the term without officially withdrawing or, for an online class, if you never logged in and participated or if you stopped performing course activities, without officially withdrawing. An FX grade will affect your GPA the same as an F grade. Failure to pass the course because you did not take the final exam or complete other course requirements will be recorded as a F grade rather than FX.)
- **NC** No credit
- **I** Incomplete
- **AU** Audit (no credit earned)
- **NR** Grade not provided by instructor
- **CS** Continued Study Required (you must enroll in a course which satisfies the requirement in the next semester). Only available in English and mathematics courses that meet Core Skills Requirements.
- **N** Non-pass (not permitted except where P/N is the only method of evaluation for a particular course)
- **AP, CE, CL, IB, PT** Pass by examination

**Incomplete**
The grade I (Incomplete) may be given at the instructor’s discretion in exceptional, documented cases if, after completing most of the work in a course, because of illness or other reasons beyond your control, you are unable to complete the remaining course requirements. An I may be removed and another grade substituted if you complete the course requirements to the instructor’s satisfaction within six weeks of the beginning of the following semester. If you fail to remove the Incomplete within the prescribed period, the I will automatically be replaced by an F on your permanent record. It is your responsibility to make arrangements to complete the course requirements for the removal of the I.

**Withdrawal**
W-Withdraw; WF-Withdrew After Deadline (Failing). A grade of W is not calculated in your GPA. A grade of W is given if you officially withdraw from a course by the published withdrawal deadline each term. It is also given if you obtain authorization from the Dean of the College offering the course to withdraw from a course or courses after the deadline. Such withdrawals will be granted only under exceptional circumstances (for example, serious illness) with information received from the instructor of the course.

**NC Grade**
The grade NC (No Credit) is to be used at an instructor’s option (instead of a grade of F) if you have put forth effort to master the content of the course but have not achieved at a level to warrant a grade above F. The NC grade may be used only if you have earned fewer than 60 credits at the end of the term preceding the term in which the NC is earned.

**Limited Pass/Fail Option**
You may take only one course per semester on the Pass/Fail Option and no more than four courses Pass/Fail during your college career. You will receive the grade of P for each of these courses passed. Credits earned in a course in which a P is received will be counted toward the number of semester hours of credit required for graduation. If you fail to do passing work in such a course, you will be graded F. The grade of P will not be used in the computation of cumulative grade point average; a grade of F will be computed.

Upon approval of your advisor up to 20% of class days of the term or session (this date will be indicated on the Academic Calendar), you may elect the P/F option for a course by submitting a form to the Registrar’s Office. At no time during the semester will an instructor be informed by any administrative office which students are enrolled for P/F credit. The instructor will assign grades of A, B, C, D, FX, or F to each student, and the Registrar’s Office will then enter grades of P for students earning A, B, C, or D but will retain a grade of FX or F. The instructor will assign grades of A, B, C, D, FX, or F to each student, and the Registrar’s Office will then enter grades of P for students earning A, B, C, or D but will retain a grade of FX or F. The instructor will assign grades of A, B, C, D, FX, or F to each student, and the Registrar’s Office will then enter grades of P for students earning A, B, C, or D but will retain a grade of FX or F.

If you wish to transfer or attend graduate school where letter grades are necessary, you may request, in writing, that the Registrar’s Office provide letter grades for those courses in which a P was recorded.

Courses in the undergraduate program may be taken for P/F credit with the following restrictions:

1. The P/F option is not permitted to be used in the General Education Program.
2. The P/F option may not be used for any course taught by your major or minor department or which fulfills your major or minor requirements, including those courses which are required by, but offered outside of, the major or minor department.
3. If you are on academic probation, you are not eligible to enroll in a course on a P/F basis.
4. You may not elect to take more than one course per semester for P/F credit. The total number of courses you may elect to take for P/F credits is four.
5. Once registered in a course on a P/F basis, you may not later choose to take the course on the conventional letter-grade system, except as noted in number 6 below.
6. If you change your academic program so that a course previously taken for P/F credit becomes a requirement for a major, minor, or a professional program, you will receive the conventional grade originally reported by the instructor.

7. You may drop a P/F course the same as any other course.

8. You are subject to the same prerequisites and requirements for the course as is the student enrolled in the course under the standard grading system.

9. To be eligible for the Dean’s List, you must take 12 semester hours of graded credit; thus 9 graded credits and 3 credits on a P/F basis do not qualify you for consideration.

Specifically, the P/F option may be used only for elective courses outside of the General Education Program, majors, minors, and concentrations.

### Mid-semester Warnings

Faculty members will assess students’ progress in all 100- and 200-level courses, and in all courses that meet Core Skills Requirements in the General Education Program, prior to mid-semester. Students performing at the D or F quality level will be issued a mid-semester warning early in the seventh week of classes. Students are responsible for discussing their performance with their instructors immediately.

### Grade Points and Grade Point Averages

A four-point system is used to indicate quality of academic work through a grade point average:

<table>
<thead>
<tr>
<th>Grade points per semester hour</th>
<th>A</th>
<th>4</th>
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<tbody>
<tr>
<td></td>
<td>B</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>C</td>
<td>2</td>
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<tr>
<td></td>
<td>D</td>
<td>1</td>
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<tr>
<td></td>
<td>F, WF, FX</td>
<td>0</td>
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</tbody>
</table>

Grades of P, PT, N, NR, NC, I, W, AU, and CS are not used in computation of averages.

The grade point average for a semester is determined by dividing the total number of grade points by the total number of semester hours graded with A, B, C, D, F, WF, and FX that semester.

The cumulative grade point average is found by dividing the total grade points earned in all courses completed at Frostburg State University by the total number of semester hours graded with A, B, C, D, F, WF, and FX at FSU. For example, a junior has attempted 80 semester hours at Frostburg and has earned a total of 192 grade points. The cumulative GPA is 2.40. If a course is repeated, the last grade earned is included in the computation. (See Course Repetition section below.)

As with most colleges and universities, credit hours earned at other institutions are accepted for transfer but grades are not. Consequently, the grades from transfer credits are not computed into the cumulative grade point average at FSU. However, academic progress is expected according to the total credit hours earned, including transfer credits.

### Calculation of GPA in Major:

1. All courses taken in the major department count in calculating the grade point average for that major (unless specifically excluded).

2. Courses required for the major but taken outside the major department are not counted in the computation, unless specified in the catalog description of the major requirements.

3. Interdisciplinary majors, however, count all courses specifically listed as meeting the requirements for the major. Interdisciplinary majors include Environmental Analysis and Planning, Earth Science, International Studies, Law and Society, Liberal Studies, Social Science and Urban and Regional Planning.

4. Prior written approval of the advisor and the department chair is required to repeat a course in which a satisfactory grade has been earned (whether a grade is considered “satisfactory” in a given major is defined by each department).

5. If a course is repeated, the last grade earned is included in the computation. (See Course Repetition section below.)

### Calculation of GPA in Minor:

Grades earned in all core and elective course options that can be applied toward minor requirements are used in calculating the grade point average.

### Course Repetition and Grading

A course may be counted toward graduation requirements only once regardless of how many times it is repeated unless the officially approved course description states that the course can be repeated for credit.

Beginning with courses repeated in fall 2007 and after, when you repeat coursework in which you earned a grade of A, B, C, D, F, FX or WF, the last grade earned, whether higher or lower, will count in your cumulative grade point average. Only a grade of A, B, C, D, F, FX, WF, or P (in courses where all students are graded P/F) can replace the previous grade earned. The earlier grade will continue to appear on your transcript, but the credit hours attempted or earned and the grade earned in the previous attempt will not be used in calculating the cumulative grade point average and cumulative credits. The coursework must be repeated at Frostburg State University. (See the special rule above concerning approvals required for course repetitions in your major.)

### Change of Grades

A faculty member desiring to change a student’s grade that has already been recorded with the Registrar must submit to the Registrar a Change of Grade form stating the reasons for the change. If the change of grade is not from “I” (incomplete) to a letter grade, the form must be approved by the Chair of the Department (or the Dean of the College if the Chair is the instructor) in which the course resides.

All grade changes must be made within six weeks of the beginning of the following semester. No grade changes are allowed after this date except in the case of an ongoing grade grievance that has reached Stage II; a late withdrawal due to documented extenuating circumstances.
circumstances; or, in exceptional cases, with the approval of the Dean of the College that offers the course. Faculty and students should raise issues about grades immediately upon recording and receipt.

**Dean's List**

Shortly after the end of each semester, the Dean of each College announces the names of students recorded on the Dean's List. The list includes all students who have earned a grade point average of at least 3.40 with at least 12 semester hours of graded credit for the semester.

**Final Exam Rescheduling Policy**

Students should not be required to take more than two final exams in one calendar day, and where conflicts arise, faculty should work with students to make necessary arrangements to avoid the conflict. It is recommended that students meet with their professors to reach alternate arrangements. If students are unable to reach alternate arrangement with their professors, they should contact their academic advisor or department chair for assistance.

**Standards Governing Academic Probation and Dismissal**

A cumulative grade point average (GPA) of 2.0 is the minimum standard acceptable for work leading to a bachelor's degree. If your cumulative GPA falls below 2.0, you will be placed on academic probation or be subject to academic dismissal.

**Review of Student Records**

Your records will be reviewed for possible dismissal at the end of the fall and spring semesters and the second six-week summer session. If you do not meet prescribed standards at the end of the spring semester, you will be so informed, but you will be permitted to attend any summer session except the third four-week session. You will need to meet the standard prescribed for your number of earned hours and number of semesters on probation no later than the end of the second six-week session or you will be dismissed and not allowed to apply for readmission until the following summer.

**Academic Dismissal**

You will be dismissed for unsatisfactory scholarship if any one of the following conditions applies:

1. Your earned cumulative grade point average is 0.0.
2. You fail at least half of the semester hours of credit in any single semester while on academic probation.
3. You fail to meet the minimum academic progress standard for your number of earned hours while on academic probation. *(See table on this page.)*
4. You remain on academic probation for three successive semesters without achieving a cumulative GPA of at least 2.0. Any enrollment in a summer session counts as one semester on probation.

**Dismissal Conditions**

1. You will not be allowed to enroll at Frostburg State University for at least two semesters. The summer sessions are considered the equivalent of one semester.
2. After the minimum two-semester dismissal period, you are eligible to apply for readmission through the Admissions Office. Readmission is not guaranteed. *(See the section on readmission in the admissions section of the catalog.)*

**Dismissal Appeals**

You may appeal your dismissal for unsatisfactory scholarship. All appeals are to be submitted to the Academic Standards Subcommittee.

1. Submit a letter of appeal to the Academic Standards Subcommittee, c/o the Associate Provost, who serves as Chair.
2. You must submit your letter of appeal and all documentation by the deadline specified in the academic dismissal notice.
Letters of appeal received after the deadline will not be considered.

3. Your letter of appeal must demonstrate that your poor academic performance has resulted directly from serious physical, emotional or other personal problems. You must detail the reasons for your poor academic performance and provide documentation of the existence of the problems. You must show that the problems described have been addressed and that there is reason to believe that these problems will no longer affect your academic performance.

4. The University reserves the right to deny the dismissal appeal of any student whose former records and/or observed conduct are incongruent with the established guidelines for student behavior and academic responsibility at Frostburg State University.

5. If you are reinstated on appeal, you will have to agree to meet specified conditions listed in the response to your appeal.

### Academic Probation

1. If you have earned a cumulative GPA above 0.00, but below 2.0, you will be placed on academic probation.

2. If you are a first-time FSU student placed on probation whose GPA is less than 1.40, you must meet with an assigned advisor to develop an academic recovery plan, and may enroll in no more than 13 credit hours during the following semester. Academic recovery plans must be submitted to the Center for Academic Advising and Retention.

3. You will be allowed to continue to enroll on academic probation if you meet the minimum academic progress standard for your number of earned hours (see table on this page), but for no longer than three successive semesters.

4. If you are on academic probation during the fall semester, you may not register for January Intersession courses. If you are on academic probation during the spring semester, or are placed on academic probation at the end of the spring semester, you may not register for the third four-week summer session.

#### Minimum Academic Progress Standards

The minimum academic progress standards you must meet in order to be continued on academic probation are as follows:

<table>
<thead>
<tr>
<th>Total Hours Earned</th>
<th>Minimum FSU Cumulative GPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-14</td>
<td>1.00</td>
</tr>
<tr>
<td>15-29</td>
<td>1.40</td>
</tr>
<tr>
<td>30-44</td>
<td>1.60</td>
</tr>
<tr>
<td>45-59</td>
<td>1.80</td>
</tr>
<tr>
<td>60-above</td>
<td>2.00</td>
</tr>
</tbody>
</table>

*Total hours earned = all earned hours, graded and ungraded, including transfer credits.

*Cumulative FSU GPA = all letter grades (A, B, C, D, F, FX, WF) earned in all courses attempted at Frostburg State University, excluding prior grades in courses repeated at FSU and grade forgiveness. Enrollment at schools other than FSU cannot improve the GPA because credits, not grades, transfer from these institutions.

### Academic Eligibility for Athletes

As a student-athlete, you must be eligible according to the regulations of the National Collegiate Athletic Association Division II and the academic eligibility standards of Frostburg State University. Specifically, in order to be eligible to participate in intercollegiate athletics, you must meet the following criteria:

1. Be regularly admitted as a degree-seeking student.

2. At the time of participation in intercollegiate athletics, be registered with the NCAA Eligibility Center. Incoming freshmen must be classified as a Final Qualifier by the Eligibility Center to participate during their first year.

3. At the time of participation in intercollegiate athletics, be registered for and maintain enrollment in 12 or more credit hours, with the following exceptions:

   a. You may practice and compete during the vacation period immediately preceding initial enrollment provided you meet all other eligibility requirements.

   b. If you are an undergraduate student enrolled in the final semester of a baccalaureate program, who is certified as enrolled in all courses required to complete degree requirements by the Registrar's Office, you may practice and compete while enrolled in less than 12 credit hours with the approval of the Assistant Director of Athletics for Compliance and Certification.

   c. If you are a graduate student who previously attended this institution as an undergraduate, you may practice and compete while enrolled in a minimum of nine credit hours with the approval of the Assistant Director of Athletics for Compliance and Certification.

4. You may participate in a maximum of four seasons of competition in any one sport during the first 10 semesters (15 quarters) of full-time enrollment in a collegiate institution.

5. If you are a transfer student, prior to participation, your eligibility must be reviewed by the Assistant Director of Athletics for Compliance and Certification and the Director of...
Special Academic Services in accordance with NCAA rules and regulations.

6. If you are a continuing or readmitted student, you must meet all of the following eligibility standards:
   a. Pass a minimum of 9 credits during the preceding academic semester.
   b. Pass a minimum of 18 credits for the Fall and Spring semesters combined.
   c. Pass a minimum of 24 credits since the beginning of the previous Fall semester. This includes Intersession and Summer courses.
   d. By the beginning of the fifth full-time semester, declare an academic major as proof of normal progress towards the degree.
   e. After the beginning of the fifth full-time semester, all courses completed must count in your declared degree program.
   f. Meet the minimum academic progress standards defined for your academic level (see table below), with the following exceptions:
      - If you are ineligible at the beginning of a semester, you may become eligible mid-semester only due to:
        o Successful completion of a course in which you earned an incomplete (I) grade.
        o An official grade change.
        o A grade change due to recognition of an institutional error.

   In any of these circumstances, you will not be eligible until the grade change is officially recorded in the Registrar’s Office.

7. If you are allowed to re-enroll on academic probation or based on a successful appeal of academic dismissal, or you are readmitted on academic probation, you will not be allowed to participate in athletics unless your Frostburg State University cumulative grade point average meets the minimum specified above for the number of semesters of enrollment, and you have met all other eligibility standards outlined on this page (credit hours, progress toward degree, etc.).

8. Requests for the application of the exceptions specified above must be submitted to the individual or committee listed. Requests for waivers of NCAA regulations must be submitted to the Assistant Director of Athletics for Compliance and Certification for approval and transmission to the appropriate authorities.

Minimum Academic Progress Standards for Athletes

<table>
<thead>
<tr>
<th>Semester at Frostburg State</th>
<th>Minimum FSU Cumulative GPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>First &amp; Second</td>
<td>1.65</td>
</tr>
<tr>
<td>Prior to Third or more</td>
<td>2.00</td>
</tr>
</tbody>
</table>

1Semester at Frostburg State = number of semesters enrolled at FSU, including current semester and excluding summer and intersession.

2Cumulative FSU GPA = all letter grades (A, B, C, D, F, FX, WF) earned in all courses attempted at Frostburg State University, excluding prior grades in courses repeated at FSU and grade forgiveness. Enrollment at schools other than FSU cannot improve the GPA because credits, not grades, transfer from these institutions.
The College of Business

Programs Offered in the College of Business

Majors:
Accounting
   BS Accounting/MBA Dual Degree
   Business Administration
      Concentrations:
      - Finance
      - General Management
      - Global Business
      - Hospitality Management
      - Human Resource Management
      - Marketing
      - Small Business/Entrepreneurship
Economics
   Concentrations:
   - Business Economics
   - Public Policy Economics
   - Quantitative Economics

Minors:
Accounting
Business Administration
Economics
Finance
Financial Services
Human Resource Management
Management
Marketing
Small Business/Entrepreneurship

Dr. Sudhir Singh
Dean

Dr. Thomas Sigerstad
Associate Dean
**Vision**

The College of Business will be the educational destination of choice for students seeking an extraordinary, career-oriented educational experience and enduring professional success.

**Mission**

- Our primary responsibility is to prepare our diverse student population for a lifetime of professional success. We drive results through a caring approach to individual development emphasizing critical thinking, experiential learning, social consciousness, and a global perspective.

- We are also committed to our faculty and staff. We forge a nurturing environment, which respects the individual, stimulates professional growth, and offers a sense of community.

- We contribute economic and academic vitality through impactful, applied scholarship as a responsibility to our communities and disciplines and to society.

**Core Values**

**Integrity** — is to engender trust by displaying principled behavior, demonstrating responsible stewardship of resources entrusted to one, and being ethical in all one says and does.

**Citizenship** — is to have a stake in the well-being of the community, and, therefore, an obligation to stay informed, to make positive contributions, and to be of service to all within the College, University, and community at large.

**Inquisitiveness** — is an abiding commitment to intellectual curiosity about oneself and the world around that entails critical thinking and personal responsibility for one’s own learning and professional development.

**Professionalism** — is characterized by unyielding dedication to excellence in all that one does, to be respectful to all, to be an engaged team player, and to be accountable for one’s choices and actions.

**Innovation** — is to effect continuous improvement and to embrace change in the service of personal and organizational growth.

**Learning Goals for All College of Business Undergraduate Programs**

In addition to Institutional Learning Goals, the basic educational objectives of the College of Business undergraduate core courses and its major programs are as follows:

1. **Business Core** — Students will demonstrate fundamental knowledge in each business discipline area.
2. **Critical Thinking and Problem Solving** — Students will be able to identify and analyze business problems, integrate diverse information, and propose sound solutions.
3. **Ethical Reasoning** — In analyzing business situations, students will be able to identify relevant ethical issues and assess the potential impact of management action on stakeholders.
4. **Oral Communication** — Students will exhibit a professional appearance, behavior and language, be able to hold audience attention, deliver clear and organized content, and properly document source material.
5. **Written Communication** — Students will be able to convey ideas and information coherently using correct grammar and punctuation and properly document source material.
6. **Global Perspective** — Students will be able to anticipate the effects of culture and global business climate on business decisions.
7. **Teamwork and Leadership** — Students will effectively participate in group work toward a shared goal, understand the appropriate leadership roles, and produce output using the talents of all group members.

**College of Business Core**

All accounting, business administration, and economics-business concentration students are required to complete the following courses with grades of C or better:

**Outside College of Business (18-19 hours)**

- CMST 122 Introduction to Public Communication
- COSC 220 Software Applications for Business (Tech. Fluency)
- ECON 201/211 Principles of Economics (Macro) (GEP Group D)
- ECON 202/212 Principles of Economics (Micro)

Select one of the following (3-4 hours)

- MATH 118 Applied Mathematics for Business
- MATH 220 Calculus for Applications I
- MATH 236 Calculus I (Core Skill 3)

**Inside College of Business (33 hours)**

- ACCT 211 Financial Accounting
- ACCT 212 Managerial Accounting
- BLAW 291 Legal Environment of Business
- FINA 370 Corporate Finance
- MGMT 110 Career and Professional Development I (1 hour)
- MGMT 251 Management of Organizations
- MGMT 310 Career and Professional Development II (2 hours)
- MGMT 355 Operations Management
- MGMT 356 Leadership and Human Behavior
- MGMT 405 Business Ethics and Social Responsibility
- MGMT 485 Business Policy and Strategy (MGMT Capstone)
- MKTG 261 Principles of Marketing

Select one of the following (3 hours)

- MATH 109/110 Elements of Applied Probability and Statistics (Core Skill 3)
Accounting

MAJOR
MINOR
COMBINED BS/MBA OPTION

Professors: Shaffer, Venezia
Assistant Professors: Al-Wreikat, Schrader (Chair)
Lecturer: Bradley

• You must have at least a 2.0 grade point average in Accounting Department offerings in order to graduate.
• MBA courses for the combined BS in Accounting/MBA option may be completed online.

Program Requirements

<table>
<thead>
<tr>
<th></th>
<th>MAJOR</th>
<th>MINOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours Required in College of Business Core:</td>
<td>33</td>
<td>6</td>
</tr>
<tr>
<td>Hours Required in Accounting:</td>
<td>30</td>
<td>12</td>
</tr>
<tr>
<td>Hours Required Outside the College of Business:</td>
<td>18-19</td>
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</tr>
<tr>
<td>Total</td>
<td>81-82</td>
<td>18</td>
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</table>

Requirements for Major in Accounting

1. College of Business Core: (33 hours)
   - ACCT 211* Financial Accounting
   - ACCT 212* Managerial Accounting
   - BLAW 291* Legal Environment of Business
   - FINA 370* Corporate Finance
   - MGMT 110* Career and Professional Development I
   - MGMT 251* Management of Organizations
   - MGMT 310* Career and Professional Development II
   - MGMT 355* Operations Management
   - MGMT 356* Leadership & Human Behavior
   - MGMT 405* Business Ethics and Social Responsibility
   - MGMT 485* Business Policy and Strategy (Capstone)
   - MKTG 261* Principles of Marketing

2. Courses Outside College of Business:
   (18-19 hours)
   - Communication Studies (3 hours)
     CMST 122* Introduction to Public Communication

   - Computer Science (3 hours)
     COSC 220* Software Applications for Business (Tech. Fluency)

   - Economics (6 hours)
     ECON 201/211* Principles of Economics (Macro) (GEP Group D)
     ECON 202/212* Principles of Economics (Micro)

   - Mathematics (6-7 hours)
     MATH 118* Applied Mathematics for Business
     or MATH 220* Calculus for Applications I
     or MATH 236* Calculus I (Core Skill 3)
     MATH 109/110* Elements of Applied Probability and Statistics (Core Skill 3)
     or MATH 380* Introduction to Probability & Statistics
3. Distribution Within Department: (24 hours)

ACCT 305* Accounting Systems
ACCT 311* Intermediate Accounting I
ACCT 312* Intermediate Accounting II
ACCT 313 Intermediate Accounting III
ACCT 315 Cost Accounting
ACCT 325 Auditing
ACCT 401 Advanced Financial Accounting
ACCT 420 Tax

4. Elective Hours in Department: (6 hours)

Requirements for Minor in Accounting

1. Required Courses: (9 hours)
   ACCT 101* Life Skills for Money Wellness
   ACCT 211* Financial Accounting
   ACCT 212* Managerial Accounting

2. Elective Courses: (9 hours)
   From ACCT courses numbered higher than 300.

   *You must receive a grade of "C" or better for this course to count toward major or minor.

Combined B.S. in Accounting/MBA Program

Coordinator: Dr. Chelsea Schrader, Chair, Dept. of Accounting

A 150-hour combined BS/MBA program enables eligible students to complete FSU’s BS in Accounting and MBA degree programs with 150 hours of academic credit. Separate pursuit of these degrees would require a minimum of 156 hours of course work. CPA candidates in Maryland may sit for the CPA examination after meeting all educational requirements and earning 120 academic credits. CPA exam candidates in many states, including Maryland, are required to complete 150 hours of academic credit as part of the licensure process. Completion of this combined BS/MBA program will meet all educational requirements for CPA exam candidacy in many states, including Maryland. This program is available to students who have graduated or will be graduating from FSU with a bachelor’s degree in accounting. Current undergraduate students should apply in the final semester of their senior year by March 15 for fall and Oct. 15 for spring. Applications should be submitted to the Office of Graduate Services. For more information about becoming a CPA in the State of Maryland, please visit the Maryland Association of Certified Public Accountants (MACPA) at https://cpaguide.macpa.org/.

Eligibility requirements for the combined B.S. in ACCT/MBA:

a) Declared accounting major at FSU, or FSU accounting graduate.
b) A minimum score of 400 on the GMAT [GRE can be substituted for GMAT and scores will be converted to equivalent GMAT scores based on percentile distributions. GMAT/GRE can be waived if undergraduate GPA is 3.25 or higher (based on 4.0 scale) combined with a minimum of 2 years of relevant work experience.]
c) Cumulative and major GPA of 2.5 or better at the time of application.
d) Application for admission to the 150-hour program must be approved by the Department of Accounting.

Requirements for Combined BS/MBA Option

1. Complete all requirements for baccalaureate degree in accounting.
   See previous page.

2. Complete the following additional MBA courses: (30 hours)
   BMIS 607 Information Management
   ECON 511 Economics for Managers
   FINA 610 Financial Management
   MGMT 510 Leadership and Ethics
   MGMT 512 Management Decision Analysis
   MGMT 542 Organizational Behavior
   MGMT 590 Special Topics in Management
   MGMT 620 Strategic Human Resource Management
   MGMT 680 Strategic Integration*
   MKTG 640 Marketing Management

   *MGMT 680 must be taken in the last 6-9 credits of study.
Business Administration

MAJOR
MINOR

CONCENTRATIONS IN:

- FINANCE
- GENERAL MANAGEMENT
- GLOBAL BUSINESS
- HOSPITALITY MANAGEMENT
- HUMAN RESOURCE MANAGEMENT
- MARKETING
- SMALL BUSINESS/ENTREPRENEURSHIP

Department of Management and Department of Marketing and Finance

Professors: Chory, Gaumer (Chair, Department of Marketing and Finance), McClellan, Monahan (Chair, Department of Management), Offstein, Rahman, Shah, Singh, Ye

Associate Professors: Ashraf, Dean, Huh, Mattare, Shore, Sigerstad

Assistant Professors: Cadenazzi, Harvison, Nguyen, Youssef, Zhuang

Lecturers: Kentrus, Wassell

- All concentrations may be completed at the Frostburg campus.
- The concentrations in General Management and Hospitality Management may be completed at the University System of Maryland at Hagerstown.

Program Requirements

<table>
<thead>
<tr>
<th>Hours Required in College of Business Core:</th>
<th>MAJOR</th>
<th>MINOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>33 hours</td>
<td></td>
<td>18</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Hours Required in Concentration:</th>
<th>MAJOR</th>
<th>MINOR</th>
</tr>
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<tbody>
<tr>
<td>27 hours</td>
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<table>
<thead>
<tr>
<th>Hours Required Outside the College of Business:</th>
<th>MAJOR</th>
<th>MINOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-19 hours</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Total</th>
<th>MAJOR</th>
<th>MINOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>78-79</td>
<td>21</td>
<td></td>
</tr>
</tbody>
</table>

Requirements for Major in Business Administration

1. College of Business Core: (33 hours)
   - ACCT 211* Financial Accounting
   - ACCT 212* Managerial Accounting
   - BLAW 291* Legal Environment of Business
   - FINA 370* Corporate Finance
   - MGMT 110* Career and Professional Development I
   - MGMT 251* Management of Organizations
   - MGMT 310* Career and Professional Development II
   - MGMT 355* Operations Management
   - MGMT 356* Leadership & Human Behavior
   - MGMT 405* Business Ethics and Social Responsibility
   - MGMT 485* Business Policy and Strategy (MGMT Capstone)
   - MKTG 261* Principles of Marketing

2. Courses Outside College of Business: (18-19 hours)
   - Communication Studies (3 hours)
     - CMST 122* Introduction to Public Communication
   - Computer Science (3 hours)
     - COSC 220* Software Applications for Business (Tech. Fluency)
   - Economics (6 hours)
     - ECON 201/211* Principles of Economics (Macro) (GEP Group D)
     - ECON 202/212* Principles of Economics (Micro)
   - Mathematics (6-7 hours)
     - MATH 118* Applied Mathematics for Business
     - or MATH 220* Calculus for Applications I
     - or MATH 236* Calculus I (Core Skill 3)
     - MATH 109/110* Elements of Applied Probability and Statistics (Core Skill 3)
     - or MATH 380* Introduction to Probability and Statistics

3. Area of Concentration: (27 hours)
   - Majors must choose to concentrate in one of the following:
     - Finance
     - General Management
     - Global Business
     - Hospitality Management
     - Human Resource Management
     - Marketing
     - Small Business/Entrepreneurship
   *You must receive a grade of C or better for this course to count toward major.

Requirements for Minor in Business Administration

1. College of Business Core: (18 hours)
   - ACCT 211 Financial Accounting
   - BUAD 100 Introduction to Business
   - or BLAW 291 Legal Environment of Business
   - FINA 303 Principles of Finance
   - or FINA 370 Corporate Finance
   - or FINA 476 Financial Management
   - MGMT 251 Management of Organizations
   - MGMT 356 Leadership & Human Behavior
   - or BMIS 455 Management Information Systems
   - MKTG 261 Principles of Marketing

2. Courses Outside College of Business:
   - Economics (3 hours)
     - ECON 200 Basic Economics
     - or ECON 201/211 Principles of Economics (Macro) (GEP Group D)

Requirements for Concentration in Finance

1. Core Courses (51-52 hours)
   - Required of all majors in Business Administration; listed above.

2. Required Courses in Concentration (12 hours)
   - FINA 375 Financial Institutions Management
   - FINA 475 Securities Investment
FINA 476 Financial Management  
FINA 479 Financial Policy (Capstone)

3. Elective Courses (15 hours)  
Select five courses from among the following:  
ACCT 420 Tax  
FINA 301 Introduction to Personal Financial Planning  
FINA 371 Insurance Planning and Risk Management  
FINA 377 Retirement Income Planning  
FINA 381 Principles of Real Estate  
FINA 405 Short-term Financial Management  
FINA 420 Entrepreneurial Finance  
FINA 451 Estate Planning and Advanced Topics in Financial Planning  
FINA 477 International Financial Management  
FINA 494 Internship in Finance

Or select three courses from above and two courses from among the following:  
ACCT 311 Intermediate Accounting I  
ACCT 312 Intermediate Accounting II  
ACCT 330 Governmental and Nonprofit Accounting  
ACCT 340 Financial Reporting Issues  
ECON 306 Money and Banking  
ECON 351 Intermediate Macroeconomics  
ECON 352 Intermediate Microeconomics  
ECON 400 International Trade

Requirements for Concentration in Global Business  
1. Core Courses (51-52 hours)  
Required of all majors in Business Administration; listed in catalog.  
2. Required Courses in Concentration (15 hours)  
ECON 400 International Trade  
FINA 477 International Financial Management  
or ECON 401 International Finance  
INTR 330 International Business  
MGMT 450 International Management  
MKTG 460 Global Marketing

3. Electives (12 hours)  
Select four from the following 3-credit courses:  
CMST 350 Intercultural Communication  
ECON 309 Comparative Economic Systems  
ECON 405 Economics of Developing Countries  
FINA 494 Internship in Finance  
or MGMT 494 Internship in Management  
or MKTG 494 Internship in Marketing  
GEOG 407 Political Geography  
INTR 490 Special Topics in Global Business  
SPAN 101 Basic Elements of Spanish I  
or FREN 101 Basic Elements of French I  
or MDFL 190 Selected Topics in Foreign Language and Literature  
SPAN 102 Basic Elements of Spanish II  
or FREN 102 Basic Elements of French II  
An additional 3 credits of foreign language study, in the same language

Requirements for Concentration in Hospitality Management  
1. Core Courses (51-52 hours)  
Required of all majors in Business Administration; listed above.  
NOTE: MGMT 485 Business Policy and Strategy serves as concentration capstone.  
2. Required Courses in Concentration (18-24 hours)  
HMGT 101 Analysis of the Hospitality Industry (3 credits online at UMES)  
HMGT 401 Law and the Hospitality Industry (3 credits online at UMES)  

Choose from Option 1 or 2 (12-18 hours)  
Option 1: Travel abroad plus internship option (18 credits)  
HMGT 396 Special Topics in Hospitality Management (12 credits)  
Approved courses will be taken as part of study abroad curriculum at an approved university.  
MGMT 494 Internship in Management (6 credits - maybe be two 3-credit internships)  
Internship must be done at a hotel, resort, or other approved hospitality management location.  

Option 2: Local internship option (12 credits)  
MGMT 494 Internship in Management (12 credits - may be multiple internships totaling 12 credits)  
Internship must be done at a hotel, resort, or other approved hospitality management location.

3. Elective Courses (Option 1: 3 hours; Option 2: 9 hours)  
Select from among the following:  
BMIS 455 Management Information Systems

Requirements for Concentration in General Management  
1. Core Courses (51-52 hours)  
Required of all majors in Business Administration; listed above.  
NOTE: MGMT 485 Business Policy and Strategy serves as concentration capstone.

2. Required Courses in Concentration (9 hours)  
MGMT 315 New Business Ventures  
MGMT 357 Human Resources Management  
MGMT 359 Quality Management

3. Elective Courses (18 hours)  
Select from among:  
BMIS 455 Management Information Systems  
ECON 305 Managerial Economics  
FINA 476 Financial Management  
HMGT 101 Analysis of the Hospitality Industry (3 credits @ UMES)  
HMGT 350 Marketing Hospitality and Leisure Services (3 credits @ UMES)  
HMGT 396 Special Topics in Hospitality Management (3, 6, 9, 12 credits)  
HMGT 401 Law and the Hospitality Industry (3 credits @ UMES)  
MGMT 425 Entrepreneurial Business Plan  
MGMT 450 International Management  
MGMT 452 Staffing and Development  
MGMT 456 Compensation Management  
MGMT 457 Labor Relations  
MGMT 490 Special Topics in Business Administration – Management  
MGMT 494 Internship in Management (1 - 12 credits)  
MGMT 499 Independent Study in Management  
MKTG 366 Consumer Behavior  

NOTE: A total of no more than 6 hours of credit in HMGT 396 and/or MGMT 494 may count as elective hours.
Requirements for Concentration in Human Resource Management

1. Core Courses (51–52 hours)
   Required of all majors in Business Administration; listed above.
   NOTE: MGMT 485 Business Policy and Strategy serves as concentration capstone

2. Required Courses in Concentration (15 hours)
   MGMT 357 Human Resources Management
   MGMT 450 International Management
   MGMT 452 Staffing and Development
   MGMT 456 Compensation Management
   MGMT 457 Labor Relations

3. Elective Courses (12 hours)
   Select from among the following:
   BMIS 455 Management Information Systems
   CMST 300 Communication & Relationships
   CMST 335 Organizational Communication
   ECON 301 Labor Economics
   MGMT 315 New Business Ventures
   MGMT 359 Quality Management
   MGMT 425 Entrepreneurial Business Plan
   MGMT 490 Special Topics in Business Administration — Management
   MGMT 494 Internship (3 or 6 credits)
   MGMT 499 Independent Study in Management

Requirements for Concentration in Marketing

1. Core Courses (51–52 hours)
   Required of all majors in Business Administration; listed above.

2. Required Courses in Concentration (12 hours)
   MKTG 366 Consumer Behavior
   MKTG 462 Marketing Research
   MKTG 465 Marketing Strategies
   MKTG 469 Marketing Plans Development (Capstone)

3. Elective Courses (15 hours)
   Select five (including at least three MKTG) from among the following:
   ART 207 Graphic Design
   CMST 322 Presentational Communication
   GEOG 410 Locational Analysis
   MGMT 359 Quality Management
     or MGMT 315 New Business Ventures
   MKTG 363 Advertising
   MKTG 364 Branding Strategy
   MKTG 365 Professional Selling and Relationship Management
   MKTG 460 Global Marketing
   MKTG 466 Services Marketing
   MKTG 467 Digital and Social Media Marketing
   MKTG 494 Internship in Marketing
   RECR 384 Special Event Management

Requirements for Concentration in Small Business/Entrepreneurship

1. Core Courses (51–52 hours)
   Required of all majors in Business Administration; listed above.
   NOTE: MGMT 485 Business Policy and Strategy serves as concentration capstone

2. Required Courses in Concentration (18 hours)
   FINA 420 Entrepreneurial Finance
   MGMT 315 New Business Ventures
   MGMT 357 Human Resources Management
   MGMT 359 Quality Management
   MGMT 425 Entrepreneurial Business Plan
   MKTG 366 Consumer Behavior

3. Elective Courses (9 hours)
   Select from among the following:
   CMST 300 Communication & Relationships
     or CMST 322 Presentational Communication
     or CMST 335 Organizational Communication
   ECON 305 Managerial Economics
   MGMT 101 Analysis of the Hospitality Industry (3 credits @ UMES)
   MGMT 350 Marketing Hospitality and Leisure Services (3 credits @ UMES)
   MGMT 396 Special Topics in Hospitality Management (1 to 12 credits)
   MGMT 401 Law and the Hospitality Industry (3 credits @ UMES)
   INTR 330 International Business
   MGMT 450 International Management
   MGMT 490 Special Topics in Business Administration — Management
   MGMT 494 Internship in Management (3 or 6 credits)
   MGMT 499 Independent Study in Management

NOTE: A total of no more than 6 hours of credit in MGMT 396 and/or MGMT 494 may count as elective hours.
Economics

MAJOR

BUSINESS CONCENTRATION

Professors: Anderson, Stair (Chair)
Associate Professors: Kiriazis, Kucher, McCoskey
Assistant Professors: Rossi, Nabar-Bhaduri

- The Concentration in Business Economics is recommended for students who intend to seek employment in the private sector and/or pursue graduate study in business.

Program Requirements

| Hours Required in College of Business Core | 33 |
| Hours Required in Economics               | 27 |
| Hours Required Outside College of Business | 19-20 |
| **Total Hours Required for Major:**       | **79-80** |

Requirements for Major in Economics with Concentration in Business Economics

1. College of Business Core: (33 hours)
   - ACCT  211* Financial Accounting
   - ACCT  212* Managerial Accounting
   - BLAW  291* Legal Environment of Business
   - FINA  370* Corporate Finance
   - MGMT 110* Career and Professional Development I
   - MGMT 251* Management of Organizations
   - MGMT 310* Career and Professional Development II
   - MGMT 355* Operations Management
   - MGMT 356* Leadership & Human Behavior
   - MGMT 405* Business Ethics and Social Responsibility
   - MGMT 485* Business Policy and Strategy (Capstone)
   - MKTG  261* Principles of Marketing

2. Courses Outside College of Business: (19-20 hours)
   - Economics (6 hours)
     - ECON 201/211* Principles of Economics (Macro) (GEP Group D)
     - ECON 202/212* Principles of Economics (Micro)
   - Communication Studies (3 hours)
     - CMST  122* Introduction to Public Communication
   - Computer Science (3 hours)
     - COSC  220* Software Applications for Business (Tech. Fluency)
   - Mathematics (7-9 hours)
     - ECON  450* Quantitative Economics
     - and MATH 118* Applied Mathematics for Business
     - or MATH 220* Calculus for Applications I

3. Area of Concentration: (27 hours)
   - ECON 305 Managerial Economics
   - ECON 351* Intermediate Macro-Economics
   - ECON 352* Intermediate Micro-Economics
   - ECON 400 International Trade
   - or ECON 401 International Finance
   - ECON 460* Introduction to Econometrics
   - ECON 491* Seminar in Economics (Capstone)

Select three of the following courses:
   - ECON 301 Labor Economics
   - ECON 306 Money and Banking
   - ECON 408 Urban and Regional Economics
   - ECON 492 Internship Research Paper
   - ECON 494 Field Experience in Economics

* Note: You must receive a grade of C or better for this course to count toward the major.

Economics

MAJOR

MINOR

CONCENTRATIONS IN:
- PUBLIC POLICY ECONOMICS
- QUANTITATIVE ECONOMICS

Professors: Anderson, Stair (Chair)
Associate Professors: Kiriazis, Kucher, McCoskey
Assistant Professors: Rossi, Nabar-Bhaduri

- All economics majors other than those with a business economics concentration must complete a common core curriculum. Students may major in economics without pursuing a specialized concentration or they may pursue a concentration in Business Economics, Public Policy Economics or Quantitative Economics.
- The economics major without specialized concentration is appropriate for students with a social science perspective. It provides excellent preparation for entry-level employment in the private or public sectors, as well as for law school or graduate school.
- The Concentration in Public Policy Economics is recommended for students who intend to seek employment in government or with other policy-oriented organizations.
- The Concentration in Quantitative Economics is recommended for students who intend to seek employment in economic consulting or forecasting and/or pursue graduate study in economics.
- A concentration in International Economics is available in the International Studies Major.
Program Requirements

<table>
<thead>
<tr>
<th></th>
<th>MAJOR</th>
<th>MINOR</th>
</tr>
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<tbody>
<tr>
<td>Hours Required in Economics:</td>
<td>33-36</td>
<td>42-45</td>
</tr>
<tr>
<td>Hours Required in Other Departments:</td>
<td>6</td>
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<td>Total Hours Required:</td>
<td>39-42</td>
<td>48-51</td>
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</table>

Requirements for Major in Economics

1. Required Core Courses in Economics:
(18 hours)
ECON 201/211* Principles of Econ. (Macro) (GEP Group D
ECON 202/212* Principles of Econ. (Micro)
ECON 351* Intermediate Macro-Economics
ECON 352* Intermediate Micro-Economics
ECON 460* Introduction to Econometrics
ECON 491* Seminar in Economics (Capstone)

2. Required Core Courses in Other Departments:
(3 hours)
MATH 236* Calculus I (Core Skill 3)
MATH 237 Calculus II
MATH 350 Linear Algebra I

3. Other Courses:
(18-42 hours)
Majors must choose from among the major in economics without specialized concentration, the public policy economics concentration or the quantitative economics concentration.

Requirements for Major in Economics without specialized concentration

1. Core Courses: (21 hours)
Required of Economics majors; listed above.

2. Other Economics Courses: (15 hours)
ECON 300* History of Economic Thought
Students must also complete 12 additional elective credit hours in economics (excluding ECON 495) at the 300 or 400 level, of which at least 6 hours must be at the 400 level.

3. Courses in Other Departments: (3-6 hours)
MATH 236* Calculus I (Core Skill 3)
MATH 237 Calculus II
MATH 350 Linear Algebra I

Requirements for Minor in Economics

1. Required Core Courses in Economics:
(18 hours)
ECON 201/211* Principles of Econ. (Macro) (GEP Group D
ECON 202/212* Principles of Econ. (Micro)
ECON 351* Intermediate Macro-Economics
ECON 352* Intermediate Micro-Economics

2. Required Core Courses in Other Departments:
(3 hours)
MATH 109/110* Elements of Applied Probability and Statistics (Core Skill 3)

3. Other Courses:
(9-10 hours)
MATH 236* Calculus I (Core Skill 3)
MATH 237 Calculus II
MATH 350 Linear Algebra I

Requirements for Major in Economics with Concentration in Quantitative Economics

1. Core Courses: (21 hours)
Required of Economics majors; listed above.

2. Other Economics Courses: (15 hours)
ECON 300 History of Economic Thought
ECON 450 Quantitative Economics

Students must also complete at least 9 additional elective credit hours in economics (excluding ECON 495) or Mathematics (excluding MATH 495) at the 300 or 400 level.

3. Courses in Other Departments: (11 hours)
MATH 236* Calculus I (Core Skill 3)
MATH 237 Calculus II
MATH 350 Linear Algebra I

Requirements for Major in Economics with Concentration in Public Policy Economics

1. Core Courses: (21 hours)
Required of Economics majors; listed above.

2. Other Economics Courses: (24 hours)
ECON 300 History of Economic Thought
ECON 307 Government, Business, and Public Policy
ECON 309 Comparative Economic Systems
ECON 404 Public Sector Economics
Select four of the following courses:
ECON 301 Labor Economics
ECON 306 Money and Banking
ECON 400 International Trade
ECON 401 International Finance
ECON 408 Urban and Regional Economics
ECON 410 Resource and Environmental Economics
ECON 492 Internship Research Paper
ECON 494 Field Experience in Economics

3. Courses in Other Departments: (3-6 hours)
MATH 236* Calculus I (Core Skill 3)
or MATH 220* Calculus for Applications I
or MATH 118* Applied Mathematics for Business
and ECON 450* Quantitative Economics

Finance

MINOR

Coordinator: Dr. Carol Gaumer, Chair, Dept. of Marketing and Finance
- You cannot earn the minor in finance if you are completing a major in business administration with a concentration in finance.
- You cannot major in finance.

Program Requirements

<table>
<thead>
<tr>
<th>Requirements for Minor in Finance</th>
<th>MINOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Hours Required:</td>
<td>18</td>
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</tbody>
</table>

You should consider the minor in finance if you are completing a major not subject to the requirements of the College of Business Core Curriculum (primarily majors outside the College of Business). This minor will give you the opportunity to learn the basic concepts and principles of finance, both for personal benefit and to explore a career in the finance profession.

Requirements for Minor in Financial Services

FINA 370 Corporate Finance or FINA 476 Financial Management
Select five courses from among the following:
FINA 301 Introduction to Personal Financial Planning
FINA 371 Insurance Planning and Risk Management
FINA 375 Financial Institutions Management
FINA 377 Retirement Income Planning
FINA 381 Principles of Real Estate
FINA 405 Short-term Financial Management
FINA 420 Entrepreneurial Finance
or FINA 476 Financial Management
(if not selected to meet the requirement listed above)
FINA 475 Securities Investment
FINA 477 International Financial Management

Financial Services

MINOR

Coordinator: Dr. Carol Gaumer, Chair, Dept. of Marketing and Finance
- You cannot earn the minor in financial services if you are completing the major in business administration with a concentration in finance.
- You cannot major in financial services.

Program Requirements

<table>
<thead>
<tr>
<th>Requirements for Minor in Financial Services</th>
<th>MINOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Hours Required:</td>
<td>18</td>
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</tbody>
</table>

You should consider the minor in financial services if you are majoring in another discipline within the College of Business that requires you to complete the College of Business Core Curriculum. You need to be prepared to take advanced finance courses.
Human Resource Management

MINOR

Coordinator: Dr. Michael Monahan, Chair, Department of Management

- Only courses in which a grade of C or better is earned will count towards satisfaction of minor requirements.
- Not open to students completing the human resource management concentration in the business administration major.

Program Requirements

<table>
<thead>
<tr>
<th>MINOR</th>
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</thead>
<tbody>
<tr>
<td>Hours Required in Management:</td>
</tr>
<tr>
<td>Hours Required in Other Departments:</td>
</tr>
<tr>
<td>Total Hours Required:</td>
</tr>
</tbody>
</table>

Requirements for Minor in Human Resource Management

1. Required Courses (18 hours)

MGMT 251 Principles of Management
MGMT 357 Human Resources Management
MGMT 405 Business Ethics and Social Responsibility
or PSYC 360 Industrial/Organizational Psychology
MGMT 452 Staffing and Development
MGMT 456 Compensation
MGMT 457 Labor Relations and Collective Bargaining

Management

MINOR

Coordinator: Dr. Michael Monahan, Chair, Department of Management

- The Department of Management also offers concentrations in general management, hospitality management, human resource management and small business/entrepreneurship as specialties in the business administration major. Concentrators in these areas cannot minor in management.
- You cannot major in Management

Program Requirements

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>1. Hours Required in Marketing:</td>
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<tr>
<td>2. Total Hours Required:</td>
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</table>

Marketing

MINOR

Coordinator: Dr. Carol Gaumer, Chair, Dept. of Marketing and Finance

- Only courses in which a grade of C or better is earned will count towards satisfaction of minor requirements.
- Not open to students completing the marketing concentration in the business administration major.
- You cannot major in Marketing
Requirements for Minor in Marketing

1. Required Courses: (6 hours)
   MKTG 261 Principles of Marketing
   MKTG 366 Consumer Behavior

2. Elective Courses: (12 hours)
   Select four of the following:
   MKTG 363 Advertising
   MKTG 364 Branding Strategy
   MKTG 365 Professional Selling and Relationship Management
   MKTG 460 Global Marketing
   MKTG 465 Marketing Strategies
   MKTG 466 Services Marketing
   MKTG 467 Digital and Social Media Marketing

Small Business/Entrepreneurship

MINOR

Coordinator: Dr. Michael Monahan, Chair, Department of Management
- The Department of Management also offers concentrations in general management, hospitality management, human resource management and small business/entrepreneurship as specialties in the business administration major. Concentrators in these areas cannot minor in small business/entrepreneurship.
- You cannot major in small business/entrepreneurship.

Program Requirements

<table>
<thead>
<tr>
<th></th>
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<td>Hours Required in other Departments:</td>
<td>3</td>
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<td>Total Hours Required:</td>
<td>18</td>
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</tbody>
</table>

Requirements for Minor in Small Business/Entrepreneurship

1. Required Courses (18 hours)
   MGMT 251 Management of Organizations
   MGMT 315 New Business Ventures
   MGMT 356 Leadership & Human Behavior
   MGMT 357 Human Resources Management
   MGMT 425 Entrepreneurial Business Plan
   MKTG 261 Principles of Marketing

Working Professional Certificates

UPPER DIVISION CERTIFICATES IN:
- MANUFACTURING LEADERSHIP
- NON-PROFIT LEADERSHIP
- SMALL BUSINESS MANAGEMENT
- RETAIL MANAGEMENT

Frostburg State University offers the Working Professional Upper Division Level Certificates in an online environment for those who seek to significantly develop professional management knowledge and skills for career advancement and marketability. The Certificates will advance your career opportunities and take you deeper into a subject area for greater expertise. Credits earned may, in the future, be applied to the BS in Business Administration degree, subject to completing the applicable admissions process for undergraduate education at FSU.

Each certificate program consists of a minimum of 12 credits. Up to 18 credits may be required for certain prerequisites to be met. All programs can be completed on a part-time basis over two semesters.

The Certificate programs bring timely and relevant information to the participant with assistance from industry leaders in the chosen field. Each program represents an area of tremendous need for major industries both regionally and nationally.

Admission requirements for certificates:
Students must meet the academic prerequisite requirements of the courses within the Certificate program. Candidates will have an AA degree or credit equivalency and be employed in a relevant work setting. Enrollees will be considered non-degree-seeking students through the duration of the Certificate program. Credits earned may, in the future, be applied to the BS in Business Administration degree, subject to completing the applicable admissions process for undergraduate education at FSU.

Upper-Division Certificate Curriculum:
Certificate in Manufacturing Leadership (12–18 hours)

Certificate in Non-Profit Leadership (12–15 hours)

Certificate in Small Business Management (12 hours)

Certificate in Retail Management (12–15 hours)
The College of Education

Programs offered in the College of Education

Department of Educational Professions
- Early Childhood/Elementary Education
- Elementary Education
- Elementary/Middle School Dual Certification
- P-12 Programs
- Secondary Teacher Education

Department of Kinesiology & Recreation
- Adventure Sports Management
- Coaching
- Exercise & Sport Science
- Exercise & Sports Science BS/Athletic Training MS (Combined)
- Health & Wellness Education
- Recreation & Parks Management

Dr. Boyce Williams
Dean

Dr. Kim Rotruck
Associate Dean
Vision

The College of Education is recognized for providing experientially based learning opportunities. Its distinctive and distinguished programs contribute to the reputation of Frostburg State University as the premier educational and cultural center for the region and for serving as a catalyst for economic development.

Mission

The mission of the College of Education is to advance the study and best practices in the fields of teaching, kinesiology and recreation and parks management by providing its candidates with rigorous, experientially based programs.

Core Values

- Academic Excellence
- Lifelong Learning
- Diverse Learning Environments
- High Standards of Ethics, Integrity, Responsibility, and Accountability
- Engagement and Collaboration with Community Members and Organizations
- Reflection and Assessment to Make Informed Decisions

Goals

- COE programs provide candidates with the knowledge and skills and model dispositions that lead to academic excellence, service, research, and other professional activities.
- COE programs promote the tools needed for candidates to develop the ability to reflect and use data to make informed decisions.
- COE programs deliver engaging and stimulating experiences to promote professional development and lifelong learning.
- COE is committed to creating supportive learning environments that promote community outreach and collaboration with community needs and future employers.
- COE recruits and retains diverse and high-quality students, faculty, staff and administrators.
- COE supports efforts to continually reflect and improve on the operations of the College and departments.
Educational Professions

Professors: Welsch
Associate Professors: Boayue, Eirich, Mattern, McGee, Milleson, Rankin
Assistant Professors: Bishoff, O'Neal
Lecturers: Park, Durham

- You may elect to major in one of four areas: Early Childhood/Elementary, Elementary Education, Elementary/Middle Education or Secondary/P12.
- All Elementary majors are required to have a concentration.
- All Elementary/Middle majors are required to have a specialization.
- Professional education sequences for secondary and P-12 programs are provided in cooperation with other departments (see separate sections of this catalog).
- You cannot minor in education.
- Internships are required.
- You must complete an application for each phase of the program. The requirements for entry in phases are described in this section.
- Further information is available in the Education Unit Advisement Center in Framptom Hall 223.

Teacher Education Programs

The Educational Professions Department offers three elementary education majors: Early Childhood/Elementary major leading to eligibility for certification in PreK through grade 6, Elementary for certification in grades 1-6, and Elementary/Middle for certification in grades 1-9.

The Educational Professions Department also offers approved teacher education programs leading to eligibility for certification in Secondary Education in the areas of English, Spanish, mathematics and social studies for grades 7-12 as well as middle school with a content area specialization, and P-12 Education (art, music, health and physical education) for grades Pre-Kindergarten-12.

Requirements for these majors and programs are listed in the catalog under Early Childhood/Elementary Education, Elementary Education, Elementary/Middle School Dual Certification, P-12 Programs, Secondary Teacher Education, and departments offering the areas of content specialization.

The teacher education programs are committed to preparing professionals who are able to provide quality instruction, service, and leadership in a global community. The conceptual framework upon which each program rests focuses on the knowledge, skills and dispositions needed to develop powerful learning communities.

Eligibility for Teacher Certification in Maryland

For eligibility for teacher certification, candidates must complete the approved program requirements, university graduation requirements and state-required assessments demonstrating the knowledge and skills of a specialized content area according to the requirements of the Maryland State Department of Education. Candidates must demonstrate the knowledge and skills required by the Maryland State Department of Education in order to gain certification.

Candidates may apply for a certificate of eligibility directly to the Maryland State Department of Education or the personnel office of a county offering employment.

Eligibility for Teacher Certification in Other States

If candidates wish to gain a teaching license in a state other than Maryland, candidates need to check the certification requirements in the state(s) for the program in which they wish to teach, including the passing scores for state-required assessments. Having a Maryland certificate of eligibility may prove helpful in the out-of-state certification effort.

Approved Program

Since CAEP (Council for the Accreditation of Educator Preparation) [formerly NCATE, the National Council for the Accreditation of Teacher Education] nationally recognizes FSU’s teacher education programs and the Maryland State Department of Education has approved FSU’s teacher education programs, the Department of Educational Professions authorizes the Registrar’s Office to affix an approved program stamp on official transcripts upon satisfactory completion of all requirements.

Special Admission Criteria

In addition to the requirements set forth in the summaries of requirements for majors in Early Childhood/Elementary, Elementary, Elementary/Middle, Secondary Programs and P-12 Programs (found in separate sections of this catalog), applicants must meet admission requirements in order to be accepted into and complete each phase of the education program.

Accreditation

Teacher Education Programs are approved by the State of Maryland under the Redesign for Teacher Education. Colleges, schools and departments of education are accredited by the Council for the Accreditation of Educator Preparation (CAEP). Individual education programs are recognized by professional content area associations which offer national recognition for being compliant with national standards.
**Program Entrance Requirements**

1. Completion of at least 45 credit hours.
2. Cumulative GPA of at least 2.5 (including all grades from transfer institutions).
3. Meeting basic skills requirements set by the Maryland State Department of Education through qualifying scores on PRAXIS CORE, SAT, ACT or having a cumulative GPA of 3.0 including all grades from transfer institutions.
4. Grade of C or better (or P) in all required Professional Education Sequence courses, including transfer equivalents, designated by program.
5. Grade of C or above in ENGL 101/111 or equivalent and Math Core Skills course.
6. Grade of C or above in MATH 206 or 207 or transfer equivalent (P-9 only).
7. Positive recommendation of advisor.
8. Twenty (20) documented hours of working with diverse populations.
9. Declaration of a major.
10. Declaration of a specialization or concentration (P-9 only).
11. Negative result on current TB test.
13. Fingerprinting as a background check is required. For more information, contact the Office of Clinical and Field Experiences in Framptom 215.

**Assistantship Admission Requirements (P-9 only)**

1. Cumulative FSU GPA of at least 2.5.
2. Cumulative GPA of at least 2.5 in the Professional Education Sequence, designated by program.
3. Grade of C or better (or P) in all required Professional Education Sequence courses, including transfer equivalents, designated by program.
4. Grade of C or above in ENGL 308 or equivalent.
5. Positive recommendation of advisor.
6. Seventy-five percent or 18 credits of specialization or concentration completed.
7. Grade of C or better in MATH 206 and MATH 207 or transfer equivalents.
8. Acceptable rating on professional dispositions evaluation.

**Internship I Admission Requirements**

1. Successful completion of field work courses.
2. Cumulative FSU GPA of at least 2.5.
3. GPA of at least 2.5 in Assistantship courses (P-9 only).
4. Grade of C or better (or P) in all required Professional Education Sequence courses, including transfer equivalents, designated by program.
5. Grade of C or better in MUSC 350 or EDUC 333 and PHEC 309 (P-9 only).
6. Successful completion of an entrance interview/conference.
7. Acceptable rating on professional dispositions evaluation.

**Internship II Admission Requirements**

1. Cumulative FSU GPA of at least 2.60.
2. Cumulative GPA of at least 2.75 in the Professional Education Sequence, designated by program.
3. GPA of at least 2.75 in content major or area of specialization/concentration.
4. Grade of C or better (or P) in all required Professional Education Sequence courses, including transfer equivalents, designated by program.
5. Passing score on Early Childhood Comprehensive Exam (EC/Elem only)
6. Successful completion of Internship I.
7. Negative result on current TB test.
8. Positive recommendation of advisor and approval of program coordinator.
9. Verification of completion of or registration for content knowledge and pedagogy assessments required by the Maryland State Department of Education.
10. Acceptable rating on professional dispositions evaluation.

**Program Exit Requirements**

1. Submission of a Teacher Performance Assessment that meets institutional standards.
2. Successful completion of an exit interview that meets institutional standards.
3. Completion of the PRAXIS II content knowledge and pedagogy assessments required by the Maryland State Department of Education.
4. Successful completion of Internship II field work and seminar.

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**Early Childhood/Elementary Education**

**MAJOR**

**Professors:** Welsch

**Associate Professors:** Boayue, Eirich, Mattern, McGee, Milleson, Rankin

**Assistant Professors:** Bishoff, O’Neal

**Lecturers:** Durham, Park

- The requirements in numbers 1-3 list specific hours required in other departments. These requirements include but go beyond the University GEP. A list of recommended GEP courses is available in the Department of Educational Professions.
- You must complete the 24-hour early childhood specialization.
- If you complete EDUC 325, Educational Technology, with a grade of C or better, you will fulfill the University’s technology fluency requirement.
- You must complete application for each phase of the program.
- The requirements for entry into phases are listed in the Educational Professions section of this catalog.
- The Early Childhood/Elementary Education major (early childhood specialization) can be completed on the Frostburg campus and, in cooperation with area community colleges, at the University System of Maryland at Hagerstown.
- A grade of C or better (or P) is required in all specialization or concentration courses taught within the Educational Professions department or transfer equivalent.

**Program Requirements**

<table>
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<th></th>
<th>MAJOR</th>
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<td>Hours Required in Education:</td>
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<td>Hours Required in Other Departments:</td>
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</tr>
<tr>
<td>Total Hours Required:</td>
<td>128-132</td>
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</table>
Requirements for Major in Early Childhood/Elementary Education

A dual certification program

Major

1. Completion of GEP: (41 hours)
   a. Core Skills (9) including MATH 109/110 (3) or MATH 119 (3), ENGL 101 (3) and Advanced Writing (3)
   b. Modes of Inquiry (29-32) including two 4-credit natural science courses

2. Additional Required Courses for Early Childhood/Elementary Majors:
   a. MATH 206 Problem solving for Elementary Teachers I (3)
   b. MATH 207 Problem solving for Elementary Teachers II (3)
   c. 4 credit laboratory science elective (4)
   d. MUSC 350 Music and Creative Interaction for the Elementary Classroom (3)
or EDUC 333 Integrated Arts in the Elementary Classroom (3)
e. PHEC 309 Health and Physical Education for the Elementary Classroom (3)

3. Specialization (24 hours; 2 courses satisfy GEP)
   a. ART 110 Visual Imagery (3 hours satisfy GEP Group A)
   b. ECED 150 Early Childhood Foundations (3 hours taken Pre-entrance or concurrent with Apprenticeship)
   c. ECED 293 Early Childhood Learning Environment, Materials and Methods (3 hours taken Pre-entrance or concurrent with Apprenticeship)
   d. ECED 431 Early Childhood Education Curriculum Development, Implementation and Assessment (3 hours taken during Internship I)
   e. ECED 443 Adults in the Child's World (3 hours taken during Apprenticeship)
   f. EDUC 390 Field Experience in Early Childhood Education (3 hours taken during Apprenticeship)
   g. PSYC 150/151 General Psychology (3 hours satisfy GEP Group D)
   h. PSYC 210 Child Development or PSYC 208 Introduction to Lifespan Development (3)

4. Professional Education Sequence (56 hours)
   See admission requirements for each phase.

   Pre-Entrance
   EDUC 100 Introduction to Teacher Education (1)
   EDUC 201 Students, Teachers and Learning Environments (3 hours taken Pre-entrance or concurrent with Apprenticeship)
   EDUC 202 Foundations of Learning and Instruction (3 hours taken Pre-entrance or concurrent with Apprenticeship)
   EDUC 325 Educational Technology (3 hours taken Pre-entrance or concurrent with Apprenticeship)

   Apprenticeship (7 hours)
   EDUC 200 Teaching and Professional Assessment Laboratory (1)
   EDUC 376 Special and Multicultural Education (3)
   REED 323 Process and Acquisition of Reading (3)

   Course required concurrent with Apprenticeship for Early Childhood/Elementary Candidates enrolled at University System of Maryland—Hagerstown:
   EDUC 335 Teaching Frameworks (2) (which replaces EDUC 100 and EDUC 200)

   Assistantship (14 hours)
   EDUC 401 Assistantship Seminar (1)
   ELED 307 Teaching Assistantship (1)

   ELED 471 Mathematics Curriculum, Methods and Assessment (3)
   ELED 474 Science Curriculum, Methods and Assessment (3)
   ELED 475 Social Studies Curriculum, Methods and Assessment (3)
   REED 473 Reading Instruction (3)

   Internship I (13 hours)
   ELED 494 Teaching Internship I: P-9 (6)
   EDUC 402 Internship I Seminar (1)
   REED 420 Assessment for Reading Instruction (3)
   REED 425 Materials and Motivations for Reading (3)

   Internship II (12 hours)
   EDUC 422 Leadership Seminar P-9 (3)
   ELED 495 Teaching Internship II: P-9 (9) (Capstone)

5. Other Internship Requirements
   a. Students must complete any school district requirements (application, fingerprinting, background check, drug testing, etc.) to qualify for an internship placement.

6. Other Graduation/Program Exit Requirements
   a. Submission of a Teacher Performance Assessment that meets institutional standards
   b. Successful completion of an exit interview that meets institutional standards.
   c. Completion of the PRAXIS II content knowledge and pedagogy assessments required by the Maryland State Department of Education.
   d. Successful completion of required field experiences in early childhood (PreK-K), primary (1-3) and intermediate (4-5) grades.

Elementary Education

MAJOR

CONCENTRATIONS IN

- INTEGRATED ARTS
- LANGUAGE AND LITERACY
- SOCIAL SCIENCE AND CIVICS
- STEM

Professors: Welsh
Associate Professors: Boayue, Eirich, Mattern, McGee, Milleson, Rankin
Assistant Professors: Bishoff, O'Neal
Lecturers: Durham, Park

- The requirements in numbers 1-3 list specific hours required in other departments. These requirements include but go beyond the University GEP. A list of recommended GEP courses is available in the Department of Educational Professions.
- If you complete EDUC 325, Educational Technology, with a grade of C or better, you will fulfill the University’s technology fluency requirement.
- You must complete a 24 credit concentration in the listed area or an approved Individualized Specialization.
- A grade of C or better (or P) is required in all specialization or concentration courses taught within the Educational Professions department or transfer equivalent.
- You must complete application for each phase of the program.
- The requirements for each phase of the program are listed in the Educational Professions section of this catalog.

### Program Requirements

<table>
<thead>
<tr>
<th>CONCENTRATIONS:</th>
<th>INTENG. ARTS</th>
<th>LANG. &amp; LIT.</th>
<th>SOC. SCI. &amp; CIV.</th>
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<td>128-131</td>
<td>125-128</td>
<td>123-126</td>
</tr>
</tbody>
</table>

### Requirements for Major in Elementary Education

1. Completion of GEP (38-41 hours)
   a. Core Skills (9) including MATH 109/110 (3) or MATH 119 (3) and Advanced Writing (3)
   b. Modes of Inquiry (29-32) including two 4-credit natural science courses.

2. Additional Required Courses for Elementary Majors (16 hours)
   a. MATH 206 Problem solving for Elementary Teachers I (3)
   b. MATH 207 Problem solving for Elementary Teachers II (3)
   c. 4 credit laboratory science elective (4)
   d. MUSC 350 Music and Creative Interaction for the Elementary Classroom (3)
   or EDUC 333 Integrated Arts in the Elementary Classroom (3)
   e. PHEC 309 Health and Physical Education for the Elementary Classroom (3)

3. Concentrations (24 hours, at least 2 courses count for GEP or Additional Required Courses)

### Requirements for Integrated Arts Concentration (24 hours)

a. Required Courses (15 hours)
   i. ART 110 Visual Imagery (GEP Group A)
   ii. MUSC 110 Music Appreciation (GEP Group A)
   iii. DANC 110 Dance Appreciation (GEP Group A)
   or THEA 110 Introduction to Acting

   iv. MUSC 350 Music and Creative Interaction for the Elementary Classroom
   v. EDUC 333 Integrated Arts in the Elementary Classroom

b. Electives (9 hours) May use a course only once

GROUP I Music
- MUSA 111 Class Guitar I
- MUSC 319 University Chorale
- MUSC 329 Marching Band
- MUSC 330 Wind Ensemble
- MUSC 331 Brass Ensemble
- MUSC 335 String Ensemble
- MUSC 336 Guitar Ensemble
- MUSC 337 Woodwind Ensemble
- MUSC 339 Percussion Ensemble

GROUP II Visual Arts
- ART 202 Ceramics
- ART 207 Graphic Design
- ART 212 Drawing
- ART 216 Illustration
- ART 221 Painting
- ART 232 Printmaking
- ART 235 Photography
- ART 240 Sculpture
- ART 336 Digital Imaging for the Fine Arts

GROUP III Dance
- DANC 131 Ballet I
- DANC 154 Jazz I
- DANC 165 Tap I
- DANC 305 Improvisation
- DANC 429 Special Topics in Dance

GROUP IV Drama
- THEA 104 Theatre
- THEA 107 Introduction to Theatrical Vision (GEP Group A)
- THEA 204 Stagecraft
- THEA 210 Voice and Movement
- THEA 315 Creative Dramatics

GROUP V Mass Communication
- MCOM 100 Digital Audio Workshop
- MCOM 101 FSU-TV3 Television Workshop
- MCOM 213 Digital Audio Production
- MCOM 250 Announcing and Performing

### Requirements for Language and Literacy Concentration (24 hours)

a. Required courses (6 hours)
   i. ENGL 150/250 Introduction to Literature (GEP Group B)
   or ENGL 221 Introduction to Literature/Intermediate Composition (GEP Group B)
   ii. ENGL 308/309/310/312/300/330/338/339 Advanced Writing (GEP Core Skills)

b. Required Advanced Courses (6 hours)
   i. REED 440 Children's Literature
   or ENGL 276 Adolescent Literature
   ii. EDUC 372 Teaching Writing in the Classroom
   or ELED 472 Language Arts Methods
c. Supporting Course (3 hours required; choice of 1 course)
   i. ENGL 418 Second Language Acquisition: Theory and Application
   ii. SPAN 101 Basic Elements of Spanish I
   iii. FREN 101 Basic Elements of French I
   iv. MDFL 111 Intercultural Understanding (GEP Group F)
   v. CMST 350 Intercultural Communication (GEP Group F)

d. Electives (9 hours) Select from at least two different areas; May use a course only once

GROUP I Reading
   ENGL 231 African American Literature
   ENGL 260 British Literature: Beowulf to Present
   ENGL 261 American Literature: Colonial to Present
   ENGL 270 European and Neo-European Literature
   ENGL 271 Asian and African Literature
   ENGL 290 Topics in Language and Literature
   EDUC 490 Special Topics in Education - Festival of Children’s Literature (1 credit, must be taken 3 times)
   ENGL 276 Adolescent Literature
   REED 440 Children’s Literature

GROUP II Writing
   EDUC 372 Teaching Writing in the Classroom
   ENGL 300 Critical Writing about Literature
   ENGL 334 Creative Writing: Fiction
   ENGL 335 Creative Writing: Poetry
   ENGL 336 Journalistic Writing
   ENGL 430 Composing Process

GROUP III Listening, Speaking, Viewing and Visually Representing
   CMST 102 Introduction to Strategic Communication Leadership
   CMST 122 Introduction to Public Communication
   CMST 215 Small Group Communication
   CMST 345 Conflict Management
   CMST 350 Intercultural Communication
   ELED 472 Language Arts Methods
   ENGL 418 Second Language Acquisition: Theory and Application

GROUP IV Teaching English Language Learners
   SPAN 101 Basic Elements of Spanish I
   SPAN 211 Spanish Grammar, Composition & Conversation
   FREN 101 Basic Elements of French I
   FREN 102 Basic Elements of French II
   MDFL 111 Intercultural Understanding (GEP Group F)
   MDFL 190 Selected Topics in Foreign Language and Literature
   MDFL 290 Selected Topics in Foreign Language and Literature

Requirements for Social Science and Civics Concentration (24 hours)

a. Required Courses in Social Science (3 hours)
   i. HIST 103 History of United States, 1492 to 1876
   or HIST 104 History of United States, 1876 to present

b. Additional required courses in Social Science (18 hours)
   ii. ECON 200 Basic Economics (GEP Group D)
   or ECON 201/211 Principles of Economics (Macro) (GEP Group D)
   iii. GEOG 104/114 Human Geography (GEP Group D or F)
   or GEOG 110 World Regional Geography: Cultural Diversity (GEP Group D)

Requirements for STEM Concentration (24 hours)

a. Required courses (8 hours; choice of 2 courses)
   i. BIOL 149/159 General Biology I (GEP Group C)
   ii. CHEM 150 General, Organic and Biochemistry (GEP Group C) OR CHEM 201 Chemistry I (GEP Group C)
   iii. GEOG 103 Physical Geography (GEP Group C)
   iv. PHYS 215 General Physics (GEP Group C)

b. Additional required courses in Technology and Engineering (3 hours required; choice of 1 course)
   i. COSC 101 The Discipline of Computer Science
   ii. COSC 130 Introduction to Programming
   iii. ENES 100 Introduction to Engineering Design

c. Additional required courses in Mathematics (6 hours required)
   i. MATH 109 Elements of Applied Probability and Statistics
   ii. MATH 119 College Algebra (GEP Core Skills)

d. Required courses in STEM Education (4 hours)
   i. EDUC 340 STEM Education Through a Transdisciplinary Approach (Phase I admission)
   ii. EDUC 440 STEM Laboratory (Phase III admission)
e. Elective in Problem Solving (3 hours)

GROUP I Technical
COSC 101 The Discipline of Computer Science
COSC 130 Introduction to Programming
GEOG 208 Earth Systems History
GEOG 324 Urban Geography
GEOG 335 Oceanography
GEOG 360 Food Systems

GROUP II Environmental
CMST 365 Environmental Communication
PHIL 315 Philosophy and the Environment
SOCI 345 Sociology of the Environment
SUST 155 Introduction to Sustainability Studies

GROUP III Global Perspectives
CMST 345 Conflict Management
CMST 350 Intercultural Communication (GEP Group C)
HLTH 125 Health and Culture (GEP Group F)
MDFL 111 Intercultural Understanding (GEP Group C)

4. Professional Education Sequence (56 hours)
See admission requirements for each Phase

Pre-Entrance
EDUC 100 Introduction to Teacher Education (1)
EDUC 201 Students, Teachers, and Learning Environments (3; Pre-entrance or concurrent with Apprenticeship)
EDUC 202 Foundations of Learning and Instruction (3; Pre-entrance or concurrent with Apprenticeship)
EDUC 325 Educational Technology (3 hours taken Pre-entrance or concurrent with Apprenticeship)

Apprenticeship (7 hours; completed over 1 or 2 semesters)
EDUC 200 Phase I Teaching and Professional Assessment Laboratory (1)
EDUC 376 Special and Multicultural Education (3)
REED 323 Process and Acquisition of Reading (3)

Assistantship
(14 hours; completed over 1 semester)
ELED 307 Teaching Assistantship (1)
EDUC 401 Assistantship Seminar (1)
ELED 471 Math Curriculum, Methods & Assessment (3)
ELED 474 Science Curriculum, Methods & Assessment (3)
ELED 475 Social Studies Curriculum, Methods & Assessment (3)
REED 473 Reading Instruction (3)

Internship I
(13 hours; completed over 1 semester)
EDUC 402 Internship I Seminar (1)
ELED 494 Teaching Internship I: P-9 (6)
REED 420 Assessment for Reading Instruction (3)
REED 425 Materials and Motivations for Reading (3)

Internship II (12 hours; completed over 1 semester)
EDUC 422 Leadership Seminar P-9 (3)
ELED 495 Teaching Internship II: P-9 (9) (Capstone)

5. Other Internship Requirements
a. Students must complete any school district requirements (application, fingerprinting, background check, drug testing, etc.) in order to qualify for an internship placement.

6. Other Graduation/Program Exit Requirements
a. Submission of a Teacher Performance Assessment that meets institutional standards.
b. Successful completion of an exit interview that meets institutional standards.
c. Completion of the Praxis II content knowledge and pedagogy assessments required by the Maryland State Department of Education.
d. Successful completion of required field experiences in primary (1-3) and intermediate (4-5) grades.

Elementary/Middle School Dual Certification

MAJOR

Professors: Welsch
Associate Professors: Boayue, Eirich, Mattern, McGee, Milleson, Rankin
Assistant Professors: Bishoff, O’Neal
Lecturers: Durham, Park

- The requirements in numbers 1-3 list specific hours required in other departments. These requirements include but go beyond the University GEP. A list of recommended GEP courses is available in the Department of Educational Professions.
- You must complete an approved 24-hour specialization in a listed area or an approved individualized specialization. Six of those hours will be in middle grades pedagogy (EDUC 316 and EDUC 445).
- A grade of C or better (or P) is required in all specialization or concentration courses taught within the Educational Professions department or transfer equivalent.
- You must complete application for each phase of the program.
- If you complete EDUC 325, Educational Technology, with a grade of C or better, you will fulfill the University’s technology fluency requirement.
- The requirements for entry into phases are described in the Educational Professions section of this catalog.

Program Requirements

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<td>Total Hours Required:</td>
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</table>
Requirements for Major in Elementary/Middle School Dual Certification

1. Completion of GEP: (41 hours)
   a. Core Skills (9) including MATH 109/110 (3) or MATH 119 (3), ENGL 101 (3) and Advanced Writing (3)
   b. Modes of Inquiry (29-32) including two 4-credit natural science courses

2. Additional Required Courses for Elementary/Middle Majors:
   a. MATH 206 Problem Solving for Elementary Teachers I (3)
   b. MATH 207 Problem Solving for Elementary Teachers II (3)
   c. 4 credit laboratory science elective (4)
   d. MUSC 350 Music and Creative Interaction for the Elementary Classroom Teacher (3)
      or EDUC 333 Integrated Arts in the Elementary Classroom
   e. PHEC 309 Health and Physical Education for the Elementary Classroom Teacher (3)

3. Specialization: (24 hours; at least 1 course satisfies GEP)

Summary of Requirements for English/Language Arts Specialization (24 hours)

a. Required GEP courses (6 hours)
   i. ENGL 308/309/310/312/330/338 Advanced Writing (3; GEP Core Skills)
   ii. ENGL 150/250 Introduction to Literature (3; GEP Group B)

b. Required Content Courses (12 hours required; choice of 4 courses)
   i. ENGL 430 The Composing Process (3)
   ii. EDUC 372 Teaching Writing in the Classroom (3)
   iii. CMST 102 Introduction to Human Communication (3)
   iv. ENGL 276 Adolescent Literature (3)
   v. REED 440 Children’s Literature (3)

c. Middle School Program Requirements (6 hours)
   i. EDUC 316 Early Adolescent Literacy and Learning (3)
   ii. EDUC 445 Strategic Reading and Writing in the Middle Grades (3; taken during Internship I)

Summary of Requirements for Mathematics Specialization (25 hours)

a. Required GEP courses (3 hours)
   i. MATH 109/110 Elements of Applied Probability and Statistics (3; GEP Core Skills)

b. Required Elementary Program courses (6 hours)
   i. MATH 206 Problem Solving for Elementary Teachers I (3 credits)
   ii. MATH 207 Problem Solving for Elementary Teachers II (3 credits)

c. Required Content Courses (10 hours)
   i. MATH 200 Discrete Mathematics (3)
   ii. MATH 236 Calculus I (4)
   iii. MATH 340 Fundamental Concepts of Geometry (3)

d. Middle School Program Requirements (6 hours)

Summary of Requirements for Science Specialization (25 hours)

a. Required GEP courses (12 hours)
   i. BIOL 149/159 General Biology I (4; GEP Group C)
   ii. PHSC 203 Physical Science (4; GEP Group C)
   iii. GEOD 103/113 Physical Geography (4; GEP Group C)

b. Required Content Courses (7 hours)
   i. CHEM 100/113 Chemistry and Society (4) or CHEM 150 General Organic Biochemistry (4) or CHEM 201 General Chemistry (4) or CHEM 103 Foundations of Chemistry (3) and STEM Lab (1)
   ii. PHSC 100 Cosmic Concepts (3) or IDIS 160 Science, Technology and Society (3; GEP Group C)

c. Middle School Program Requirements (6 hours)
   i. EDUC 316 Early Adolescent Literacy and Learning (3)
   ii. EDUC 445 Strategic Reading and Writing in the Middle Grades (3; taken during Internship I)

Summary of Requirements for Social Studies Specialization (24 hours)

a. Required GEP courses (6 hours)
   i. GEOG 104/114 Human Geography (3; GEP Group D) or GEOG 110 World Regional Geography (3; GEP Group D)
   ii. POSC 110/112 Introduction to American Politics (3, GEP Group D)

b. Required Content Courses (12 hours)
   i. HIST 100/111 The Contemporary World in Historical Perspective (3, GEP Group B) or HIST 445 History of Maryland (3) or GEOG 302 Geography of Maryland (3)
   ii. HIST 113 World History (Earliest times to 1500)(3) or HIST 114 World History (1500-1900)(3)
   iii. HIST 103 History of the United States (1492-1876)(3) or HIST 104 History of the United States (1876 to present) (3)
   iv. HIST 461 Colonial America, 1607-1763 (3) or HIST 464 Civil War and Reconstruction, 1849 – 1877 (3)

c. Middle School Program Requirements (6 hours)
   i. EDUC 316 Early Adolescent Literacy and Learning (3)
   ii. EDUC 445 Strategic Reading and Writing in the Middle Grades (3; taken during Internship I)

4. Professional Education Sequence (56 hours)

See admission requirements for each phase.

Pre-Entrance

EDUC 100 Introduction to Teacher Education (1)
EDUC 201 Students, Teachers and Learning Environments (3; Pre-entrance or concurrent with Phase I)
EDUC 202 Foundations of Learning and Instruction (3; Pre-entrance or concurrent with Phase I)
EDUC 325 Educational Technology (3 hours taken Pre-entrance or concurrent with Phase I)
Apprenticeship (7 hours)
EDUC 200 Teaching and Professional Assessment Laboratory (1)
EDUC 376 Special and Multicultural Education (3)
REED 323 Process and Acquisition of Reading (3)

Assistantship (14 hours)
ELED 307 Teaching Assistantship (1)
EDUC 401 Assistantship Seminar (1)
ELED 471 Mathematics Curriculum, Methods and Assessment (3)
ELED 474 Science Curriculum, Methods and Assessment (3)
ELED 475 Social Studies Curriculum, Methods and Assessment (3)
REED 473 Reading Instruction (3)

Internship I (13 hours)
EDUC 402 Internship I Seminar (1)
ELED 494 Teaching Internship I: P-9 (6)
REED 420 Assessment for Reading Instruction (3)
REED 425 Materials and Motivations for Reading (3)

Internship II (12 hours, completed over 1 semester)
EDUC 422 Leadership Seminar: P-9 (3)
ELED 495 Teaching Internship II: P-9 (9) (Capstone)

5. Other Internship Requirements
a. Students wishing to have an internship placement in a middle school must have successfully completed EDUC 316.
b. Students must complete any school district requirements (application, fingerprinting, background check, drug testing, etc.) to qualify for an internship placement.

6. Other Graduation/Program Exit Requirements
a. Submission of a Teacher Performance Assessment that meets institutional standards.
b. Successful completion of an exit interview that meets institutional standards.
c. Completion of the PRAXIS II content knowledge and pedagogy assessments required by the Maryland State Department of Education.
d. Successful completion of required field experiences in primary (1-3), intermediate (4-5) and middle grades (6-8).

P-12 Programs

TEACHING CERTIFICATION

Contact: Dr. Jodi Eirich, Associate Professor
Associate Professors: Eirich, Mattern, Rankin, Gallagher
Assistant Professors: Bosley, Simpson
Lecturers: Rieker

- You must complete an application for each phase of the program.
- The requirements for entry into phases of the program are listed in the Educational Professions section of this catalog.
- The courses of study to be followed in academic content areas are established by the individual programs (art, health and physical education, music).
- You cannot minor in P-12 programs.

Professional Education Sequence for P-12 Programs

ART

Pre-entrance (9 hours)
EDUC 202 Foundations of Learning & Instruction
EDUC 310 Diversity and Social Justice in Education
EDUC 325 Technology Education

Program Entrance (7 hours)
EDUC 200 Phase I Teaching and Professional Assessment Laboratory
REED 417 Literacy in the Content Area I
SPED 451 Adapting Instruction in Diverse Classrooms

Internship I (11 hours)
EDUC 300 Phase II Teaching and Professional Assessment Laboratory
EDUC 392 K-12 Field Experience
EDUC 450 Art Education Methods for the Secondary Teacher
EDUC 451 Art Education Methods for the Elementary Teacher

Internship II (12 hours)
EDUC 422 Leadership Seminar
EDUC 497 Teaching Internship, K-12 Program

Other Graduation/Program Exit Requirements
1. Submission of a Teacher Performance Assessment that meets institutional standards.
2. Successful completion of an exit interview that meets institutional standards.
3. Completion of the PRAXIS II content knowledge and pedagogy assessments required by the Maryland State Department of Education.
4. Successful completion of required field experiences.

MUSIC

Pre-entrance (3 hours)
MUSC 125 Introduction to Music Education

Program Entrance (4 hours)
MUSC 252 Early Music Experience
REED 417 Literacy in the Content Area I

Internship I (17.5 hours)
EDUC 300 Phase II Teaching and Professional Assessment Laboratory
EDUC 392 K-12 Field Experience
EDUC 452 General Music Methods in Elementary School
EDUC 453 General Music Methods in Secondary School
MUSC 452 Choral Music Methods
or MUSC 453 Instrumental Music Methods
SPED 451 Adapting Instruction in Diverse Classrooms

Internship II (12 hours)
EDUC 422 Leadership Seminar
EDUC 497 Teaching Internship, K-12 Program

Other Graduation/Program Exit Requirements
1. Submission of a Teacher Performance Assessment that meets institutional standards.
2. Successful completion of an exit interview that meets institutional standards.
3. Completion of the PRAXIS II content knowledge and pedagogy assessments required by the Maryland State Department of Education.
4. Successful completion of required field experiences.
HEALTH & PHYSICAL EDUCATION

Pre-entrance (29 hours)
HPED 201 Teaching Fitness
HPED 202 Teaching Tactical Games I
HPED 203 Teaching Tactical Games II
HPED 204 Teaching Dance and Gymnastics
HPED 205 Teaching Outdoor Adventures and Group Initiatives
HPED 208 Inclusion Strategies in Health Education
HPED 232 Teaching Substance Abuse and Safety & Violence Prevention
HPED 233 Teaching Family Life & Human Sexuality and Mental & Emotional Health
HPED 234 Teaching Disease Prevention & Control and Healthy Eating
HPED 416 Curriculum Design in Health and Physical Education

Internship I (15 hours)
EDUC 392 K-12 Field Experience
HPED 402 Adapted Physical Education
HPED 404 Health Instruction
HPED 408 Elementary Methods of Physical Education
HPED 418 Secondary Methods of Physical Education

Program Requirements

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<th>Hours Required in Education:</th>
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The courses of study to be followed in academic content areas are established by individual departments. You may select the secondary teacher education major’s certification option in addition to completing the major in the following fields:

- Foreign Languages & Literature (concentration in Spanish leading to certification)
- English
- Mathematics
- Social Science

Professional Teacher Education Sequence

Pre-entrance (10 hours)
EDUC 100 Career Analysis in Education (1)
EDUC 202 Foundations of Learning and Instruction (3)
EDUC 310 Diversity and Social Justice in Education (3)
EDUC 325 Educational Technology (3)

Program Entrance (10 hours)
EDUC 200 Phase I Teaching & Professional Assessment Laboratory (1)
REED 417 Literacy in the Content Area I (3)
SCED 410 Secondary Methods and Curriculum (3) May be taken concurrent with Internship I.
SPED 451 Adapting Instruction in Diverse Classrooms (3)

Internship I (6 hours)
EDUC 300 Phase II Teaching & Professional Assessment Laboratory (1)
EDUC 391 Teaching Internship I: Secondary Education (2)
SCED 411 English in the Secondary School (3)
or SCED 414 Mathematics in the Secondary School (3)
or SCED 415 Methods of Teaching Modern Foreign Languages (3)
or SCED 419 Science in the Secondary School (3)
or SCED 420 Social Studies in the Secondary School (3)
May be taken concurrent with Internship I.

Internship II (12 hours)
EDUC 422 Leadership Seminar
SCED 496 Teaching Internship II: Secondary Education (9)

Other Graduation/Program Exit Requirements

1. Submission of a Teacher Performance Assessment that meets institutional standards.
2. Successful completion of an exit interview that meets institutional standards.
3. Completion of the PRAXIS II content knowledge and pedagogy assessments required by the Maryland State Department of Education.
4. Successful completion of required field experiences.

Secondary Teacher Education

CERTIFICATE OPTION

Contact: Dr. Jodi Eirich, Associate Professor
Associate Professors: Eirich, Hurst, Mattern, Rankin
Assistant Professors: Bishoff, Bosley, O’Neal

- You must complete an application for each phase of the program.
- The requirements for entry into phases are listed in the Educational Professions section of this catalog.
- Secondary Teacher Education is not a primary major. To meet Maryland State certification requirements, Secondary Teacher Education candidates must select the teacher certification option in one of the following disciplines: English, foreign languages and literature, mathematics or social science. Contact Dr. Jodi Eirich, program coordinator, for details.
Coaching

MINOR

Associate Professor: M. Kentrus
Assistant Professor: Wright
Coordinator/Lecturer: Brakeall

- Field experience required in school program. Recommended during senior year.
- You cannot major in coaching.

Program Requirements

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Requirements for Minor in Coaching

All of the following: (16 hours)
EXSS 305 Care and Prevention of Athletic Injuries
EXSS 175 Foundations of Resistance Training
PHEC 405 Psycho-Social Foundations of Sport
PHEC 412 Principles of Coaching
PHEC 420 Sports Law and Ethics
PHEC 481 Field Experience in Coaching
Two from among: (6 hours)
PHEC 360 Theory of Track & Field
PHEC 361 Theory of Football
PHEC 362 Theory of Baseball
PHEC 364 Theory of Basketball
PHEC 365 Theory of Volleyball
PHEC 366 Theory of Soccer
PHEC 369 Theory of Softball

Exercise & Sport Science

MAJOR

Associate Professors: M. Kentrus
Assistant Professors: Wright
Coordinator: Brakeall
Lecturers: Bennett, Brakeall

- You must complete a 9-credit internship during your senior year after successful completion of all other major requirements. This internship, taken in conjunction with the seminar, may be completed during the fall, spring, or summer.
- You must complete a minimum of 3 credits of EXSS 482. These credits can be split between separate semesters or taken together during one semester.
- You must achieve a C or better in all major courses to count toward graduation requirements.
- Upon completion of degree requirements, you will be eligible to take the National Strength and Conditioning Association (NSCA) and American College of Sports Medicine (ACSM) certification exams for various health fitness certifications such personal trainer, certified strength and conditioning specialist, group exercise instructor and exercise physiologist.
- The EXSS Program is accredited by CoAES (Committee on Accreditation for the Exercise Sciences), a division of CAAHEP (Commission on Accreditation of Allied Health Education Programs).

Program Requirements

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<td>Hours Required in Kinesiology:</td>
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<td>Electives:</td>
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<td>Total Hours Required:</td>
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Requirements for Major in Exercise & Sport Science

1. Discipline Core Courses:
(52 hours)
EXSS 103 Foundations of Exercise and Sport Science
EXSS 115 Methods of Group Exercise Instruction
EXSS 175 Foundations of Resistance Training
EXSS 200 Nutrition (GEP Group C)
EXSS 303 Biomechanics for Exercise and Sport Science
EXSS 305 Care and Prevention of Athletic Injuries
EXSS 306 Organization & Admin. of Exercise & Sport Science
EXSS 315 Nutrition for the Physically Active
EXSS 341 Psychology of Physical Activity
EXSS 401 Physiology of Exercise
EXSS 410 Advanced Strength Training
EXSS 411 Evaluation and Prescription in Fitness
EXSS 435 Lifespan Health and Fitness
EXSS 482 Field Experience in Health Fitness (3 hours)
EXSS 492 Seminar in Health Fitness
EXSS 495 Internship in Health Fitness (Capstone - 9 hours)
2. Courses Required in Other Departments:

(15 hours)

- BIOL 149/159 General Biology I (GEP Group C)
- BIOL 321 Anatomy and Physiology I
- BIOL 322 Anatomy and Physiology II
- MATH 109 Elements of Applied Probability and Statistics (Core Skill 3)

3. Electives:

Choose at least 14 credits from the following:

- BUAD 100 Introduction to Business
- or MGMT 251 Management of Organizations
- CHEM 150 General, Organic & Biochemistry (GEP Group C)
- CHEM 201 General Chemistry I (GEP Group C)
- CHEM 202 General Chemistry II
- EXSS 300 Advanced Human Nutrition
- EXSS 330 Exercise Epidemiology
- EXSS 430 Training for Peak Performance
- HPED 407 Motor Learning & Performance
- HSCI 101 Medical Terminology
- MGMT 315 New Business Ventures
- PHYS 215 General Physics I (GEP Group C)
- PHYS 216 General Physics II

Pre-Physical Therapy Option for EXSS Majors

In addition to the discipline core courses, students interested in pursuing a doctoral degree in Physical Therapy should choose the following courses as their program electives. Students are expected to consult the professional school of their choosing to determine any other specific requirements.

- CHEM 201 General Chemistry I
- CHEM 202 General Chemistry II
- PHYS 215 General Physics I
- PHYS 216 General Physics II

Combined Bachelor of Science in Exercise and Sport Science/Master of Science in Athletic Training

Frostburg State University offers a unique opportunity for students interested in becoming an athletic trainer to pursue a combined Bachelor of Science in Exercise and Sport Science/Master of Science in Athletic Training program (BS/MSAT). This is an accelerated five-year program where students will earn both degrees in just five years taking a total of 174 credits, instead of the usual six years with 183 total credits. A student can be admitted directly to this program as an entering first-year student or may be admitted as a first-year or sophomore, if the applicant has met all admission requirements for the program. A student in the program will take up to 9 credits of graduate course work while an undergraduate, which will count toward both the undergraduate AND graduate degrees.

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Admission Requirements

A high school student applying for the direct entry program as a first-year student must apply to the University and complete the BS/MSAT supplemental application by March 1, which includes a personal statement and two letters of reference. Students must also meet an 1800 SAT-I Composite Score by March 1. Upon submitting all required BS/MSAT supplemental application documents, selected students will be invited for an interview.

FSU first-year or sophomore Exercise & Sport Science major students can apply to the program, submitting all required BS/MSAT program supplemental application documents no later than March 1 prior to the third year of study and will be required to meet the following admission requirements:

- Cumulative 3.0 GPA.
- Grade of B or better in all MSAT prerequisite courses:
  - Biomechanics for Exercise & Sport Science
  - Physiology of Exercise
  - Advanced Strength Training
  - Evaluation & Prescription in Fitness
  - Nutrition
  - Biology with lab
  - Chemistry with lab
  - Physics with lab
  - Anatomy & Physiology I
  - Anatomy & Physiology II
  - General or Introduction to Psychology
- Selected students will also be required to participate in an interview process to determine admission.
- Students admitted to the combined BS/MSAT program will be required to follow the BS/MSAT plan of study determined by the AT program director, maintain a 3.0 GPA and obtain a B or better in all MSAT prerequisite courses. This BS/MSAT plan of study includes required summer sessions. Students admitted to the program will be required to take the following courses that will satisfy the requirements for the undergraduate Exercise & Sport Science degree. These credits will also be counted toward the required 63-66 credits for the Master of Science in Athletic Training degree.
  - ATTR 500 Foundations of Injury Management (instead of EXSS 305)
  - ATTR 530 Athletic Training Administration (instead of EXSS 306)
  - ATTR 645 Psychosocial Intervention (instead of EXSS 341)

**NOTE:** Students admitted to the BS/MSAT program must meet all requirements outlined for progression into the MSAT program prior to matriculation into the graduate program. Students who do not meet the requirements for matriculation into the MSAT program can continue in the Bachelor in Exercise & Sport Science to graduate with a Bachelor of Science in Exercise & Sport Science upon successful completion of all degree program requirements.

Please refer to the Graduate Catalog for details on the BS/MSAT program requirements for application, admission, progression and graduation.
Health and Wellness Education

MAJOR WITH CONCENTRATIONS IN:
- HEALTH AND PHYSICAL EDUCATION with teacher certification
- HEALTH EDUCATION with teacher certification*
- COMMUNITY HEALTH EDUCATION

Contact: Dr. Rebecca Gallagher, Associate Professor
Assistant Professors: N. Bosley, L. Simpson

- Upon successful completion of the Health and Physical Education concentration, you will be eligible to apply for PreK-12 health certification and PreK-12 physical education certification.
- Upon successful completion of the Health Education concentration, you will be eligible to apply for PreK-12 health certification.
- You cannot minor in Health and Wellness Education.

* Teacher certification is pending Maryland State Department of Education (MSDE) approval.

Program Requirements

<table>
<thead>
<tr>
<th>Hours Required in Kinesiology and Recreation:</th>
<th>HEALTH &amp; PHYSICAL EDUCATION</th>
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* Teacher certification is pending Maryland State Department of Education (MSDE) approval.

Requirements for Major in Health & Wellness Education

1. Discipline Core: (21 hours)
   - HPED 103 Foundations of Health Education
   - HPED 104 Foundations of Health Education
   - HPED 232 Teaching Substance Abuse and Safety & Violence Prevention
   - HPED 233 Teaching Family Life & Human Sexuality and Mental & Emotional Health
   - HPED 234 Teaching Disease Prevention & Control and Healthy Eating
   - HPED 310 Technology in Health and Wellness Education
   - HPED 404 Health Instruction

Requirements for Concentration in Health and Physical Education

1. Concentration Core: (15 hours)
   - HPED 201 Teaching Fitness
   - HPED 202 Teaching Tactical Games I
   - HPED 203 Teaching Tactical Games II
   - HPED 204 Teaching Dance & Gymnastics
   - HPED 205 Teaching Outdoor Adventures and Group Initiatives
   - HPED 208 Inclusion Strategies in Health Education
   - HPED 232 Teaching Substance Abuse and Safety & Violence Prevention
   - HPED 233 Teaching Family Life & Human Sexuality and Mental & Emotional Health
   - HPED 234 Teaching Disease Prevention & Control and Healthy Eating
   - HPED 416 Curriculum Design in Health and Physical Education
   - REED 417 Content Area Reading

2. Required Courses in Other Departments: (8 hours)
   - BIOL 149 General Biology I (GEP Group C)
   - BIOL 211 Essentials of Anatomy and Physiology

3. Recommended Courses in Other Departments:
   - GEOG 104 Human Geography
   - IDIS 150 Health in America (GEP Group E)
   - PSYC 150 General Psychology (GEP Group D)

4. Professional Education Sequence (59 hours)
   Pre-entrance (29 hours)
   - HPED 201 Teaching Fitness
   - HPED 202 Teaching Tactical Games I
   - HPED 203 Teaching Tactical Games II
   - HPED 204 Teaching Dance & Gymnastics
   - HPED 205 Teaching Outdoor Adventures and Group Initiatives
   - HPED 208 Inclusion Strategies in Health Education
   - HPED 232 Teaching Substance Abuse and Safety & Violence Prevention
   - HPED 233 Teaching Family Life & Human Sexuality and Mental & Emotional Health
   - HPED 234 Teaching Disease Prevention & Control and Healthy Eating
   - HPED 416 Curriculum Design in Health and Physical Education
   - REED 417 Content Area Reading

   Internship I (15 hours)
   - EDUC 392 K-12 Field Experience
   - HPED 402 Adapted Physical Education
   - HPED 404 Health Instruction
   - HPED 408 Elementary Methods of Physical Education
   - HPED 418 Secondary Methods of Physical Education

   Internship II (15 hours)
   - EDUC 422 Leadership Seminar
   - HPED 497 Teaching Internship: K-12 Programs (Capstone)

5. Other Graduation/Program Exit Requirements
   - Submission of a Teacher Performance Assessment that meets institutional standards.
   - Successful completion of an exit interview that meets institutional standards.
   - Completion of the PRAXIS II content knowledge and pedagogy tests required by the Maryland State Department of Education.
   - Successful completion of required field experiences.
Requirements for Concentration in Health Education*

1. Concentration Core: (18 hours)
   - HPED 104 Foundations of Health Education
   - HPED 230 Assessment in Health & Physical Education
   - HPED 309 Wellness & the Whole Child
   - HPED 310 Technology in Health and Wellness Education
   - HLTH 405 Sexuality
   - EDUC 310 Diversity and Social Justice in Education

2. Required Courses in Other Departments: (8 hours)
   - BIOL 149 General Biology I (GEP Group C)
   - BIOL 211 Essentials of Anatomy and Physiology

3. Supporting Courses: (18 hours)
   Choose 18 credits from:
   - BIOL 360 Virology
   - BIOL 465 Environmental Health
   - EXSS 200 Nutrition
   - EXSS 300 Advanced Human Nutrition
   - EXSS 315 Nutrition for the Physically Active
   - EXSS 330 Exercise Epidemiology
   - EXSS 435 Lifespan Health and Fitness
   - HPED 201 Teaching Fitness
   - HPED 301 Applied Biomechanics
   - HPED 406 Applied Physiology
   - HLTH 330 Epidemiology of Health
   - PSYC 208 Introduction to Lifespan Development
   - PSYC 210 Child Development
   - PSYC 212 Adolescent & Adult Development
   - PSYC 409 Human Learning and Cognition
   - PSYC 430 Health Psychology
   - Others as approved by program coordinator

4. Professional Education Sequence (38 hours)
   Pre-entrance (18 hours)
   - HPED 208 Inclusion Strategies in Health Education
   - HPED 232 Teaching Substance Abuse and Safety & Violence Prevention
   - HPED 233 Teaching Family Life & Human Sexuality and Mental & Emotional Health
   - HPED 234 Teaching Disease Prevention & Control and Healthy Eating
   - EDU 416 Curriculum Design in Health and Physical Education
   - REE 417 Content Area Reading
   - SPE 451 Adapting Instruction in Diverse Classrooms

   Internship I (5 hours)
   - EDUC 392 K-12 Field Experience
   - HPED 404 Health Instruction

   Internship II (15 hours)
   - EDUC 422 Leadership Seminar
   - HPED 497 Teaching Internship: K-12 Programs (Capstone)

5. Other Graduation/Program Exit Requirements
   - Submission of a Teacher Performance Assessment that meets institutional standards.
   - Successful completion of an exit interview that meets institutional standards.
   - Completion of the PRAXIS II content knowledge and pedagogy tests required by the Maryland State Department of Education.
   - Successful completion of required field experiences.

Requirements for Concentration in Community Health Education

1. Concentration Core: (47 hours)
   - HLTH 101 Community Health Promotion
   - HLTH 125 Health and Culture
   - HLTH 330 Epidemiology of Health
   - HLTH 405 Sexuality
   - HLTH 430 Methods and Materials for Health Promotion
   - HLTH 435 Health Promotion Programming
   - HLTH 483 Field Experience in Community Health Education
   - HLTH 492 Seminar in Community Health Education
   - HPED 104 Foundations of Health Education
   - HPED 232 Teaching Substance Abuse and Safety & Violence Prevention
   - HPED 233 Teaching Family Life & Human Sexuality and Mental & Emotional Health
   - HPED 234 Teaching Disease Prevention & Control and Healthy Eating
   - HPED 301 Applied Biomechanics
   - HPED 406 Applied Physiology
   - HLTH 330 Epidemiology of Health
   - PSYC 208 Introduction to Lifespan Development
   - PSYC 210 Child Development
   - PSYC 212 Adolescent & Adult Development
   - PSYC 214 Introduction to Geropsychology
   - PSYC 430 Health Psychology

2. Required Courses in Other Departments: (36 hours)
   - BIOL 149 General Biology I (GEP Group C)
   - BIOL 321 Anatomy and Physiology I
   - BIOL 322 Anatomy and Physiology II
   - CMST 102 Introduction to Human Communication
   - GEOG 104 Human Geography OR GEOG 110 World Regional Geography
   - GEOG 209 People, Places, and Landscapes of Appalachia
   - NURS 402 Nursing Research & Evidence-Based Practice
   - PSYC 150 General Psychology
   - PSYC 318 Social Psychology
   - SOWK 370 Introduction to Social Welfare & Social Work
   - SOWK 370 Introduction to Social Welfare & Social Work
   - SOWK 370 Introduction to Social Welfare & Social Work

3. Supporting Courses: (12 hours)
   Choose 12 credits from:
   - BIOL 304 Microbiology
   - BIOL 360 Virology
   - BIOL 465 Environmental Health
   - EXSS 300 Advanced Human Nutrition
   - EXSS 315 Nutrition for the Physically Active
   - EXSS 330 Exercise Epidemiology
   - EXSS 435 Lifespan Health and Fitness
   - MGMT 356 Leadership & Human Behavior
   - NURS 412 Women's Health in Global Perspectives
   - PSYC 208 Introduction to Lifespan Development
   - PSYC 210 Child Development
   - PSYC 212 Adolescent & Adult Development
   - PSYC 214 Introduction to Geropsychology
   - PSYC 430 Health Psychology

* Teacher certification is pending Maryland State Department of Education (MSDE) approval.
Adventure Sports Management

MAJOR

Associate Professor: Buta
Affiliated Faculty: Hershey, Peterson, Richardson: Garrett College

- The Adventure Sports Management degree program requires courses at both Frostburg State University and at Garrett College.
- Students will participate in a number of experiential education courses that require a significant amount of time outside of the traditional classroom.
- Students will participate in an “immersion semester” that requires full-time enrollment in Adventure Sport Management courses, as well as extended travel.
- The required immersion semester at FSU and outdoor adventure skills courses at Garrett College include additional course fees for equipment use, travel and course support.
- Tuition and fees associated with all Winter Intersession and/or Summer courses are the responsibility of the student.

Program Requirements

<table>
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<td>Hours Required at Frostburg State University:</td>
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<td>Total Hours Required:</td>
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</table>

Requirements for Major in Adventure Sports Management

1. Adventure Sports Courses: (36 credits)
   - ADSP 280 Leadership and Group Dynamics in Adventure Sports
     or ASI 201 Leadership & Group Dynamics*
     or RECR 280 Recreation Leadership
   - ADSP 330 Outdoor Education
     or ASI 170 Field Guiding and Instruction*
   - ADSP 340 Expedition Planning in Adventure Sports
   - ADSP 342 Fitness and Nutrition in Adventure Sports
   - ADSP 348 Adaptive and Inclusive Adventure Sports
   - ADSP 350 Risk Management in Adventure Sports
   - ADSP 360 Entrepreneurship in Adventure Sports
     or MGMT 315 New Business Ventures
   - ADSP 382 Agency Assessment and Administration in Adventure Sports
   - ADSP 492 Mentorship Project (Internship) (Capstone)
     and ADSP 495 Mentorship Hours (9 cr.)

2. Recreation and Parks Management Course: (12 credits)
   - RECR 201 Introduction to Recreation and Parks
     or ASI 101* Intro ASL, Park, Recreation
   - RECR 382 Program Planning
     or ASI 200* Program Management
   - RECR 393 History and Philosophy of Outdoor Recreation
     or HUM 210* Society and the Environment
   - RECR 394 Environmental Interpretation

3. Skill Courses Outside Department: (13 credits)
   - ASI 110 Backcountry Living Skills*
     Basic Skills Courses (2 Credits)*
     Intermediate Courses (3 Credits)*
     Instructor Level Course (1 Credit)*
     Rescue Skills Course (1 Credit)*
   - ASI 164 Advanced Level First Aid and CPR (3 Credits)*

4. Completion of one of the following:
   a) A second major
   b) A minor
   c) An associate degree
   d) A bachelor’s degree from another institution
   e) Two additional ASI skills tracks at Garrett College

Recreation and Parks Management

MAJOR

MINOR

CONCENTRATIONS IN
- ADVENTURE SPORTS
- COMMUNITY PROGRAM DELIVERY
- HOSPITALITY MANAGEMENT & TOURISM
- SPORT PROMOTION & COMMUNICATION

Professor: Blankenship
Associate Professor: Buta
Assistant Professor: Barrett
Lecturer: Hershey

Affiliated Faculty: Debra Frank, Allegany College of Maryland; Therese Peterson, Garrett College

- Program is accredited by the Council on Accreditation of Parks, Recreation, Tourism and Related Professions (COAPRT)
- Students are required to complete RECR 497, which includes attendance at a state, regional or national conference during their
junior or senior year; possess current certifications in CPR and First Aid; and complete 80 hours of professional experiences beyond the curriculum prior to graduation.

- Legal residents of Delaware may complete a recreation and parks management degree at Maryland resident tuition rates through the SREB Academic Common Market (ACM). You may retain your eligibility ONLY if you select the additional requirement options of a minor, an associate degree or a concentration. If you already have a bachelor's degree from another institution or pursue a second major at FSU, you are not eligible to participate in ACM.

### Program Requirements

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### Requirements for Major in Recreation and Parks Management

1. **Discipline Core: (36 hours)**
   - RECR 201 Introduction to Recreation and Parks
   - RECR 280 Recreation Leadership
   - RECR 342 Park and Facility Design
   - RECR 382 Program Planning
   - RECR 388 Research Methods in Recreation and Parks
   - RECR 440 Organization and Administration of Recreation and Parks
   - RECR 443 Issues and Risk Management in Recreation and Parks
   - RECR 491 Practicum and Professional Seminar
   - RECR 492 Internship Project (Capstone)
   - RECR 495 Internship in Recreation
   - RECR 497 Out-of-Class Requirements (see bullets at left)

2. **Courses Outside Department: (3 hours)**
   - COSC 100/110 Intro. to Computer Science (Tech. Fluency)

3. **Complete one of the following:**
   - a second major
   - a minor
   - an associate degree
   - a bachelor’s degree from another institution
   - a concentration within the major as follows:

### I. Community Program Delivery Concentration

(27 hours)

**A. Recreation: (12 hours)**

Select four of the following:
- ADSP 330 Outdoor Education
- EXSS 103 Foundations of Exercise and Sport Science
- EXSS 115 Methods of Group Exercise Instruction
- EXSS 200 Nutrition
- IDS 150 Outdoor Leadership (GEP Group E)
- RECR 100 Leisure and the Diverse American Culture (GEP Group F)
- RECR 221 Introduction to Therapeutic Recreation
- RECR 230 Introduction to Sport Management
- RECR 332 Sport Media and Communication
- RECR 384 Special Event Management
- RECR 393 History and Philosophy of Outdoor Recreation
- RECR 394 Environmental Interpretation
- RECR 480 Field Experience in Recreation and Parks (3 credits)

**B. Psychology: (6 hours)**

- PSYC 150 General Psychology (GEP Group D)
- PSYC 210 Child Development
  or PSYC 212 Adolescence and Adulthood

**C. Sociology: (6 hours)**

- SOCI 100 Intro. to Sociology (GEP Group D)
  And one additional SOCI course at the 200 level or above

**D. Communications Studies: (3 hours)**

Select one of the following:
- CMST 102/112 Introduction to Human Communications
- CMST 122 Introduction to Public Communication
- CMST 215 Small Group Communication

### II. Adventure Sports Concentration (27-28 hours)

- Students can enroll in this program at Frostburg State University and take adventure sports courses at Garrett College, or complete their first two years at Garrett College and then transfer to FSU.
- Students who complete the Adventure Sports concentration are eligible to receive an AAS in adventure sports at Garrett College.
- Tuition and fees associated with all Winter Intersession and/or Summer courses are the responsibility of the student.

*Garrett College courses

**A. Skills courses outside department: (9 hours)*

- ASI Basic Skills Courses (4 hours)*
- ASI Intermediate Skills Courses (3 hours)*
- ASI Instructors Level Course (1 hour)*
- ASI Rescue Skills Course (1 hour)*

*Garrett College courses

**B. Take all of the following: (12 hours)**

- ADSP 330 Outdoor Education (or ASI 170)
- ASI 110 Backcountry Living Skills*
- ASI 164 Wilderness First Responder*
C. Select two of the following: (6-7 hours)

ACCT 211 Financial Accounting
ADSP 340 Expedition Planning in Adventure Sports
ADSP 342 Fitness and Nutrition in Adventure Sports
ADSP 348 Adaptive and Inclusive Adventure Sports
ADSP 360 Entrepreneurship in Adventure Sports
ADSP 382 Agency Assessment in Adventure Sports
BIOL 110 Natural History (4 credit hours)*
PSYC 150 General Psychology (GEP Group D)
PSYC 210 Child Psychology
PSYC 212 Adolescence and Adulthood
PSYC 317 Abnormal Psychology
PSYC 385 Group Processes
PSYC 386 Drugs and Human Behavior
PSYC 410 Introduction to Counseling
RECR 394 Environmental Interpretation
*Garrett College courses

III. Hospitality Management and Tourism Concentration (28 hours)

- The hospitality & tourism concentration is a collaborative program with Allegany College of Maryland (ACM).
- You may enroll in this program at Frostburg State University and take the hospitality courses at ACM, or you may complete your first two years at ACM and then transfer to FSU.

A. Recreation courses: (3 hours)

Select one of the following:
RECR 384 Special Events Management
RECR 448 Principles of Ecotourism

B. Tourism and Hospitality courses: (6 hours)

**HMG 101 Introduction to Hospitality
**HMG 219 Mechanics of Event Management

C. Hotel and Resort courses: (16 hours)

**HMG 110 Food Service Sanitation
**HMG 160 Quantity Food Production or CULA 150 Food Preparation I
**HMG 203 Hospitality Purchasing, Inventory, and Cost Control
**HMG 204 Menu Planning and Food Merchandising
**HMG 205 Food and Beverage Cost Control
**HMG 209 Front Office Management

D. Hospitality choice: (3 hours)

Select one of the following:
**HMG 211 Hospitality Supervision
**HMG 218 Hospitality Marketing
**Allegany College of Maryland courses.

IV. Sport Promotion and Communication Concentration (27 credits)

A. Sport Courses (21 credits)

RECR 230 Introduction to Sport Management
RECR 332 Sport Media and Communication
RECR 384 Special Event Management
RECR 405 Psycho-Social Foundations of Sport
PHEC 420 Sports Law and Ethics
RECR 430 Sport Promotion
RECR 480 Field Experience in Recreation and Parks

B. Marketing and Communication Courses (6 credits)

Select one of the two options described below:

Marketing Courses
MKTG 261 Principles of Marketing
Select one of the following Marketing courses:
  MKTG 363 Advertising
  MKTG 365 Professional Selling and Relationship Management
  MKTG 366 Consumer Behavior

Communication Courses
Take both of the following courses:
MCOM 205 Mobile Media Production
MCOM 105 Digital Media and Media Literacy

Requirements for Minor in Recreation and Parks Management

1. Required Courses: (6 hours)

RECR 280 Recreation Leadership
RECR 382 Program Planning

2. Electives: (15 hours)

Select five additional RECR courses, at least four of which must be at the 300- or 400-level, excluding field experiences and internships (RECR 480, RECR 492 and RECR 495).
The College of Liberal Arts & Sciences

Programs offered in the College of Liberal Arts & Sciences

Addictions Counseling
African American Studies
Animal Behavior
Art & Design
Art History
Biology
Chemistry
Child & Family Psychology
Climate Science
Communication Studies
Computer Print Graphics
Computer Information Systems
Computer Science
Cultural Anthropology
Dance
Earth Sciences
Engineering
English
Film Studies
Fine Arts
Foreign Languages & Literature
Forestry
Geography
Graphic Design
Health Science
History
Industrial & Organizational Psychology
Information Technology
International Studies
Interpretive Biology & Natural History
Jazz Studies
Journalism
Law and Society
Law: Bachelor’s/J.D. Dual Degree
Law School Preparation
Leadership in Psychology
Leadership Studies
Liberal Studies
Life-Cycle Facilities Management
Mass Communication
Mathematical Sciences
Mathematics
Mechanical Engineering
Music
Musical Theatre
Nursing
Philosophy
Physics
Political Science
Professional Writing
Psychology
Public Administration
Public Relations
Secure Computing & Information Assurance
Social Work
Sociology
Sustainability Studies
Teaching of Writing
Theatre
Wildlife & Fisheries
Women’s Studies

Dr. Kim Hixson
Dean

Dr. Cindy Herzog
Associate Dean

Dr. Keith Terry
Assistant Dean
Vision Statement
The College of Liberal Arts and Sciences will be recognized for providing experientially based learning opportunities. Its distinctive and distinguished programs will contribute to the reputation of Frostburg State University as the premier educational and cultural center for the region and for serving as a catalyst for economic development. The college’s efforts in undergraduate research and experiential learning will achieve national recognition for providing “real life” experiences for students and for serving as a national model for regional engagement.

Mission
The mission of the College of Liberal Arts and Sciences (CLAS) is to provide students with a rigorous liberal arts and sciences curriculum grounded in a flexible, broad-based general education program and enriched by the availability of challenging academic majors and minors, graduate programs, interdisciplinary offerings, and other newly evolving programs that are responsive to emerging societal needs.

The college mission is implemented through a diverse, recognized, and credentialed faculty committed to excellence in teaching, learning, scholarship, and creative artistic production.

CLAS fulfills its mission by preparing future leaders to enter a complex changing global society with competence and confidence.

Core Values
1. We value a high standard of excellence in teaching, service, research, and other professional endeavors.
2. We value a stimulating, collaborative, and supportive setting for students, faculty, staff, and administrators characterized by creativity, innovation, and excellence.
3. We value lifelong learning and professional development for students, faculty, staff, and administrators.
4. We value an atmosphere of mutual respect and support, which promotes open sharing of ideas and viewpoints and debate of issues and concerns.
5. We value high standards of ethics, integrity, responsibility, and accountability.
6. We value the active participation of stakeholders in the planning and development of programs.
7. We value diversity and an atmosphere of mutual respect and acceptance.
8. We value interdisciplinary collaboration.
9. We value assessment as a mechanism for continuous improvement.
10. We value nimble response to change.

Fundamental Assumptions
1. Teaching methodologies, strategies, curricula, and classroom architecture must be informed by research on the science of learning.
2. In an environment of accelerating change, FSU must be responsive to emerging needs of society.
3. A pattern of continuously diminishing state resources for public higher education has developed nationally.
4. New or expanded programs will be supported by reallocation of existing resources or through external funding.
5. Following the Board of Regents initiative, FSU will continue to improve effectiveness and efficiency.
6. Collaboration across programs, departments, divisions, and colleges can lead to enhanced student learning and improved effectiveness and efficiency.
7. Growth of FSU student population will continue but not uniformly across colleges or departments.
8. Faculty development is critical to achieving educational objectives.
9. CLAS will increase its support of economic development throughout the region.
Addictions Counseling

**EMPHASIS**

**Coordinator:** Dr. Anne Murtagh, Associate Professor, Dept. of Psychology

- Frostburg State University offers an Emphasis in Addictions Counseling to help prepare you to be a Certified Associate Counselor – Alcohol and Drug in the state of Maryland. This program outlines the educational requirements set forth by the Maryland Board for persons seeking to become certified as an addictions counselor at the bachelor's level. (See below for additional requirements for certification.)
- This emphasis is open to majors in psychology and social work.

**Emphasis in Addictions Counseling at Frostburg State University**

Complete all of the following required courses (a minimum of 36 credit hours):

- PSYC 208 Lifespan Development
- PSYC 317 Abnormal Psychology
- PSYC 385 Group Counseling
- PSYC 386 Pharmacology of Chemical Dependence
- PSYC 387 Addictions Treatment Delivery
- PSYC 388 Topics in Substance-Related and Addictive Disorders
- PSYC 389 Ethics for the Addictions Counselor
- PSYC 406 Theories of Counseling
- PSYC 410 Individual Counseling: Evidence-Based Practice
- PSYC 492/495 Internship Seminar/Internship in Psychology*
- Placement in an addictions-related internship: Internship Seminar (PSYC 492) (3 cr.) and Internship in Psychology (PSYC 495) (minimum 6 cr.)

*In place of this, social work students can enroll in SOWK 495 Internship in Social Work (12 cr.), with placement in an addictions-related internship.

**Additional Maryland State Certification Information**

The Board of Professional Counselors and Therapists oversees the process of certifying addictions counselors in Maryland. There are several levels of certification available, only one of which is addressed via this emphasis and generally described below (accurate as of fall 2019; contact the Board for up-to-date information).

**Certified Associate Counselor – Alcohol and Drug (CAC-AD):**

- Bachelor’s degree in a health or human services counseling field.
- 33 credit hours of specific courses in alcohol and drug counselor training.

Completing this degree program AND taking the required alcohol and drug counselor training courses are the first steps in meeting certification requirements.

Other requirements include:

- Supervised clinical experience: Not less than 1 year with a minimum of 2,000 hours of clinical experience in alcohol and drug counseling with a board-approved alcohol and drug supervisor
- Three professional references
- Examinations: Must pass both the NCAC Level II exam and the Maryland law exam.
- A Criminal History Records Check (CHRC)

For more information, see [https://health.maryland.gov/bopc/Pages/cacad.aspx](https://health.maryland.gov/bopc/Pages/cacad.aspx) or search “MD Board CAC-AD” and look for the official State of Maryland site. Also see COMAR 10.58.07.06 for a complete description of requirements.

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**African American Studies**

**MINOR**

**Coordinator:** Dr. James Saku, Professor, Department of Geography

**Professors:** Abbay (History), Armiento (English and Foreign Languages), Idris (English and Foreign Languages), Rogers Thomas (Sociology), Saku (Geography), Makanq (Philosophy), Moore (Sociology), O’Rorke (Political Science), Yost-Rushton (Theatre and Dance)

**Associate Professors:** English (Visual Arts), McMullen (Sociology), Redmond (Psychology)

**Assistant Professor:** Preston (Theatre and Dance)

**Lecturers:** Stevenson (Athletics), Wynder (Diversity Center)

- You may minor in African American Studies. There is no major available.
- All courses in African American Studies may be taken whether or not you wish to pursue the minor.
- A listing of Special Topics courses offered for the minor in future semesters is available through the Coordinator.

**Program Requirements**

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<th>Requirement</th>
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**Requirements for Minor in African American Studies**

1. **Required Core Course:** (3 hours)
   - AAST 200 Introduction to African American Studies (GEP Group F)

2. **Elective Courses:** (15 hours)
   - AAST 300/HIST 301 Traditional Africa
   - AAST 400 Africans of the Diaspora (GEP Group F)
   - AAST 425 History of African American Theatre
   - AAST 490 Topics in African American Studies
   - AAST 494 AAST Practicum
   - ART 302 Artistic Traditions: Africa and the Americas (GEP Group F)
   - ENGL 231 African American Literature (GEP Group F)
   - ENGL 271 Asian and African Literature
   - ENGL 379 Postcolonial Literature
Animal Behavior

MINOR

Coordinator: Erica Kennedy, Associate Professor, Dept. of Psychology
Professors: Raesly, Serfass (Biology)
Associate Professors: Lambert (Biology), Kennedy (Psychology)
Assistant Professors: Hocking (Biology), Lambert (Biology)

- Animal Behavior is an interdisciplinary minor.
- You cannot major in animal behavior.
- You may find this minor of special interest if you are majoring in biology, interpretive biology and natural history, psychology, or wildlife and fisheries, or if you wish to attend veterinary medicine school.
- Advanced students may apply to care for and conduct research with FSU’s small colony of cotton-top tamarin monkeys or to assist with field research projects studying diverse animals in their natural habitats.

Program Requirements

<table>
<thead>
<tr>
<th></th>
<th>MINOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours Required in Biology:</td>
<td>10-11</td>
</tr>
<tr>
<td>Hours Required in Psychology:</td>
<td>12</td>
</tr>
<tr>
<td>Total Hours Required:</td>
<td>22-23</td>
</tr>
</tbody>
</table>

Requirements for Minor in Animal Behavior

1. Required Courses in Biology: (7 hours)
   - BIOL 149/159 General Biology I (GEP Group C)
   - BIOL 334 Animal Behavior

2. Required Courses in Psychology: (9 hours)
   - PSYC 150 General Psychology (GEP Group D)
   - PSYC 345 Animal Learning and Cognition
   - PSYC 420 Physiological Psychology

3. Choose one course from Biology and one course from Psychology from the list of courses below. (6-7 hours)

   One of the following Biology courses:
   - BIOL 402 Evolution
   - BIOL 406 Ornithology
   - BIOL 422 Herpetology
   - BIOL 423 Mammalogy

   One of the following Psychology courses:
   - PSYC 210 Child Development
   - PSYC 306 Sensation and Perception
   - PSYC 409 Human Learning and Cognition
   - PSYC 445 Research Applications in Animal Learning and Cognition
   - PSYC 490 Evolutionary Psychology

4. Recommended Research Experience:
   - PSYC 499 Psychology Projects or BIOL 499 Special Problems in Biology

Art & Design

MAJOR

TEACHING CERTIFICATION OPTION

Professors: Brown
Associate Professors: English (Chair), Hein, Herzfeld, Odone

- If you complete the major in Art & Design, you will earn the Bachelor of Fine Arts (BFA) degree.
- Minors are offered in art history, fine arts, and graphic design. An emphasis is offered in Computer Print Graphics. See separate sections of catalog.
- You must successfully pass Studio Focus Review (ART 291 — concurrent enrollment in second advanced studio course) and Senior Review (ART 491 — concurrent enrollment in ART 411).
- You must successfully complete ART 207 Graphic Design by the time you earn 45 credit hours. ART 207 also provides instruction in technology fluency and information literacy for BFA candidates.
- Only courses in which a grade of C or better is earned may count towards satisfaction of major and minor requirements.
- Optional internships are available to qualifying students.
Program Requirements

<table>
<thead>
<tr>
<th>Hours Required in Art:</th>
<th>Major</th>
<th>71</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours Required in Other Departments:</td>
<td>65</td>
<td></td>
</tr>
<tr>
<td>Total Hours Required:</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

Requirements for BFA in Art & Design

1. Basic Courses: (15 hours)
   - ART 104 Two-Dimensional Design
   - ART 105 Three-Dimensional Design
   - ART 207 Graphic Design (Tech. Fluency)
   - ART 212 Drawing
   - ART 412 Advanced Drawing

2. Introductory Studio: (21 hours)
   - ART 202 Ceramics
   - ART 216 Illustration
   - ART 221 Painting
   - ART 232 Printmaking
   - ART 235 Photography
   - ART 240 Sculpture
   - ART 307 Computer Graphics or ART 336 Digital Imaging for the Fine Arts
   - Graphic Design students must include ART 307 and Fine Art students must include ART 336.

3. Studio Focus Review: (1 hour)
   - ART 291 Studio Focus Review

4. Art History and Critical Studies: (12 hours)
   - ART 301 Artistic Traditions: Asia (GEP Group F)
   - ART 302 Artistic Traditions: Africa and the Americas (GEP Group F)
   - ART 360 Western Art History
   - ART 408 20th Century Art History
   - ART 415 Art Criticism

5. Advanced Studio Focus (18 hours — 12 credit hours in focus and 6 credit hours in secondary area)
   - OR Dual-Media Studio Focus (18 hours — 9 credit hours in focus and 9 hours in secondary area)
     - ART 402 Advanced Ceramics
     - ART 416 Advanced Illustration
     - ART 407 Advanced Graphic Design
     - ART 421 Advanced Painting
     - ART 432 Advanced Printmaking
     - ART 435 Advanced Photography
     - ART 440 Advanced Sculpture
     - ART 407 Advanced Graphic Design: Print
     - ART 414 Advanced Graphic Design: Interactive Multimedia Design

6. Senior Portfolio: (3 hours)
   - ART 411 Senior Portfolio (Capstone) (co-registration in ART 491 required)

7. Senior Review: (1 hour)
   - ART 491 Senior Review (co-registration in ART 411 required)

Requirements for P-12 Teaching Certification Option in Art

If you wish to complete a Maryland State approved program in teaching Art, you must:

- Complete the BFA in Art and Design.
- Meet the phase admissions requirements summarized in the Educational Professions section.
- Complete the professional education sequence described in Education: P-12 Programs.

If You Are Interested in Teaching Art ...

Students wishing to teach Art PK12 level (elementary, middle and high school) can obtain both a Bachelor of Fine Arts in Art and Design and a Master of Arts in Teaching (MAT) in five years through the following pathway offered by the MAT Secondary program. This pathway requires students to take nine credits of specified graduate courses while completing their undergraduate program in Art. These nine graduate credits will be used as electives toward the undergraduate degree as well as the requirements of the MATS.

Students interested in this pathway should:

1. Discuss the MATS pathway option with their first-year advisor.
2. Meet with the MATS Coordinator as a first-year or sophomore.
3. Apply to the MATS program in the Spring of their sophomore year (February 1 application deadline).
4. Once conditionally admitted (a requirement for the following graduate courses to count as electives in the undergraduate program as well as in the MATS program) take:
   - REED 517 Reading in the Content Area (Fall or Spring Junior or Senior year).
   - SPED 551 Adapting Instruction in Diverse Classrooms (Fall Senior year).
   - SCED 510 Secondary Methods in Curriculum (Spring Senior year).

Please note that students who are considering this pathway should work with their advisor to create a plan of study that allows these 9 credits of graduate courses to be taken in the Junior and Senior years in addition to a minimum of 12 undergraduate credits per semester.
Art History

MINOR

Professors: Brown
Associate Professors: English (Chair), Hein, Herzfeld, Odone

- Minors are also offered in fine arts and graphic design. A major is offered in Art & Design. See separate listings in this catalog.
- Only courses in which a grade of C or better is earned may count towards satisfaction of major and minor requirements.

Program Requirements

<table>
<thead>
<tr>
<th></th>
<th>MINOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours Required in Art:</td>
<td>15-18</td>
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<tr>
<td>Hours Required in Other Departments:</td>
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<td>Total Hours Required:</td>
<td>18</td>
</tr>
</tbody>
</table>

Requirements for Minor in Art History

1. Basic Courses: (3 hours)
   Choose from:
   ART 100  Art Appreciation (GEP Group A)
   HIST 100 The Twentieth Century World (GEP Group B or Group F)

2. Core Courses: (12 hours)
   ART 301  Artistic Traditions: Asia (GEP Group F)
   or ART 302  Artistic Traditions: Africa and the Americas (GEP Group F)
   ART 360  Western Art History
   ART 408  20th Century Art History
   ART 415  Art Criticism

3. Elective: (3 hours)
   Choose from:
   ART 370  Women/Gender and the Visual Arts
   ART 380  19th Century Art History
   ART 430  Greek and Roman Art
   ART 460  Renaissance and Baroque Art History

Biology

MAJOR

CONCENTRATIONS IN
- MOLECULAR BIOLOGY
- ENVIRONMENTAL SCIENCE

OPTION IN PRE-HEALTH PROFESSIONS

MINOR

SEE RELATED PROGRAMS:
- ETHNOBOTANY
- FORESTRY
- INTERPRETIVE BIOLOGY & NATURAL HISTORY
- WILDLIFE & FISHERIES

Contact: David Puthoff, Associate Professor, Department of Biology
Professors: Li, Raesly, Seddon, Serfass
Associate Professors: Keller, Lambert, Taylor (chair)
Assistant Professors: Hocking, Hughes, Sheehan

- Biology is often selected as a major by students planning to enter medicine and other health professions careers. If you plan advanced study in the health professions, you should choose the pre-health professions option.

Program Requirements

<table>
<thead>
<tr>
<th></th>
<th>MAJOR</th>
<th>MINOR</th>
<th>PRE-HEALTH</th>
<th>MOLEC BIO</th>
<th>ENV SCIENCE</th>
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<tbody>
<tr>
<td>Hours Req. in Biology:</td>
<td>41-44</td>
<td>21-24</td>
<td>43-45</td>
<td>38-40</td>
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<tr>
<td>Hours Req. in Other Departments:</td>
<td>30</td>
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<td>30</td>
<td>39</td>
<td>40</td>
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<tr>
<td>Total Hours Req.:</td>
<td>71-74</td>
<td>21-24</td>
<td>73-75</td>
<td>77-79</td>
<td>86</td>
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</table>

Requirements for Major in Biology

1. Introductory Level Courses: (12 hours)
   BIOL 149  General Biology I (GEP Group C)
   BIOL 160  General Zoology
   BIOL 161  General Botany

2. Advanced Level Courses: (20 hours)
   BIOL 304  Microbiology
   BIOL 310  Cell Biology
   BIOL 340  General Ecology
   BIOL 350  Genetics
   BIOL 401  Genetics Laboratory
   BIOL 402  Evolution
3. Biology Electives: (9-12 hours)

Select any 3 classes between the 300 and 456 level. Students can use 3 credits of BIOL 499 or 493 as one (1) of the classes in this category, but may NOT use both.

4. Required Courses in Other Departments: (30 hours)

Chemistry:
CHEM 201 and 202 General Chemistry I & II (CHEM 201 - GEP Group C)
CHEM 311 and 312 Organic Chemistry I
CHEM 321 and 322 Organic Chemistry II

Mathematics:
MATH 109/110 Elements of Applied Probability & Statistics (Core Skill 3)
Select one from:
MATH 119 College Algebra
MATH 120 Pre-Calculus Mathematics (Core Skill 3)
or MATH 220 or higher

Physics:
PHYS 215 and 216 General Physics I & II (PHYS 215 - GEP Group C)
or PHYS 261 and 262 Principles of Physics I & II (PHYS 261 - GEP Group C)

Requirements for Minor in Biology

1. Introductory Level Courses: (12 hours)
   BIOL 149 General Biology I (GEP Group C)
   BIOL 160 General Zoology
   BIOL 161 General Botany

2. Elective Hours Within Department: (9-12 hours)
   Select any 3 biology courses between the 300 and 456 level, except 401.

Pre-Health Professions Option for Biology Majors

(Pre-Dental, Pre-Medical, Pre-Optometry, Pre-Veterinary, Allied Health Fields)

1. Introductory Level Courses: (12 hours)
   BIOL 149 General Biology I (GEP Group C)
   BIOL 160 General Zoology
   BIOL 161 General Botany

2. Advanced Level Courses: (17 hours)
   BIOL 304 Microbiology
   BIOL 310 Cell Biology
   BIOL 340 General Ecology
   BIOL 350 Genetics
   BIOL 401 Genetics Laboratory
   BIOL 496 Seminar in Biology (Capstone)

3. Advanced Level Classes in Biology (8 hours)
   BIOL 321 Anatomy and Physiology I
   BIOL 322 Anatomy and Physiology II
   or
   BIOL 302 Animal Physiology
   BIOL 427 Comparative Anatomy

4. Electives: (6-8 hours)
   Choose two of the following:
   BIOL 402 Evolution
   BIOL 404 Histology
   BIOL 412 General Parasitology
   BIOL 435 Molecular Biology
   BIOL 440 Developmental Biology
   BIOL 445 Immunology
   BIOL 456 Advanced Microscopy
   BIOL 493 Advanced Biological Research*
   BIOL 499 Special Problems in Biology (must be 3 credits)*
   CHEM 455 Biochemistry I

*Students may NOT use both BIOL 493 and BIOL 499 as the two required electives.

5. Required Courses in Other Departments: (30 hours)
   See Section 4 above (Biology major).

Requirements for Major in Biology — Molecular Biology Concentration

- The molecular biology concentration offers an interdisciplinary program with a strong emphasis on laboratory experiences in biology and chemistry, while maintaining a strong biology core. The option is best suited for students who wish to pursue an advanced degree in cell or molecular biology or to find employment in the biotechnology industry.

1. Introductory Level Courses: (12 hours)
   BIOL 149 General Biology I (GEP Group C)
   BIOL 160 General Zoology
   BIOL 161 General Botany

2. Advanced Level Courses: (11 hours)
   BIOL 304 Microbiology
   BIOL 310 Cell Biology
   BIOL 350 Genetics

3. Molecular Biology Option: (9 hours)
   BIOL 401 Genetics Lab
   BIOL 435 Molecular Biology
   BIOL 437 Molecular Biology Seminar (Capstone)
   BIOL 438 Biotechnology Laboratory (3 hours)

4. Electives: (6-8 hours)
   Choose two of the following:
   BIOL 302 Animal Physiology
   BIOL 403 Plant Physiology
   BIOL 402 Evolution
   BIOL 404 Histology
   BIOL 440 Developmental Biology
   BIOL 445 Immunology
   BIOL 456 Advanced Microscopy
   BIOL 493 Advanced Biological Research*
   BIOL 499 Special Problems in Biology*
   or IDIS 493 Honors Thesis

*Students may NOT use both BIOL 493 and BIOL 499 as the two required electives.
Chemistry:
CHEM 201 and 202 General Chemistry (CHEM 201 – GEP Group C)
CHEM 311 and 312 Organic Chemistry I
CHEM 321 and 322 Organic Chemistry II
CHEM 455, 457 and 456 Biochemistry I, II and Biochemistry Lab

Mathematics:
MATH 109/110 Elements of Applied Probability & Statistics (Core Skill 3)
and select one from:
MATH 220 Calculus for Applications I
MATH 236 Calculus I (Core Skill 3)

Physics:
PHYS 215 and 216 General Physics I & II (PHYS 215 – GEP Group C)
PHYS 261 and 262 Principles of Physics I & II (PHYS 261 – GEP Group C)

Requirements for Major in Biology – Environmental Science Concentration

- For students interested in the stewardship of natural resources with a greater emphasis on economic and political perspectives.
- This concentration allows you to choose electives in economics, political science and the humanities, which potentially add a thematic direction to your degree.
- You should not choose this concentration if you are in pre-health professions or planning to attend a traditional biology graduate program.

1. Introductory Level Courses: (22 hours)
BIOL 149 General Biology I (GEP Group C)
BIOL 160 General Zoology
BIOL 161 General Botany
ECON 201/211 Macroeconomics (GEP Group D)
GEOG 103/113 Physical Geography (GEP Group C)
POSC 110/112* Introduction to American Politics (GEP Group D)
or POSC 113/114 Introduction to World Politics (GEP Group D)
or POSC 131** Introduction to Comparative Politics (GEP Group D or F)

2. Advanced Level Courses: (24 hours)
BIOL 304 Microbiology
BIOL 310 Cell Biology
BIOL 340 General Ecology
BIOL 350 Genetics
BIOL 402 Evolution
BIOL 494 Field Experiences in Biological Sciences (Capstone - 6 credits)

3. Supporting Courses: (16 hours)
BIOL 406 Ornithology
or BIOL 423 Mammalogy
or BIOL 426 Vertebrate Zoology
BIOL 425 Forest Ecology and Conservation
BIOL 450 Ecology and Management of Wildlife Populations
or BIOL 420 Fish Management and Culture
ECON 202 Microeconomics
GEOG 473 Environmental Law

4. Courses in Other Departments (18 hours)

Chemistry:
CHEM 201 and 202 General Chemistry (CHEM 201 – GEP Group C)
CHEM 420 Environmental Chemical Analysis

Mathematics:
MATH 109/110 Elements of Applied Probability and Statistics (Core Skill 3)
Select one from:
MATH 119 College Algebra
MATH 120 Pre-Calculus Mathematics (Core skill 3)
or MATH 220 or higher

5. Electives: (6 hours)
Select two courses from different groups.

Group I Advanced Economics
ECON 309 Comparative Economic Systems
ECON 405 Economic Growth and Development: The Developing Economies
ECON 410 Resource and Energy Economics

Group II Advanced Political Science
GEOG 407 Political Geography
POSC 330 Politics of Africa
POSC 331 Politics of Latin America
POSC 332 Politics of the Middle East
POSC 450 Environmental Public Policy

Group III Advanced Humanities
ENGL 440 Literature of the Environment
HIST 409 World Environmental History
PHIL 315 Philosophy and the Environment

Check the prerequisites for other POSC courses before choosing your introductory POSC course.
*POSC 131 preferred prerequisite for POSC 330, 331, 332.
**POSC 110/112 required prerequisite for POSC 450

If You Are Interested in Teaching Biology . . .

Students wishing to teach biology at the secondary school level (middle and high school) can obtain both a Bachelor of Science in Biology and a Master of Arts in Teaching – Secondary (MATS) in five years through the following pathway offered by the MATS program. This pathway allows students to take up to nine credits of required graduate courses while completing their undergraduate program in biology. These nine graduate credits will be used as electives toward their undergraduate degree as well as the requirements of the MATS.

Students interested in this pathway should:
1. Discuss the MATS pathway option with their first-year advisor.
2. Meet with the MATS Coordinator as a first-year or sophomore.
3. Apply to the MATS program in the Spring of their sophomore year (February 1 application deadline).
4. Once conditionally admitted (a requirement for the following graduate courses to count as electives in the undergraduate program as well as in the MATS program) take:
   a. REED 517 Reading in the Content Area (Fall or Spring of Junior or Senior year).
   b. SPED 551 Adapting Instruction in Diverse Classrooms (Fall Senior year).
   c. SCED 510 Secondary Methods in Curriculum (Spring Senior year).

Please note that students who are considering this pathway should work with their advisor to create a plan of study that allows these nine credits of graduate courses to be
taken in the Junior and Senior years in addition to a minimum of 12 undergraduate
credits per semester.

Interpretive Biology
and Natural History

MAJOR

SEE RELATED PROGRAMS:
- BIOLOGY
- ETHNOBOTANY
- FORESTRY
- WILDLIFE & FISHERIES

Contact: Thomas Lambert, Associate Professor, Department of Biology
Professors: Li, Raesly, Seddon, Serfass
Associate Professors: Keller, Lambert, Puthoff, Taylor (chair)
Assistant Professors: Hughes, Munasinghe, Sheehan

- Students majoring in Interpretative Biology and Natural History will
  learn the skills to teach the general public about the great outdoors. A
  variety of biological disciplines will be explored including zoology and
  botany.
- Students are required to participate in a capstone internship working
  with a federal, state or private agency or industry related to individual
  interest.
- Students interested in professional and graduate degrees may need to
  take additional courses.
- Minors are available in biology, ethnobotany, forestry, geography, and
  sustainability studies.

Program Requirements

<table>
<thead>
<tr>
<th>Requirement</th>
<th>MAJOR</th>
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</thead>
<tbody>
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<td>Hours Required in Biology:</td>
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<tr>
<td>Hours Required in Other Departments:</td>
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<tr>
<td>Total Hours Required:</td>
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</tr>
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Requirements for Major in Interpretive Biology
and Natural History

1. Introductory Level Courses: (29 hours)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<tbody>
<tr>
<td>BIOL 149</td>
<td>General Biology I (GEP Group C)</td>
</tr>
<tr>
<td>BIOL 160</td>
<td>General Zoology</td>
</tr>
<tr>
<td>BIOL 161</td>
<td>General Botany</td>
</tr>
<tr>
<td>CHEM 201</td>
<td>General Chemistry (GEP Group C)</td>
</tr>
<tr>
<td>CHEM 150</td>
<td>General, Organic and Biochemistry (GEP Group C)</td>
</tr>
<tr>
<td>CMST 102/112</td>
<td>Introduction to Communication</td>
</tr>
<tr>
<td>GEOG 103/113</td>
<td>Physical Geography</td>
</tr>
<tr>
<td>MATH 109/110</td>
<td>Elements of Applied Probability and Statistics (Core Skill 3)</td>
</tr>
<tr>
<td>MATH 119</td>
<td>College Algebra</td>
</tr>
<tr>
<td>MATH 120</td>
<td>Pre-Calculus Mathematics (Core Skill 3)</td>
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</table>

or MATH 220 Calculus for Applications I
or a higher level MATH course

2. Advanced Level Courses (24 hours)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 334</td>
<td>General Animal Behavior</td>
</tr>
<tr>
<td>BIOL 340</td>
<td>General Ecology</td>
</tr>
<tr>
<td>BIOL 426</td>
<td>Vertebrate Zoology</td>
</tr>
<tr>
<td>BIOL 492</td>
<td>Wildlife, Fisheries and Interpretive Biology and Natural History Seminar (Capstone)</td>
</tr>
<tr>
<td>BIOL 494</td>
<td>Field Experiences in the Biological Sciences (Minimum 3 credits)</td>
</tr>
<tr>
<td>ENGL 339</td>
<td>Scientific Writing</td>
</tr>
<tr>
<td>ENGL 338</td>
<td>Technical Writing (Core Skill 2)</td>
</tr>
<tr>
<td>RECR 394</td>
<td>Environmental Interpretation</td>
</tr>
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</table>

3. Electives: (19-21 hours)

Take one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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</thead>
<tbody>
<tr>
<td>BIOL 406</td>
<td>Ornithology</td>
</tr>
<tr>
<td>BIOL 417</td>
<td>Ichthyology</td>
</tr>
<tr>
<td>BIOL 422</td>
<td>Herpetology</td>
</tr>
<tr>
<td>BIOL 423</td>
<td>Mammalogy</td>
</tr>
</tbody>
</table>

Take one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 309</td>
<td>General Entomology</td>
</tr>
<tr>
<td>BIOL 411</td>
<td>Invertebrate Zoology</td>
</tr>
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</table>

Take one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 405</td>
<td>Dendrology</td>
</tr>
<tr>
<td>BIOL 409</td>
<td>Plant Taxonomy</td>
</tr>
</tbody>
</table>

Take one additional course from above electives or one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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</thead>
<tbody>
<tr>
<td>BIOL 200</td>
<td>Scientific Investigation and Communication</td>
</tr>
<tr>
<td>BIOL 230</td>
<td>Wildlife Techniques</td>
</tr>
<tr>
<td>BIOL 313</td>
<td>Plant Evolution and Diversity</td>
</tr>
<tr>
<td>BIOL 402</td>
<td>Evolution</td>
</tr>
<tr>
<td>BIOL 420</td>
<td>Fish Management and Culture</td>
</tr>
<tr>
<td>BIOL 425</td>
<td>Forest Ecology and Conservation</td>
</tr>
<tr>
<td>BIOL 450</td>
<td>Ecology and Management of Wildlife Populations</td>
</tr>
</tbody>
</table>

Chemistry

MAJOR
MINOR

TRACK IN TRADITIONAL CHEMISTRY

CONCENTRATIONS IN
• PROFESSIONAL CHEMISTRY
• BIOCHEMISTRY
• PRE-PHARMACY

Professors: Larivee, Senese
Associate Professors: Crawford (Chair), Currie, Norris, Simon

All chemistry majors must take the core courses and select the Traditional Track, Professional Concentration, Biochemistry Concentration or Pre-Pharmacy Concentration to fulfill requirements for the major. The Traditional Track is recommended for students wishing to double major.

Chemistry is often selected as a major by students planning to enter health professions careers. The Biochemistry Concentration or Pre-Pharmacy Concentration is a suitable choice.

The Professional Concentration is a strong program for graduate school preparation.

Program Requirements

<table>
<thead>
<tr>
<th></th>
<th>MAJOR</th>
<th>MINOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours Req. in Chem.:</td>
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<td>54-56</td>
</tr>
<tr>
<td>Hours Req. in Other Depts.:</td>
<td>20</td>
<td>28</td>
</tr>
<tr>
<td>Total Hours Req.:</td>
<td>60</td>
<td>82-84</td>
</tr>
</tbody>
</table>

Requirements for Major in Chemistry

1. Core Introductory-Level Courses: (8 hours)
CHEM 201 General Chemistry I (GEP Group C)
CHEM 202 General Chemistry II

2. Core Advanced Courses: (24 hours)
CHEM 304 Computational Tech. in Chem. (Tech. Fluency)
CHEM 305 Research Methods in Chemistry
CHEM 311 Organic Chemistry I
CHEM 312 Organic Chemistry Laboratory I
CHEM 320 Quantitative Anal. Chem.
CHEM 321 Organic Chemistry II
CHEM 322 Organic Chemistry Laboratory II
CHEM 441 Physical Chemistry Lecture I

Requirements for Minor in Chemistry

1. Core Introductory Level Courses: (8 hours)
CHEM 201 General Chemistry I (GEP Group C)
CHEM 202 General Chemistry II

2. Core Advanced Courses: (13 hours)
CHEM 311 Organic Chemistry I
CHEM 312 Organic Chemistry Laboratory I
CHEM 313 Organic Chemistry Laboratory II
CHEM 320 Quantitative Anal. Chem.
CHEM 321 Organic Chemistry II
CHEM 322 Organic Chemistry Laboratory II
CHEM 441 Physical Chemistry Lecture I

3. Required Courses in Other Departments:
Mathematics: (8 hours)
MATH 236 Calculus I (Core Skill 3)
MATH 237 Calculus II

Physics: (8 hours)
PHYS 215, 216 General Physics I, II (215: GEP Group C)
or PHYS 261, 262 Principles of Physics I, II (261: GEP Group C)

4. Choice of Specialization: (12-33 hours)
Majors must choose the Traditional Track, Professional Concentration, Biochemistry Concentration or Pre-Pharmacy Concentration. Requirements listed below.

5. All majors must earn a C or better in CHEM 201, 202, 311, 320, 321.

Requirements for Traditional Track for Chemistry Majors

1. Core Courses: (48 hours)
Required of all Chemistry majors, listed above

2. Advanced Courses: (8 hours)
CHEM 421 Instrumental Analysis
CHEM 442 Physical Chemistry II
CHEM 446 Physical Chemistry Lab II

3. Required Courses in Mathematics: (4 hours)
MATH 238 Calculus III

4. All majors in this track must earn a C or better in CHEM 441.
Requirements for the Professional Concentration for Chemistry Majors

1. Core Courses: (48 hours)
   Required of all Chemistry majors, listed above.

2. Advanced Courses: (15 hours)
   CHEM 411 Advanced Inorganic Chemistry
   CHEM 421 Instrumental Analysis
   CHEM 442 Physical Chemistry II
   CHEM 446 Physical Chemistry Lab II
   CHEM 455 Biochemistry I

3. Required Elective Courses (7-9 hours)
   A minimum of 7 hours in at least two courses:
   CHEM 420 Environmental Chemical Analysis
   CHEM 438 Advanced Organic Chemistry
   CHEM 456 Biochemistry Lab
   CHEM 457 Biochemistry II
   CHEM 460 Environmental Chemistry
   CHEM 490 Selected Topics in Chemistry
   CHEM 493 Advanced Chemistry Research

4. Required Course in Other Departments:
   (12 hours)
   BIOL 149/159 General Biology I (GEP Group C)
   BIOL 310 Cell Biology
   MATH 238 Calculus III

5. All majors in this concentration must earn a C or better in CHEM 441.

Requirements for the Biochemistry Concentration for Chemistry Majors

1. Core Courses: (48 hours)
   Required of all Chemistry majors, listed above.

2. Advanced Courses: (9 hours)
   CHEM 455 Biochemistry I
   CHEM 456 Biochemistry Lab
   CHEM 457 Biochemistry II

3. Required Courses in Biology: (19 hours)
   BIOL 149/159 General Biology I (GEP Group C)
   BIOL 304 Microbiology
   BIOL 310 Cell Biology
   BIOL 321 Anatomy and Physiology I
   BIOL 322 Anatomy and Physiology II

4. All majors in this concentration must earn a C or better in CHEM 455.

Requirements for the Pre-Pharmacy Concentration for Chemistry Majors

1. Core Courses: (48 hours)
   Required of all chemistry majors, listed above.

2. Advanced Chemistry Courses: (3 hours)
   CHEM 455 Biochemistry I

3. Chemistry Elective: (3-4 hours)
   Choose one of the following courses:
   CHEM 330 Medicinal Chemistry
   CHEM 411 Inorganic Chemistry
   CHEM 421 Instrumental Analysis
   CHEM 438 Advanced Organic Chemistry
   CHEM 442 Physical Chemistry II
   CHEM 456 Biochemistry Lab
   CHEM 457 Biochemistry II

4. Required Courses in Biology: (20 hours)
   BIOL 149/159 General Biology I (GEP Group C)
   BIOL 304 Microbiology
   BIOL 310 Cell Biology
   BIOL 321 Anatomy and Physiology I
   BIOL 322 Anatomy and Physiology II

5. Required Courses in Other Departments (12 hours)
   CMST 102/112 Introduction to Strategic Communication Leadership
   or CMST 122 Introduction to Public Communication
   ECON 200 Basic Economics (GEP Group D)
   or ECON 201/211 Principles of Economics (Macro)
   (GEP Group D)
   ENGL 339 Scientific Writing (Core Skills 2)
   or ENGL 338 Technical Writing (Core Skills 2)
   MATH 109/110 Elements of Applied Probability and Statistics (Core Skills 3)
   or MATH 280 Introductory Applied Statistics and Data Analysis

6. All majors in this concentration must earn a C or better in CHEM 455.

If You Are Interested in Teaching Chemistry ...

Students wishing to teach chemistry at the secondary school level (middle and high school) can obtain both a Bachelor of Science in Chemistry and a Master of Arts in Teaching – Secondary (MATS) in five years through the following pathway offered by the MATS program. This pathway allows students to take up to nine credits of required graduate courses while completing their undergraduate program in chemistry. These nine graduate credits will be used as electives toward their undergraduate degree as well as the requirements of the MATS.

Students interested in this pathway should:

1. Discuss the MATS pathway option with their first-year advisor.
2. Meet with the MATS Coordinator as a first-year or sophomore.
3. Apply to the MATS program in the Spring of their sophomore year (February 1 application deadline).
4. Once conditionally admitted (a requirement for the following graduate courses to count as electives in the undergraduate program as well as in the MATS program) take:
   a. REED 517 Reading in the Content Area (Fall or Spring of Junior or Senior year).
   b. SPED 551 Adapting Instruction in Diverse Classrooms (Fall Senior year).
   c. SCED 510 Secondary Methods in Curriculum (Spring Senior year).

Please note that students who are considering this pathway should work with their advisor to create a plan of study that allows these nine credits of graduate courses to be taken in the Junior and Senior years in addition to a minimum of 12 undergraduate credits per semester.

Climate Science

MINOR

Associate Professor: Tianna Bogart, Department of Geography

Program Requirements

<table>
<thead>
<tr>
<th>CLIMATE SCIENCE MINOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Hours Required:</td>
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<td>22</td>
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</tbody>
</table>

Requirements for Climate Science Minor

1. Required Core Courses: (16 hours)
   - GEOG 103 Physical Geography (GEP Group C)
   - GEOG 205 Descriptive Meteorology
   - GEOG 330 Global Climate Change
   - GEOG 405 Physical Climatology
   - GEOG 469 Principles of Atmospheric Science

2. Electives: (6 hours)
   Complete two of the following courses from two different departments:
   - GEOG 340 Soil: Genesis, Nature and Characteristics*
   - GEOG 360 Food Systems*
   - GEOG 406 Management and Conservation of Natural Resources*
   - GEOG 445 Biogeography*
   - GEOG 473 Environmental Law
   - HIST 409 World Environmental History
   - HIST 420 Green: Environment and Economy in US History
   - PHIL 315 Philosophy and the Environment
   - POSC 450 Environmental Public Policy*
   - SOCI 345 Sociology of the Environment*
   *Prerequisite needed to enroll in these courses

3. Recommendations:
   Students are encouraged to select additional course work:
   - COSC 130 Introduction to Programming
   - MATH 236/237/238 Calculus I/II/III
   - PHSC 215 General Physics 1
   - Additional Geographic Techniques courses
   - Additional Advanced Physical Geography courses

Communication Studies

MAJOR

MINORS IN
- COMMUNICATION STUDIES
- SOCIAL MEDIA

TRACKS IN
- STRATEGIC COMMUNICATION LEADERSHIP
- STRATEGIC SOCIAL MEDIA

Professor: Ruminski
Associate Professors: Danzi (Chair), Whalen
Lecturers: Daggett, Stoltz

- Only courses in which you earn a grade of C or better may count toward satisfaction of major or minor requirements.
- All grades earned in courses completed for the major in Communication Studies count in determining whether you meet the graduation requirement of a 2.0 cumulative grade point average in the major.

Program Requirements

<table>
<thead>
<tr>
<th></th>
<th>MAJOR</th>
<th>CMST</th>
<th>SOCIAL MEDIA</th>
</tr>
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<tbody>
<tr>
<td>Hours Required in Communication Studies:</td>
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<td>21</td>
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<tr>
<td>Hours Required in Other Departments:</td>
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<td>Total Hours Required:</td>
<td>45</td>
<td>21</td>
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</tbody>
</table>

Requirements for Major in Communication Studies

1. Required Introductory Courses:
   (6 hours)
   - CMST 225 Foundations of Strategic Messaging
   Choose one of the following:
   - CMST 102/112 Introduction to Strategic Communication Leadership
   - CMST 122 Introduction to Public Communication

2. Required Upper-Division Courses:
   (21 hours)
   - CMST 310 Civic Communication
   - CMST 312 Digital Identity and Community
   - CMST 322 Presentational Communication
   - CMST 325 Public Relations Principles
   - CMST 345 Conflict Management
CMST 350  Intercultural Communication (GEP Group F)
CMST 485  Rights and Responsibilities of Communication (Capstone)

3. Complete one of the two required tracks below:

**Strategic Communication Leadership (15 hours)**
- LEAD 101  Introduction to Leadership Studies
- CMST 215  Collaboration and Team Communication
- CMST 302  Argumentation and Advocacy
- CMST 335  Organizational Communication

Choose one of the following courses:
- LEAD 301  Organizational Leadership
- LEAD 401  Citizen Leadership

**Strategic Social Media (15 hours)**
- MCOM 105  Digital Media and Media Literacy
- MCOM 205  Mobile Media Production
- MCOM 326  Writing for Electronic Media
- MKTG 261  Principles of Marketing
- MKTG 467  Digital and Social Media Marketing

4. Required Electives:
(3 hours not already taken in track)
- CMST 215  Collaboration and Team Communication
- CMST 300  Communication and Relationships
- CMST 302  Argumentation and Advocacy
- CMST 335  Organizational Communication
- CMST 355  Political Communication
- CMST 365  Environmental Communication
- CMST 422  Seminar in Rhetorical Criticism
- CMST 425  Public Relations Strategies
- CMST 451  Seminar in Communication Theory
- CMST 490  Special Topics in Communication Studies
- CMST 494  Communication Studies Field Experience
- LEAD 101  Introduction to Leadership Studies
- LEAD 301  Organizational Leadership
- LEAD 401  Citizen Leadership

5. Required Additional Program:
(Complete one of the following)
- A second major
- A minor (except the Communication Studies minor)
- An associate degree

Requirements for Minor in Communication Studies

1. Required Core Courses:
(6 hours)
- CMST 225  Foundations of Strategic Messaging

**Choose one of the following:**
- CMST 102/112  Introduction to Strategic Communication Leadership
- CMST 122  Introduction to Public Communication

2. Electives:
(Select 15 hours from the courses below)
- CMST 215  Collaboration and Team Communication
- CMST 300  Communication and Relationships
- CMST 302  Argumentation and Advocacy
- CMST 310  Civic Communication
- CMST 312  Digital Identity and Community
- CMST 322  Presentational Communication
- CMST 325  Public Relations Principles
- CMST 335  Organizational Communication
- CMST 345  Conflict Management
- CMST 350  Intercultural Communication
- CMST 365  Environmental Communication
- CMST 422  Seminar in Rhetorical Criticism
- CMST 425  Public Relations Strategies
- CMST 485  Rights and Responsibilities of Communication (Capstone)
- LEAD 101  Introduction to Leadership Studies
- LEAD 301  Organizational Leadership
- LEAD 401  Citizen Leadership

Requirements for Minor in Social Media

1. Social Media Introductory Courses:
(3 hours)
- Choose one of the following:
  - CMST 102/112  Introduction to Strategic Communication Leadership
  - MCOM 105  Digital Media and Media Literacy

2. Social Media Required Courses:
(18 hours)
- MCOM 205  Mobile Media Production
- CMST 225  Foundations of Strategic Messaging
- MKTG 261  Principles of Marketing
- CMST 312  Digital Identity and Community
- MCOM 326  Writing for Electronic Media
- MKTG 467  Digital and Social Media Marketing

**Choose one of the following courses:**
(3 hours)
- CMST 302  Argumentation and Advocacy
- CMST 322  Presentational Communication
- CMST 335  Organizational Communication

3. Recommended Courses*:
- CMST 122  Introduction to Public Communication
- CMST 215  Collaboration and Team Communication
- CMST 310  Civic Communication
- CMST 325  Public Relations Principles
- ENGL 355  Socially Networked Journalism
- MCOM 447  Media Law and Regulations

* One must take the appropriate prerequisites for any recommended courses chosen.
Computer Science

MAJOR

MINOR

CONCENTRATION IN NETWORKS

SEE RELATED PROGRAMS:

- COMPUTER INFORMATION SYSTEMS
- INFORMATION TECHNOLOGY
- SECURE COMPUTING & INFORMATION ASSURANCE

Professors: M. Flinn (chair), G. Rinard, M. Chitsaz, X. Zheng
Associate Professors: W. Xu, X. Pan, L. Xiao, G. Xu
Assistant Professors: J. Guo, Y. Zheng, C. Huang, Z. Chen, O. Kayode
Lecturers: O. Arinde, S. Kennedy, M. Root, R. Flinn, M. Qian
Administrative Assistant: S. Boggs

- Computer science courses must have a grade of C or better to be applied towards major or minor requirements.
- You will be de-registered from any computer science course for which you have not earned a C or better in the prerequisite computer science course(s).

You may receive credit by examination for the following courses: COSC 100, 101, 240, 350.

Mission Statement

The Computer Science & Information Technologies Department’s mission is to present our students with up-to-date curricula and pedagogy in the computer science and information systems disciplines, ensure that they have a solid foundation in the core concepts, equip them with problem solving and decision-making skills, and prepare them for lifelong learning in the discipline. The department provides for and encourages collegial, intellectual, and academic growth of its faculty. The department supports and encourages local and regional technology initiatives contributing to educational and economic advances.

Program Educational Objectives

The Frostburg Computer Science program will graduate computer science professionals who have:

- A solid foundation in core computer science concepts reinforced with mathematics and natural science
- An ability to apply modern computer science concepts and theories to contemporary, real world problems
- An understanding of professional responsibility to evaluate their ethical obligations to society, employers, employees and their peers
- An understanding of the commitment needed to pursue lifelong goals through educational and professional endeavors

Program Outcomes

The Frostburg Computer Science program will provide students with:

- An ability to apply knowledge of computing and mathematics appropriate to the discipline;
- An ability to analyze a problem, and identify and define the computing requirements appropriate to its solution;
- An ability to design, implement and evaluate a computer-based system, process, component, or program to meet desired needs;
- An ability to function effectively on teams to accomplish a common goal;
- An understanding of professional, ethical, legal, security, and social issues and responsibilities;
- An ability to communicate effectively with a range of audiences;
- An ability to analyze the local and global impact of computing on individuals, organizations and society;
- A recognition of the need for, and an ability to engage in, continuing professional development;
- An ability to use current techniques, skills, and tools necessary for computing practices;
- An ability to apply mathematical foundations, algorithmic principles, and computer science theory in the modeling and design of computer-based systems in a way that demonstrates comprehension of the tradeoffs involved in design choices;
- An ability to apply design and development principles in the construction of software systems of varying complexity.

Program Requirements

<table>
<thead>
<tr>
<th></th>
<th>MAJOR</th>
<th>NETWORKS</th>
<th>MINOR</th>
</tr>
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<tbody>
<tr>
<td>Hours Required in Computer Science:</td>
<td>50</td>
<td>50</td>
<td>20</td>
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<tr>
<td>Hours Required in Other Departments:</td>
<td>32</td>
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<tr>
<td>Total Hours Required:</td>
<td>82</td>
<td>82</td>
<td>20</td>
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</tbody>
</table>

Requirements for Major in Computer Science

1. Core Courses: (26 hours)
   - COSC 101 The Discipline of Computer Science (Tech. Fluency)
   - COSC 102 Foundations of Computer Science
   - COSC 240 Computer Science I
   - COSC 241 Computer Science II
   - COSC 325 Software Engineering
   - COSC 365 Digital Logic
   - COSC 460 Operating Systems Concepts
   - COSC 489 Capstone Course

2. Required Advanced Courses: (18 hours)
   - COSC 310 Data Structures & Algorithm Analysis
   - COSC 331 Fundamentals of Computer Networks
   - COSC 350 Low-Level Programming Concepts
   - COSC 444 Introduction to Parallel Computing
3. Other Required Courses:

Mathematics (14 hours):
MATH 236 Calculus I (Core Skill 3)
MATH 237 Calculus II
MATH 350 Linear Algebra I
or MATH 432 Differential Equations
or MATH 437 Combinatorics and Graph Theory
or MATH 470 Mathematical Models and Applications
MATH 380 Introduction to Probability & Statistics

Science (12 hours):
Select two courses from the following:
BIOL 149/159 General Biology I (GEP Group C)
CHEM 201 General Chemistry I
GEOG 103/113 Physical Geography
PHYS 261 Principles of Physics I: Mechanics
and select one course from the following:
BIOL 160 General Zoology
BIOL 161 General Botany
CHEM 202 General Chemistry II
PHYS 262 Principles of Physics II: Electricity and Magnetism

Other (6 hours)
CMST 102 Introduction to Human Communication
ENGL 338 Technical Writing (Core Skill 2)

4. Electives: (9 hours)
A minimum of 9 hours in at least three courses:
COSC 305 Computer Ethics
COSC 335 Advanced Topics in Computer Networks
COSC 345 The Internet and Multimedia Communications
COSC 415 Computer Interfacing
COSC 420 Robotics and Computer Control
COSC 431 Secure Computing
COSC 435 Network Implementation and Testing
COSC 440 Database Management Systems
COSC 445 Network Programming
COSC 455 Artificial Intelligence
COSC 465 Computer Systems Architecture
COSC 470 Compiler Design and Implementation
COSC 475 Interactive Computer Graphics
COSC 491 Seminar in Computer Science
COSC 494 Field Exp. in Computer/Information Science
COSC 499 Individual Problems in Computer Science
ITEC 442 Electronic Commerce

Requirements for Major Concentrating in Networks

1. Core Courses: (26 hours)
COSC 101 The Discipline of Computer Science (Tech. Fluency)
COSC 102 Foundations of Computer Science
COSC 240 Computer Science I
COSC 241 Computer Science II
COSC 325 Software Engineering
COSC 365 Digital Logic
COSC 460 Operating Systems Concepts
COSC 489 Capstone Course

2. Required Advanced Courses: (15 hours)
COSC 331 Fundamentals of Computer Networks
COSC 335 Advanced Topics in Computer Networks
COSC 345 The Internet and Multimedia Communications
COSC 431 Secure Computing
COSC 435 Network Implementation and Testing

3. Other Required Courses:

Mathematics: (14 hours)
MATH 236 Calculus I (Core Skill 3)
MATH 237 Calculus II
MATH 350 Linear Algebra I
or MATH 432 Differential Equations
or MATH 437 Combinatorics and Graph Theory
or MATH 470 Mathematical Models and Applications
MATH 380 Introduction to Probability & Statistics
or MATH 109/110 Elements of Applied Probability and Statistics (Core Skill 3)

Science: (12 hours):
Select two courses from the following:
BIOL 149 General Biology I
CHEM 201 General Chemistry I
GEOG 103 General Geography
PHYS 261 Principles of Physics I: Mechanics
and select one course from the following:
BIOL 160 General Zoology
BIOL 161 General Botany
CHEM 202 General Chemistry II
PHYS 262 Principles of Physics II: Electricity and Magnetism

Other: (6 hours)
CMST 102 Introduction to Human Communication
ENGL 338 Technical Writing (Core Skill 2)

4. Electives: (9 hours)
A minimum of 9 hours in at least three courses:
COSC 305 Computer Ethics
COSC 310 Data Structures and Algorithm Analysis
COSC 350 Low-Level Programming Concepts
COSC 444 Introduction to Parallel Computing
COSC 445 Network Programming
COSC 450 Programming Language Principles and Paradigms
COSC 455 Artificial Intelligence
COSC 465 Computer Systems Architecture
COSC 475 Interactive Computer Graphics
COSC 485 Introduction to the Theory of Computation
COSC 491 Seminar in Computer Science
COSC 494 Field Exp. in Computer/Information Science
COSC 499 Individual Problems in Computer Science
ITEC 442 Electronic Commerce

Requirements for Minor in Computer Science

1. Core Courses: (11 hours)
COSC 101 The Discipline of Computer Science (Tech. Fluency)
COSC 240 Computer Science I
COSC 241 Computer Science II
2. Electives: (9 hours)
Three additional computer science courses.
Two must be at the 300-level or above.

Computer Information Systems

MAJOR

SEE RELATED PROGRAMS:
- COMPUTER SCIENCE
- INFORMATION TECHNOLOGY
- SECURE COMPUTING & INFORMATION ASSURANCE

Professors: M. Flinn (chair), G. Rinard, M. Chitsaz, X. Zheng
Associate Professors: W. Xu, X. Pan, L. Xiao, G. Xu
Assistant Professors: J. Guo, Y. Zheng, C. Huang, Z. Chen, O. Kayode
Lecturers: O. Arinde, S. Kennedy, M. Root, R. Flinn, M. Qian
Administrative Assistant: S. Boggs

- Computer science courses must have a grade of C or better to be applied toward major or minor requirements.
- You will be de-registered from any computer science course for which you have not earned a C or better in the prerequisite computer science course(s).

You may receive credit by examination for the following courses: COSC 100, 101, 240, 350.

Requirements for Major in Computer Information Systems

1. Core Courses: (26 hours)
   - COSC 101 The Discipline of Computer Science (Tech. Fluency)
   - COSC 102 Foundations of Computer Science
   - COSC 240 Computer Science I
   - COSC 241 Computer Science II
   - COSC 325 Software Engineering
   - COSC 365 Digital Logic
   - COSC 460 Operating Systems Concepts
   - COSC 489 Capstone Course

2. Required Advanced Courses: (15 hours)
   - COSC 300 Structured Systems Analysis and Design
   - COSC 331 Fundamentals of Computer Networks
   - COSC 380 Computer-Based Information Systems
   - COSC 440 Database Management Systems
   - COSC 480 Knowledge-Based Systems

3. Electives in Business: (6 hours)
   At least two courses selected from:
   - BLAW 291 Legal Environment of Business
   - MGMT 355 Operations Management
   - MGMT 356 Leadership and Human Behavior
   - MKTG 261 Principles of Marketing

Requirements for Minor in Computer Information Systems

1. Core Courses (10 hours)
   - COSC 101 The Discipline of Computer Science (Tech. Fluency)
   - COSC 240 Computer Science I
   - ACCT 211 Financial Accounting

2. Advanced Courses: (6 hours)
   Two of the following
   - COSC 300 Structured System Analysis and Design
   - COSC 305 Computer Ethics
   - COSC 380 Computer-Based Information Systems

3. Elective in Business: (3 hours)
   One of the following
Requirements for Major in Information Technology

1. Core Courses: (15 hours)
   COSC 100/110 Introduction to Computer Science (Tech. Fluency)
   or COSC 101 The Discipline of Computer Science (Tech. Fluency)
   COSC 102 Foundations of Computer Science
   COSC 130 Introduction to Programming
   COSC 305 Computer Ethics
   ITEC 315 Programming

2. Required Advanced Courses: (22 hours)
   COSC 300 Structured Systems Analysis and Design
   ITEC 312 Human-Computer Interaction
   ITEC 345 Database Systems I
   ITEC 355 Network Implementation
   ITEC 360 Operating Systems
   ITEC 470 Security and Risk Management
   ITEC 480 Project Management
   ITEC 489 Capstone Course

3. Other Required Courses: (12-13 hours)
   CMST 102/112 Introduction to Human Communication
   ENGL 338 Technical Writing (Core Skill 2)
   MATH 109/110 Elements of Applied Probability & Statistics (Core Skill 3)
   or MATH 380 Intro. To Probability & Statistics
   MATH 220 Calculus for Applications I
   or MATH 236 Calculus I (Core Skill 3)

4. Electives: (6 hours):
   Choose a minimum of 6 hours in at least two courses:
   ITEC 410 Diversity in the Global Information Technology
   ITEC 414 Knowledge Management
   ITEC 442 Electronic Commerce
   ITEC 445 Database Systems II
   ITEC 452 Network Administration and Security
   ITEC 462 Emerging Issues and Technologies
   ITEC 475 Computer and Cyber Forensics
   ITEC 491 Seminar in Information Technology
   ITEC 494 Field Experience in Information Technology
   ITEC 499 Individual Problems in Information Technology

5. Tracks/Application Areas (12 hours):
   Choose one of the following tracks/application areas:

   **Accounting**
   ACCT 211 Financial Accounting
   ACCT 212 Managerial Accounting
   ACCT 305 Accounting Systems
   ACCT 311 Intermediate Accounting I

   **Business Information Technology**
   BUAD 100 Introduction to Business
   MGMT 251 Management of Organizations
   MGMT 356 Leadership and Human Behavior
   MGMT 405 Business Ethics and Social Responsibility

   **Computer Security**
   IDIS 150 First Year FSU Colloquium: Personal Security and Privacy in the Age of Information
   or SCIA 120 Introduction to Secure Computing and Information Assurance
   ITEC 452 Network Administration and Security
ITEC 472  Ethical Hacking  
ITEC 475  Computer and Cyber Forensics

Graphic Arts
ART 104  Two-Dimensional Design  
ART 105  Three-Dimensional Design  
ART 207  Graphic Design  
ART 307  Computer Graphics

Mass Communication
MCOM 105  Digital Media and Media Literacy  
MCOM 246  Media Research Methods  
MCOM 287  Single-Camera Production  
MCOM 346  Communication Theory

Requirements for Minor in Information Technology
COSC 101  The Discipline of Computer Science (Tech. Fluency) 
or COSC 100 Introduction to Computer Science (Tech. Fluency)  
COSC 130  Introduction to Programming  
COSC 300  Structured Systems Analysis and Design  
ITEC 345  Database Systems I  
ITEC 442  Electronic Commerce

and select one course from the following:  
ITEC 312  Human-Computer Interaction  
ITEC 410  Diversity in Global Information Technology

Secure Computing and Information Assurance

MAJOR
MINOR
SEE RELATED PROGRAMS:

• COMPUTER INFORMATION SYSTEMS MAJOR & MINOR  
• COMPUTER SCIENCE MAJOR & MINOR  
  - CONCENTRATION IN NETWORKS  
• INFORMATION TECHNOLOGY MAJOR & MINOR

Professors: M. Flinn (chair), G. Rinard, M. Chitsaz, X. Zheng
Associate Professors: W. Xu, X. Pan, L. Xiao, G. Xu
Assistant Professors: J. Guo, Y. Zheng, C. Huang, Z. Chen, O. Kayode
Lecturers: O. Arinde, S. Kennedy, M. Root, R. Flinn, M. Qian

Requirements for Major in Secure Computing & Information Assurance

1. Core Courses: (25 hours)
COSC 101  The Discipline of Computer Science (Tech. Fluency)  
COSC 102  Foundations of Computer Science  
SCIA 120  Introduction to Secure Computing and Information Assurance  
SCIA 210  Introduction to Cyber Law  
COSC 240  Computer Science I  
COSC 241  Computer Science II  
SCIA 340  Secure Databases  
SCIA 489  Capstone Course  

• You will be de-registered from any computer science or secure computing course for which you have not earned a C or better in the prerequisite computer science or secure computing course(s).

You may receive credit by examination for the following courses: COSC 100, 101, 240.

Program Objectives and Outcomes
Problem Solving and Critical Thinking. Solve problems by creating secure computing and information assurance environments, analyzing computing environments and implementing policies and practices to guarantee secure computing and information assurance environments. The student will be able to:

• Apply programming and system management techniques to address secure computing and information assurance problems  
• Perform critical analyses of the impacts of decisions  
• Participate in forensic analysis of hardware, software and systems

Communication and Interpersonal Skills. Use written, oral and electronic methods for effective communication. The student will be able to:

• Document all aspects of a system precisely and clearly  
• Document and communicate organizational secure computing and information assurance strategies, practices and policies  
• Use written, oral, and electronic communication to convey technical information effectively  
• Work cooperatively in teams and with others

Ethical and Professional Responsibilities. Discern and articulate the impact of secure computing and information assurance on society. The student will be able to:

• Determine the economic and organizational effects of secure computing and information assurance on global society  
• Recognize important legal issues and demonstrate appropriate social responsibilities in secure computing and information assurance  
• Demonstrate an awareness of the codes of professional ethics in secure computing and information assurance  
• Plan for and ensure the security, privacy and integrity of data  
• Recognize the need for continuing professional development

Program Requirements

<table>
<thead>
<tr>
<th>Hours Required in Computer Science</th>
<th>MAJOR</th>
<th>MINOR</th>
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<tbody>
<tr>
<td>Hours Required in Other Departments</td>
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<tr>
<td>Total Hours Required</td>
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Requirements for Minor in Information Technology

COSC 101  The Discipline of Computer Science (Tech. Fluency)  
COSC 100 Introduction to Computer Science (Tech. Fluency)  
COSC 102  Foundations of Computer Science  
SCIA 120  Introduction to Secure Computing and Information Assurance  
SCIA 240  Computer Science I  
SCIA 241  Computer Science II  
SCIA 340  Secure Databases  
SCIA 489  Capstone Course

• You must earn a grade of C or better in all computer science, information technology, and secure computing courses to be applied towards major or minor requirements.
2. Required Advanced Courses: (27 hours)

- COSC 331 Fundamentals of Computer Networks
- SCIA 325 Software Security Engineering
- SCIA 335 Network Security
- SCIA 360 Operating System Security
- SCIA 370 Security Policy and Assessment
- SCIA 460 Cloud Computing and Security
- SCIA 470 Computer and Network Forensics I
- SCIA 471 Computer and Network Forensics II
- SCIA 472 Hacking Exposed and Incident Response

3. Other Required Courses: (12-13 hours)

- CMST 102/112 Introduction to Human Communication
- ENGL 338 Technical Writing
- MATH 109/110 Elements of Applied Probability and Statistics (Core Skill 3)
  or MATH 380 Intro. to Probability and Statistics
- MATH 220 Calculus for Applications I
  or MATH 236 Calculus I (Core Skill 3)

4. Electives: (9 hours)

A minimum of 9 hours in at least three courses:

- COSC 305 Computer Ethics
- ITEC 442 Electronic Commerce
- SCIA 425 Software Testing and Assurance
- SCIA 435 Access Control
- SCIA 480 Applied Cryptography
- SCIA 485 Emerging Issues and Cyber Warfare
- SCIA 491 Seminar in Secure Computing and Information Assurance
- SCIA 494 Field Experience in Secure Computing and Information Assurance
- SCIA 499 Individual Problems in Secure Computing and Information Assurance

- You should consider this emphasis if you are a degree-seeking student in another major who would like to acquire additional skills to enhance your professional marketability or a community member seeking professional education in the technology sector.
- Classes are scheduled so you can complete the emphasis in four semesters.

**Program Requirements**

<table>
<thead>
<tr>
<th></th>
<th>EMPHASIS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours Required in Art</td>
<td>24</td>
</tr>
<tr>
<td>Hours Required in Other Departments</td>
<td>0</td>
</tr>
<tr>
<td>Total Hours Required</td>
<td>24</td>
</tr>
</tbody>
</table>

The emphasis in Computer Print Graphics is designed to assist you to:

- Understand the role a computer plays in a graphic designer’s career
- Learn the basic functions of the Macintosh computer
- Gain fundamental knowledge of graphic applications like QuarkXpress, Adobe Illustrator and Adobe Photoshop
- Learn reproduction and manipulation of scanned images
- Create comprehensive layouts
- Develop a personal design style and vocabulary based on knowledge of past and contemporary design trends, materials and commercial printing techniques

**Requirements for Emphasis in Computer Print Graphics**

Students may transfer a maximum of 12 credits into the program selected from ART 104, ART 207, ART 212 and ART 336.

**Required Courses:** (24 hours)

- ART 104 Two-Dimensional Design
- ART 207 Graphic Design
- ART 212 Drawing
- ART 307 Computer Graphics
- ART 336 Digital Imaging for the Fine Arts
- ART 407 Advanced Graphic Design: Print (Level I)
- ART 407 Advanced Graphic Design: Print (Level II)
- ART 414 Advanced Graphic Design: Interactive Multimedia Design

College-level proficiency in English is required, as evidenced by a passing score on the English placement exam, completion of ENGL 101 or completion of its equivalent at another institution.

**Cultural Anthropology**

**MINOR**

**Coordinator:** Kara Rogers Thomas, Professor, Dept. of Sociology

- You cannot major in Cultural Anthropology

---

**Computer Print Graphics**

**EMPHASIS**

**Professors:** Brown

**Associate Professors:** English (Chair), Hein, Herzfeld, Odone

- The emphasis in Computer Print Graphics is offered by the Department of Visual Arts. The department also offers a B.F.A. in Art and Design and minors in art history, fine arts and graphic design.
Program Requirements

<table>
<thead>
<tr>
<th></th>
<th>MINOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours Required in Sociology:</td>
<td>9-12</td>
</tr>
<tr>
<td>Hours Required in Other Departments:</td>
<td>6-9</td>
</tr>
<tr>
<td>Total Hours Required:</td>
<td>18</td>
</tr>
</tbody>
</table>

Requirements for Minor in Cultural Anthropology

1. Basic Courses: (9 hours)
   - SOCI 100/111 Intro to Sociology (GEP Group D)
   - SOCI 224 Cultural Anthropology (GEP Group F)
   - SOCI 362 Sociology of Religion

2. Distribution of Electives: (9 hours)
   At least 6 of which must be in two different disciplines other than Sociology.
   - AAST 300/HIST 301 Traditional Africa
   - AAST 400 Africans of the Diaspora
   - ART 302 Artistic Traditions: Africa and the Americas
   - BIOL 128 Introduction to Ethnobotany
   - BIOL 484 Field Experiences in Ethnobotany and Ecology
   - ENGL 280 Mythology and Literature
   - GEOG 104/114 Human Geography (GEP Group D or F)
   - GEOG 110 World Regional Geography (GEP Group D or F)
   - GEOG 320 Geography of Latin America
   - or GEOG 403 The Geography of Sub-Sahara Africa
   - GEOG 452 Rural Geography
   - HIST 418 Native Peoples of the Americas (GEP Group F)
   - INST 150 Introduction to World Religions (GEP Group F)
   - INST 200 Intro. to International Studies (GEP Group F)
   - MUSC 117 Music of Africa, Asia, & the Americas (GEP Group F)
   - SOCI 350 Folklore in Appalachia
   - SOCI 334 Gender and Social Life
   - SOCI 306 The Sociology of African American

Dance

MINOR

Contact: Nicole Mattis (Chair), Department of Theatre and Dance

- You cannot major in Dance.

Program Requirements

<table>
<thead>
<tr>
<th></th>
<th>MINOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours Required in Dance:</td>
<td>21</td>
</tr>
<tr>
<td>Hours Required in Other Disciplines:</td>
<td>2-3</td>
</tr>
<tr>
<td>Total Hours Required:</td>
<td>23-24</td>
</tr>
</tbody>
</table>

Requirements for Minor in Dance

1. Courses in Dance Technique: (12 hours)
   - DANC 131 Ballet I
   - DANC 154 Jazz I
   - DANC 165 Tap I
   Select a minimum of 6 credits from among:
   - DANC 231 Ballet II
   - DANC 254 Jazz II
   - DANC 265 Tap II
   - DANC 342 Contemporary Modern
   - DANC 361 Dance for Musical Theatre

2. Courses in Dance Composition and Theory: (9 hours)
   - DANC 110 Dance Appreciation (GEP Group A)
   Select a minimum of 6 hours from among:
   - DANC 255 Dance Company I (3 or 6 hours)
   - DANC 305 Improvisation
   - DANC 309 Composition and Theory
   - DANC 355 Dance Company II (3 hours)
   - DANC 429 Special Topics in Dance (3 or 6 hours)

3. Required Courses in Other Disciplines:
   Select a minimum of 2-3 hours from among:
   - EXSS 200 Nutrition
   - MUSC 100 Introduction to Music Theory
   - THEA 110 Introduction to Acting
   - THEA 210 Voice and Movement
   - THEA 306 Stage Lighting
Earth Sciences

MAJOR
CONCENTRATION IN ENVIRONMENTAL SCIENCE

Contact: Richard Russo (Chair), Department of Geography
Participating Faculty:
Associate Professors: Allen (Geography), Bogart (Geography), Crawford (Chemistry), Lambert (Biology), Moore (Physics), Norris (Chemistry), Ramsport (Geography)
Assistant Professor: Sheehan (Biology), Wetherholt (Geography)
Lecturers: T. Edwards (Geography), A. Lewis (Geography), Reynolds (Geography)

• This is a multidisciplinary program administered by the Department of Geography.
• An optional internship is available in Earth Sciences.

Program Requirements

<table>
<thead>
<tr>
<th></th>
<th>MAJOR</th>
<th>EARTH SCIENCE MINOR</th>
<th>ENV. SCIENCE CONC.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours Required in Geography:</td>
<td>37-43</td>
<td>21-22</td>
<td>38</td>
</tr>
<tr>
<td>Hours Required in Other Depts.:</td>
<td>8-12</td>
<td>0</td>
<td>33-34</td>
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<tr>
<td>Total Hours Required:</td>
<td>48-51</td>
<td>21-22</td>
<td>60-61</td>
</tr>
</tbody>
</table>

Requirements for Major in Earth Sciences

1. Required Core Courses: (21 hours)
   GEOG 103/113 Physical Geography (GEP Group C)
   GEOG 205 or PHSC 205 Descriptive Meteorology
   GEOG 207 Physical Geology and Geomorphology
   GEOG 208 Earth Systems History
   GEOG 275 Fund. of Geographic Data Handling* (Tech. Fluency)
   GEOG 380 Research Methods in Geography

   *MATH prerequisite for this course is MATH 109/110, or MATH 119 or Math 220 or a higher-level math course or placement at Math Level III. MATH 119 is the prerequisite for CHEM 201/202. Please consult the catalog for the MATH prerequisites for the other supporting science sequence courses.

2. Required Supporting Science Sequence (8 hours)
   Complete one of the following science sequences:
   CHEM 201/202 General Chemistry I & II (GEP Group C)
   ENES 102 Statics/220 Mechanics of Materials
   PHYS 215/216 General Physics I & II (GEP Group C)
   PHYS 261/262 Principles of Physics I & II (GEP Group C)

3. Advanced Electives (9-11 hours)
   Complete three of the following courses:
   CHEM 420 Environmental Chemical Analysis
   or CHEM 320 Quantitative Analytical Chemistry
   or CHEM 460 Environmental Chemistry
   GEOG 330 Global Climate Change
   GEOG 340 Soils: Genesis, Nature and Characteristics
   GEOG 405 Physical Climatology
   GEOG 406 Management and Conservation of Natural Resources
   GEOG 430 Surface Water Hydrology
   or GEOG 335 Oceanography
   GEOG 431 Quaternary Environments
   or GEOG 441 Soil Analysis
   GEOG 445 Biogeography
   GEOG 460 Natural Hazards in the Physical Environment
   GEOG 469 Principles of Atmospheric Science
   GEOG 475 AdvancedGeomorphology
   GEOG 477 Advanced Geology

4. Technique Courses (3-4 hours)
   Complete one of the following courses:
   GEOG 310 Fundaments of Cartography
   GEOG 317 Principles of Geographic Information Science
   GEOG 413 Remote Sensing – Image Interpretation
   GEOG 433 Surveying and Field Techniques

5. Senior Requirement (6 hours)
   Complete one of the following options:
   A. Research Option
      GEOG 482 Senior Project (I)
      GEOG 483 Senior Project (II)
   B. Technical Option
      Take one additional course from Advanced Electives and one from Technique Courses.

6. Capstone Experience (1 hour)
   GEOG 486 Earth Science Capstone

Requirements for Minor in Earth Science

1. Required Core Courses: (12 hours)
   GEOG 103/113 Physical Geography (GEP Group C)
   GEOG 207 Physical Geology and Geomorphology
   GEOG 208 Earth System History

2. Advanced Electives (9-10 hours)
   Complete at least 9 credits from the following courses:
   GEOG 310 Fundaments of Cartography
   or GEOG 317 Principles of Geographic Information Science
   or GEOG 413 Remote Sensing – Image Interpretation
   or GEOG 433 Surveying and Field Techniques
   GEOG 340 Soils: Genesis, Nature and Characteristics
   GEOG 431 Quaternary Environments
   GEOG 441 Soil Analysis
   GEOG 475 AdvancedGeomorphology
   GEOG 477 Advanced Geology

**Some of these courses may require additional prerequisite course work.
If You Are Interested in Teaching Earth Sciences...

Students wishing to teach earth science at the secondary school level (middle and high school) can obtain both a Bachelor of Science in Earth Sciences and a Master of Arts in Teaching – Secondary (MATS) in five years through the following pathway offered by the MATS program. This pathway allows students to take up to nine credits of required graduate courses while completing their undergraduate program in geography. These nine graduate credits will be used as electives toward their undergraduate degree as well as the requirements of the MATS.

Students interested in this pathway should:

1. Discuss the MATS pathway option with their first-year advisor.
2. Meet with the MATS Coordinator as a first-year or sophomore.
3. Apply to the MATS program in the Spring of their sophomore year (February 1 application deadline).
4. Once conditionally admitted (a requirement for the following graduate courses to count as electives in the undergraduate program as well as in the MATS program) take:
   a. REED 517 Reading in the Content Area (Fall or Spring of Junior or Senior year).
   b. SPED 551 Adapting Instruction in Diverse Classrooms (Fall Senior year).
   c. SCED 510 Secondary Methods in Curriculum (Spring Senior year).

Please note that students who are considering this pathway should work with their advisor to create a plan of study that allows these nine credits of graduate courses to be taken in the Junior and Senior years in addition to a minimum of 12 undergraduate credits per semester.

Environmental Science Concentration in Earth Sciences

- The Environmental Science concentration is dedicated to the study of the relationships between humans and their environments.
- You will become sensitive, articulate, and knowledgeable about increasingly complex environmental issues facing contemporary society.
- Course work in this concentration will provide the theoretical and practical background as well as the skills necessary to study environmental science from a wide range of perspectives.
- You must meet certain criteria and deadlines prior to enrollment in either GEOG 488 or GEOG 492.

Summary of Requirements for Environmental Science Concentration in Earth Sciences

1. Introductory Level Courses: (13 hours)
   - GEOG 103/113 Physical Geography (GEP Group C)
   - GEOG 104/114 Human Geography (GEP Group D or F)
   - or GEOG 110 World Regional Geography: Cultural Diversity (GEP Group D or F)
   - GEOG 275 Fundamentals of Geographic Data Handling (Tech. Fluency)
   - MATH 119 College Algebra (Core Skill 3) – or any other MATH 220 or above

2. Required Advanced Courses: (7 hours)
   - GEOG 380 Research Methods in Geography
   - GEOG 473 Environmental Law
   - GEOG 486 Earth Science Capstone

3. Required Supporting Science Sequence: (16 hours)
   - BIOL 149/159 General Biology I (GEP Group C)
   - BIOL 160 General Zoology
   - or BIOL 161 General Botany
   - CHEM 201 General Chemistry I (GEP Group C)
   - CHEM 202 General Chemistry II

4. Electives: (24-25 hours)
   Select two courses in each group.**

GROUP I Advanced Biology
   - BIOL 340 General Ecology
   - BIOL 406 Ornithology
   - BIOL 409 Plant Taxonomy or BIOL 405 Dendrology
   - BIOL 421 Sample Design and Analysis of Plant Communities
   - BIOL 422 Herpetology
   - BIOL 423 Mammalogy
   - BIOL 430 Introductory Limnology

GROUP II Advanced Techniques
   - GEOG 310 Fundamentals of Cartography
   - GEOG 317 Principles of Geographic Information Science
   - GEOG 413 Remote Sensing - Image Interpretation
   - GEOG 420 Topics in the Mapping and Geospatial Sciences
   - GEOG 433 Surveying and Field Techniques

GROUP III Advanced Physical Geography
   - GEOG 335 Oceanography
   - GEOG 340 Soil: Genesis, Nature and Characterization
   - GEOG 405 Physical Climatology
   - GEOG 430 Surface Water Hydrology
   - GEOG 431 Quaternary Environments
   - GEOG 432 Groundwater Hydrology
   - GEOG 445 Biogeography
   - GEOG 460 Natural Hazards in the Physical Environment
   - GEOG 469 Principles of Atmospheric Science

GROUP IV Advanced Human Systems

Take two of the following from two different disciplines:
   - CMST 365 Environmental Communication
   - ECON 410 Resource and Environmental Economics
   - ENGL 440 Literature of the Environment
   - GEOG 300 Economic Geography
   - GEOG 330 Global Climate Change
   - GEOG 360 Food Systems
   - GEOG 406 Management & Conservation of Natural Resources
   - GEOG 410 Locational Analysis
   - GEOG 425 Geography of Transportation
   - GEOG 452 Rural Geography
   - HIST 409 World Environmental History
   - HIST 418 Native Peoples of the Americas
   - HIST 420 Green: Environment and Economy in U.S. History
   - PHIL 315 Philosophy and the Environment
   - POSC 450 Environmental Public Policy
   - PSYC 488 Environmental Psychology
   - RECR 394 Environmental Interpretation
   - RECR 443 Issues & Risk Management in Recreation and Parks
   - RECR 448 Principles of Ecotourism
   - SOCI 345 Sociology of the Environment
   - SUST 455 Seminar in Sustainability Studies

**Some of these courses may require additional prerequisite course work.
Engineering

MAJOR
Professors: Deng-Luzader, G. Latta, Piltnik, O. Soysal, Wang
Associate Professors: Abdo (Chair), Eltayeb, E. Moore
Assistant Professors: Liu, Speights

Mission Statement
The mission of the FSU Bachelor of Science in Engineering program is to provide excellent undergraduate education in engineering, to establish close partnership with and facilitate technology transfers to industry and government, to contribute to economic development within the state of Maryland, specifically in the Western Maryland region, and to provide related service to the campus community and community at large.

Program Educational Objectives
Within the first few years following graduation, alumni of the FSU BS in Engineering program will:

- Act as valuable employees or professionals in a broad range of career paths centered on Materials or Electrical Engineering skills.
- Apply their broader analytical skill set by finding innovative solutions to real-world problems and creating new knowledge, ideas, and products.
- Show professionalism and an ability to think globally through constructive teamwork, group problem solving, and effective communication with others not of an engineering background.
- Demonstrate ethical decision-making, which will lead to increased levels of responsibility and leadership positions.
- Engage in lifelong learning by keeping their technical knowledge and understanding of contemporary issues up-to-date and taking advantage of professional development opportunities.

Program Outcomes

1. an ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics
2. an ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors
3. an ability to communicate effectively with a range of audiences
4. an ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts
5. an ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives
6. an ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions
7. an ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

B.S. in Engineering at AACC and Cecil College
The B.S. in Engineering is also offered at the Anne Arundel Community College Regional Higher Education Center at Arundel Mills in collaboration with AACC (electrical engineering) and at Cecil College (materials engineering). Students with an associate degree in engineering may complete the bachelor’s degree through onsite, interactive video, and online courses offered at these sites. See following pages.

Program Requirements

<table>
<thead>
<tr>
<th>ELEC. CONC.</th>
<th>MATERIALS CONC.</th>
</tr>
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<tbody>
<tr>
<td>Hours Required in Engineering:</td>
<td>56-58</td>
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<tr>
<td>Hours Required in Other Disciplines:</td>
<td>31</td>
</tr>
<tr>
<td>Total Hours Required:</td>
<td>87-89</td>
</tr>
</tbody>
</table>

Requirements for Major in Engineering

1. Core Courses (42 hours)
CHEM 201 General Chemistry I (GEP Group C)
ENES 100 Introduction to Engineering Design
ENES 401 Fundamentals of Energy Engineering
ENME 271 Numerical Methods in Mechanical Engineering
ENME 272 Introduction to Computer-Aided Design
MATH 236 Calculus I (Core Skill 3)*
MATH 237 Calculus II*
MATH 238 Calculus III*
MATH 432 Differential Equations*
PHYS 261 Principles of Physics I – Mechanics, Waves and Oscillations (GEP Group C)*
PHYS 262 Principles of Physics II – Thermodynamics, Electricity and Magnetism*
PHYS 263 Principles of Physics III – Light and Modern Physics*

*All majors must earn a C or better in MATH 236, MATH 237, MATH 238, MATH 432, PHYS 261, PHYS 262, and PHYS 263.

2. Area of Concentration (45–47 hours)
Majors must choose to concentrate in one of the following areas:

Electrical Engineering (45–47 hours)
ENEE 204 Basic Circuit Theory
ENEE 206 Fund. Digital and Electric Circuits Lab
ENEE 244 Digital Logic Design
ENEE 303 Analog and Digital Circuits Lab
ENEE 307 Electronic Circuits Lab
ENEE 322 Signal and System Theory
ENEE 350 Computer Organization
ENEE 380 Electromagnetic Theory
ENEE 445 Introduction to Communication Systems
ENEE 408 Capstone Design Project for Electrical Engineers
ENEE 439  Topics in Signal Processing
ENEE 475  Power Electronics
ENEE 481  Project Development in Electrical Engineering
ENES 310  Mechatronic and Robotic Design

Two electives from any 300- or 400-level ENEE, ENES or ENME course or CHEM 304

Materials Engineering (46 hours)
ENES 102  Statics
ENES 220  Mechanics of Materials
ENES 221  Dynamics
ENME 232  Thermodynamics
ENME 331  Fluid Mechanics
ENME 332  Transfer Processes
ENME 350  Electronics and Instrumentation I
ENME 351  Electronics and Instrumentation II
ENME 382  Engineering Materials and Manufacturing Processes
ENME 405  Fundamentals of Materials Engineering
ENME 410  Capstone Design Project for Materials Engineering
ENME 425  Microfabrication
ENME 481  Project Development in Materials Engineering

Two electives from any 300- or 400-level ENEE, ENES, or ENME course or CHEM 304

Engineering at AACC

BS PROGRAM
LOCATED AT AACC AT ARUNDEL MILLS, A REGIONAL HIGHER EDUCATION CENTER

About the Program

- Accessible
- Earn your B.S. degree close to home
- Affordable
- FSU has one of the lowest tuition rates in the state of Maryland
- Transfer-friendly
- Credits taken at community college applied toward the B.S. degree
- FSU offers a Bachelor of Science in Engineering degree with an electrical engineering concentration at Anne Arundel Community College at Arundel Mills Regional Higher Education Center.
- This program is designed to meet the needs of modern industry and is open to community college graduates who have completed an A.S. or A.S.E. degree in Engineering.
- FSU offers courses on site and via distance learning for students at the Arundel Mills Center to complete the Bachelor of Science requirements.

Program Educational Objectives

Within the first few years following graduation, alumni of the B.S. in Engineering program at AACC will:

- Act as valuable employees or professionals in a broad range of career paths centered on Electrical Engineering skills.
- Apply their broader analytical skill set by finding innovative solutions to real-world problems and creating new knowledge, ideas, and products.
- Show professionalism and an ability to think globally through constructive teamwork, group problem solving, and effective communication with others not of an engineering background.
- Demonstrate ethical decision-making, which will lead to increased levels of responsibility and leadership positions.
- Engage in life-long learning by keeping their technical knowledge and understanding of contemporary issues up-to-date and taking advantage of professional development opportunities.

Program Outcomes

1. an ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics
2. an ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors
3. an ability to communicate effectively with a range of audiences
4. an ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts
5. an ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives
6. an ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions
7. an ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

Program Requirements

To earn the Bachelor of Science in Engineering from FSU, students must complete a total of 120 credit hours of coursework.

Students entering this program must have an associate’s degree in engineering from a community college and are expected to have completed:

1. 32-33 credits of general education, to include Freshman Composition, 3 credits in the arts, 6 credits in the humanities and 6 credits in social sciences
2. 3 additional credits (any category)
3. Calculus 1, 2 and 3 and Differential Equations
4. Calculus-based physics sequence
5. General Chemistry
6. Engineering coursework, to include Introduction to Engineering Design, Circuit Theory, Programming in C and Digital Logic Design

Once admitted into the program at AACC at Arundel Mills, students will complete a minimum of 50 additional credits of engineering and upper-division general education coursework. The majority of the upper-division courses will be taught on site at AACC at Arundel Mills Regional Higher Education Center. Several will be delivered via interactive video or through online learning.

Total Hours Required at FSU: 50
**Courses at FSU (50 hours)**

ENEE 303  Analog and Digital Electronics  
ENEE 307  Electronic Circuits Lab  
ENEE 322  Signal and System Theory  
ENEE 350  Computer Organization  
ENEE 380  Electromagnetic Theory  
ENEE 408  Capstone Design Project for Electrical Engineers  
ENEE 439  Topics in Signal Processing  
ENEE 445  Introduction to Communication Systems  
ENEE 475  Power Electronics  
ENEE 481  Project Development in Electrical Engineering  
ENES 310  Mechatronic and Robotic Design  
ENES 401  Fundamentals of Energy Engineering  
ENME 373  Advanced Computer-Aided Design

Advanced Writing General Education Course from Approved List  
Two electives from any 300- or 400-level ENEE, ENES or ENME course. Any courses offered at FSU to meet credit requirements.

All majors must earn a C or better in the following prerequisite courses for the major requirements at FSU: ENEE 204, ENEE 206, ENEE 244, MATH 236, MATH 237, MATH 238, MATH 432, PHYS 261, PHYS 262, and PHYS 263.

*Other courses as needed to meet FSU graduation requirements.

### Engineering at Cecil College

**BS PROGRAM**

**Onsite Coordinator:** Dale Schultz, Associate Professor

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**About the Program**

- Accessible  
- Earn your B.S. degree close to home  
- Affordable  
- FSU has one of the lowest tuition rates in the state of Maryland  
- Transfer-friendly  
- Credits taken at community college applied toward the B.S. degree  
- FSU offers a Bachelor of Science in Engineering degree with a materials engineering concentration at Cecil College’s Northeast campus. This program is designed to meet the needs of modern industry and is open to community college graduates who have completed an A.S. or A.S.E. degree in Engineering.  
- FSU offers courses on site and via distance learning for students at Cecil College to complete the Bachelor of Science requirements.

**Program Educational Objectives**

Within the first few years following graduation, alumni of the B.S. in Engineering program at Cecil will:

- Act as valuable employees or professionals in a broad range of career paths centered on Materials Engineering skills.
- Apply their broader analytical skill set by finding innovative solutions to real-world problems and creating new knowledge, ideas, and products.
- Show professionalism and an ability to think globally through constructive teamwork, group problem solving, and effective communication with others not of an engineering background.
- Demonstrate ethical decision-making, which will lead to increased levels of responsibility and leadership positions.
- Engage in life-long learning by keeping their technical knowledge and understanding of contemporary issues up-to-date and taking advantage of professional development opportunities.

**Program Outcomes**

1. an ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics  
2. an ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors  
3. an ability to communicate effectively with a range of audiences  
4. an ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts  
5. an ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives  
6. an ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions  
7. an ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

**Program Requirements**

To earn the Bachelor of Science in Engineering from FSU, students must complete a total of 120 credit hours of coursework.

Students entering this program must have an associate degree in engineering from a community college and are expected to have completed:

1. 30 credits of general education, to include Freshman Composition, 6 credits in arts and humanities and 6 credits in social sciences  
2. Calculus 1, 2 and 3 and Differential Equations  
3. Calculus-based physics sequence  
4. General Chemistry  
5. Engineering coursework, to include Introduction to Engineering Design, Statics, Mechanics of Materials, Dynamics and Thermodynamics

All majors must earn a C or better in the following prerequisite courses for the major requirements at FSU: MATH 236, MATH 237, MATH 238, MATH 432, PHYS 261, PHYS 262 and PHYS 263.

Once admitted into the program at Cecil College, students will complete at least an additional 50 credits of engineering and upper-division general education coursework. The majority of the upper-division courses will be
After completing 45 credits of designated course work, you must apply during the first-year and sophomore years, you will be enrolled as a student. The degree awarded to students completing the program is a B.S. from FSU. Students will need to complete an additional course in the category in which they are deficient once admitted to FSU.

| Total Hours Required at FSU: | 55 |

*FSU Courses (55 hours)*

Advanced Writing General Education course from approved list
- ENME 331 Fluid Mechanics
- ENME 332 Transfer Processes
- ENME 350 Electronics and Instrumentation I
- ENME 351 Electronics and Instrumentation II
- ENME 373 Advanced Computer-Aided Design
- ENME 382 Engineering Materials and Manufacturing Processes
- ENES 401 Fundamentals of Energy Engineering
- ENME 405 Fundamentals of Materials Engineering
- ENME 410 Capstone Design Project for Mechanical Engineers
- ENME 425 Microfabrication
- ENME 481 Project Development in Materials Engineering

Three electives from any 300-400 level ENES, ENEE, or ENME course and one additional elective (any)

For students transferring from Cecil College: Students at FSU are required to have 3 credits in arts and 6 credits in humanities. Since Cecil College requires only 3 credits in arts and humanities (plus EGL 102, which counts as 6 credits of humanities), students will need to complete an additional course in the category in which they are deficient once admitted to FSU.

*Other courses as needed to meet FSU graduation requirements.

Mechanical Engineering COLLABORATIVE PROGRAM MAJOR

Coordinator: Julie Wang, Department of Physics and Engineering

- A collaborative program between Frostburg State University and the University of Maryland, College Park, which allows students to remain on the Frostburg campus for four years while receiving a B.S. degree in mechanical engineering from UMCP.
- This program is accredited by ABET.
- The degree awarded to students completing the program is a B.S. from UMCP.
- During the first-year and sophomore years, you will be enrolled as a pre-engineering major. You will complete general education and engineering science courses taught by faculty on-site at FSU. FSU tuition rates will apply.
- After completing 45 credits of designated course work, you must apply for admission to College Park’s Clark School of Engineering. After meeting UMCP’s admissions standards, you will be accepted into the second half of the program as an engineering major. UMCP’s tuition rates will apply for this part of the program. You must reapply for financial aid and scholarships through UMCP.
- Upper-level engineering courses will be delivered over interactive video from College Park to FSU. All laboratory and design courses will be taught by FSU faculty.
- To be granted advanced placement credit for a course, you must meet UMCP’s minimum requirements. These differ from FSU’s standards, with a higher score required by UMCP in a number of areas. Please consult the Engineering Coordinator to verify AP scores required to receive credit.

Mission Statement

The mission of the FSU Collaborative Mechanical Engineering Program is to provide excellent undergraduate education in mechanical engineering; to establish close partnership with and provide technical knowledge to industry, government and local business; to contribute to economic development within the state of Maryland, specifically in the Western Maryland region; and to provide related services to the campus community and community at large.

Program Educational Objectives

A few years from graduation, the graduates of the Collaborative Mechanical Engineering Program will:

1. Act as valuable employees or professionals in a broad range of career paths centered on Mechanical Engineering skills.
2. Apply their broader analytical skill set through finding innovative solutions to real-world problems and creating new knowledge, ideas, and products.
3. Show professionalism and an ability to think globally through constructive teamwork, group problem solving, and effective communication with others not of an engineering background.
4. Demonstrate ethical decision-making, which will lead to increased levels of responsibility and leadership positions.
5. Engage in life-long learning by keeping their technical knowledge and understanding of contemporary issues up-to-date and taking advantage of professional development opportunities.

Program Outcomes

The students of the Mechanical Engineering Collaborative Program will demonstrate throughout the curriculum:

1. An ability to identify, formulate and solve complex engineering problems by applying principles of engineering, science and mathematics
2. An ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety and welfare, as well as global, cultural, social, environmental and economic factors
3. An ability to communicate effectively with a range of audiences
4. An ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental and societal contexts
5. An ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks and meet objectives
6. An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.

7. An ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

### Program Requirements

| Hours Required in Engineering: | 68 |
| Hours Required in Other Departments: | 40 |
| **Total Hours Required:** | 108* |

*Note: A minimum of 120 credits and satisfactory completion of all department, college, and university requirements must be satisfied to earn a degree from UMCP.

### Summary of UMCP’s General Education Program Requirements

- The University of Maryland will accept completion of FSU’s General Education Program.
- Minimum of 40 credit hours required

### Summary of Pre-Engineering Requirements

1. **Engineering Science Courses (12 hours)**
   - ENES 100 Introduction to Engineering Design
   - ENES 102 Statics
   - ENES 220 Mechanics of Materials
   - ENES 221 Dynamics

2. **Required Courses in Other Departments (40 hours)**
   - CHEM 133 General Chemistry for Engineers (preferred)
   - CHEM 202 General Chemistry II
   - ENGL 101 Freshman Composition (Meets GEP requirement)
   - ENGL 339 Scientific Writing
   - ENGL 338 Technical Writing (Meets GEP requirement)
   - MATH 236 Calculus I (Meets GEP requirement)
   - MATH 237 Calculus II
   - MATH 238 Calculus III
   - MATH 432 Differential Equations
   - PHYS 261 Principles of Physics I: Mechanics, Waves and Oscillations (Meets GEP requirement)
   - PHYS 262 Principles of Physics II: Thermodynamics, Electricity and Magnetism
   - PHYS 263 Principles of Physics III: Light and Modern Physics

After completing 45 credits of designated course work, you must apply for admission to College Park’s Clark School of Engineering.

### Admission Criteria

To be eligible for fall 2021 admission to the Collaborative Program at UMD, students must meet the following criteria by the end of the spring 2021 semester:

- A minimum cumulative GPA of 3.0 on all college level coursework
- Completion of MATH 237 (Calc II) with a minimum grade of B or better
- Completion of PHYS 261 (Physics I) with a minimum grade of B or better
- Completion of CHEM 133 or CHEM 202 (Chemistry for Engineers or Chemistry II) with a minimum grade of C or better

### Summary of Engineering Requirements

1. **Required Engineering Courses (41 hours)**
   - ENME 232 Thermodynamics
   - ENME 271 Numerical Methods in Mechanical Engineering (will satisfy MATH 206)
   - ENME 272 Introduction to Computer-Aided Design
   - ENME 331 Fluid Mechanics
   - ENME 332 Transfer Processes
   - ENME 350 Electronics and Instrumentation I
   - ENME 351 Electronics and Instrumentation II
   - ENME 361 Vibration, Controls and Optimization I
   - ENME 371 Product Engineering and Manufacturing
   - ENME 382 Engineering Materials and Manufacturing Processes
   - ENME 392 Statistical Methods for Product and Process Development
   - ENME 400 Machine Design
   - ENME 462 Vibration, Controls and Optimization II
   - ENME 472 Integrated Product and Process Development (Capstone)

2. **Elective Hours in Department (15 hours)**

### English

**MAJOR**

**MINOR**

**CONCENTRATIONS IN:**

- LITERATURE
- CREATIVE WRITING
- PROFESSIONAL WRITING

**Professors:** Armiento, Barkley, A. Duncan, S. Duncan, Idris, Kehrwald (Chair), LaFemina, R. Smith

**Associate Professors:** Knott, Morris, Raucci

**Assistant Professors:** Hartzog, Shimmin
Lecturer: Browne

- The department also coordinates minors in creative writing, film studies, journalism and public relations.
- Emphases in professional writing and in the teaching of writing are offered.
- ENGL 101, 111, 150, 215, 221, 250, 308, 309, 310, and 312 do not count toward major or minor.

Program Requirements

<table>
<thead>
<tr>
<th></th>
<th>MAJOR</th>
<th>MINOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours Required in English:</td>
<td>42</td>
<td>24</td>
</tr>
<tr>
<td>Hours Required in Other Departments:</td>
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<td>0</td>
</tr>
<tr>
<td>Total Hours Required:</td>
<td>42</td>
<td>24</td>
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</tbody>
</table>

Requirements for Major in English

1. Core Curriculum (15 hours)
   ENGL 260 British Literature: Beowulf to Present*
   ENGL 261 Literature of the United States: Pre-Colonial to Present*
   ENGL 270 European and Neo-European Literature* or ENGL 271 Asian and African Literature*
   ENGL 300 Critical Writing About Literature* (Core Skill 2)
   ENGL 306 English Language Structure and Development *†
   * Must have a C or better to count toward major.

2. Concentrations (27 hours)
   Majors must choose one of the following concentrations:
   Literature
   Creative Writing
   Professional Writing

Requirements for Literature Concentration

1. Major Core Curriculum: (15 hours – listed above)

2. Concentration Core Requirements: (9 hours)
   ENGL 340 Shakespeare
   ENGL 471 Seminar in Critical Theory
   ENGL 489 English Capstone

3. Period Courses: (9 hours)
   Take one of the following:
   ENGL 371 Literature of the Middle Ages
   ENGL 372 Early Modern Literature
   ENGL 373 Literature of the Enlightenment
   Take one of the following:
   ENGL 374 Literature of the Age of Revolution
   ENGL 375 Romanticism
   ENGL 376 Realism and Naturalism
   Take one of the following:
   ENGL 377 Modernism
   ENGL 378 Postmodernism
   ENGL 379 Postcolonial Literature

4. Specialization Course: (3 hours)
   Take one of the following:
   ENGL 431 World Drama I
   ENGL 432 World Drama II
   ENGL 440 Literature of the Environment
   ENGL 450 Women and Literature
   ENGL 490 Selected Topics in English

5. Electives: (6 hours)
   Students may count a maximum of 3 hours of writing courses beyond ENGL 300 Critical Writing About Literature. Students may count one 200-level course

Requirements for Creative Writing Concentration

1. Major Core Curriculum: (15 hours – listed above)

2. Concentration Requirements: (21 hours)
   ENGL 334 Creative Writing: Fiction
   ENGL 335 Creative Writing: Poetry
   ENGL 460 Form and Theory of Fiction and Poetry
   ENGL 470 Senior Workshop
   ENGL 489 English Capstone
   Six hours from the following:
   ENGL 360 Creative Nonfiction
   ENGL 434 Advanced Fiction Writing
   ENGL 435 Advanced Poetry Writing

3. Elective: (3 hours)
   English course (300/400 level)

Requirements for Professional Writing Concentration

1. Major Core Curriculum: (15 hours – listed above)

2. Concentration Requirements: (27 hours)
   ENGL 330 Business Writing
   or ENGL 338 Technical Writing
   ENGL 336 Journalistic Writing
   ENGL 355 Socially Networked Journalism
   ENGL 360 Creative Nonfiction
   ENGL 402 Editing and Production
   ENGL 430 The Composing Processes
   ENGL 436 Advanced News and Feature Writing
   ENGL 438 Applied Digital Writing
   ENGL 489 English Capstone

Requirements for Minor in English

1. Core Curriculum
   (15 hours – Same as major)
2. Minor Core Requirement (3 hours)
ENGL 340 Shakespeare

3. Electives (6 hours)
Criteria for electives: Students must take 6 hrs. of literature at the 300/400 level.

Requirements for Creative Writing Minor

1. Core (12 hours)
ENGL 334 Creative Writing: Fiction
ENGL 335 Creative Writing: Poetry
ENGL 460 Form and Theory of Fiction and Poetry
ENGL 434 Advanced Fiction Writing
or ENGL 435 Advanced Poetry Writing

2. Electives (9 hours)
Choose from the following
ENGL 100 Publication Practicum (1 hour; repeatable to 4 credits)
ENGL 360 Creative Nonfiction
ENGL 377 Modernism OR ENGL 378 Postmodernism
ENGL 402 Editing and Production
ENGL 430 Composing Processes
ENGL 434 Advanced Fiction Writing (if not taken for core)
ENGL 435 Advanced Poetry Writing (if not taken for core)
THEA 350 Playwriting

Relevant special topics courses are also welcomed as electives as approved by the coordinator.

Requirements for Certification in Teaching Secondary English

If you wish to complete a Maryland State-approved program in teaching English, you must:

1. Major Core Curriculum (15 hours — listed above)
2. Certification Requirements: (27 hours)
Complete the requirements for the Literature Concentration and take ENGL 276 Adolescent Literature and ENGL 430 The Composing Processes as your required electives. If these courses are not taken as the required electives in the Literature Concentration, you will need to take them as additional six credits.

- Select the Teacher Certification Option. See the Secondary Education Coordinator for details.
- Meet the phase admission requirements summarized in the Educational Professions section.
- Complete the professional education sequence described in Education: Secondary Programs.

3. Educational Professions Requirements: (37 hours)
Students must meet the phase admissions requirements summarized in the Educational Professions section.

Summary of Requirements for the Secondary Teacher Certification Option:

If you wish to complete a Maryland State-approved program in teaching English, you must:

- Complete the BA/BS in English: Literature Concentration
- Take some additional coursework in English to qualify for Maryland State certification and to meet NCATE accreditation standards: ENGL 276, ENGL 416 and ENGL 430.
- Meet the phase admission requirements summarized in the Educational Professions section.
- Declare a second major in Secondary Teacher Education. See the Secondary Teacher Education Program Coordinator for details.
- Complete the professional education sequence described in Education: Secondary Programs

If you wish to pursue certification for teaching at the secondary level, through a Master of Arts in Teaching degree, you should complete the undergraduate English major and then the Master of Arts in Teaching program. In the English major, you should choose the Literature Concentration. In addition, you must complete the following courses:

ENGL 276 Adolescent Literature
ENGL 306 English Language Structure and Development
ENGL 430 The Composing Processes

If the courses listed above are not completed on the undergraduate level, candidates for the Master of Arts in Teaching program may be required to take additional coursework to meet content standards. It is highly recommended that candidates take ENGL 491 Practicum in the Teaching of Writing.

Requirements for Certification in Teaching Secondary English through the Master of Arts in Teaching Degree

If you wish to pursue certification for teaching at the secondary level through a Master of Arts in Teaching degree, you should complete the undergraduate English major and then the Master of Arts in Teaching program. In the English major, you should choose the Literature Concentration and take these courses as your electives:

ENGL 276 Adolescent Literature
ENGL 430 The Composing Processes

(If the courses listed above are not completed on the undergraduate level, as a candidate for the Master of Arts in Teaching program, you may be required to take additional coursework to meet content standards.)

1. Complete the Master of Arts in Teaching (graduate) program.
Professional Writing

**EMPHASIS**

**Coordinator:** Sydney Duncan, Professor, Department of English

- To be eligible for an emphasis, you must achieve at least a C in each writing course applied to emphasis.
- If you are majoring in English with a concentration in professional writing, you are not eligible for the emphasis.
- You cannot major in Professional Writing.

The emphasis in professional writing is open to degree-seeking students in any major and non-degree seeking members of the community who would like to strengthen writing skills.

Non-degree-seeking students must provide evidence of successful completion of no fewer than 42 college-level credits, including a first-year English course, passed with a grade of C or better.

**Program Requirements**

<table>
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<tr>
<th>Hours Required in English:</th>
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<td>Total Hours Required:</td>
<td>12</td>
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</tbody>
</table>

**Requirements for Emphasis in Professional Writing**

Select 12 hours from the following courses:

- ENGL 330 Business Writing
- ENGL 336 Journalistic Writing
- ENGL 338 Technical Writing
- ENGL 339 Scientific Writing
- ENGL 355 Socially Networked Journalism
- ENGL 402 Editing and Production
- ENGL 436 Advanced News and Feature Writing
- ENGL 430 The Composing Processes
- ENGL 438 Applied Digital Writing

Teaching of Writing

**EMPHASIS**

**Coordinator:** Sydney Duncan, Professor, Department of English

- The Emphasis in the Teaching of Writing is open to degree-seeking students in any major.
- To be eligible to complete the emphasis, students must achieve at least a C in each applied course.

**Program Requirements**

<table>
<thead>
<tr>
<th>Hours Required in English:</th>
<th>12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours Required in Other Departments:</td>
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</tr>
<tr>
<td>Total Hours Required:</td>
<td>12</td>
</tr>
</tbody>
</table>

**Requirements for Emphasis in the Teaching of Writing**

1. Select 3 hours from the following:

   - ENGL 300 Critical Writing About Literature
   - ENGL 308 Social Sciences Advanced Composition
   - ENGL 309 Advanced Composition: Humanities
   - ENGL 310 General Advanced Composition
   - ENGL 312 Honors: Advanced Composition
   - ENGL 330 Business Writing
   - ENGL 338 Technical Writing
   - ENGL 339 Scientific Writing

2. 6 hours of ENGL 491 Practicum in the Teaching of Writing

3. Select 3 hours from the following:

   - ENGL 306 Language Structure and Development
   - ENGL 430 Composing Processes

Ethnobotany

**MINOR**

**SEE RELATED PROGRAMS:**

- BIOLOGY
- CULTURAL ANTHROPOLOGY
- FORESTRY
- GEOGRAPHY
- INTERPRETIVE BIOLOGY & NATURAL HISTORY
- SUSTAINABILITY STUDIES
- WILDLIFE & FISHERIES

**Participating Faculty:**

**Professors:** Li (Biology)

**Associate Professors:** Puthoff (Biology), Rogers Thomas (Sociology)

- You cannot major in Ethnobotany
- A minor in Ethnobotany will prepare you for work in government and non-governmental organizations focused on resource management, conservation, and related areas where human communities and natural environments interact.
- You are encouraged to participate in summer internships with local and regional organizations.
• Students interested in professional and graduate degrees may need to take additional courses.

Program Requirements

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<tr>
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<th>MINOR</th>
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<tbody>
<tr>
<td>Total Hours Required:</td>
<td>20-21</td>
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</tbody>
</table>

Requirements for Minor in Ethnobotany

1. **Scientific Foundations** *(4 hours)*
   BIOL 149/159 General Biology I (GEP Group C)

2. **Ethnobotany Core** *(7 hours)*
   - BIOL 128 Introduction to Ethnobotany
   - Select one additional course from:
     - BIOL 328 Economic Botany
     - BIOL 428 Ethnographic Field Techniques
     - BIOL 460 Field Experiences in Forestry

3. **Botany and Plant Ecology** *(3 hours)*
   GEOG 445 Biogeography

4. **Cultural Perspectives** *(3 hours)*
   SOCI 224 Cultural Anthropology (GEP Group F)

5. **Electives** *(3-4 hours)*
   - Select one additional course from:
     - BIOL 313 Plant Evolution and Diversity
     - BIOL 340 General Ecology
     - BIOL 403 Plant Physiology
     - BIOL 405 Dendrology
     - BIOL 409 Plant Taxonomy
     - BIOL 425 Forest Ecology and Conservation
     - GEOG 104 Human Geography (GEP Group D or F)
     - GEOG 110 World Regional Geography (GEP Group F)
     - SOCI 350 Folklore in Appalachia

Film Studies

**MINOR**

**Coordinator:** Dr. Kevin Kehrwald, Professor, Department of English

**Participating Faculty:** John Lombardi (Communication)

**Professors:** A. Duncan (English), Kehrwald (English), R. Smith (English)

**Associate Professors:** Danzi (Communication) Knott (English), Raucci (English)

• The minor is open to students majoring in any field.
• You cannot major in film studies.

The goal of the film minor is to help you develop visual literacy. You will acquire the essential skills of critical thinking by learning to "read texts" in the most pervasive medium of contemporary culture – film.

You will:

1. Become a more critical viewer of film as a medium by learning to read, analyze, and interpret films
2. Recognize how cinematic techniques, such as camera movement, editing, and cinematography contribute to a film’s impressions
3. Become familiar with film language and terminology
4. Recognize film as a global medium of diverse cultural styles and voices
5. Become acquainted with a variety of aesthetic and cinematic movements
6. Recognize film as a vehicle for forming cultural values
7. Understand how cultural events and technologies have shaped (and continue to shape) film styles, genres, and narrative techniques
8. Understand the historical development of film as an art form

Program Requirements

<table>
<thead>
<tr>
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<th>MINOR</th>
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<tbody>
<tr>
<td>Total Hours Required:</td>
<td>18</td>
</tr>
</tbody>
</table>

Requirements for Minor in Film Studies

1. **Required Core Courses:** *(9 hours)*
   - ENGL 207* Introduction to Film Studies (Fall)
   - ENGL 281 Literature into Film (variable)
   - ENGL 282 Shakespeare on Film (Fall, odd-numbered years)
   - ENGL 345 Film Genre (Fall, even-numbered years)
   - MCOM 205 Mobile Media Production (every semester)
   - MCOM 287 Intro to Video Production (every semester)
   - MCOM 388 Multi-Camera Production (Fall)

   *Must have C or better to count toward minor.

2. **Elective Courses:** *(9 hours)*
   - ENGL 281 Literature into Film (variable)
   - ENGL 282 Shakespeare on Film (Fall, odd-numbered years)
   - ENGL 345 Film Genre (Fall, even-numbered years)
   - MCOM 205 Mobile Media Production (every semester)
   - MCOM 287 Intro to Video Production (every semester)
   - MCOM 388 Multi-Camera Production (Fall)

Relevant Special Topics courses will be welcomed as electives as approved by the Coordinator.
Fine Arts

MINOR

Professors: Brown
Associate Professors: English (Chair), Hein, Herzfeld, Odone

- Minors are also offered in art history and graphic design. A major is offered in Art & Design. See separate listings in this catalog.
- Only courses in which a grade of C or better is earned may count towards satisfaction of major and minor requirements.

Program Requirements

<table>
<thead>
<tr>
<th>MINOR</th>
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<tbody>
<tr>
<td>Hours Required in Art:</td>
</tr>
<tr>
<td>Hours Required in Other Departments:</td>
</tr>
<tr>
<td>Total Hours Required:</td>
</tr>
</tbody>
</table>

Requirements for Minor in Fine Arts

1. Basic Courses: (6 hours)
   ART 104  Two-Dimensional Design
   ART 105  Three-Dimensional Design

2. Art History and Critical Studies: (3 hours)
   Choose 3 credits from:
   ART 301  Artistic Traditions: Asia (GEP Group F)
   or ART 302  Artistic Traditions: Africa and the Americas (GEP Group F)
   ART 360  Western Art History
   ART 380  19th Century Art History
   ART 408  20th Century Art History
   ART 460  Renaissance and Baroque Art History

3. Introductory Studio: (9 hours)
   Choose three courses from among:
   ART 202  Ceramics
   ART 209  Crafts Workshop
   ART 212  Drawing
   ART 216  Illustration
   ART 221  Painting
   ART 232  Printmaking
   ART 235  Photography
   ART 240  Sculpture
   ART 336  Digital Imaging for the Fine Arts

4. Advanced Studio Focus: (3 hours)
   Choose 3 hours from:
   ART 402  Advanced Ceramics
   ART 416  Advanced Illustration
   ART 421  Advanced Painting
   ART 432  Advanced Printmaking
   ART 435  Advanced Photography

Foreign Languages & Literature

MAJOR
CONCENTRATION IN SPANISH

MINOR

Associate Professor: Cisneros
Assistant Professor: de Leon

- At least half of the credit hours required in your major language (Spanish) must be taken at FSU.
- Foreign language majors who have courses transferred from a foreign institution at the 300 or 400 level must take at least one 300 or 400 level course at FSU after they return and prior to graduation.
- Only courses in which a grade of C or better is earned will count towards satisfaction of major or minor requirements.
- A minor in French is also offered.
- The department also offers course work in intercultural studies, literature in translation, and linguistics.
- Courses in Italian, Chinese and Japanese are offered as MDFL courses on an irregular basis.

If you have no experience in French or Spanish, you will have to begin your language study at the elementary level (FREN 101 or SPAN 101)

If you have studied French or Spanish previously, you must take the online placement exam. Please go to the departmental web page to take the online exam.

Accelerated Placement

If the results of the placement exam determine that you are eligible for accelerated placement, and you complete a course above the 101-level with a grade of C or better, you may apply to the department for academic credit for the courses waived, as summarized below.

- at the 102 level, you will be eligible to receive 3 additional credits.
- at the 211 level, you will be eligible to receive 6 additional credits.
- at the 212 level, you will be eligible to receive 9 additional credits.
- at the 250 level, you will be eligible to receive 12 additional credits.
- at the 300 level, you will be eligible to receive 15 additional credits.

There is a $10.00 fee for each hour of credit received through accelerated placement.

Program Requirements

<table>
<thead>
<tr>
<th>MAJOR</th>
<th>MINOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours Required in Foreign Languages:</td>
<td>36</td>
</tr>
</tbody>
</table>
Requirements for Major in Foreign Languages & Literature with a Concentration in Spanish

1. Core Curriculum (9 hours)
   - SPAN 211  Spanish Grammar, Composition and Conversation I*
   - SPAN 212  Spanish Grammar, Composition and Conversation II
   - SPAN 250  Overview of Spanish Language and Culture (GEP Group B)

2. Advanced Courses (27 hours)
   - SPAN 489  Capstone in Spanish
   - Eight upper-level Spanish courses, four of which must be at the 400 level

Requirements for Minor in Foreign Languages & Literature with a Concentration in Spanish

1. Core Curriculum (9 hours)
   - SPAN 211  Spanish Grammar, Composition and Conversation I*
   - SPAN 212  Spanish Grammar, Composition and Conversation II
   - SPAN 250  Overview of Spanish Language and Culture (GEP Group B)

2. Advanced Courses (9 hours)
   - Any three 300 or 400–level courses in Spanish

Requirements for Minor in Foreign Languages & Literature with a Concentration in French

1. Core Curriculum (9 hours)
   - FREN 211  French Grammar, Composition and Conversation I *
   - FREN 212  French Grammar, Composition and Conversation II
   - FREN 250  Overview of French Language and Culture (GEP Group B)

2. Advanced Courses (9 hours)
   - Any three 300 or 400–level courses in French

If you wish to complete a Maryland State approved program in teaching secondary Spanish, you must:
- Complete the BA in Foreign Languages & Literature with the Spanish concentration.
- See the Secondary Teacher Education Program Coordinator for details.

Forestry

MINOR

SEE RELATED PROGRAMS:
- BIOLOGY
- BIOTECHNOLOGY
- ENVIRONMENTAL SCIENCE
- ETHNOBOTANY
- FORESTRY
- INTERPRETIVE BIOLOGY & NATURAL HISTORY
- SUSTAINABILITY STUDIES
- WILDLIFE & FISHERIES
- You cannot major in forestry.

Associate Professors: Puthoff

Program Requirements

<table>
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<tr>
<th>Hours Required in Other Departments:</th>
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<th>0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Hours Required:</td>
<td>36</td>
<td>18</td>
</tr>
</tbody>
</table>

Students are strongly encouraged to keep work from all their courses in anticipation of the senior seminar.

Forestry

MINOR

SEE RELATED PROGRAMS:
- BIOLOGY
- BIOTECHNOLOGY
- ENVIRONMENTAL SCIENCE
- ETHNOBOTANY
- FORESTRY
- INTERPRETIVE BIOLOGY & NATURAL HISTORY
- SUSTAINABILITY STUDIES
- WILDLIFE & FISHERIES
- You cannot major in forestry.

Associate Professors: Puthoff

Program Requirements

<table>
<thead>
<tr>
<th>Total Hours Required:</th>
<th>MINOR</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>23</td>
</tr>
</tbody>
</table>

Requirements for Minor in Forestry

1. Required Courses: (17 hours)
   - BIOL 149/159 General Biology I (GEP Group C)
   - BIOL 161 General Botany
   - BIOL 405 Dendrology
   - BIOL 425 Forest Ecology and Conservation
   - BIOL 460 Forestry Field Practice

2. Electives: (6 hours)
   - At least 6 credits selected from two of the following groups:
   - (Some of the following courses may have prerequisites.)

Geography
- GEOG 317  Principles of Geographic Information Systems
- GEOG 340  Soils: Genesis, Nature and Characterization
- GEOG 406  Management and Conservation of Natural Resources
- GEOG 413  Remote Sensing - Image Interpretation
- GEOG 430  Surface Water Hydrology
- GEOG 433  Surveying
- GEOG 445  Biogeography

Biology
- BIOL 230  Wildlife Techniques
- BIOL 410  Plant Diseases
- BIOL 421  Sample Design and Plant Community Analysis
- BIOL 494  Field Experiences in Biology*
- BIOL 499  Special Problems in Biology *

Other electives
- RECR 342  Park and Facility Design
- RECR 440  Organization & Administration of Recreation and Parks
- POSC 450  Environmental Public Policy
- POSC 498  Readings in Political Science*
- ECON 410  Resource & Energy Economics
* Independent studies courses MUST address a Forestry topic.
Geography

MAJOR
MINOR
CONCENTRATIONS IN:
  • global systems analysis
  • mapping & geospatial sciences

See related programs:
  • climate science
  • earth science

Professor: Ramsrott, Saku
Associate Professors: Allen, Bogart, Russo (Chair)
Assistant Professor: Wetherholt
Instructor: Reynolds
Lecturers: T. Edwards, A. Lewis

• You may elect to complete the major without specialized concentration or choose a concentration in global systems analysis or mapping science.
• An internship is optional.

Program Requirements

<table>
<thead>
<tr>
<th></th>
<th>MAJOR</th>
<th>MINOR</th>
<th>MAPPING/GEOSPAT.</th>
<th>GLOBAL SYSTEMS</th>
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<tbody>
<tr>
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<td>22</td>
<td>42-42</td>
<td>38-39</td>
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<td>12-13</td>
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<td>44-47</td>
<td>22</td>
<td>54-56</td>
<td>47-48</td>
</tr>
</tbody>
</table>

Requirements for Major in Geography
(without specialized concentration)

1. Required Core Courses: (20 hours)
   - GEOG 103 Physical Geography (GEP Group C)
   - GEOG 104 Human Geography (GEP Group D or F)
     or GEOG 110 World Regional Geography: Cultural Diversity (GEP Group D or F)
   - GEOG 275 Fundamentals of Geographic Data Handling (Tech. Fluency)
   - GEOG 310 Fundamentals of Cartography
   - GEOG 380 Research Methods in Geography
   - GEOG 480 The Geographic Perspective
   - GEOG 481 Geography Capstone

2. Advanced Physical Geography: (3-4 hours)
   - GEOG 335 Oceanography
   - GEOG 340 Soils: Genesis, Nature and Characterization

3. Advanced Human Geography: (3 hours)
   - GEOG 300 Economic Geography
   - GEOG 324 Urban Geography
   - GEOG 407 Political Geography
   - GEOG 410 Locational Analysis
   - GEOG 425 Geography of Transportation
   - GEOG 427 Geography of Languages & Religions (GEP Group F)
   - GEOG 452 Rural Geography
   - GEOG 454 Geography of Tourism

4. Advanced Regional Geography: (3 hours)
   Select from:
   - GEOG 301 Geography of North America
   - GEOG 302 Geography of Maryland
   - GEOG 320 Geography of Latin America
   - GEOG 400 Geography of Asia
   - GEOG 401 Geography of Europe
   - GEOG 402 Geography of Northern Eurasia
   - GEOG 403 The Geography of Sub-Saharan Africa
   - GEOG 404 Geography of the Middle East and Central Asia

5. Geographic Techniques: (3 hours)
   Select from:
   - GEOG 317 Principles of Geographic Information Systems
   - GEOG 413 Remote Sensing - Image Interpretation
   - GEOG 420 Topics in the Mapping and Geospatial Sciences
   - GEOG 433 Surveying and Field Techniques

6. Human-Earth Relationships: (3 hours)
   Select from:
   - GEOG 360 Food Systems
   - GEOG 406 Mgmt. and Conservation of Natural Resources
   - GEOG 450 Urban Planning
   - GEOG 460 Natural Hazards in the Physical Environment
   - GEOG 472 Environmental Planning
   - GEOG 473 Environmental Law

7. Electives (6-8 hours)
   Any two additional geography courses at or above the 200-level or equivalent except GEOG 495

8. Required Courses in Other Departments:
   (3 hours)
   - MATH 109 Elements of Applied Probability and Statistics (Core Skill 3)
   *Three or more credits earned in GEOG 499 Research in Geography, may count as one course.

Requirements for Minor in Geography

1. Required Core Courses: (7 hours)
   - GEOG 103 Physical Geography (GEP Group C)
   - GEOG 104 Human Geography (GEP Group D or F)
     or GEOG 110 World Regional Geography: Cultural Diversity (GEP Group D or F)
2. Electives (15 hours)
Select any from GEOG courses at or above the 200-level or equivalent except GEOG 492 and 495

Requirements for Global Systems Analysis Concentration

1. Required Core Courses: (20 hours)
   GEOG 103 Physical Geography (GEP Group C)
   GEOG 104 Human Geography (GEP Group D or F)
   or GEOG 110 World Regional Geography: Cultural Diversity (GEP Group F)
   GEOG 275 Fundamentals of Geographic Data Handling (Tech. Fluency)
   GEOG 310 Fundamentals of Cartography
   GEOG 380 Research Methods in Geography
   GEOG 480 The Geographic Perspective
   GEOG 481 Geography Capstone

2. Specialized Advanced Courses: (15 hours)
   Group I Human Geography: (9 hours)
   GEOG 300 Economic Geography
   GEOG 407 Political Geography
   Select one from:
   GEOG 222 Introduction to Cities
   GEOG 410 Locational Analysis
   GEOG 425 Geography of Transportation
   GEOG 427 Geography of Languages and Religions (GEP Group F)
   GEOG 452 Rural Geography
   GEOG 454 Geography of Tourism
   Group II Regional Geography: (6 hours)
   Select two from:
   GEOG 320 Geography of Latin America
   GEOG 400 Geography of Asia
   GEOG 401 Geography of Europe
   GEOG 402 Geography of Northern Eurasia
   GEOG 403 The Geography of Sub-Saharan Africa
   GEOG 404 Geography of the Middle East and Central Asia

3. Complementary Advanced Courses: (3-4 hours)
   Select one course from one of the three groups:
   Group I Physical Geography: (0-4 hours)
   GEOG 335 Oceanography
   GEOG 340 Soils: Genesis, Nature and Characterization
   GEOG 405 Physical Climatology
   GEOG 430 Surface Water Hydrology
   GEOG 431 Quaternary Environments
   GEOG 445 Biogeography
   Group II Geographic Techniques: (0-3 hours)
   GEOG 317 Principles of Geographic Information Science (GIS)
   GEOG 413 Remote Sensing – Image Interpretation
   GEOG 420 Topics in the Mapping and Geospatial Sciences
   GEOG 433 Surveying and Field Techniques
   Group III Human-Earth Relationships: (0-3 hours)
   GEOG 360 Food Systems
   GEOG 406 Management and Conservation of Natural Resources
   GEOG 450 Urban Planning
   GEOG 460 Natural Hazards in the Physical Environment
   GEOG 472 Environmental Planning
   GEOG 473 Environmental Law

4. Required Courses in Other Departments:* (9 hours)
   MATH 109 Elements of Applied Probability and Statistics (Core Skill 3)
   and select two from:
   ECON 309 Comparative Economic Systems
   ECON 400 International Trade
   ECON 401 International Finance
   ECON 405 Econ. Growth & Develop.: Developing Economies
   HIST 304 History of Latin America
   HIST 341 Modern & Contemporary Middle East
   HIST 353 Contemporary Africa
   HIST 376 Modern Europe
   HIST 404 Revolutionary and Soviet Russia
   HIST 409 World Environmental History
   HIST 437 History of Korea
   HIST 450 History of Mexico
   HIST 455 Latin American Revolutions
   HIST 457 India
   HIST 458 History of China
   HIST 459 History of Japan
   PHIL 311 Asian and African Philosophy (GEP Group F)
   PHIL 315 Philosophy and the Environment
   POSC 330 Politics of Africa
   POSC 331 Politics of Latin America
   POSC 332 Politics of the Middle East
   POSC 333 Politics of Europe
   POSC 341 International Organization
   POSC 431 Russian Politics
   POSC 435 Model Organization of American States
   POSC 441 International Relations: Theory and Practice

Foreign language courses at the 200 level or higher may fulfill this requirement.

* some courses may have prerequisites

Requirements for Mapping and Geospatial Sciences Concentration

1. Required Core Courses: (20 hours)
   GEOG 103 Physical Geography (GEP Group C)
   GEOG 104 Human Geography (GEP Group D or F)
   or GEOG 110 World Regional Geography: Cultural Diversity (GEP Group F)
   GEOG 275 Fundamentals of Geographic Data Handling (Tech. Fluency)
   GEOG 310 Fundamentals of Cartography
   GEOG 380 Research Methods in Geography
   GEOG 480 The Geographic Perspective
   GEOG 481 Geography Capstone

2. Specialized Advanced Courses:
   Geographic Techniques: (12 hours)
   GEOG 317 Principles of Geographic Information Science (GIS)
   GEOG 413 Remote Sensing – Image Interpretation
   GEOG 420 Topics in the Mapping and Geospatial Sciences
3. Complementary Advanced Courses: (9-10 hours)
Select one course from three of the four groups:

**Group I Physical Geography: (0-4 hours)**
- GEOG 335 Oceanography
- GEOG 340 Soils: Genesis, Nature and Characterization
- GEOG 405 Physical Climatology
- GEOG 430 Surface Water Hydrology
- GEOG 431 Quaternary Environments
- GEOG 445 Biogeography

**Group II Human Geography: (0-3 hours)**
- GEOG 222 Introduction to Cities
- GEOG 300 Economic Geography
- GEOG 324 Urban Geography
- GEOG 407 Political Geography
- GEOG 410 Locational Analysis
- GEOG 425 Geography of Transportation
- GEOG 427 Geography of Languages and Religions (GEP Group F)
- GEOG 452 Rural Geography
- GEOG 454 Geography of Tourism

**Group III Regional Geography: (0-3 hours)**
- GEOG 301 Geography of North America
- GEOG 302 Geography of Maryland
- GEOG 320 Geography of Latin America
- GEOG 400 Geography of Asia
- GEOG 401 Geography of Europe
- GEOG 402 Geography of Northern Eurasia
- GEOG 403 The Geography of Sub-Saharan Africa
- GEOG 404 Geography of the Middle East and Central Asia

**Group IV Human-Earth Relationships: (0-3 hours)**
- GEOG 360 Food Systems
- GEOG 406 Management and Conservation of Natural Resources
- GEOG 450 Urban Planning
- GEOG 460 Natural Hazards in the Physical Environment
- GEOG 472 Environmental Planning
- GEOG 473 Environmental Law

4. Required Courses in Other Departments:*
(12 hours)
- MATH 109 Elements of Applied Probability and Statistics (Core Skill 3)
- MATH 119 College Algebra (Core Skill 3)
  or MATH 220 Calculus for Applications I
  or any MATH level III class (3 hours)
- COSC 130 Introduction to Programming (3 hours)
  Select one additional COSC or ITEC course not to include COSC 101 or ITEC 312 (3-4 hours).

5. Recommendations:*
Students are encouraged to select additional course work depending on their specific area of interest such as:
- MATH 220 & 221 Calculus I and II
- COSC 240 Computer Science I (4 hours)
- COSC 241 Computer Science II (4 hours)
- ITEC 315 Programming (3 hours)

*Some of these courses may have prerequisites.

If you are interested in teaching geography ...
- Students wishing to teach geography at the secondary level (middle and high school) must first obtain a degree in geography and then complete the Master of Arts in Teaching (MAT) program in the College of Education. Refer to the Graduate Catalog for information on the MAT program and the application process.

Graphic Design MINOR

**Professors:** Brown

**Associate Professors:** English (Chair), Hein, Herzfeld, Odone

- Minors are also offered in fine arts and art history. A major is offered in Art & Design. See separate listings in this catalog.
- Only courses in which a grade of C or better is earned may count towards satisfaction of major and minor requirements.

**Program Requirements**

<table>
<thead>
<tr>
<th></th>
<th>MINOR</th>
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<tbody>
<tr>
<td>Hours Required in Art:</td>
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<td>Hours Required in Other Departments:</td>
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<td>Total Hours Required:</td>
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</table>

**Requirements for Minor in Graphic Design**

1. **Basic Courses:** (9 hours)
- ART 104 Two-Dimensional Design
- ART 207 Graphic Design (Tech. Fluency)
- ART 212 Drawing

2. **Introductory Studio:** (3 hours)
Choose from:
- ART 216 Illustration
- ART 221 Painting
- ART 232 Printmaking
- ART 235 Photography

3. **Advanced Studio Focus:** (9 hours)
- ART 307 Computer Graphics
- ART 407 Advanced Graphic Design: Print
- ART 414 Advanced Graphic Design: Interactive Multimedia Design
Health Science

MAJOR

Coordinator: Karen L. Keller, Associate Professor, Department of Biology

- The interdisciplinary B.S. in Health Science provides an alternative to traditional bachelor degrees for students interested in a health-related field and will prepare students that are qualified to enter a variety of graduate and professional programs in the health sciences.
- Completion of the program will provide students with a strong background in the natural, social and health sciences while allowing a wide choice of elective courses to suit individual career and graduate/professional school requirements.

Participating Departments:

- Biology
- Chemistry
- Kinesiology and Recreation
- Mathematics
- Nursing
- Philosophy
- Psychology
- Physics and Engineering
- Sociology

Health Science majors should continually examine the catalog of the institution(s) they plan to attend to complete the courses required by the professional school(s), to fulfill additional entrance expectations and be aware of any changes in the requirements. The student should also communicate this information to his or her adviser.

Program Requirements

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<thead>
<tr>
<th>Major Requirements</th>
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<tr>
<td>Hours Required in HSCI:</td>
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<td>Hours Required in Other Departments:</td>
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<td>72</td>
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Requirements for Major in Health Science

1. Required GEP Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>BIOL 149/159</td>
<td>General Biology I (GEP Group C)</td>
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<tr>
<td>CHEM 201</td>
<td>General Chemistry I (GEP Group C)</td>
</tr>
<tr>
<td>ENGL 101</td>
<td>Freshman Composition (Core Skill)</td>
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<tr>
<td>MATH 119</td>
<td>College Algebra (or higher) (Core Skill)</td>
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<tr>
<td>PSYC 150</td>
<td>General Psychology (GEP Group D)</td>
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<tr>
<td>SOCI 100</td>
<td>Introduction to Sociology (GEP Group D)</td>
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2. Health Science Required Courses

(34 credits)

<table>
<thead>
<tr>
<th>Course Code</th>
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<tbody>
<tr>
<td>BIOL 160</td>
<td>General Zoology</td>
</tr>
<tr>
<td>BIOL 321/322</td>
<td>Anatomy and Physiology I/II or BIOL 302 Animal Physiology and BIOL 427 Comparative Anatomy¹</td>
</tr>
<tr>
<td>CHEM 202</td>
<td>General Chemistry II</td>
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<tr>
<td>HSCI 101</td>
<td>Medical Terminology</td>
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<tr>
<td>MATH 109</td>
<td>Statistics</td>
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<tr>
<td>PHIL 313</td>
<td>Biomedical Ethics</td>
</tr>
<tr>
<td>PHYS 215</td>
<td>General Physics I</td>
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<tr>
<td>PHYS 216</td>
<td>General Physics II</td>
</tr>
<tr>
<td>HSCI 491</td>
<td>Health Science Seminar</td>
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¹Veterinary and some medical schools

3. Health and Natural Science Electives

(32 credits)

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<th>Course Code</th>
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<tbody>
<tr>
<td>BIOL 304</td>
<td>Microbiology</td>
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<td>BIOL 310</td>
<td>Cell Biology</td>
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<td>BIOL 334</td>
<td>General Animal Behavior</td>
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<td>BIOL 350</td>
<td>Genetics</td>
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<td>BIOL 360</td>
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<td>BIOL 401</td>
<td>Genetics Laboratory</td>
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<td>BIOL 404</td>
<td>Histology</td>
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<td>BIOL 412</td>
<td>General Parasitology</td>
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<td>BIOL 435</td>
<td>Molecular Biology</td>
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<td>BIOL 440</td>
<td>Developmental Biology</td>
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<td>BIOL 445</td>
<td>Immunology</td>
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<tr>
<td>CHEM 305</td>
<td>Research Methods in Chemistry</td>
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<td>CHEM 311/312</td>
<td>Organic Chemistry I</td>
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<td>CHEM 321/322</td>
<td>Organic Chemistry II</td>
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<td>CHEM 330</td>
<td>Medicinal Chemistry</td>
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<td>CHEM 455</td>
<td>Biochemistry I</td>
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<td>CHEM 456</td>
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<td>CHEM 457</td>
<td>Biochemistry II</td>
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<td>EXSS 200</td>
<td>Nutrition</td>
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<tr>
<td>EXSS 300</td>
<td>Advanced Nutrition</td>
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<tr>
<td>EXSS 303</td>
<td>Biomechanics for Exercise and Sport Science</td>
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<tr>
<td>EXSS 305</td>
<td>Care and Prevention of Athletic Injuries</td>
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<tr>
<td>EXSS 315</td>
<td>Nutrition for the Physically Active</td>
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<td>EXSS 330</td>
<td>Exercise Epidemiology</td>
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<td>EXSS 341</td>
<td>Psychology of Physical Activity</td>
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<td>EXSS 401</td>
<td>Physiology of Exercise</td>
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<td>EXSS 435</td>
<td>Lifespan Health and Fitness</td>
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<td>HSCI 425</td>
<td>Biostatistics</td>
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4. Social Science Electives (6 credits)

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<th>Course Code</th>
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<tr>
<td>PSYC 208</td>
<td>Introduction to Lifespan Development</td>
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<tr>
<td>PSYC 210</td>
<td>Child Development</td>
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<tr>
<td>PSYC 212</td>
<td>Adolescent and Adult Development</td>
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<tr>
<td>PSYC 214</td>
<td>Introduction to Geropsychology</td>
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<tr>
<td>PSYC 220</td>
<td>Psychology of Women</td>
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<tr>
<td>PSYC 250</td>
<td>Death and Dying</td>
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<tr>
<td>PSYC 317</td>
<td>Abnormal Psychology</td>
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<td>PSYC 345</td>
<td>Animal Learning and Cognition</td>
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<td>PSYC 386</td>
<td>Pharmacology of Chemical Dependences</td>
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<td>PSYC 409</td>
<td>Human Learning and Cognition</td>
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<td>PSYC 420</td>
<td>Physiological Psychology</td>
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<tr>
<td>PSYC 430</td>
<td>Health and Psychology</td>
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<td>PSYC 489</td>
<td>Abnormal Child Psychology</td>
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<tr>
<td>SOCI 367</td>
<td>Sociology of Medicine</td>
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<tr>
<td>SOCI 420</td>
<td>Animals in Human Society</td>
</tr>
<tr>
<td>SOCI 466</td>
<td>Women, Health and Healing</td>
</tr>
<tr>
<td>SOCI 468</td>
<td>Sociology of Later Life</td>
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</tbody>
</table>
History

MAJOR
MINOR
CONCENTRATIONS IN:
• INTERNATIONAL HISTORY
• HISTORY OF THE AMERICAS

Professors: Abbay, Wood (Chair)
Associate Professors: Ma, McConnell

• Only courses in which you earn a grade of C or better will count toward satisfaction of major requirements.
• The Department strongly encourages majors to consider the internship option.
• HIST 492 counts as elective credit toward the HIST major; HIST 495 counts as general elective credit.

Program Requirements

<table>
<thead>
<tr>
<th></th>
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<tr>
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</table>

Requirements for Major in History

1. Core Introductory Level Courses: (6 hours)
   Select from:
   HIST 103 History of the United States to 1876
   HIST 104 History of the United States, 1876 to the Present
   HIST 113 World History to 1500
   HIST 114 World History, 1500-1900

   (The Master of Arts in Teaching (MAT) program and Secondary Teacher Education require completion of one of the following sequences:
   HIST 103 and HIST 104 or HIST 113 and HIST 114)

2. Research Core: (6 hours)
   HIST 299 Writing and Research in History
   Completion of HIST 299 with a C or better is required for admission to the history major.
   Students may file a declaration of major BEFORE completing HIST 299.

   HIST 485 Seminar in History
   Must be completed during the senior year with a grade of C or better. Fulfills Capstone Experience in the major requirement.

3. Concentrations: (27 hours)
   Majors must choose one of the following concentrations:
   International History
   History of the Americas

4. Electives (6 hours)
   Any two 300/400-level HIST courses except HIST 495.

Requirements for Minor in History

1. Core Introductory Level Courses: (12 hours)
   HIST 103 History of the United States to 1876
   HIST 104 History of the United States, 1876 to the Present
   HIST 113 World History to 1500
   HIST 114 World History, 1500-1900

2. Electives (12 hours)
   Any four 300/400-level HIST courses except HIST 495.

Requirements for International History Concentration

1. Select five courses from the following:
   HIST 301 Traditional Africa
   HIST 303 History of Latin America to 1825
   HIST 304 History of Latin America, 1825 to the Present
   HIST 306 Medieval Europe
   HIST 307 Renaissance and Reformation Europe
   HIST 308 Europe, 1600-1815
   HIST 310 Ancient Greece and Rome
   HIST 341 Modern and Contemporary Middle East
   HIST 353 Contemporary Africa
   HIST 360 Modern and Contemporary Asia
   HIST 376 Modern Europe
   HIST 403 Imperial Russia
   HIST 404 Revolutionary and Soviet Russia
   HIST 409 World Environmental History
   HIST 418 Native Peoples of the Americas (GEP Group F)
   HIST 419 A History of Terrorism
   HIST 433 Public History
   HIST 436 Women’s Issues in World History (GEP Group F)
   HIST 437 History of Korea
   HIST 450 History of Mexico
   HIST 455 Latin American Revolutions
   HIST 457 India
   HIST 458 History of China
   HIST 459 History of Japan
   HIST 475 Genocide and Mass Violence
   HIST 481 Experiential History/International
   HIST 489 Special Topics in International History

2. Select two history courses from the History of the Americas concentration.

3. Select two complementary courses from the following areas (some of these courses may require additional pre-requisite course work):
   ART 301 Artistic Traditions: Asia (GEP Group F)
   ART 302 Artistic Traditions: Africa & the Americas (GEP Group F)
   ART 360 Western Art History
Requirements for History of the Americas Concentration

1. Select five courses from the following:
   HIST 303 History of Latin America to 1825
   HIST 304 History of Latin America, 1825 to the Present
   HIST 409 World Environmental History
   HIST 418 Native Peoples of the Americas (GEP Group F)
   HIST 420 Green: Environment and Economy in U.S. History
   HIST 433 Public History
   HIST 434 Women in the United States
   HIST 436 Women’s Issues in World History (GEP Group F)
   HIST 445 History of Maryland
   HIST 450 History of Mexico
   HIST 455 Latin American Revolutions
   HIST 461 Colonial America, 1607-1763
   HIST 462 Revolutionary America, 1763-89
   HIST 463 The Age of Jefferson and Jackson, 1789-1848
   HIST 464 The Civil War and Reconstruction, 1849-77
   HIST 465 Gilded Age America, 1877-1913
   HIST 466 The U.S. in the 20th Century, 1914-45
   HIST 470 America and the Vietnam War
   HIST 480 The American West
   HIST 482 Experiential History/Americas
   HIST 490 Special Topics in History of the Americas

2. Select two history courses from the International History concentration.

3. Select two complementary courses from the following areas (some of these courses may require additional pre-requisite course work):
   ART 302 Artistic Traditions: Africa & the Americas (GEP Group F)
   ECON 303 American Economic Development
   ECON 405 Economic Growth and Development
   ENGL 231 African American Literature
   ENGL 261 Literature of the United States: Pre-Colonial to Present
   ENGL 372 Early Modern Literature
   ENGL 373 Literature of the Enlightenment
   ENGL 374 Age of Revolution
   ENGL 375 Romanticism
   ENGL 376 Realism and Naturalism
   ENGL 377 Modernism
   ENGL 378 Postmodernism
   ENGL 379 Postcolonial Literature
   FREN 250 or above (250 – GEP Group B)
   GEOG 301 Geography of North America
   GEOG 320 Geography of Latin America
   GEOG 324 Urban Geography: Internal City Patterns
   POSC 321 American State and Local Politics
   POSC 331 Politics of Latin America
   POSC 363 Media and Politics
   POSC 421 American Legislative Politics
   POSC 427 The American Presidency
   POSC 471 American Political Thought
   SOCI 307 African Americans in Appalachia
   SPAN 250 or above (250 – GEP Group B)

Industrial and Organizational Psychology

MINOR

Coordinator: Paul C. Bernhardt, Associate Professor, Department of Psychology

Participating Faculty:

Professor: Offstein (Management)

Associate Professors: Bernhardt (Psychology), Chory (Management), McClellan (Management), Monahan (Management), Ruminski (Communications), Shore (Management)

Assistant Professor: James (Psychology)

- Industrial and Organizational Psychology is an interdisciplinary minor.
- You cannot major in Industrial and Organizational Psychology
- This minor is available to students in all majors at the University. It may be of particular interest for students who intend to work in business management or human resources areas of their field of study, or for students who intend to go to graduate school in Industrial and Organizational Psychology or related fields.
- Only courses in which a grade of C or better is earned may count towards satisfaction of the requirements of the minor.
Program Requirements

<table>
<thead>
<tr>
<th>MINOR</th>
<th>Hours Required in Psychology:</th>
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<tr>
<td>MINOR</td>
<td>Hours Required in Management:</td>
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<tr>
<td>MINOR</td>
<td>Total Hours Required:</td>
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</table>

Minor in Industrial and Organizational Psychology

1. Required Courses in Psychology: (6 hours)
   - PSYC 150/151 General Psychology
   - PSYC 360 Industrial/Organizational Psychology

2. Required Courses in Management: (6 hours)
   - MGMT 251 Management of Organizations
   - MGMT 357 Human Resources Management

3. Elective Courses: (6+ hours, variable credit course must be 3 hours minimum)
   Choose two courses from the following:
   - CMST 335 Organizational Communication
   - MGMT 356 Leadership and Human Behavior
   - PSYC 318 Social Psychology
   - PSYC 408 Tests & Measurements
   - One (and only one) of PSYC 490, 491, 492/495, 497, 498, 499 if course topic is approved by the Minor Coordinator in advance, see coordinator for details.

International Studies

MAJOR

MINOR

CONCENTRATION IN

- INTERNATIONAL BUSINESS
- INTERNATIONAL POLITICS
- INTERNATIONAL ECONOMICS
- INTERNATIONAL DEVELOPMENT

Coordinator: Suzanne McCoskey, Associate Professor, Department of Economics

Departmental Contacts:

Professors: Abbay (History), Andorfer (Political Science), Boniece (History), Twing (Political Science)

Associate Professors: Russo (Geography)

Assistant Professor: Cisneros (English & Foreign Languages)

The International Studies major is interdisciplinary in nature and allows you to choose among four concentrations: International Business, International Politics, International Development and International Economics. The required core courses emphasize the interconnections among these four specializations and provide the solid foundation in history, politics, economics, and geography necessary both for the concentration and future employment.

- You are strongly encouraged to combine this major with a second major or minor, particularly in foreign languages.
- An internship is optional but INST 492 may be used for elective credits.
- Only courses in which a grade of C or better is earned will count toward satisfaction of major requirements.

Requirements for Major in International Studies

1. Required Core Courses: (24 hours)
   - INST 150 Intro. to World Religions (GEP Group F)
   - INST 200 Intro. to International Studies (GEP Group F)
   - INST 491 Seminar in International Studies (Capstone)
   - ECON 201/211 Principles of Economics (Macro) (GEP Group D)
   - GEOG 104/114 Human Geography (GEP Group D or F)
     or GEOG 110 World Regional Geography: Cultural Diversity (GEP Group D or F)
   - HIST 100/111 The Contemporary World in Historical Perspective (GEP Group B or F)
     or HIST 114 World History
   - MATH 109/110 Elements of Applied Probability and Statistics (Core Skill)
   - POSC 113/114 Introduction to World Politics (GEP Group D)
     or POSC 131 Intro. to Comparative Politics (GEP Group D or F)

2. Foreign Language: (12 hours)
   Students must complete 12 hours (or receive credit by exam) in one modern foreign language. For languages not offered at FSU, the language requirement may be met by transferring in 12 credits in one language from another institution or by passing a proficiency exam at the intermediate level. A minor in Spanish or French can be earned with 18 credits at the 200-level and above.

3. Additional Courses: (21 hours)
   Choose seven courses from at least three disciplines in consultation with your advisor.
   [For those completing a concentration, go to the concentration requirements.]

   - AAST 300 Traditional Africa
   - AAST 400 Africans of the Diaspora
   - ART 301 Artistic Traditions: Asia
   - ART 302 Artistic Traditions: Africa and the Americas
   - ART 360 Western Art History
   - ECON 309 Comparative Economic Systems
   - ECON 400 International Trade
   - ECON 401 International Finance
   - ECON 405 Economics of Developing Countries
   - ECON 410 Resource and Energy Economics
### Requirements for Minor in International Studies

1. **Required Core Courses:** (3 hours)
   - INST 200 Intro. to International Studies (GEP Group F)

2. **Foreign Language:** (0 hours)

3. **Elective Courses:** (18 hours)
   - A minimum of 9 hours must be taken from Group I and 9 hours from Group II. You must select courses from at least three different disciplines in fulfilling the 18 hours for this requirement. Many courses in Group II require specific courses in Group I as prerequisites.

**Group I (9 hours)**

- ECON 201/211 Principles of Economics — Macro (GEP Group D)
- ECON 202/212 Principles of Economics — Micro
- GEOG 104/114 Human Geography (GEP Group D or F)
- or GEOG 110 World Regional Geography: Cultural Diversity (GEP Group D or F)
- HIST 100/111 The Contemp. World in Historical Perspective (GEP Group B or F)
- or HIST 114 World History
- INST 150 Introduction to World Religions (GEP Group F)
- INTR 330 International Business
- MDFL 111 Intercultural Understanding (GEP Group F)
- PHIL 308 Political Philosophy (GEP Group F)
- SOCI 224 Cultural Anthropology (GEP Group F)

**Group II (9 hours)**

- ECON 309 Comparative Economic Systems
- ECON 400 International Trade
- ECON 401 International Finance
- ECON 405 Economics of Developing Countries
- FINA 477 International Financial Management
- GEOG 300 Economic Geography
- GEOG 360 Food Systems
- GEOG 406 Mgmt. and Conservation of Natural Res.
- or GEOG 427 Geography of Languages & Religions (GEP Group F)
- HIST 409 World Environmental History
- HIST 419 A History of Terrorism
- HIST 436 Women’s Issues in World History (GEP Group F)
- HIST 437 History of Korea
- HIST 450 The History of Mexico
- HIST 455 Latin American Revolutions
- HIST 457 India
- HIST 458 History of China
- HIST 459 History of Japan
- HIST 475 Genocide and Mass Violence
- HIST 481 Experiential History/International
- HIST 482 Experiential History/Americas
- HIST 489 Special Topics in International History
- HIST 490 Special Topics in History of the Americas
- INST 490 Special Topics in International Studies
- INST 492 Internship Seminar (up to 6 hours)
- INST 495 Internship in International Studies
- INTR 330 International Business
- INTR 490 Special Topics in Global Business
- LING 301 Introduction to Language
- MDFL 111 Intercultural Understanding (GEP Group F)
- MDFL 211 Introduction to World Literature I
- MDFL 212 Introduction to World Literature II
- MDFL 301 Latin American Women’s Issues
- MDFL 407 Latin American and Spanish Film
- MDFL 417 World Film
- PHIL 311 Asian and African Philosophy
- POSC 330 Politics of Africa
- POSC 331 Politics of Latin America
- POSC 332 Politics of Middle East
- POSC 333 Politics of Europe
- POSC 341 International Organization
- POSC 342 Foreign Policy of the United States
- POSC 336 Politics of Food
- POSC 370 Introduction to Political Thought
- POSC 441 Foreign Policy of the United States
- POSC 443 Transnational Terrorism and Counter-Terrorism

### Requirements for International Business Concentration

1. **Required Core Courses:**
   - (24 hours — listed above)
2. Foreign Language:  
(12 hours – listed above)  
3. Additional Courses: (27 hours)  

A. Required Courses: (18 hours)  
ACCT 211 Financial Accounting  
BLAW 291 Legal Environment of Business  
INTR 330 International Business  

and one of the following pairs of courses:  
FINA 370 Corporate Finance*  
FINA 477 International Financial Management  
or  
MGMT 251 Management of Organizations  
MGMT 450 International Management  
or  
MKTG 261 Principles of Marketing  
MKTG 460 Global Marketing  

and one of the following courses:  
ECON 309 Comparative Economic Systems  
ECON 400 International Trade  
ECON 401 International Finance  

B. Elective Courses: (9 hours)  
ECON 405 Economics of Developing Countries  
FINA 303 Principles of Finance  
GEOG 300 Economic Geography  
GEOG 407 Political Geography  

Requirements for International Development Concentration  
1. Required Core Courses:  
(24 hours – listed above)  
2. Foreign Language:  
(12 hours – listed above)  
3. Additional Courses: (27 hours)  

A. Required Courses: (15 hours)  
ECON 202/212 Principles of Economics (Micro)  
ECON 309 Comparative Economic Systems  
ECON 405 Economics of Developing Countries  
GEOG 300 Economic Geography  
POSC 341 International Organization  

B. Elective Courses: (12 hours)  
Four courses (chosen from at least three different disciplines)  
from among the following:  
ECON 400 International Trade  

Requirements for International Economics Concentration  
1. Required Core Courses: (24 hours – listed above)  
2. Foreign Language: (12 hours – listed above)  
3. Additional Courses: (30-31 hours)  

A. Required Courses: (21-22 hours)  
ECON 202/212 Principles of Economics (Micro)  
ECON 400 International Trade  
ECON 401 International Finance  
ECON 405 Economics of Developing Countries  
ECON 450 Quantitative Economics  
or  
ECON 460 Introduction to Econometrics  
GEOG 300 Economic Geography  
MATH 118 Algebra With Calculus for Business  
or  
MATH 220 Calculus for Applications I  
or  
MATH 236 Calculus I (Core Skill 3)  

B. Elective Courses: (7 hours)  
Two from among the following:  
ECON 309 Comparative Economic Systems  
ECON 410 Resource and Energy Economics  
GEOG 407 Political Geography  
POSC 341 International Organization  

Requirements for International Politics Concentration  
1. Required Core Courses:  
(24 hours – listed above)
2. Foreign Language:  
(12 hours – listed above)

3. Additional Courses: (27 hours)

A. Required Courses: (18 hours):
- ECON 309 Comparative Economic Systems
- GEOG 407 Political Geography
- POSC 250 Research Methods
- POSC 341 International Organization
- POSC 342 Foreign Policy of the United States
- POSC 441 International Relations: Theory and Practice

B. Elective Courses: (9 hours)  
Three from among the following:
- ECON 400 International Trade
- HIST 409 World Environmental History
- HIST 419 A History of Terrorism
- INST 490 Seminar in International Studies
- INST 492 Internship Seminar (if internship is relevant to International Politics)
- POSC 330 Politics of Africa
- POSC 331 Politics of Latin America
- POSC 332 Politics of Middle East
- POSC 333 Politics of Europe
- POSC 336 Politics of Food
- POSC 370 Introduction to Political Thought
- POSC 431 Russian Politics
- POSC 435 Model Organization of American States
- POSC 442 National Security Policy
- POSC 443 Transnational Terrorism and Counter-Terrorism

Jazz Studies

MINOR

Program Coordinator: Brent Weber, Associate Professor, Department of Music

- The Jazz Studies Minor is open to music majors looking for a broader musical experience or students wanting to explore jazz instruction and performance while pursuing another major.
- Course of study includes:
  - Jazz and Vocal Jazz Ensembles
  - Private Applied Instruction
  - Music Theory and Jazz Theory and Analysis
  - Jazz History
- Student must demonstrate prior study of an instrument or voice.
- Only courses in which you earn a grade of C or better will count toward satisfaction of the minor requirements.

Requirements for Jazz Studies Minor

1. Music Theory and History: (16 hours)
- MUSC 102 Tonal Analysis I
- MUSC 103 Tonal Analysis II (Tech. Fluency)
- MUSC 104 Aural Musicianship I
- MUSC 105 Aural Musicianship II
- MUSC 214 Jazz Theory and Analysis
- MUSC 311 Jazz History (GEP Group F)

2. Ensemble: (4 hours)  
4 hours selected from:
- MUSC 327 Jazz Orchestra (for instrumentalists)
- MUSC 370 Vocal Jazz Ensemble (for vocalists)

3. Private Instruction: (4 hours)
- MUSA 122 Private Instruction
  and/or MUSA 362 Private Instruction

Journalism

MINOR

Coordinator: Andy Duncan, Professor, Department of English

Participating Faculty:

Professors: Abbay (History), A. Duncan (English)

Associate Professors: Ma (History), McConnell (History), Morris (English), Whalen (Communication), Wood (History)

The minor in journalism will help you develop:
- Improved communication skills
- Familiarity with the roles that journalists perform in different environments
- Understanding of cultural differences, political matters, and global issues facing the practicing journalist today
- Enhanced problem-solving skills
- Ability to perform specific tasks related to print and media journalism
- Awareness of legal and ethical restrictions on journalists

You cannot major in journalism.
Requirements for Minor in Journalism

1. Required Courses: (18 hours)
   - ENGL 336  Journalistic Writing
   - ENGL 402  Editing and Production
   - ENGL 436  Advanced News and Feature Writing
   - ENGL 494  Field Experience in W
   - MCOM 326  Writing for the Electronic Media
   - MCOM 447  Media Law and Regulations

2. Electives: (3 hours)
   Choose one from the following:
   - ENGL 355  Socially Networked Journalism
   - ENGL 360  Creative Nonfiction
   - Any 300- or 400-level HIST or POSC course

Law and Society

MAJOR

CONCENTRATIONS IN:
- CRIMINAL JUSTICE
- LEGAL STUDIES

Coordinator: Scott Johnson, Professor, Department of Political Science

Program Requirements

Requirements for Major in Law and Society

1. Required Core Courses: (16 hours)
   - PHIL 102  Contemporary Ethical Problems (GEP Group B)
   - PHIL 112  Honors Contemporary Ethical Problems (GEP Group B)
   - POSC 110  Intro. to American Politics (GEP Group D)
   - POSC 112  Honors Intro. to American Politics (GEP Group D)
   - POSC 250  Research Methods
   - SOCI 311  Basic Research Methods
   - POSC 423  Civil Rights and Liberties
   - POSC 489  Law & Society Capstone
   - SOCI 100  Intro. to Sociology (GEP Group D)
   - SOCI 111  Honors Intro. to Sociology (GEP Group D)

2. Concentrations: (30-33 hours) Complete one of the following concentrations:

Concentration in Legal Studies

(30 hours)
A. Required Course (6 hours)
PHIL 410 Philosophy of Law
POSC 422 Constitutional Law

B. Elective Courses (24 hours)

Select a total of eight courses, with at least three from Group 1 and at least four from Group 2:

Group 1
BLAW 291 Legal Environment of Business
GEOG 473 Environmental Law
MCOM 447 Media Law and Regulations
MGMT 457 Labor Relations
PHIL 420 Sport Law and Ethics
POSC 324 Criminal Justice Systems
SCIA 210 Introduction to Cyber Law

Group 2
CMST 302 Argumentation and Advocacy
PHIL 100 Critical Thinking
PHIL 301 Ethics
PHIL 304 Social Philosophy
PHIL 305 Criminal Justice Ethics
PHIL 308 Political Philosophy
POSC 321 State and Local Politics
POSC 323 Public Administration
POSC 358 American Public Policy
SOCI 340 Criminology
SOCI 442 Juvenile Delinquency
SOCI 443 The American Correctional System

Concentration in Criminal Justice
(33 hours)

A. Required Courses (18 hours)
CMST 102 Introduction to Human Communication
or CMST 122 Introduction to Public Communication
PHIL 305 Criminal Justice Ethics
or PHIL 410 Philosophy of Law
POSC 324 Criminal Justice Systems
SOCI 200 Social Problems
or SOCI 203 Deviant Behavior
SOCI 340 Criminology
SOCI 443 The American Correctional System

B. Elective Courses (15 hours)

Select any five of the following courses:
PHIL 301 Ethics
PHIL 304 Social Philosophy
POSC 321 American State & Local Politics
POSC 422 Constitutional Law
POSC 323 Public Administration
POSC 353 Public Program Evaluation
POSC 355 Public Budgeting
POSC 358 American Public Policy
PSYC 340 Forensic Psychology
PSYC 386 Drugs & Human Behavior
SCIA 120 Intro. to Secure Computing and Info. Assurance
SOCI 305 Racial and Cultural Minorities
SOCI 341 Race and Crime
SOCI 442 Juvenile Delinquency
SPAN 101 Basic Elements of Spanish
SPAN 211 Spanish Grammar & Composition

3. Internship: (optional; 9 or 15 hours)
POSC 492 Internship Seminar
POSC 495 Internship in Political Science

Law School Preparation

PRE-PROFESSIONAL PROGRAM

Pre-law Advisor: Scott Johnson, Professor, Department of Political Science

- While you cannot major or minor in law school preparation, there are law-related courses offered at Frostburg State University.
- Prospective law students should carefully examine the catalog of the law school they wish to attend in order to determine the test requirements for that school.

The traditional preparatory majors for entering law schools have been political science, history, English, philosophy, or sociology. Most law schools prefer that undergraduates interested in admission to law school not follow a prescribed “pre-law” curriculum. Rather, they prefer that students pursue a broad, liberal education.

Almost all professional law schools require applicants to take the Law School Aptitude Test. In some cases, the Graduate Record Exam may also be required. Information regarding the L.S.A.T. may be obtained from this university's pre-law advisor. Information regarding the G.R.E. may be obtained from University Counseling and Psychological Services.

Prospective law students should strive to acquire exceptional ability in communication; gain critical understanding of human values and institutions; and develop understanding in the use of various types of reasoning: deductive, inductive, and analogous. Students should develop the ability to think creatively and to analyze critically. They should also learn how to recognize, differentiate, and organize facts according to their relevance to particular issues.

Suggested Elective Courses for Law School Preparation

The following courses may be especially helpful in achieving the qualities stated above. Students are advised to choose elective courses from this list:

BLAW 291 Legal Environment of Business
CMST 122 Intro. to Public Communication
CMST 225 Interviewing
CMST 302 Argumentation & Advocacy
CMST 322 Presentational Communication
CMST 451 Seminar in Communication Theory
ECON 404 Public Finance
ENGL 330 Business Writing
ENGL 334 Creative Writing
ENGL 336 Journalistic Writing
ENGL 338 Technical Writing
GEOG 450 Urban Planning
GEOG 473 Environmental Law
HIST 103,104 History of U.S. I, II
PHIL 100 Critical Thinking
PHIL 102/112 Contemporary Ethical Problems
PHIL 410 Philosophy of Law
POSC 324 Criminal Justice Systems
POSC 422 Constitutional Law
POSC 423 Civil Rights and Liberties
Law School Admission Test (LSAT) Preparation Course

This non-credit course is designed to help students prepare for the Law School Admission Test (LSAT), a prerequisite for all students seeking admission to law school. The course is offered twice during the academic year in preparation for the October and June tests. There is a fee for the course that covers the costs of instruction and a textbook that contains more than 500 questions and problems, including analytical exercises, practice tests, and a full-length home-study exam. The course covers each of the main sections of the LSAT in depth: application of rules, reading comprehension, logical games, logical reasoning, and essay writing. For each section, students are exposed to a wide variety of sample questions, which are analyzed in class, and various suggestions and methods are presented in lectures for approaching the types of questions in each section.

Graduates of the LSAT prep course have gained admission to such law schools as The Georgetown University Law Center, Duquesne University School of Law, The University of Baltimore School of Law, The West Virginia University College of Law, Appalachian School of Law, Ohio Northern University College of Law, The Thomas M. Cooley Law School, and Liberty College of Law.

For further information, contact Dr. Scott Johnson, pre-law advisor and instructor of the course.

Leadership Studies

MINOR

Coordinator: Elesha L. Ruminski, Department of Communication

- The Leadership Studies Minor is open to any student seeking theoretical and experiential leadership development. It is not necessary to be in a leadership role on or off campus to minor in Leadership Studies.
- The minor entails a substantial number of experiential learning activities.
- Only courses in which a grade of C or better is earned will count towards satisfaction of the minor requirements.
- You cannot major in Leadership Studies.

Program Requirements

<table>
<thead>
<tr>
<th>Requirements for Minor in Leadership Studies</th>
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</table>

1. Required Core Courses: (12 credits)
   LEAD 101 Introduction to Leadership Studies
   LEAD 401 Citizen Leadership

Leadership Studies

Leadership Competencies:
- CMST 215 Collaboration and Team Communication
- CMST 300 Communication and Relationships
- CMST 322 Presentational Communication
- CMST 335 Organizational Communication
- CMST 345 Conflict Management
- PSYC 385 Group Processes
- RECR 382 Program Planning
- SOCI 325 Community Analysis

Leadership Dynamics and Ethics:
- PHIL 305 Criminal Justice Ethics
- PHIL 308 Political Philosophy
- PHIL 313 Biomedical Ethics
- PHIL 410 Philosophy of Law
- POSC 462 Personality and Politics
- PSYC 314 Theories of Personality
- PSYC 318 Social Psychology
- SOWK 375 Human Behavior and the Social Environment

Leadership Contexts:
- CMST 365 Environmental Communication
- MCOM 316 Digital Media Management and Programming
- MGMT 251 Management of Organizations
- MGMT 359 Quality Management
- POSC 321 State and Local Politics
- POSC 323 Public Administration
- POSC 352 Interest Groups
- POSC 358 American Public Policy
- POSC 427 The American Presidency
- RECR 280 Recreation Leadership
- SOWK 370 Introduction to Social Welfare and Social Work

Liberal Studies

MAJOR

Coordinator: Linda Steele, Program Coordinator, College of Liberal Arts and Sciences

- The Liberal Studies major may be completed on the Frostburg campus or at the University System of Maryland in Hagerstown.
- You cannot earn a minor in Liberal Studies. The Liberal Studies major is an interdisciplinary program providing breadth in the arts, humanities, natural and social science disciplines, and depth in an area of specialization (the focus of study). The major is adaptable to student interest in combining more than one field of study as well as preparation for technical and/or professional studies and provides a desirable preparation and pathway for graduate studies or for entry
and advancement opportunities in a wide array of employment fields requiring a baccalaureate degree.

Program Requirements

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<th>MAJOR</th>
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<td>Total Hours Required:</td>
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Requirements for Major in Liberal Studies

I. Liberal Core: (21 hours)
A minimum of 21 hours of course work in addition to courses satisfying General Education Program requirements, and distributed as follows:
A. 3 hours in a communication arts course that focuses on writing or speaking.
B. 18 hours in arts and sciences, including a minimum of 3 hours each in arts, humanities, natural sciences, and social sciences.

II. Focus Area Requirements
approval of LBST Coordinator required): (30 hours)
A. A minimum of 27 hours in a discipline or disciplines (including current minors or emphases) related to the student’s area of technical or professional training or other specialized interest, including a minimum of 15 hours at the 300/400 level.
B. A minimum of 3 hours in a capstone course (seminar, individual research, special topics, practicum, field experience or internship).

III. Capstone Seminar (1 hour)
LBST 450 Senior Self-assessment (Capstone)

Life-Cycle Facilities Management

MAJOR

Coordinator: Thomas Cadenazzi, College of Liberal Arts and Sciences
Associate Professors: E. Moore

- The interdisciplinary B.S. in Life Cycle Facilities Management aims to develop managers and leaders, who can balance both the pressure of short-term goals and priorities along with long-term goals, for the strategic design, construction and operations of complex facilities, with mastery in resiliency, sustainability, decision-making, and optimization strategies.
- Students will learn how to become resource-efficient responsible throughout a building’s/project’s/product’s life-cycle, from design up to end-of-life, by bridging the gap between resilience and sustainability in construction management practices.
- Completion of the program will provide students with the necessary skills and mind-set to operate in view of minimizing resource consumption while maximizing resource reuse and profits, with the use of sustainable, durable, renewable or recyclable resources to protect the natural environment.
- You cannot minor in Life-Cycle Facilities Management.

Program Requirements

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<th>MAJOR</th>
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<tr>
<td>Hours Required in LCFM:</td>
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<td>Hours Required in Geography:</td>
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<tr>
<td>Hours Required in Other Departments:</td>
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<tr>
<td>Total Hours Required:</td>
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</table>

Requirements for Major in Life-Cycle Facilities Management

1. Required Core Courses: (68 hours)
LCFM 103 Applied CAD
LCFM 200 Physical Sciences and Materials
LCFM 201 Building Materials
LCFM 202 Construction Methods of Structure and Infrastructures
LCFM 203 Systems Life-Cycle Cost Analysis
LCFM 204 Durability of Materials
LCFM 301 Structures in a Resilient World
LCFM 302 Facility and Maintenance Scheduling
LCFM 303 Contracts and Bidding
LCFM 304 Environmental Building Systems
LCFM 305 Project Management for Life-Cycle Facilities
LCFM 306 Estimating Life-Cycle Facilities in the Context of Climate Change Realities
LCFM 401 Sustainable Building Design
LCFM 402 Emerging Technologies in Climate Change Context
LCFM 403 Risk Management
LCFM 404 Life-Cycle Assessment of Building Materials
LCFM 405 Negotiation Strategies
LCFM 485 Life-Cycle Facilities Management Capstone
LCFM 495 Life-Cycle Facilities Management Internship

2. Required Geography Courses: (19 hours)
GEOG 103 Physical Geography (GEP Group C)
GEOG 205 or PHSC 205 Descriptive Meteorology
GEOG 330 Global Climate Change
GEOG 340 Soils: Genesis, Nature and Characterization
GEOG 405 Physical Climatology
GEOG 433 Surveying and Field Techniques

3. Required Other Courses: (19 hours)
BLAW 291 Legal Environment of Business
ECON 201/211 Principles of Economics (Macro) (GEP Group D)
IDS 155 Introduction to Sustainability Studies (GEP Group E)
MATH 109/110 Elements of Applied Probability and Statistics (Core Skill 3)
MATH 119 College Algebra (Core Skill 3)
ORIE 101 Introduction to Higher Education
Mass Communication

MAJOR

MINOR

Professor: J. Lombardi
Associate Professor: Danzi (Chair), Whalen
Lecturer: Ash

- Only courses in which you earn a grade of C or better may count towards satisfaction of major or minor requirements.
- All grades earned in courses completed for the major in Mass Communication count in determining whether you meet the graduation requirement of a 2.0 cumulative grade point average in the major.
- All courses completed for the Mass Communication major count in determining whether one-half of the major is completed at FSU.

Program Requirements

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<th>Hours Required in Mass Comm.:</th>
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<td>Hours Required in Other Departments:</td>
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<td>24</td>
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<tr>
<td>Total Hours Required:</td>
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</tbody>
</table>

Requirements for Major in Mass Communication

1. Mass Communication Major: (48 hours)
- CMST 122  Introduction to Public Communication
- ART 207 Graphic Design (Tech. Fluency)
- MCOM 105 Digital Media and Media Literacy
- MCOM 205 Mobile Media Production
- MCOM 246* Media Research Methods
- MCOM 326* Writing for Electronic Media
- MCOM 346* Communication Theory
- MCOM 447* Media Law and Regulations
- MCOM 485* Digital Media Aesthetics and Criticism
- MCOM 486* Media and Society
- MCOM 498* Senior Seminar in Digital Media (Capstone)

2. Professional Focus: (15 hours)

All MCOM majors must complete one of the focus groupings listed below OR one of the following minors: African American Studies, Communication Studies, Creative Writing, Film Studies, Graphic Design, Journalism, Leadership Studies, Marketing, Public Relations, Social Media, or Theatre. Students wishing to substitute a course for one of the courses in the listed focus groupings may petition the Chair, in writing, prior to earning 90 credit hours. Many of these courses have prerequisites and students should plan their earlier studies accordingly.

Digital Video Production
Choose fifteen hours from:
- MCOM 100 Digital Audio Workshop (repeatable for maximum of 3 credits)
- MCOM 101 FSU-TV3 Television Workshop (repeatable for maximum of 3 credits)
- MCOM 250 Announcing and Performance
- MCOM 287* Single-Camera Production
- MCOM 350* Episodic Screenwriting
- MCOM 388* Multi-Camera Production
- MCOM 450* Business of Digital Media Production
- MCOM 487* Advanced Single-Camera Production
- MCOM 488* Advanced Multi-Camera Production
- MCOM 492* Digital Media Internship Project
- MCOM 494* Directed Internship
- MCOM 499* Directed Study

Digital Media Production
Choose six hours from one group and nine from the other:

Group 1
- MCOM 100 Digital Audio Workshop (repeatable for maximum of 3 credits)
- MCOM 213 Digital Audio Production
- MCOM 250 Announcing and Performance
- MCOM 313* Advanced Digital Audio Production
- MCOM 465* Digital Audio Promotion and Production

Group 2
- MCOM 101 FSU-TV3 Television Workshop (repeatable for maximum of 3 credits)
- MCOM 287* Single-Camera Production
- MCOM 350* Episodic Screenwriting
- MCOM 388* Multi-Camera Production
- MCOM 450* Business of Digital Media Production
- MCOM 487* Advanced Single-Camera Production
- MCOM 488* Advanced Multi-Camera Production
- MCOM 499* Directed Study

Digital Audio Production
Choose fifteen hours from:
- MCOM 100 Digital Audio Workshop (repeatable for maximum of 3 credits)
- MCOM 101 FSU-TV3 Television Workshop (repeatable for maximum of 3 credits)
- MCOM 213 Digital Audio Production
- MCOM 250 Announcing and Performance
- MCOM 250* Business of Digital Media Production
- MCOM 450* Advanced Digital Audio Production
- MCOM 465* Digital Audio Promotion and Production
- MCOM 492* Digital Media Internship Project
- MCOM 494* Directed Internship
- MCOM 499* Directed Study
Digital Media Strategies†
Choose fifteen hours from:
MCOM 100  Digital Audio Workshop (repeatable for maximum of 3 credits)
MCOM 101  FSU-TV3 Television Workshop (repeatable for maximum of 3 credits)
MKTG 261  Principles of Marketing
MCOM 316*  Digital Media Management and Programming
CMST 325*  Public Relations Principles
CMST 355*  Political Communication
MCOM 356*  Promotional Media Strategies
MCOM 450*  Business of Digital Media Production
MCOM 492*  Digital Media Internship Project
MCOM 494*  Digital Media Internship
MCOM 495*  Extended Internship
MCOM 499*  Directed Study

Digital Audio Workshop (repeatable for maximum of 3 credits)
FSU-TV3 Television Workshop (repeatable for maximum of 3 credits)

Requirements for Minor in Mass Communication
1. Required Courses (18 hours)
MCOM 105  Digital Media and Media Literacy
MCOM 205  Mobile Media Production
MCOM 246*  Media Research Methods
MCOM 346*  Communication Theory
MCOM 447*  Media Law and Regulations
MCOM 485*  Digital Media Aesthetics and Criticism
2. Electives (6 hours)
Select six additional credits of MCOM courses (excluding MCOM 100 and MCOM 101)

*Course has prerequisites; consult the course description section of this catalog
† This program is intended to give a foundational background in some business aspects of MCOM, but is not intended as preparation for a professional career in business.

Mathematics

MAJOR

MINOR

Professors: Hegde, Hughes, Lemmert, Michael
Associate Professors: Barnet, Dunmyre (Chair), N. Tootoonchi, Wojnar
Assistant Professors: Bubp, Forsythe, Horacek
Lecturers: Devlin, Pathmanathan

• You may major or minor in Mathematics
• Elementary Education students may elect a specialization in Mathematics.
• You may elect to focus in Mathematical Sciences (see next section). The Mathematical Sciences Focus is designed for mathematics, chemistry, and physics majors.
• The department offers an honors program.

Program Requirements

<table>
<thead>
<tr>
<th>Hours Required in Mathematics:</th>
<th>45</th>
<th>20-21</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours Required in Other Departments:</td>
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<tr>
<td>Total Hours Required:</td>
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<td>20-21</td>
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</tbody>
</table>

Requirements for Major in Mathematics

1. Basic Courses (39 hours)

MATH 236  Calculus I (Core Skill 3)
MATH 237  Calculus II
MATH 238  Calculus III
MATH 280  Introductory Applied Statistics and Data Analysis
MATH 315  Foundations of Mathematics
MATH 350  Linear Algebra I
MATH 380  Introduction to Probability and Statistics
MATH 432  Differential Equations
MATH 440  Modern College Geometry
MATH 451  Modern College Algebra
MATH 470  Mathematical Models and Applications
MATH 491  Seminar in Mathematics (Capstone)

2. Electives (6 hours)
Select from courses at the 400 level, except MATH 495 Internship in Mathematics.
Most students will fulfill the elective requirements with the following courses:
MATH 425  Introduction to Real Analysis
MATH 452  Linear Algebra II
MATH 461  History of Mathematics
MATH 465  Theory of Numbers

If you wish to complete a Maryland State-approved program in teaching secondary Mathematics, you must:
• Complete the BA/BS in Mathematics.
• See the Secondary Teacher Education Program Coordinator for details.
• Within the electives portion of the Mathematics major, you must select certain courses in order to qualify for Maryland State certification and to meet NCATE accreditation standards. These courses are listed below.

1. Basic Core Curriculum (39 hours)

MATH 236  Calculus I (Core Skill 3)
MATH 237  Calculus II
MATH 238  Calculus III
MATH 280  Introductory Applied Statistics and Data Analysis
MATH 315  Foundations of Mathematics
MATH 350  Linear Algebra I
MATH 380 Introduction to Probability and Statistics
MATH 432 Differential Equations
MATH 440 Modern College Geometry
MATH 451 Modern College Algebra
MATH 470 Mathematical Models and Applications
MATH 491 Seminar in Mathematics (Capstone)

2. Mathematics Teaching Certification Option Requirements (6 hours)
MATH 461 History of Mathematics
MATH 465 Theory of Numbers

Mathematical Sciences

FOCUS

Coordinator: Marc Michael Chair, Department of Mathematics

- You may elect to focus in Mathematical Sciences.
- The Mathematical Sciences Focus is designed for Mathematics, Chemistry, and Physics majors.
- You cannot major or minor in Mathematical Sciences.

Program Requirements

<table>
<thead>
<tr>
<th></th>
<th>FOCUS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours Required in Mathematics:</td>
<td>12</td>
</tr>
<tr>
<td>Hours Required in Other Departments:</td>
<td>10-12</td>
</tr>
<tr>
<td>Total Hours Required:</td>
<td>22-24</td>
</tr>
</tbody>
</table>

Requirements for Focus in Mathematical Sciences

1. Core Mathematics Courses: (3 hours)
From among:
MATH 315 Foundations of Mathematics
MATH 425 Introduction to Real Analysis
MATH 440 Modern College Geometry
MATH 451 Modern Higher Algebra
MATH 452 Linear Algebra II
MATH 460 Introductory Topology
MATH 465 Theory of Numbers

2. Applied Mathematics: (9 hours)
From among:
MATH 380 Introduction to Probability and Statistics
MATH 426 Introduction to Complex Analysis
MATH 432 Differential Equations
MATH 436 Mathematical Physics
MATH 437 Combinatorics and Graph Theory
MATH 470 Mathematical Models and Applications
MATH 480 Probability and Statistics
MATH 492 Internship Seminar

3. Required Courses in Other Departments:

Computer Science (7-8 hours)
From among:
COSC 240 Computer Science I
COSC 241 Computer Science II
COSC 350 Low-Level Programming Concepts
COSC 450 Programming Language Principles and Paradigms

Science (3-4 hours)
PHYS 261 Principles of Physics I (GEP Group C) or
CHEM 441 Physical Chemistry I
Music

MAJOR

MINOR

CONCENTRATIONS IN:
- VOCAL PERFORMANCE
- MUSIC INDUSTRY

TRACKS IN:
- INSTRUMENTAL PERFORMANCE
- MUSIC STUDIES

OPTIONS:
- MUSIC EDUCATION
- TEACHER CERTIFICATION

Associate Professors: M. Gallagher, Weber (chair)
Assistant Professor: DeWire

- All students entering or re-entering the major are required to pass an audition in their primary performance area before being accepted as a music major. Students changing their primary performance area must re-audition before being re-accepted as a music major.
- You must choose a concentration, a track, the teaching certification option or the option in music education.
- Only courses in which you earn a C or better will count towards satisfaction of requirements for the major and the minor.
- MUSC/MUSA courses in which you earn a grade of C or better will count towards satisfaction of requirements for the major and minor. Concentrations for the major involving minors or coursework in other departments shall abide by the grade requirements for those programs.

Requirements for Major in Music

Core Requirements: (48-49 hours)

1. Music Theory: (20 hours)
   - MUSC 102 Tonal Analysis I
   - MUSC 103 Tonal Analysis II (Tech. Fluency)
   - MUSC 104 Aural Musicianship I
   - MUSC 105 Aural Musicianship II
   - MUSC 204 Tonal Analysis III
   - MUSC 205 Tonal Analysis IV
   - MUSC 206 Aural Musicianship III
   - MUSC 207 Aural Musicianship IV

2. Music History & Literature: (9 hours)
   - MUSC 110 Music Appreciation (GEP Group A)
   - MUSC 308 Music History I
   - MUSC 309 Music History II
   - MUSC 313 Music History III

3. Ensemble:
   (8 hours for performance concentrations, music studies and option in Music Education; 7 hours for music industry and teaching certification option)
   Select from:
   - MUSC 319 University Chorale
   - MUSC 330 Wind Ensemble
   - MUSC 335 String Ensemble
   - MUSC 336 Guitar Ensemble
   - MUSC 340 Chamber Singers

4. Piano Proficiency and Sophomore Evaluation
   Students must successfully pass the Department of Music Piano Proficiency Exam and Sophomore Evaluation.

5. Private Instruction: (12 hours)
   - MUSA 116-123 Private Instruction
     and/or MUSA 356-363 Private Instruction

Requirements for Minor in Music

Core Requirements: (18-19 hours)

1. Foundation Courses (7 hours)
   - MUSC 102 Tonal Analysis I (3 cr.)
   - MUSC 104 Aural Musicianship I (2 cr.)
   - MUSC 308 Music History I (2 cr.)

2. Core Areas (4-5 hours)
   Select One Core Area
   - Group A – Music History (4 hours)
     - MUSC 309 Music History II
     - MUSC 313 Music History III
   - Group B – Music Theory (5 hours)
     - MUSC 103 Tonal Analysis II
     - MUSC 105 Aural Musicianship II
3. Ensemble: (3 hours)
Select from:
MUSC 319 University Chorale
MUSC 330 Wind Ensemble
MUSC 335 String Ensemble
MUSC 336 Chamber Guitar Ensemble
MUSC 340 Chamber Singers

4. Private Instruction: (4 hours)
MUSA 116-123 Private Instruction
and/or MUSA 356-363 Private Instruction

Requirements for Option in Music Education
This option is designed for students to complete a degree in Music with an Option in Music Education. It does not require completion of initial certification or the MAT. For students who wish to complete the MAT or pursue careers in music education that do not require certification, they should follow this Option. All students who complete this Undergraduate Option in Music Education will receive a Bachelor of Science in Music upon successful completion of the requirements outlined below.

Entrance Requirements for those students opting to complete the Master of Arts in Teaching (MAT)
After completion of the sophomore evaluation, apply for provisional admission to the MAT program. Students applying to the MAT must meet all entry requirements as set forth by the College of Education MAT program. A transcript review will be completed prior to entrance into the MAT after completion of the Undergraduate Degree. Any deficiencies must be completed before full admission to the MAT program. Students in this Option will complete the Bachelor of Science in Music and complete all of the prerequisites to enter the Master of Arts in Teaching to complete their certification.

Please note, students taking this option should work with their advisor to create a plan of study that allows these 9 credits of graduate courses to be taken throughout the Junior and Senior years in addition to a minimum of 12 undergraduate credits per semester. Please note that winter session and summer courses may affect your ability to meet these requirements.

1. Core Courses: (49 hours)
Required for all music majors; listed above.

2. Recital Requirement: (1 hour)
MUSA 490 Senior Recital (Capstone)

3. Supplemental Requirements: (4 hours)
MUSA 117 Private Instruction (Piano) (2 semesters required)
And select 2 hours from:
MUSA 116-123 Private Instruction
and/or MUSA 356-363 Private Instruction

4. Other Requirements for Option in Music Education: (19.5 hours)
MUSA 108 Class Instruments: Strings
MUSA 208 Class Instruments: Woodwinds
MUSA 209 Class Instruments: Brass
MUSA 311 Class Instruments: Percussion
MUSC 413 Vocal Pedagogy
MUSC 125 Introduction to Music Education
MUSC 252 Early Music Experience
MUSC 310 Basic Principles of Conducting I — Choral
MUSC 359 Computer Music Technology (2 hours)
MUSC 410 Basic Principles of Conducting II — Instrumental

Choral Emphasis
MUSC 210 Diction I (1 hour)
MUSC 211 Diction II (1 hour)

Instrumental Emphasis
Select 2 hours from:
MUSC 329 Marching Bobcats (1 hour)
MUSC 411 March Band Techniques (2 hours)

5. Supplemental ensemble requirement(s): (2 hours)
(Students whose primary instrument is Piano/Guitar should take each ensemble once. Students whose primary instrument is voice should enroll in two semesters of Wind Ensemble. Students whose primary instrument is woodwinds, brass, percussion, or strings should enroll in two semesters of University Chorale.)

Choral Emphasis
MUSC 330 Wind Ensemble

Instrumental Emphasis
MUSC 319 University Chorale

6. Other Course Requirements: (9 hours)
Complete at least 9 credits outside of the music major.

Students who are admitted into the Option in Music Education must complete the following courses to meet this requirement.

Please note, students taking this option should work with their advisor to create a plan of study that allows these 9 credits of graduate courses to be taken throughout the Junior and Senior years in addition to a minimum of 12 undergraduate credits per semester. Please note that winter session and summer courses may affect your ability to meet these requirements.

EDUC 552 General Music Methods for Elementary School
EDUC 553 General Music Methods for Secondary School
Choose one:
MUSC 552 Choral Music Methods K-12
MUSC 553 Instrumental Music Methods K-12

Requirements for the Teaching Certification Option in Music

1. Core Courses: (48 hours)
Required for all music majors; listed above.

2. Recital Requirement: (1 hour)
MUSA 490 Senior Recital (Capstone)

3. Other Required Courses for P-12 Teaching Certification: (51.5 hours)
If you wish to complete a Maryland State-approved program in teaching music, you must:
Complete the following additional courses in music:
MUSA 108 Class Instruments: Strings
MUSA 208 Class Instruments: Woodwinds
MUSA 209  Class Instruments III: Brass
MUSA 311  Class Instruments IV: Percussion
MUSC 310  Basic Principles of Conducting I - Choral
MUSC 410  Basic Principles of Conducting II – Instrumental

- If your performing area is instrumental, you must complete 2 credit hours of MUSC 319 University Chorale.
- If your performing area is guitar, you must complete 2 credit hours of MUSC 319 University Chorale and 2 credit hours of MUSC 330 Wind Ensemble.
- If your performing area is vocal, you must complete MUSA 210 Diction I and MUSC 211 Diction II.
- Meet the phase admissions requirements summarized in the Educational Professions section.
- Complete the professional education sequence described in the Education: P-12 Programs.

Summary of Requirements for the Music Industry Concentration

1. Core Courses: (48 hours)
   Required for all music majors; listed above.

2. Advanced Courses: (18-21 hours)
   MUSC 356  Computer Music Technology
   MUSC 390  Junior Recital
   MUSC 358  The Business of Music and Arts Management
   MUSC 494  Practicum in Music Industry
   (MUSC 494: 3 hours must be begun after Sophomore Evaluation is completed prior to taking MUSC 494)
   MUSC 495  Internship in Music Industry (9 or 12 hours) (Capstone)

3. Required Courses in Other Departments:
   (15-18 hours)
   BUAD 100  Introduction to Business
   MCOM 213  Digital Audio Production
   MCOM 465  Digital Audio Promotion and Production
   and select 6-9 hours from the following courses
   MKTG 261  Principles of Marketing
   ECON 200  Introduction to Economics
   MCOM 313  Advanced Digital Audio Production
   RECR 384  Special Event Management

Requirements for the Instrumental Performance Track

1. Core Courses: (49 hours)
   Required for all music majors; listed above.

2. Recital Requirements: (2 hours)
   MUSA 390  Junior Recital
   MUSA 490  Senior Recital (Capstone)

3. Supplementary Requirements:
   (3 hours)
   MUSA 116-123  Private Instruction
   MUSA 356-363  Private Instruction

MUSC 315, 319, 327, 331, 337, 339 Ensembles

4. Other Requirements: (11 hours)
   MUSC 310  Basic Principles of Conducting I – Choral
   MUSC 401  Post-Tonal Analysis
   And select five hours from:
   MUSA 213  Piano Pedagogy
   MUSC 305  Orchestration
   MUSC 360  Special Topics in Music (up to 4 credits)
   MUSC 499  Individual Research in Music (up to 4 credits)

5. Minor or Other Course Requirements: (15 hours)
   Complete a minor of the student’s choosing or a minimum of at least 15 credits outside of the music major.

Requirements for the Music Studies Track

1. Core Courses: (49 hours)
   Required of all music majors; listed above.

2. Supplementary Course Requirements:
   (11 hours)
   MUSC 310  Basic Principles of Conducting I – Choral
   MUSC 401  Post-Tonal Analysis
   And select 5 hours from:
   MUSA 213  Piano Pedagogy
   MUSC 305  Orchestration
   MUSC 360  Special Topics in Music (up to 2 cr.)
   MUSC 412  History of Musical Theatre

3. Supplementary Lesson Requirements:
   (2 hours)
   MUSA 116-123  Private Instruction
   MUSA 356-363  Private Instruction

4. Supplementary Ensemble Requirements:
   (2 hours)
   Selected from: MUSC 315, 319, 321, 327, 331, 335, 336, 337, 339, 340, 370 Ensembles

5. Capstone Experience: (1 hour)
   MUSC 493  Senior Research

6. Minor or Other Course Requirements: (15 hours)
   Complete a minor of the student’s choosing or a minimum of at least 15 credits outside of the music major.

Requirements for the Vocal Performance Concentration

1. Core Courses: (49 hours)
   Required for all music majors; listed above.

2. Recital Requirements: (2 hours)
   MUSA 390  Junior Recital
   MUSA 490  Senior Recital (Capstone)

3. Supplementary Requirements:
   (3 hours)
   MUSA 116-123  Private Instruction
   MUSA 356-363  Private Instruction
   MUSC 315, 327, 331, 337, 339, 340 Ensembles

4. Other Requirements for Vocal Performance Majors:
   (12 hours)
   MUSC 210  Diction I
   MUSC 211  Diction II
MUSC 310 Basic Principles of Conducting I - Choral
MUSC 346 Opera and Art Song Repertoire
MUSC 401 Post-Tonal Analysis
MUSC 413 Vocal Pedagogy
And select two hours from the following:
MUSC 305 Orchestration
MUSC 346 Opera and Art Song Repertoire
MUSC 360 Special Topics in Music
MUSC 499 Individual Research in Music

5. Minor or Other Course Requirements:
(15 hours)
Complete a minor of the student's choosing or a minimum of at least 15 credits outside of the music major.

Musical Theatre

MINOR

Contact: Nicole Mattis (Chair), Department of Theatre and Dance
Professor: Mattis, Rushton, Yost-Rushton
Associate Professors: Gallagher, Weber
Assistant Professor: DeWire

- Only courses in which a grade of C or better is earned will count toward satisfaction of minor requirements.
- Departmental permission required for admission to the minor.

Program Requirements

<table>
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<tr>
<th>Hours Required in Music:</th>
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<tbody>
<tr>
<td>Hours Required in Theatre:</td>
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<tr>
<td>Hours Required in Dance:</td>
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<td>Total Hours Required:</td>
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</table>

Requirements for Minor in Musical Theatre

1. Music Courses: (9 hours)
   MUSC 104 Aural Musicianship I (2 cr.)
   MUSC 412/THEA 412 History of Musical Theatre (3 cr.)
   MUSC 169 Music Theory for Musical Theatre (2 cr.)
   MUSA 125 or 325 Private Instruction in Musical Theatre Voice (2 cr.)

2. Theatre Arts: (12 hours)
   THEA 110 Introduction to Acting (3 cr.)
   THEA 208 Acting: Basic Principles and Application (3 cr.)
   THEA 210 Voice and Movement (3 cr.)
   THEA 211 Voice and Movement II (3 cr.)

3. Dance: (5 hours)
   DANC 154 Jazz I (2 cr.)
   DANC 361 Dance for Musical Theatre (3 cr.)

4. Ensemble/Experiential Learning Requirement: (2 hours)
   Choose from:
   MUSC 321 Opera Workshop (1 cr.)
   THEA 105 Performance Practicum (1 cr.)
   (only musical productions will be counted )
   Both courses are repeatable for credit.
   Students may not fulfill their MUSC 321 and THEA 105 (musical) requirements during the same semester.

Nursing

RN TO BSN COMPLETION PROGRAM
COLLABORATIVE TRANSFER PROGRAM
MAJOR

Coordinator: Kara Platt (Chair), Department of Nursing

- The RN to BSN Completion Program does not lead to licensure as a registered nurse.
- If you are interested in a career in nursing but are not licensed as a registered nurse, or enrolled in a program leading to licensure, you should follow the Collaborative Bachelor of Science described in this catalog to earn admission to an initial licensure program.
- You cannot minor in nursing.
- You must meet all requirements for the Bachelor of Science listed in this catalog.

The RN to BSN Program is based on the American Association of Colleges of Nursing's proposed Essentials of Baccalaureate Nursing Education. The program is approved by the Maryland Board of Nursing, the Maryland Higher Education Commission and the Commission on Collegiate Nursing Education (CCNE), and meets the requirements of the Maryland statewide nursing education articulation agreement.

The RN to BSN curriculum is designed to increase the registered nurse's knowledge and skills in the areas of leadership, quality improvement, evidence-based nursing practice, nursing informatics, population-focused health promotion and disease prevention, interdisciplinary collaboration and professionalism. The program will prepare nurses to assume roles in leadership, complex clinical care coordination and community/public health, and serves as the academic foundation for graduate study.

The program is open to all registered nurses who meet the program admissions criteria, including an active, unencumbered RN license from within the United States. The program builds on the elements of Associate Degree nursing education. Nursing students concurrently enrolled in an Associate Degree in Nursing (ADN) program at a community college who meet the admission criteria (with the exception of RN licensure) are eligible to take RN-BSN courses at the discretion of the assigned advisor prior to licensure. Courses are delivered in full-time and part-time, online formats to maximize scheduling flexibility and maintain the student-faculty connection that is essential to academic success. Once the student begins the RN-BSN program, he or she will have five years to complete the degree requirements.

Program Goal
The RN to BSN Program prepares the registered nurse to be a professional health care practitioner who provides compassionate care that is based on scientific evidence and who serves as the link between the patient (individual, family, community or population) and the health care environment across the lifespan.
Program Objectives
The RN to BSN Program prepares the graduate to:

- Utilize critical thinking and creativity to address professional practice and patient care issues.
- Apply leadership concepts and collaborative strategies to the process of nursing care delivery.
- Utilize quality improvement and safety management principles in clinical nursing practice.
- Identify and understand basic elements of nursing research.
- Integrate scientific evidence with clinical judgment and patient preference to improve patient outcomes.
- Safely use information technology to improve patient care.
- Describe the ethical, legal, political and financial influences on the delivery of patient care.
- Demonstrate interpersonal communication skills and collaborative strategies that support the delivery of interdisciplinary, patient-centered care.
- Provide evidenced-based, preventative health care to families, communities and vulnerable populations in community-based settings.
- Demonstrate the knowledge, skills and attributes of professional nursing practice.

Program Requirements

<table>
<thead>
<tr>
<th>MAJOR</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours transferred from community college:</td>
<td>30-55</td>
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<tr>
<td>Hours earned with unencumbered RN license</td>
<td>30</td>
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<tr>
<td>Hours required at Frostburg State University</td>
<td>35-60</td>
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<td>Total Hours Required:</td>
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Requirements for Major in Nursing

Required Courses From GEP

<table>
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<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>BIOL 321</td>
<td>Anatomy and Physiology I</td>
<td>4 hours</td>
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<tr>
<td>CHEM 100</td>
<td>Chemistry and Society</td>
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<tr>
<td>or CHEM 150</td>
<td>General, Organic and Biochemistry</td>
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<tr>
<td>or CHEM 201</td>
<td>General Chemistry I</td>
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<tr>
<td>ENGL 308</td>
<td>Social Sciences Advanced Composition</td>
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<tr>
<td>or ENGL 338</td>
<td>Technical Writing</td>
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<tr>
<td>or ENGL 339</td>
<td>Scientific Writing</td>
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<tr>
<td>MATH 109</td>
<td>Elements of Applied Probability and Statistics</td>
<td>110 Honors: Elements of Appl. Probability &amp; Statistics (3 hours)</td>
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<tr>
<td>PSYC 150</td>
<td>General Psychology</td>
<td>3 hours</td>
</tr>
<tr>
<td>SOCI 100</td>
<td>Introduction to Sociology</td>
<td>3 hours</td>
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</tbody>
</table>

Additional Required Courses

Courses may be completed at ACM, FSU or another institution. FSU course number specified below.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 322</td>
<td>Anatomy and Physiology II (1)</td>
<td>1</td>
</tr>
<tr>
<td>BIOL 304</td>
<td>Microbiology (1)</td>
<td>4 hours</td>
</tr>
<tr>
<td>DSS 200</td>
<td>Nutrition (3)</td>
<td>3 hours</td>
</tr>
<tr>
<td>PSYC 208</td>
<td>Intro to Lifespan Development</td>
<td>3 hours</td>
</tr>
</tbody>
</table>

A Human Growth and Development course approved by the Program Coordinator. (1)

Total Additional Hours: 14 hours

(1) Course completed as part of Associate Degree in Nursing.

Upper-Division Credits

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS 401</td>
<td>Health Assessment</td>
<td>3 hours</td>
</tr>
<tr>
<td>NURS 402</td>
<td>Nursing Research and Evidence-Based Practice</td>
<td>3 hours</td>
</tr>
<tr>
<td>NURS 403</td>
<td>Elements of the Professional Nursing Role</td>
<td>3 hours</td>
</tr>
<tr>
<td>NURS 404</td>
<td>Nursing Informatics (Tech. Fluency)</td>
<td>3 hours</td>
</tr>
<tr>
<td>NURS 405</td>
<td>Ethics in Contemporary Nursing Practice</td>
<td>3 hours</td>
</tr>
<tr>
<td>NURS 406</td>
<td>Leadership for Quality and Safety</td>
<td>3 hours</td>
</tr>
<tr>
<td>NURS 491</td>
<td>Population-Focused Nursing Practice</td>
<td>3 hours</td>
</tr>
<tr>
<td>NURS 495</td>
<td>Population-Focused Nursing Practice Practicum</td>
<td>3 hours</td>
</tr>
<tr>
<td>NURS 496</td>
<td>Capstone Project</td>
<td>2 hours</td>
</tr>
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</table>

Total Hours for Unencumbered RN License: 30 hours

Courses that must be completed at FSU**(4)

1. Discipline core courses:

- NURS 401 Health Assessment (3 hours)
- NURS 402 Nursing Research and Evidence-Based Practice (3 hours)
- NURS 403 Elements of the Professional Nursing Role (3 hours)
- NURS 404 Nursing Informatics (Tech. Fluency) (3 hours)
- NURS 405 Ethics in Contemporary Nursing Practice (3 hours)
- NURS 406 Leadership for Quality and Safety (3 hours)
- NURS 491 Population-Focused Nursing Practice (3 hours)
- NURS 495 Population-Focused Nursing Practice Practicum (3 hours)
- NURS 496 Capstone Project (2 hours)

2. Courses outside the discipline:

a. Required:

- MGMT 356 Leadership and Human Behavior (3 hours)

b. Electives:

(choose one of the following): 3 hours

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>CMST 300</td>
<td>Interpersonal Communication</td>
<td>3 hours</td>
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<tr>
<td>HLTH 330</td>
<td>Epidemiology of Health</td>
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<tr>
<td>HLTH 430</td>
<td>Methods and Materials for Health Promotion</td>
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<tr>
<td>HLTH 435</td>
<td>Health Promotion Programming</td>
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<tr>
<td>MGMT 359</td>
<td>Quality Management</td>
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<td>MGMT 405</td>
<td>Business Ethics and Social Responsibility</td>
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<tr>
<td>NURS 407</td>
<td>Healthcare Finance</td>
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<tr>
<td>NURS 410</td>
<td>Contemporary Psychiatric Nursing Practice</td>
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<tr>
<td>NURS 412</td>
<td>Women's Health in Global Perspectives</td>
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<td>PSYC 386</td>
<td>Drugs and Human Behavior</td>
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<td>PSYC 387</td>
<td>Addictions and Treatment Delivery</td>
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<td>PSYC 388</td>
<td>Treatment Issues and Theory in Addictions</td>
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<tr>
<td>PSYC 409</td>
<td>Human Learning and Cognition</td>
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<tr>
<td>PSYC 430</td>
<td>Health Psychology</td>
<td></td>
</tr>
<tr>
<td>PSYC 485</td>
<td>Behavioral Approaches to Human Problems</td>
<td></td>
</tr>
<tr>
<td>PSYC 386</td>
<td>Drugs and Human Behavior</td>
<td></td>
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<tr>
<td>PSYC 387</td>
<td>Addictions and Treatment Delivery</td>
<td></td>
</tr>
<tr>
<td>PSYC 388</td>
<td>Treatment Issues and Theory in Addictions</td>
<td></td>
</tr>
<tr>
<td>PSYC 409</td>
<td>Human Learning and Cognition</td>
<td></td>
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<tr>
<td>PSYC 430</td>
<td>Health Psychology</td>
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<td>PSYC 485</td>
<td>Behavioral Approaches to Human Problems</td>
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<tr>
<td>SOCI 305</td>
<td>Racial and Cultural Minorities</td>
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<tr>
<td>SOCI 367</td>
<td>Sociology of Medicine</td>
<td></td>
</tr>
<tr>
<td>SOWK 468/SOCI 468</td>
<td>Sociology of Later Life</td>
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</tr>
</tbody>
</table>

Total Hours in Major: 32 hours

(4) All upper-division credits are subject to the Nursing Department Course Repeat Policy.

** Only courses in which a grade of C or better is earned may count toward satisfaction of upper-level major requirements.

Nursing

COLLABORATIVE BACHELOR OF SCIENCE

Coordinator: Lindsey Staggers-Gardner, Assistant Professor, Department of Nursing

- This is a dual enrollment option between FSU and Allegany College of Maryland (ACM).
This option is for students that are not local to Allegany County or surrounding counties. Local students can apply through ACM and then enter dual enrollment through an Associate to Bachelor’s agreement.

This program will result in completion of an associate degree in nursing from ACM and a Bachelor of Science in Nursing from FSU.

Students must attend classes on both FSU and ACM campuses.

Students can gain nursing licensure after graduation from ACM and a successful passing score on the NCLEX exam.

The Collaborative Bachelor of Science in Nursing Option is a pathway for current FSU students who do not have permanent residence within Allegany County or surrounding counties. This is a dual enrollment pathway that gives FSU students the opportunity to earn a Bachelor of Science in Nursing degree. Students will take prerequisite and general education courses at FSU for two years then apply for and enter a dual enrollment with ACM for two years. After successful completion, students will graduate with an Associate Degree in Nursing (ADN) from ACM and then the following semester graduate with their Bachelor of Science in Nursing from FSU.

### Program Requirements

<table>
<thead>
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<tbody>
<tr>
<td>General Education Credits at FSU:</td>
<td>26</td>
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<tr>
<td>General Education Credits/ACM Prerequisites:</td>
<td>33</td>
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<tr>
<td>Nursing Credits Completed at ACM:</td>
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<tr>
<td>Nursing Credits Completed at FSU:</td>
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<td>Total Hours Required:</td>
<td>128</td>
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</table>

### Prerequisites for ACM Nursing Program

**33 Credits**

| BIOL 321 Anatomy and Physiology I          |
| BIOL 322 Anatomy and Physiology II         |
| BIOL 304 Microbiology                      |
| ENGL 101 Freshman Composition              |
| MATH 109 Elements of Applied Probability and Statistics |
| PSYC 150 General Psychology                 |
| PSYC 208 Introduction to Lifespan Development |
| SOCI 100 Introduction to Sociology Humanities (6 credits) |

### Allegany College of Maryland Nursing

**37 Credits**

These credits taken at ACM campus and clinical requirements within local health settings. Follow ACM catalog for more details.

### FSU Nursing Courses and Additional Prerequisites

**32 Credits with Major courses**

Meet all requirements within the Nursing Program details on pages 135-136 of the Undergraduate catalog.

### Philosophy

**MAJOR**

**MINOR**

Professor: Brill (Chair), Makang, Mathias

Associate Professors: Brassfield

#### Program Requirements

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Hours Required in Philosophy:</td>
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</table>

#### Requirements for Major in Philosophy

1. **Required Courses:** (12 hours)

   - PHIL 100 Critical Thinking
   - PHIL 301 Ethics
   - PHIL 310 Classics of Western Philosophy
   - PHIL 452 Seminar in Contemporary Metaphysics (Capstone) or PHIL 455 Seminar in Philosophy (Capstone)

2. **Elective Courses:** (18 hours)

   a. **Introductory Level** (3 hours)
      Select one from:
      - PHIL 101 Introduction to Philosophy (GEP Group B) or PHIL 111 Honors: Introduction to Philosophy (GEP Group B)
      - PHIL 102 Contemporary Ethical Problems (GEP Group B) or PHIL 112 Honors: Contemporary Ethical Problems (GEP Group B)

   b. **Advanced Level** (15 hours)
      Select 15 hours from among courses at the 300 or 400 level, with the exception of PHIL 495, which may not be used to satisfy the requirements for the major:
      - PHIL 300 Logic
      - PHIL 302 Philosophy of Religion
      - PHIL 303 Philosophy of Art
      - PHIL 304 Social Philosophy
      - PHIL 305 Criminal Justice Ethics
      - PHIL 306 Science on Trial
      - PHIL 308 Political Philosophy
      - PHIL 311 Asian and African Philosophy
      - PHIL 313 Biomedical Ethics
      - PHIL 314 Business Ethics
      - PHIL 315 Philosophy and the Environment
      - PHIL 316 The Meaning of Life
      - PHIL 317 Skepticism and Knowledge
      - PHIL 319 Philosophy of Existentialism
      - PHIL 409 Philosophy and Women
Requirements for Minor in Philosophy

1. **Required Course:** (3 hours)
   - PHIL 310 Classics of Western Philosophy

2. **Elective Courses:** (15 hours)
   
   **A. Introductory Level (3 hours)**
   - Select one from:
     - PHIL 100 Critical Thinking
     - PHIL 101 Introduction to Philosophy (GEP Group B)
     - PHIL 111 Honors: Introduction to Philosophy (GEP Group B)
     - PHIL 102 Contemporary Ethical Problems (GEP Group B)
     - PHIL 112 Honors: Contemporary Ethical Problems (GEP Group B)

   **B. Advanced Level (12 hours)**
   - Select 12 hours from among courses at the 300 or 400 level, with the exception of PHIL 495, which may not be used to satisfy the requirements for the minor.

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**Physics**

**MAJOR**

**MINOR**

**TRACKS IN:**

- TRADITIONAL PHYSICS
- ENGINEERING PHYSICS

**Professors:** Deng-Luzader, Latta, Plitnik, O. Soysal, Wang

**Associate Professors:** Abdo (Chair), Eltayeb, E. Moore

**Assistant Professors:** Liu, Speights

- You may not use courses listed under the heading Physical Science to satisfy the requirements of a major or minor in Physics.
- For engineering programs offered by the Dept. of Physics and Engineering, see the Engineering section of this catalog.
- The Traditional Physics track is recommended if you plan to attend graduate school.

**Program Requirements**

<table>
<thead>
<tr>
<th></th>
<th>MAJOR</th>
<th>MINOR</th>
</tr>
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<tbody>
<tr>
<td>Hours Required in Physics:</td>
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<td>17</td>
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<td>Hours Required in Other Departments:</td>
<td>18</td>
<td>8</td>
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<td>Total Hours Required:</td>
<td>56</td>
<td>25</td>
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</table>

**Requirements for Major in Physics**

1. **Introductory Level Courses:** (12 hours)
   - PHYS 261 Principles of Physics I: Mechanics, Waves and Oscillations (GEP Group C)
   - PHYS 262 Principles of Physics II: Thermodynamics, Electricity and Magnetism
   - PHYS 263 Principles of Physics III: Light and Modern Physics

2. **Advanced Courses:** (17 hours)
   - PHYS 310 Classical Mechanics
   - PHYS 312 Electricity & Magnetism
   - PHYS 320 Experimental Physics
   - PHYS 420 Introduction to Computational Physics
   - PHYS 491 Seminar
   - PHYS 492 Capstone Senior Research and Seminar

3. **Required Courses in Other Departments:** (18 hours)
   - ENES 100 Intro. to Engineering Design
   - MATH 236 Calculus I (Core Skill 3)
   - MATH 237 Calculus II
   - MATH 238 Calculus III
   - MATH 432 Differential Equations

4. **Choice of Track:** (9 hours)
   - Majors must choose a track in: Traditional Physics or Engineering Physics (requirements listed below)

**Traditional Physics Track**

1. **Courses required for all majors:** (47 hours)
   - Listed above.

2. **Advanced Courses in the Department:** (9 hours)
   - Choose three of the following:
     - PHYS 300 Introductory Astrophysics
     - PHYS 311 Thermodynamics
     - PHYS 313 Optics
     - PHYS 410 Theoretical Mechanics
     - PHYS 412 Theoretical Electromagnetism
     - PHYS 417 Quantum Physics
     - PHYS 436 Mathematical Physics
     - PHYS 440 Acoustics
     - PHYS 490 Special Topics
     - PHYS 495 Physics Internship
     - PHYS 499 Special Projects

**Engineering Physics Track**

1. **Courses required for all majors:** (47 hours)
   - Listed above.

2. **Elective Hours in the Department:** (9 hours)
   - With permission of the Department Chair, as many as 6 credits of mechanical engineering or electrical engineering at the 200 level or above may be applied.

**Requirements for Minor in Physics**

1. **Introductory Level Courses:** (12 hours)
   - PHYS 261 Principles of Physics I: Mechanics, Waves and Oscillations (GEP Group C)
PHYS 262  Principles of Physics II: Thermodynamics, Electricity and Magnetism
PHYS 263  Principles of Physics III: Light and Modern Physics

2. Advanced Courses: (5 hours)
PHYS 320  Experimental Physics
One additional 300-400 level physics or engineering course

3. Required Courses in Other Departments: (8 hours)
  MATH 236  Calculus I (Core Skill 3)
  MATH 237  Calculus II

If You Are Interested in Teaching Physics ...

Students wishing to teach physics at the secondary school level (middle and high school) can obtain both a Bachelor of Science in Physics and a Master of Arts in Teaching – Secondary (MATS) in five years through the following pathway offered by the MATS program. This pathway allows students to take up to nine credits of required graduate courses while completing their undergraduate program in physics. These nine graduate credits will be used as electives toward their undergraduate degree as well as the requirements of the MATS.

Students interested in this pathway should:

1. Discuss the MATS pathway option with their first-year advisor.
2. Meet with the MATS Coordinator as a first-year or sophomore.
3. Apply to the MATS program in the Spring of their sophomore year (February 1 application deadline).
4. Once conditionally admitted (a requirement for the following graduate courses to count as electives in the undergraduate program as well as in the MATS program): take:
   a. REED 517 Reading in the Content Area (fall or spring of junior or senior year).
   b. SPED 551 Adapting Instruction in Diverse Classrooms (fall senior year).
   c. SCED 510 Secondary Methods in Curriculum (spring senior year).

Please note that students who are considering this pathway should work with their advisor to create a plan of study that allows these nine credits of graduate courses to be taken in the Junior and Senior years in addition to a minimum of 12 undergraduate credits per semester.

Political Science

MAJOR
MINOR

Professors: Andorfer, Hartlaub, S. Johnson, D. Lewis, O’Rorke, Simpson, Twing (Chair)
Lecturer: Magrath

- The Department considers it essential that majors take POSC 250 Research Methods before enrolling in 300 and 400 level POSC courses.
- Upon the completion of 75 credit hours, all majors must enroll in POSC 490 Capstone Seminar.

Program Requirements

<table>
<thead>
<tr>
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<th>MAJOR</th>
<th>MINOR</th>
</tr>
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<tbody>
<tr>
<td>Hours Required in Political Science:</td>
<td>36-37</td>
<td>21</td>
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<tr>
<td>Hours Required in Other Departments:</td>
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<td>Total Hours Required:</td>
<td>37</td>
<td>21</td>
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</table>

Requirements for Major in Political Science

1. Introductory Level Courses: (6 hours)
   POSC 110/112  Introduction to American Politics (GEP Group D)
   and one of the following:
   POSC 113/114  Introduction to World Politics (GEP Group D)
   POSC 131  Introduction to Comparative Politics (GEP Group D or F)

2. Research Methods: (3 hours)
   POSC 250  Research Methods

3. Capstone Experience (Students must choose one of the following):
   POSC 435  Model Organization of American States (3 hours)
   POSC 490  Capstone Seminar in Political Science (1 hour)
   POSC 492  Internship Seminar (3 or 6 hours)

   POSC 435 can be used to satisfy both the capstone requirements and the Group II Comparative Politics distribution. POSC 492 can be used to fulfill the capstone requirement and up to 6 hours of Political Science electives.

4. Distribution Within Department: (15 hours)
   Select one course in each of the following five groups. *

GROUP I American Politics
   POSC 321  American State & Local Politics
   POSC 323  Public Administration
   POSC 324  Criminal Justice Systems in Action
   POSC 352  Interest Groups
   POSC 361  Public Opinion and Political Behavior
   POSC 362  Political Parties and Elections
   POSC 363  Media and Politics
   POSC 365  Women and Politics
   POSC 421  American Legislative Politics
   POSC 422  American Constitutional Law I
   POSC 423  American Constitutional Law II
   POSC 427  The American Presidency
   POSC 462  Personality and Politics

GROUP II Comparative Politics
   POSC 330  Politics of Africa
   POSC 331  Politics of Latin America
POSC 332  Politics of Middle East
POSC 333  Politics of Europe
POSC 336  Politics of Food
POSC 431  Russian Politics
POSC 435  Model Organization of American States

GROUP III International Relations
POSC 341  International Organization
POSC 342  Foreign Policy of the United States
POSC 441  Theory and Practice of International Relations
POSC 442  National Security Policy
POSC 443  Transnational Terrorism and Counter-Terrorism

GROUP IV Public Administration and Policy
POSC 353  Public Program Evaluation
POSC 355  Public Budgeting
POSC 358  American Public Policy
POSC 450  Environmental Public Policy

GROUP V Political Theory
POSC 370  Introduction to Political Thought
POSC 470  Seminar in Political Thought
POSC 471  American Political Thought

5. Free Elective Hours in Department:
(12 hours)
Any courses from the above subfields not already taken and/or:
POSC 492  Internship Seminar (3 or 6 credits)
POSC 498  Readings in Political Science

*Seminar courses may be applicable to the distribution requirements with the prior approval of the department chair.

Requirements for Minor in Political Science

1. Introductory Level Courses: (6 hours)
POSC 110/112  Introduction to American Politics (GEP Group D) and one of the following:
POSC 113/114  Introduction to World Politics (GEP Group D) or
POSC 131  Introduction to Comparative Politics (GEP Group D or F)

2. Free Elective Hours in Department: (15 hours)
Any courses from the above subfields not already taken and/or:
POSC 492  Internship Seminar (3 or 6 credits)
POSC 498  Readings in Political Science

Psychology

MAJOR
MINOR
INTERNSHIP OPTION
CHILD AND FAMILY PSYCHOLOGY EMPHASIS
LEADERSHIP IN PSYCHOLOGY EMPHASIS

Professors: D.A. Bensley, C. Herzog, J. Flinn, E. Kennedy, M. Murtagh (Chair), R. Nowaczyk
Associate Professors: P. Bernhardt, C. Masciocchi, A. Murtagh, T. Redmond-Matz
Assistant Professors: K. James, K. Jocoy, R. Mitchell

- Majors may elect an internship option and/or any of the following emphases: Addictions Counseling, Child & Family, Leadership in Psychology (invitation only for Leadership).
- Majors must earn a grade of C or better in ENGL 101, their math Core Skills course, ENGL 308/312, and BIOL 109/149 to satisfy major requirements.
- Only psychology courses in which you earn a grade of C or better will count towards satisfaction of major and minor requirements, with the exception that you must pass PSYC 197 and PSYC 397 to satisfy major requirements.
- The psychology major may be completed on the Frostburg campus or at the University System of Maryland - Hagerstown.

Program Requirements

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<tr>
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<th>MINOR</th>
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<tbody>
<tr>
<td>Hours Required in Psychology:</td>
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<td>Hours Required in Other Departments:</td>
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<td>Total Hours Required:</td>
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<td>18</td>
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Requirements for Major in Psychology

1. Foundation Courses: (9 hours)
PSYC 150  General Psychology
or PSYC 151 Honors: General Psychology (GEP Group D)
PSYC 201  Research Methods in Psychology
PSYC 301  Statistical Methods in Psychology

2. Fundamental Courses: (6 hours)
PSYC 155  Critical Thinking & Scientific Inquiry
PSYC 197  Introduction to the Profession of Psychology
PSYC 397  Career Planning in Psychology

3. Courses in Core Areas: (12 hours)
Select one course in each of four groups.

GROUP A Biological Bases
PSYC 306  Sensation and Perception
PSYC 386  Drugs and Human Behavior
PSYC 420  Physiological Psychology
PSYC 430  Health Psychology

GROUP B Learning and Cognition
PSYC 345  Animal Learning and Cognition
PSYC 409  Human Learning and Cognition
PSYC 485  Behavioral Approaches to Human Problems

GROUP C Developmental Changes Across the Lifespan
PSYC 208  Introduction to Lifespan Development
PSYC 210  Child Development
4. Diverse Populations Courses: (3 hours)
Select one of the following:
PSYC 214 Introduction to Geropsychology
PSYC 220 Psychology of Women (GEP Group F)
PSYC 270 Psychological Perspectives of Human Sexuality
PSYC 325 African American Psychology (GEP Group F)
PSYC 404 Psychology of the Exceptional Child
PSYC 489 Abnormal Child Psychology

5. Applied Courses: (3 hours)
Select one of the following:
PSYC 340 Forensic Psychology
PSYC 360 Industrial/Organizational Psychology
PSYC 387 Addictions Treatment Delivery
PSYC 388 Treatment Issues and Theory in Addictions
PSYC 394 Learning Mentor in Psychology Field Experience
PSYC 408 Tests and Measurements
PSYC 410 Introduction to Counseling
PSYC 445 Research Applications in Animal Behavior and Cognition
PSYC 450 Multicultural Counseling Issues
PSYC 488 Environmental Psychology

6. Elective Hours in Department: (3 hours)
1 additional course in Psychology, including courses listed in the electives section or any additional course from Core Areas, Diverse Populations, or Applied Courses.
PSYC 213 Psychology of Adjustment
PSYC 250 Death and Dying
PSYC 290 Psychological Issues and Practices
PSYC 303 Psychology of Couples
PSYC 385 Group Processes
PSYC 440 Survey of Family Psychology and Intervention Issues
PSYC 490 Special Topics in Psychology
PSYC 491 Seminar in Psychology
PSYC 498 Readings in Psychology
PSYC 499 Psychology Projects

7. Capstone/Senior Integrative Experience: (3 hours minimum)
Select one of the following:
PSYC 470 Research Methods Applications
PSYC 481 History and Systems of Psychology
PSYC 492/495 Internship Option
PSYC 497 Senior Seminar

8. Required Courses in Other Departments (7 hours)
BIOL 109 Human Biology and the Environment
or BIOL 149/159 General Biology I (GEP Group C)
ENGL 308 Social Sciences Advanced Composition
or ENGL 312* Advanced Composition (Core Skill 2)

Requirements for Internship Option
1. Complete the Psychology major - described above.
2. Required Background in Psychology:
Pass a departmental ethics examination and complete specific courses required for different types of internships. (See the department guide.)

3. Internship Orientation Meetings:
Attend 2 internship orientation meetings: 1 at least 2 semesters before interning, and 1 in the semester preceding the internship.

4. Complete a résumé and an internship proposal.

5. Complete PSYC 495 Internship in Psychology with a grade of P and PSYC 492 Internship Seminar with a C or better (Capstone).

Requirements for Child and Family Psychology Emphasis
1. Complete Psychology major - described above.
2. Required Coursework in Psychology:
Please be aware that many of the required courses have prerequisites. Additionally, PSYC 489 must be taken BEFORE PSYC 492/495 if you select the internship under “D” as your 400-level learning experience (12 hours minimum):
(May be used to satisfy group and elective requirements for the major above)

A) PSYC 150/151 General Psychology
B) PSYC 208 Introduction to Lifespan Development or PSYC 210 Child Development or PSYC 212 Adolescence and Adulthood
C) PSYC 489 Abnormal Child Psychology
D) One of the following 400-level learning experiences:
PSYC 404 Psychology of the Exceptional Child
PSYC 440 Survey of Family Psychology and Intervention Issues
PSYC 485 Behavioral Approaches to Human Problems
PSYC 490 Special Topics in Psychology involving children and/or adolescents
PSYC 492/495 Internship in Psychology involving children and/or adolescents
PSYC 498 Readings in Psychology involving children and/or adolescents
PSYC 499 Psychology Projects involving research concerning children and/or adolescents

3. Attendance at a Child and Family Psychology Emphasis Orientation Meeting
Attend at least one child and family orientation meeting in a semester prior to taking PSYC 489 Child and Adolescent Disorders.

4. Recommended Course:
PSYC 303 Psychology of Couples

Requirements for the Emphasis in Addictions Counseling and for state certification in Alcohol and Drug Counseling are listed under Addictions Counseling this catalog.

Requirements for Minor in Psychology
1. Foundation Courses: (6 hours)
PSYC 150 General Psychology
or PSYC 151 Honors: General Psychology (GEP Group D)
PSYC 201  Research Methods in Psychology
   or a departmentally approved research methods course substitution*

2. Courses in Core Areas: (12 hours.)
Select one course in each of four groups.

   GROUP A Biological Bases
   PSYC 306  Sensation and Perception
   PSYC 386  Drugs and Human Behavior
   PSYC 420  Physiological Psychology
   PSYC 430  Health Psychology

   GROUP B Learning and Cognition
   PSYC 345  Animal Learning and Cognition
   PSYC 409  Human Learning and Cognition
   PSYC 485  Behavioral Approaches to Human Problems

   GROUP C Developmental Changes Across the Lifespan
   PSYC 208  Introduction to Lifespan Development
   PSYC 210  Child Development
   PSYC 212  Adolescent and Adult Development

   GROUP D Sociocultural
   PSYC 314  Theories of Personality
   PSYC 317  Abnormal Psychology
   PSYC 318  Social Psychology

*If a research methods course from another department is substituted for PSYC 201,
then you must complete an additional psychology course (15 hours total) from the list
above. Thus, the completion of the minor requires you to take a minimum of 18 hours in
PSYC.

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Public Administration

EMPHASIS

Coordinator: John O’Rorke, Professor, Department of Political Science

The emphasis in public administration is open to:
- degree-seeking students in any major who would like to explore the public sector as a possible area of future employment and
- non-degree seeking members of the community who would like to obtain employment in the public sector or who already work in public administration and desire to upgrade their skills.

Program Requirements

<table>
<thead>
<tr>
<th></th>
<th>EMPHASIS</th>
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<tbody>
<tr>
<td>Total Hours Required:</td>
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</table>

Requirements for Emphasis in Public Administration

POSC 110/112  Introduction to American Politics
POSC 323  Public Administration
POSC 353  Public Program Evaluation
POSC 355  Public Budgeting

Public Relations

MINOR

Coordinator: Andy Duncan, Professor, Department of English
Participating Faculty:
Professors: A. Duncan (English), J. Lombardi (Communication)
Associate Professors: Dean (Marketing & Finance), Hein (Visual Arts), Herzfeld (Visual Arts), Ruminiski (Communication), Ye (Marketing & Finance)

- You cannot major in Public Relations.

Program Requirements

<table>
<thead>
<tr>
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<th>MINOR</th>
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<tbody>
<tr>
<td>Total Hours Required:</td>
<td>24</td>
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</tbody>
</table>
Requirements for Minor in Public Relations

1. Courses in Communication Studies: (6 hours)
   - CMST 300 Interpersonal Communication
   - or CMST 322 Presentational Communication
   - CMST 335 Organizational Communication

2. Courses in English: (6 hours)
   - ENGL 336 Journalistic Writing
   - ENGL 436 Advanced News and Feature Writing

3. Courses in Other Departments: (12 hours)
   - ART 207 Graphic Design (Tech. Fluency)
   - ART 235 Photography
   - MCOM 205 Mobile Media Production
   - CMST 325 Principles of Public Relations
   - or MKTG 261 Principles of Marketing

Recommended Additional Courses:
The following courses are recommended but not required for the minor in Public Relations. These courses provide valuable background for the course work in the minor:
   - ART 104 Two-dimensional Design
   - BUAD 100 Introduction to Business
   - CMST 122 Introduction to Public Communication
   - ECON 200 Basic Economics (GEP Group D)

Social Media

MINOR

Requirements for Minor in Social Media

1. Social Media Introductory Courses: (3 hours)
   - Choose one of the following:
     - CMST 102/112 Introduction to Strategic Communication Leadership
     - MCOM 105 Digital Media and Media Literacy

2. Social Media Required Courses: (18 hours)
   - MCOM 205 Mobile Media Production
   - CMST 225 Foundations of Strategic Messaging
   - MKTG 261 Principles of Marketing
   - CMST 312 Digital Identity and Community
   - MCOM 326 Writing for Electronic Media
   - MKTG 467 Digital and Social Media Marketing
   - Choose one of the following courses:
     - CMST 302 Argumentation and Advocacy
     - CMST 322 Presentational Communication
     - CMST 335 Organizational Communication

3. Recommended Courses*:
   - CMST 122 Introduction to Public Communication
   - CMST 215 Collaboration and Team Communication
   - CMST 310 Civic Communication
   - CMST 325 Public Relations Principles
   - ENSL 355 Socially Networked Journalism
   - MCOM 447 Media Law and Regulations

* One must take the appropriate prerequisites for any recommended courses chosen.

Social Science

MAJOR

Coordinator: Linda Steele, Program Coordinator, College of Liberal Arts and Sciences

Department Contacts: Gregory Wood (Chair), Department of History; Jodi Eirich (Associate Professor), Department of Educational Professions; M. Murtagh (Chair), Department of Psychology; David Kiriazis (Chair), Department of Economics; Robert Moore (Chair), Department of Sociology; Richard Russo (Chair), Department of Geography; Stephen Twing (Chair), Department of Political Science

- A major in Social Science requires a minimum of 63 hours; you cannot minor in Social Science.
- Only courses in which you earn a grade of C or better will count toward satisfaction of major requirements in Social Science.

Program Requirements

<table>
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<tbody>
<tr>
<td>Hours Required in Social Science:</td>
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<td>Hours Required in Other Fields:</td>
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<td>Total Hours Required:</td>
<td>63-64</td>
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</tbody>
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Requirements for Major in Social Science

1. Introductory Level Courses: (36 hours)
   - Economics (6 hours)
     - ECON 201 Principles of Economics (Macro) (GEP Group D)
     - or ECON 211 Honors: Principles of Macroeconomics (GEP Group D)
   - ECON 202 Principles of Economics (Micro)
     - or ECON 212 Honors: Principles of Microeconomics
   - Geography (6 hours)
     - GEOG 104 Human Geography (GEP Group D or F)
     - or GEOG 110 World Regional Geography: Cultural Diversity (GEP Group D or F)
     - or GEOG 301 Geography of North America
     - or GEOG 302 Geography of Maryland
History (6 hours)
Select one of the following sequences:
HIST 103/104 History of the United States
or HIST 113, 114 World History
(NOTE: Students pursuing secondary social studies certification are required to take both the US and World history sequences.)

Political Science (6 hours)
POSC 110 Introduction to American Politics (GEP Group D)
or POSC 112 Honors Introduction to American Politics (GEP Group D)
POSC 113 Introduction to World Politics (GEP Group D)
or POSC 114 Honors Introduction to World Politics (GEP Group D)
or POSC 131 Introduction to Comparative Politics (GEP Group D or F)

Psychology (6 hours)
PSYC 150 General Psychology (GEP Group D)
or PSYC 151 Honors General Psychology (GEP Group D)
and one from among:
PSYC 210 Child Development
PSYC 212 Adolescence and Adulthood
PSYC 220 Psychology of Women (GEP Group F)

Sociology (6 hours)
SOCI 100 Introduction to Sociology (GEP Group D)
or SOCI 111 Honors Introduction to Sociology (GEP Group D)
and one from among:
SOCI 200 Social Problems
SOCI 224 Cultural Anthropology (GEP Group F)
SOCI 305 Racial and Cultural Minorities (GEP Group F)
SOCI 306 Sociology of African Americans
(NOTE: Students interested in pursuing secondary social studies certification at either the undergraduate or master’s level should choose SOCI 224, SOCI 305, or SOCI 306.)

2. Tracks: (18 hours)
Select 2 of the following departmental patterns:
Economics (9 hours)
Select from:
ECON 300 History of Economic Thought
ECON 303 American Economic History
ECON 306 Money and Banking
ECON 309 Comparative Economic Systems
ECON 351 Intermediate Macroeconomics
ECON 352 Intermediate Microeconomics
ECON 400 International Trade
ECON 401 International Finance
ECON 405 Economics of Developing Countries
ECON 408 Urban and Regional Economics
ECON 490 Special Topics in Economics

Geography (9 hours)
Select from:
GEOG 300 Economic Geography
GEOG 310 Fundamentals of Cartography
GEOG 320 Geography of Latin America
GEOG 324 Urban Geography
GEOG 360 Food Systems
GEOG 400 Geography of Asia
GEOG 401 Geography of Europe
GEOG 403 The Geography of Sub-Saharan Africa
GEOG 404 Geography of the Middle East and Central Asia
GEOG 407 Political Geography
GEOG 410 Locational Analysis
GEOG 425 Geography of Transportation
GEOG 427 Geography of Languages and Religions
GEOG 452 Rural Geography
GEOG 454 Geography of Tourism

History (9 hours)
Select from 300- or 400-level history courses.

Political Science (9 hours)
Select one course from each of the three groups:
a. POSC 352 Interest Groups
POSC 361 Public Opinion and Political Behavior
POSC 362 Political Parties and Elections
POSC 363 Media and Politics
POSC 365 Women and Politics
POSC 462 Personality and Politics
b. POSC 330 Politics of Africa
POSC 331 Politics of Latin America
POSC 332 Politics of Middle East
POSC 333 Politics of Europe
POSC 341 International Organization
POSC 342 Foreign Policy of the United States
POSC 431 Russian Politics
c. POSC 321 American State and Local Politics
POSC 323 Public Administration
POSC 324 Criminal Justice Systems
POSC 421 American Legislative Politics
POSC 422 American Constitutional Law I
POSC 423 American Constitutional Law II
POSC 427 The American Presidency

Psychology (9-10 hours)
Select one course from each of the four groups:
a. PSYC 210 Child Development
or PSYC 212 Adolescence and Adulthood
Selection may not duplicate introductory courses.
b. PSYC 213 Psychology of Adjustment
or PSYC 301 Research Methods and Analysis II
or PSYC 303 Psychology of Couples
c. PSYC 318 Social Psychology
d. PSYC 314 Theories of Personality
or PSYC 317 Abnormal Psychology

Sociology (9 hours)
Select one course from each of the three groups. If SOCI 224 or 305 was chosen as an introductory level course, a different course must be chosen to count for the track. Selections may not duplicate courses used elsewhere in the major.
a. Social Institutions and Structures
SOCI 305 Racial and Cultural Minorities (GEP Group F)
SOCI 362 Sociology of Religion
SOCI 364 Marriage and Family Relationships
SOCI 366 Social Inequality
SOCI 367 Sociology of Medicine
SOCI 436 Social Aspects of Mass Communication

b. Social Behavior
SOCI 203 Sociology of Deviant Behavior
SOCI 306 Sociology of African Americans
The major in Social Work is designed to prepare you for generalist practice. It is built upon a liberal arts foundation and provides you with the knowledge, values, and skills needed to help individuals, families, groups, organizations, and communities.

Content in the major forms the foundation for professional practice. The curriculum covers values and ethics, diversity, social and economic justice, populations-at-risk, human behavior and the social environment, social welfare policy and services, social work practice, research and field practicum. All students are required to complete a full-time internship which constitutes the last semester of the senior year.

Graduates with a major in Social Work may begin professional practice in a variety of fields including mental health, aging, family and children's services, health care, addictions, juvenile and adult corrections, developmental disabilities, and community planning and development.

The Social Work program is accredited by the Council on Social Work Education (CSWE). Graduates of the program are eligible to apply to take state social work licensure exams at the baccalaureate level and to compete for employment positions where such a license is required. In addition, qualified graduates may also apply for advanced standing in graduate schools of social work which allows for completion of a Master's degree in less time than it would otherwise take. Contact the Department Chair for further information.

**Requirements for Admission to the Social Work Program**

Applicants must meet the following admissions requirements in order to be accepted into and complete the Social Work program.

Enrollment in the program is controlled by the number of slots available in the program at the time of admission. Admissions decisions are based on a competitive process. Application deadlines for all students, including transfer students, are established each semester by the program and publicly announced by the department.

**Admission Requirements**

1. Completion of at least 30 credit hours.
2. Cumulative GPA of at least 2.3 (or recommendation of faculty member).
3. Completion of a declaration of major form.
4. Completion of an application to the Social Work program which includes a self statement and three letters of reference. Application packets are available from the department.
5. Completion of SOWK 370 with a grade of C or better.
6. Approval of the Social Work Department Admissions Committee (which may require a personal interview with the Social Work faculty). The Admissions Committee may award special provisional admission.

**Graduation Requirements**

1. Completion of SOWK 492 (Capstone) with a grade of C or better and SOWK 495 with a grade of P.
2. Cumulative GPA of at least 2.3 both overall and in courses required for the major.
3. Meet program performance standards set by the department as measured by a standardized exit exam. Students who do not successfully meet these standards will be given additional opportunities to repeat the exam but only at their own expense.
4. Completion of an exit interview with the Social Work faculty.

**Dismissal Policy**

The following constitute grounds for dismissal from the Social Work program:

1. Inability to meet the academic requirements of the program.
2. Failure to address and correct deficiencies in competencies cited at last assessment review.
3. Violations of the National Association of Social Workers' Code of Ethics (Copies of the Code are available from the Department of Social Work.)
4. Violations of FSU’s Student Code of Conduct as outlined in the PathFinder which would result in a referral to the University’s Judicial System.

A grievance procedure for protecting students’ rights to due process is outlined in the Social Work Student Handbook available from the Department of Social Work.

Program Requirements

| Hours Required in Social Work: | MAJOR | 48 |
| Hours Required in Other Departments: | 19 |
| Total Hours Required: | 67 |

Requirements for Major in Social Work

1. Social Work Courses: (48 hours)
   - SOWK 305 Racial and Cultural Minorities (GEP Group F)
   - SOWK 310 Statistics for Social Science
   - SOWK 311 Basic Research Methods
   - SOWK 370 Introduction to Social Welfare and Social Work
   - SOWK 371 Social Policy
   - SOWK 375 Human Behavior and the Social Environment I
   - SOWK 377 Human Behavior and the Social Environment II
   - SOWK 379 Foundations for Generalist Practice
   - SOWK 470 Generalist Practice with Individuals and Families
   - SOWK 471 Generalist Practice with Communities and Organizations
   - SOWK 473 Generalist Practice with Groups
   - SOWK 492 Social Work Seminar (Capstone)
   - SOWK 495 Internship in Social Work

* A seminar course (491) may be applicable to the Distribution Requirements with the prior approval of the department; only 1 seminar may be used in this manner.

2. Courses in Other Departments: (19 hours)
   - SOCI 100 or 111 Introduction to Sociology (GEP Group D)
   - SOCI 200 Social Problems
   - COSC 100 Introduction to Computer Science (Tech. Fluency)
   - PSYC 150 or 151 General Psychology (GEP Group D)
   - POSC 110 or 112 Introduction to American Politics (GEP Group D)
   - BIOL 109 Human Biology and the Environment (GEP Group C)

Sociology

**MAJOR**

**MINOR**

**Professors:** Moore (Chair), Rogers Thomas

**Associate Professors:** W. Li, McMullen, Moorehead

**Assistant Professor:** Luvara

- For departmental courses above the 100 level in the Sociology major, only courses in which a grade of C or better is earned will count toward satisfaction of major requirements.
- The Sociology major may be completed on the Frostburg campus.
- The department also offers a minor in cultural anthropology.
- Internship opportunities are available.

### Program Requirements

| Hours Required in Sociology: | 36 |
| Hours Required in Other Departments: | 3 |
| Total Hours Required: | 39 |

### Requirements for Major in Sociology

1. **Basic Courses:** (6 hours)
   - SOCI 100/111 Intro. to Sociology (GEP Group D)
   - SOCI 200 Social Problems

2. **Methods and Theory** (15 hours)
   - SOCI 310 Statistics for Social Science
   - SOCI 311 Basic Research Methods
   - SOCI 450 Classical Sociological Theory
   - SOCI 451 Contemporary Sociological Theory
   - SOCI 491 Seminar in Sociology (Capstone)

3. **Distribution within Department:** (15 hours)
   - At least nine hours must be at the 300 or 400 level

4. **Electives**
   - SOCI 203 Sociology of Deviant Behavior
   - SOCI 224 Cultural Anthropology
   - SOCI 305 Racial and Cultural Minorities
   - SOCI 306 Sociology of African Americans
   - SOCI 307 African Americans in Appalachia
   - SOCI 312 Applied Social Research
   - SOCI 322 Social Demography
   - SOCI 325 Community Analysis
   - SOCI 326 Sociology of Rural Life
   - SOCI 328 Sociology of Urban Life
   - SOCI 332 Collective Behavior and Social Movement
   - SOCI 334 Gender and Social Life
   - SOCI 340 Criminology
   - SOCI 341 Race and Crime
   - SOCI 345 Sociology of the Environment
   - SOCI 350 Folklore in Appalachia
   - SOCI 362 Sociology of Religion
   - SOCI 364 Marriage and Family Relationships
   - SOCI 366 Social Inequality
   - SOCI 367 Sociology of Medicine
   - SOCI 420 Animals in Human Society
   - SOCI 425 Work and Occupations
   - SOCI 433 Sociology of Education
   - SOCI 436 Sociological Aspects of Mass Communication
   - SOCI 442 Juvenile Delinquency
   - SOCI 443 The American Correctional System
5. Internship Requirement: optional

6. Required Course in Other Departments: (3 hours)
   COSC 100 Intro. to Computer Science (Tech. Fluency)

Requirements for Minor in Sociology

1. Basic Courses: (6 hours)
   SOCI 100/111 Intro. to Sociology (GEP Group D)
   SOCI 200 Social Problems
   or SOCI 203 Sociology of Deviant Behavior

2. Methods and Theory (0 hours)

3. Distribution within Department: (12 hours)
   At least six hours must be at the 300 or 400 level

4. Internship Requirement: (0 hours)

5. Required Courses in Other Departments: (0 hours)

Sustainability Studies

MINOR

Coordinator: Tracy Edwards, Lecturer, Department of Geography

Steering Committee:

Associate Professors: Bernhardt (Psychology), Rogers Thomas (Sociology),
Wood (History), Ye (Marketing & Finance)

Assistant Professors: Hocking (Biology), Wetherholt (Geography)

Lecturers: T. Edwards (Geography), J. Browne (English)

Program Requirements

<table>
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<td>Total Hours Required:</td>
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Requirements for Minor in Sustainability Studies

1. Core Courses: (6 hours)
   IDIS/SUST 155 Introduction to Sustainability Studies
   SUST 455 Seminar in Sustainability Studies

2. Foundation Courses: (6-8 hours)
   Select two of the following courses:
   BIOL 109 Human Biology and the Environment
   GEOG 103 Physical Geography
   GEOG 104 Human Geography
   GEOG 205/PHSC 205 Descriptive Meteorology
   HIST 100 The Contemporary World in Historical Perspective
   IDS 160 Science, Technology and Society
   LEAD 101 Introduction to Leadership Studies
   MGMT 111 Intercultural Understanding
   PHIL 102 Contemporary Ethical Problems
   POSC 124 Cultural Anthropology
   SUST 246 Sustainability in Action

3. Elective Courses*: (9 hours)
   Select three courses from at least two departments:
   BIOL 340 General Ecology
   BIOL 425 Forest Ecology and Conservation
   BIOL 450 Ecology and Management of Wildlife Populations
   CHEM 420 Environmental Chemical Analysis
   CHEM 460 Environmental Chemistry
   CMST 345 Conflict Management
   CMST 365 Environmental Communication
   ECON 410 Resource and Energy Economics
   ENGL 402 Editing and Production
   ENGL 440 Literature of the Environment
   GEOG 335 Oceanography
   GEOG 360 Food Systems
   GEOG 405 Physical Climatology
   GEOG 406 Management and Conservation of Natural Resources
   GEOG 421 Regional Planning
   GEOG 445 Biogeography
   GEOG 450 Urban Planning
   GEOG 452 Rural Geography
   GEOG 472 Environmental Planning
   GEOG 473 Environmental Law
   HIST 409 World Environmental History
   HIST 420 Green: Environment and Economy in U.S. History
   LEAD 401 Citizen Leader
   MGMT 356 Leadership and Human Behavior
   MGMT 405 Business Ethics and Social Responsibility
   PHIL 315 Philosophy and the Environment
   PHSC 350 Practical Solar Energy
   POSC 336 Politics of Food
   POSC 450 Environmental Public Policy
   PSYC 488 Environmental Psychology
   RECR 393 History and Philosophy of Outdoor Recreation
   SOCI 345 Sociology of the Environment
   SOCI 366 Social Inequality
   SOCI 420 Animals in Human Society
   SUST 350 Sustainable Agriculture
   SUST 494 Field Experiences in Sustainability

* Special topics courses numbered 490 or 491 in participating departments when approved by the Program Coordinator. One 3-hour independent studies course numbered 499 when approved by the Program Coordinator. With prior approval, a study abroad experience of 3 credits or more with a sustainability focus can be used in place of an elective course.
Theatre

MAJOR
MINOR

TRACKS IN:
• ACTING
• DESIGN AND TECHNOLOGY
• THEATRICAL STUDIES

Professor: Mattis (Chair, Department of Theatre and Dance), Rushton
Assistant Professor: Georgeson, Preston

- You must earn a 2.7 cumulative GPA in all theatre courses to meet graduation requirements.
- Legal residents of Delaware may complete a theatre degree (design and technology) at Maryland resident tuition rates through the SREB Academic Common Market.
- All students who wish to enter or re-enter the major with a primary focus in the Acting Track are required to pass an audition/interview for admittance.
- All students who wish to enter or re-enter the major with a primary focus in the Design and Technology Track are required to pass a portfolio review/interview for admittance.
- Students changing their primary area of focus must re-audition/interview before being accepted into that area of focus.
- Students who wish to enter the major with a primary focus in Theatrical Studies may simply declare that track on admittance to Frostburg State University.
- An interview/audition is required for all students seeking departmental scholarship consideration.

Program Requirements

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<th></th>
<th>MAJOR</th>
<th>ACTING TRACK</th>
<th>DESIGN /TECH. TRACK</th>
<th>THEA, STUDIES TRACK</th>
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<td>60</td>
<td>60</td>
<td>60</td>
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</table>

Requirements for Major in Theatre

1. Core Courses in Theatre: (30 hours)
THEA 102 Shop Practicum
THEA 103 Front of House Practicum

THEA 104 Production Crew Practicum (For THEA 102, 103, 104: One hour must be completed within student’s first two semesters as a theatre major. All 3 hours must be completed by the end of student’s junior year.)
THEA 106 Introduction to Theatre (GEP Group A)
THEA 107 Introduction to Theatrical Vision (GEP Group A)
THEA 110 Introduction to Acting
THEA 204 Stagecraft
THEA 206 Modern American Playwrights
THEA 308 Directing
THEA 425 History of Theatre I
THEA 426 History of Theatre II
THEA 431 World Drama I (also offered as ENGL 431)

2. Theatre Tracks: (30 hours)

a. Acting
THEA 208 Acting: Basic Principles and Application
THEA 210 Voice and Movement
THEA 211 Voice and Movement II
THEA 310 Voice and Speech
THEA 318 Acting: Analysis and Performance
THEA 420 Marketing Yourself as an Actor
THEA 421 Advanced Acting: Analysis and Performance of Shakespeare (Acting Capstone)

And nine credits from the following:
DANC 131 Ballet I
DANC 154 Jazz I
DANC 165 Tap I
DANC 361 Dance for Musical Theatre
THEA 335 Acting in Simulation
THEA 360 Stage Combat
THEA 460 Physical Comedy

b. Design and Technology
THEA 202 Stage Management
THEA 203 Costume Technologies
THEA 207 TheatreCAD
THEA 304 Sound Design
THEA 305 Scene Design
THEA 306 Stage Lighting Design
THEA 307 Costume Design
THEA 311 Stagecraft II
THEA 409 Marketing Yourself as a Designer and/or Technician

Choose one of the following:
THEA 400 Theatre Production (Production Capstone – Technical)
THEA 465 Projects in Theatrical Design (Production Capstone – Design)

C. Theatrical Studies
THEA 202 Stage Management
THEA 208 Acting: Basic Principles and Application

And select two from:
THEA 304 Sound Design
THEA 305 Scene Design
THEA 306 Stage Lighting
THEA 307 Costume Design

And one of the following three options:
Wildlife & Fisheries

MAJOR

SEE RELATED PROGRAMS:

BIOLOGY
- PRE-HEALTH OPTION
- MOLECULAR BIOLOGY
- ENVIRONMENTAL SCIENCE

FORESTRY

INTERPRETIVE BIOLOGY & NATURAL HISTORY

Contact: Thomas Lambert, Associate Professor, Department of Biology

Professors: Li, Raesly, Seddon, Serfass

Associate Professors: Keller, Lambert, Puthoff, Taylor (chair)

Assistant Professors: Hughes, Munasinghe, Sheehan

- Students completing the professional programs as listed meet all educational requirements for their certification by The Wildlife Society or American Fisheries Society (depending upon the option chosen).
- Students can choose to add a fisheries option to either wildlife option.
- Students will meet educational requirements for scientific research positions in Wildlife Biology or Fisheries Biology for federal and state agencies.
- Students intending to further their education in graduate school are also encouraged to take one semester of organic chemistry.
- Minors are available in biology, forestry, ethnobotany, geography, and sustainability studies.

Program Requirements

<table>
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<th>WILDLIFE PROFESS.</th>
<th>GENERAL</th>
<th>PROFESS. FISHERIES</th>
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<td>53-59</td>
<td>37</td>
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<td>20-23</td>
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<td>Total Hours Required:</td>
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<td>76-79</td>
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Requirements for Major in Wildlife & Fisheries

1. Core Curriculum: (44 hours)

BIOL 149/159 General Biology I (GEP Group C)
BIOL 160 General Zoology
BIOL 161 General Botany
BIOL 200 Scientific Investigation and Communication
BIOL 340 General Ecology
BIOL 350 Genetics
BIOL 492 Wildlife-Fisheries IBNH Seminar (Capstone)
BIOL 494 Field Experience in Biology

or BIOL 499 Special Problem in Biology (Minimum 3 cr.)

CHEM 201 General Chemistry I (GEP Group C)
CMST 102/112 Introduction to Human Communication
ENGL 339  Scientific Writing (Core Skill 2)
   or ENGL 338 Technical Writing (Core Skill 2)
GEOG 103/113 Physical Geography (GEP Group C)
MATH 109/110 Elements of Applied Probability and Statistics (Core Skill 3)

2. Wildlife Core Requirements: (23-24 hours)

Wildlife Management:
BIOL 450  Ecology and Management of Wildlife Populations

Wildlife Techniques:
BIOL 230  Wildlife Techniques

Wildlife Biology, take two of the following:
BIOL 406  Ornithology
BIOL 422  Herpetology
BIOL 423  Mammalogy

Anatomy and Physiology, take one of the following:
BIOL 302  Animal Physiology
BIOL 427  Comparative Anatomy

Botany, take one of the following:
BIOL 405  Botany
BIOL 409  Plant Taxonomy

Policy, Administration, and Law, take one of the following:
BIOL 425  Forest Ecology and Conservation
GEOG 472  Environmental Planning
GEOG 473  Environmental Law

3. Requirements for Professional Wildlife Track:

1. Core Curriculum: (44 hours — listed above)
2. Wildlife Core Requirements: (23-24 hours — listed above)
3. Professional Certification Core Requirements (16-18 hours)

Quantitative Sciences:
BIOL 414  Quantitative Analysis of Vertebrate Populations
MATH 220  Calculus for Applications I
   or MATH 236 Calculus I (Core Skill 3)
CHEM 202  General Chemistry II

Botany, one additional course from:
BIOL 313  Plant Evolution and Diversity
BIOL 403  Plant Physiology
BIOL 405  Dendrology
BIOL 409  Plant Taxonomy

Policy, Administration and Law, one additional course from:
BIOL 425  Forest Ecology and Conservation
GEOG 472  Environmental Planning
GEOG 473  Environmental Law

4. Requirements for General Wildlife Track

1. Core Curriculum: (44 hours — listed above)
2. Wildlife Core Requirements: (23-24 hours — listed above)
3. General Wildlife Track Requirements (9-11 hours)

MATH 119  College Algebra (Core Skill 3)
   or MATH 120 Pre-Calculus (Core Skill 3)
   or MATH 220 Calculus for Applications I
   or a higher level MATH course

Plus two additional courses from:
BIOL 302  Animal Physiology
BIOL 309  General Entomology
BIOL 334  General Animal Behavior
BIOL 402  Evolution
BIOL 406  Ornithology

BIOL 411  Invertebrate Zoology
BIOL 412  General Parasitology
BIOL 417  Ichthyology
BIOL 422  Herpetology
BIOL 423  Mammalogy
BIOL 426  Vertebrate Zoology
BIOL 427  Comparative Anatomy

5. Requirements for Professional Fisheries Track

1. Core Curriculum: (44 hours — listed above)
2. Professional Fisheries Track Requirements: (25-26 hours)

CHEM 202  General Chemistry II
BIOL 417  Ichthyology
BIOL 420  Fish Management and Culture
BIOL 430  Introductory Limnology
CHEM 420  Environmental Chemical Analysis
GEOG 430  Surface Water Hydrology
MATH 220  Calculus for Applications I
   or MATH 236 Calculus I (Core Skill 3)

Women's Studies

MINOR

Coordinator: Angela Luvara, Assistant Professor, Department of Sociology

Participating Faculty:

Professors: Armiento (English), J. Flinn (Psychology), Ruminski (Communication Studies)

Associate Professors: Brassfield (Philosophy), English (Fine Arts), McConnell (History), McCoskey (Economics), Morris (English)

Assistant Professors: Danzi (Mass Communication), Luvara (Sociology), Mitchell (Psychology)

Librarian I: Zakharova
Librarian II: VerMeulen
Librarian III: Bena

- Women’s Studies is a multicultural and multidisciplinary minor.
- You cannot major in Women’s Studies.

Program Requirements

<table>
<thead>
<tr>
<th>Total Hours Required:</th>
<th>MINOR</th>
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<tbody>
<tr>
<td></td>
<td>18</td>
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</tbody>
</table>
Requirements for Minor in Women’s Studies

1. Required Course: (3 hours)
WMST 201 Introduction to Women’s Studies (GEP Group F)

2. Elective Courses: (15 hours)
Select five from among the following:
ART 370 Women/Gender and the Visual Arts
ENGL 290 Topics in Language & Literature (when content is appropriate)
ENGL 450 Women and Literature
HIST 436 Women’s Issues in World History (GEP Group F)
MDFL 301 Latin American Women’s Issues (GEP Group F)
MUSC 250 Gender and Sexuality in Music (GEP Group F)
NURS 412 Women’s Health in Global Perspectives
PHIL 409 Philosophy and Women (GEP Group F)
POSC 365 Women and Politics
PSYC 220 Psychology of Women (GEP Group F)
PSYC 270 Psychological Perspectives of Human Sexuality
SOCI 332 Collective Behavior and Social Movements
SOCI 334 Gender and Social Life
SOCI 364 Marriage and Family Relationships
SOCI 366 Social Inequality
SOCI 466 Women, Health, and Healing
THEA 428 Women Through Theatre
WMST 490 Special Topics in Women’s Studies
WMST 491 Seminar in Women’s Studies
WMST 494 Practicum in Women’s Studies (a maximum of 3 credits may be applied to the minor)
WMST 499 Independent Study
Course Descriptions

Accounting

ACCT 101 Life Skills for Money Wellness 3 cr.
A practical approach to understanding and applying common financial life skills necessary to gain financial confidence and independence. Coverage of introductory topics include budgeting arrangements, spending and savings plans, personal banking, credit management, loan/debt selection and organization, retirement planning, employment taxes, and more.

ACCT 211 Financial Accounting 3 cr.
An introduction to the principles and concepts of financial accounting, including the basic accounting process, required to make informed decisions based on financial statement information. Credit cannot be earned for both ACCT 201 and ACCT 211. Every semester. Prerequisite or corequisite: MGMT 110 for all ACCT, BUAD, and ECON majors (Business Economics Concentration) only.

ACCT 212 Managerial Accounting 3 cr.
Accounting as a tool for decision making, planning, control and evaluation. Cost-volume-profit analysis, cost behavior, profit planning and product costing. Every semester. Prerequisite: C grade or better in ACCT 211.

ACCT 305 Accounting Systems 3 cr.
Modern accounting systems, computer applications in accounting problems and systems design. Lab/Lecture. Fall. Prerequisite: C grade or better in ACCT 311 and COSC 100/110/220.

ACCT 311 Intermediate Accounting I 3 cr.
Accounting standards, conceptual framework, comprehensive development of the accounting process, financial statement preparation, revenue recognition and time value of money. Every semester. Prerequisite: C grade or better in ACCT 211. Prerequisite or corequisite: MATH 118, 220, or 236.

ACCT 312 Intermediate Accounting II 3 cr.
Application of accounting theory and techniques, sequel to ACCT 311. Current assets, investments, plant assets, intangible assets, liabilities. Every semester. Prerequisites: C grade or better in MATH 118 or 220 or 236, ACCT 212 and ACCT 311.

ACCT 313 Intermediate Accounting III 3 cr.
Application of accounting theory and techniques, sequel to ACCT 311 and ACCT 312. Earnings per share, stockholders' equity, income taxes, pensions and post-retirement benefits, leases, accounting changes and error analysis, statement of cash flows and full disclosure. Fall. Prerequisite: C grade or better in ACCT 312.

ACCT 315 Cost Accounting 3 cr.
In-depth coverage of cost-volume-profit analysis, cost behavior and cost analysis. Cost management, cost control, determination, evaluation and analysis. Pricing decisions and decision making with relevant costs. Every semester. Prerequisites: C grade or better in MATH 118 or 220 or 236, ACCT 212 and ACCT 311.

ACCT 316 Advanced Cost Accounting 3 cr.
In-depth coverage of job costing, activity-based costing and process costing. Flexible budgets, variance analysis, inventory costing and capacity analysis. Variable. Prerequisite: C grade or better in ACCT 315.

ACCT 325 Auditing 3 cr.
Fundamentals of auditing theory and practice. Ethics, legal liability, generally accepted auditing standards, the conceptual framework underlying auditing and reporting. General approaches to auditing financial statements, other services provided by public accountants. Spring. Prerequisites: C grade or better in ACCT 301 or ACCT 311.

ACCT 330 Governmental and Nonprofit Accounting 3 cr.
Accounting and financial reporting for state and local governments, and nonprofit organizations such as hospitals and colleges. Fall. Prerequisite: C grade or better in ACCT 301 or ACCT 311.

ACCT 350 International Accounting 3 cr.
Accounting principles of various countries including coverage of International Financial Reporting Standard (IFRS), convergence, comparative accounting, foreign currency transactions and translation, analysis of foreign financial statements, other issues. Spring. Prerequisite: C grade or better in ACCT 312.

ACCT 401 Advanced Financial Accounting 3 cr.
Business combinations, consolidated financial statements, partnerships, SEC reporting issues and/or other current financial reporting topics. Spring. Prerequisite: C grade or better in ACCT 312.

ACCT 420 Tax 3 cr.
Federal income taxation of individuals and corporations. Introductory tax research, tax planning, and professional responsibilities. Other topics, such as tax preparation software, at the discretion of the instructor. Fall. Prerequisites: 75 credits and C grade or better in ACCT 312 or permission of instructor.

ACCT 421 Advanced Tax 3 cr.
Partnerships, S corporations and other advanced topics in individual taxation. Other topics, such as basic tax research, tax preparation software and Maryland income taxes at the discretion of the instructor. Variable. Prerequisite: C grade or better in ACCT 420.

ACCT 425 Tax Practicum 3 cr.
Guided work experience in tax preparation of federal and state returns provided as a community service with National Volunteer Income Tax Assistance Program. Requires a minimum of 50 hours of work after completion of IRS and campus training programs. Fulfills ACCT major electives requirements. Repeatable for a maximum of 6 credits, but only 3 credits may be applied toward the ACCT major. Spring. Prerequisite: Permission of instructor.

ACCT 490 Special Topics in Accounting 3 or 6 cr.
A detailed study of limited topic, problem, or period. Topics vary from semester to semester. Repeatable for maximum of 6 credits if topics are substantially different. Variable.

ACCT 494 Internship in Accounting 3 or 6 cr.
Guided work experience in public accounting, industry, government or not-for-profit accounting. Minimum of 135 clock hours of experience for 3 credits. Minimum of 270 clock hours of experience for 6 credits. Academic component consists of two research papers on experience-related topics and a detailed report on the internship experience. Previous experience not acceptable for credit. Repeatable for maximum of 6 credits. Every semester and summer. Prerequisites: ACCT 212, ACCT 312 and departmental approval.

ACCT 499 Independent Study in Accounting 1-4 cr.
Research and report on a specific topic not covered by regularly rostered courses. Topic will be defined by the student, in conjunction with faculty sponsor. Proposals must be approved prior to registration. Repeatable for a maximum of 4 credits. Every semester. Prerequisites: 18 credits of business administration course work, 90 credits and permission of department chair.
Adventure Sports Management

ADSP 280 Leadership and Group Dynamics in Adventure Sports 3 cr.
Leadership and group dynamics skills necessary to lead adventure sports activities. Emphasis includes group dynamics, facilitation, judgement, leadership styles, risk management and ethical considerations. Spring.

ADSP 330 Outdoor Education 3 cr.
Development of outdoor education in the nonprofit service industry, teaching and learning styles; assessment, lesson planning, curriculum design, delivery options and evaluation. Fall.

ADSP 340 Expedition Planning in Adventure Sports 3 cr.
Students learn the principles of planning adventure sports expeditions and experiences, including professional outfitting. Course taken as part of the LIFE program during the immersion semester. Spring. Prerequisite: ASI 110 (Garrett College course) or permission of instructor.

ADSP 342 Fitness and Nutrition in Adventure Sports 3 cr.
Students learn the principles of proper physical training and sport specificity, injury prevention, injury rehabilitation and nutrition in the Adventure Sport setting for practitioners and participants. Course taken as part of the LIFE program during the immersion semester. Spring.

ADSP 348 Adaptive and Inclusive Adventure Sports 3 cr.
Development of knowledge and skills related to providing adventure sport programming to individuals with disabilities. Includes an introduction to disability, program delivery options for specific disabilities and facilitation experience. Course taken as part of the LIFE program during the immersion semester. Spring. Prerequisite: ADSP 280 or permission of instructor.

ADSP 350 Risk Management in Adventure Sports 3 cr.
An integrated approach to risk management focusing on negligence, accident process, risk management plans and post-incident management. Fall. Prerequisite: 60 credit hours or permission of instructor.

ADSP 360 Entrepreneurship in Adventure Sports 3 cr.
Principles of starting a new business in adventure sports. Development of a business plan. Fall. Prerequisite: ADSP 382 or permission of instructor.

ADSP 382 Agency Assessment and Administration in Adventure Sports 3 cr.
The use of accreditation standards or similar industry standards to assess an adventure sports agency, camp or private company. Course taken as part of LIFE program during the immersion semester. Spring. Prerequisite: RECR 382 or permission of instructor.

ADSP 480 Field Experience in Adventure Sports 1-6 cr.
Practical experience in adventure sports. Site of study may vary. Repeatable for maximum of six credits. Every Semester. Prerequisite: Permission of the instructor.

ADSP 492 Mentorship in Adventure Sports 3 cr.
Intensive study under an individual, owner or leader in the adventure sports industry. Completion of an approved project and 400 hours minimum required. Taken in conjunction with ADSP 495. Fall/spring/summer.

ADSP 495 Mentorship in Adventure Sports 9 cr.
Credits for the 400 hours required for the mentorship. Fall/spring/summer.

AAST 200 Introduction to African American Studies 3 cr.
Overview of critical aspects of the history and culture of African Americans. Employs various interdisciplinary perspectives to explore the experience of Africans uprooted from their land, ways in which these African Americans have adjusted to their new society, and contributed to its growth and development. Spring. GEP Group F.

AAST 300 Traditional Africa 3 cr.
The African pre-colonial states: their governments, economic systems, cultural patterns, achievements, and relations with other African and non-African peoples. Also offered as HIST 301. Variable.

AAST 400 Africans of the Diaspora 3 cr.
Exploration of the main historical trends, cultural tenets, social movements, and intellectual constructions of the African Diaspora with focus on the international connections created by voluntary and forced migrations of people of African descent in antiquity and modern times. Examination of the historical challenges to Africans of the Diaspora and initiatives taken in the face of various Euro-American systems and institutions. Variable. GEP Group F.

AAST 425 History of African American Theatre 3 cr.
Study of the development of African American theatre from nineteenth century through present. Examination of representative forms, dramatists, theatre artists from across the United States with an awareness of the ways African American theatre interacts with various social, cultural and political concerns. Variable.

AAST 490 Topics in African American Studies 3 cr.
Variable topics related to African American Studies from disciplines across the University. Variable. Repeatable for maximum of 6 credits if topics are substantially different. Prerequisite: AAST 200 or permission of the instructor.

AAST 494 AAST Practicum 1-3 cr.
Study of African American history and culture through field trips to cities in Maryland and neighboring states, articulated with a theoretical analysis of major themes under study. Readings, some classroom sessions, private consultations with the instructor and personal writings constitute the theoretical component of the practicum. Lecture, travel and independent study. Additional fees may be required. Repeatable for a maximum of 3 credits. Every semester. Prerequisite: permission of the instructor.

Art

ART 100 Art Appreciation 3 cr.
Introduction to the appreciation and understanding of the visual arts. Every semester. GEP Group A.

ART 104 Two-Dimensional Design 3 cr.
Introduction to the visual organization and formal analysis of two-dimensional design. Critical study, vocabulary, design applications and media explorations as applied to two-dimensional design. Required of all art majors and minors. Two hr. lecture, 2 hr. lab. Fall.

ART 105 Three-Dimensional Design 3 cr.
Introduction to the visual organization and formal analysis of three-dimensional design. Critical study, vocabulary, design applications and media explorations as applied to three-dimensional design. Required of all art majors and minors. Two hr. lecture, 2 hr. lab. Spring.

ART 110 Visual Imagery 3 cr.
An introduction to the visual arts through theory and practice; exploring basic aesthetic concepts, modes of visual communication, expressive meaning of various
materials, theoretical components and symbol systems. Admission priority for Early Childhood and Elementary Education majors. Every semester. GEP Group A.

**ART 110 Honors: Art Appreciation** 3 cr.
Introduction to the appreciation and understanding of the representational and visual arts. Focus includes the visual arts’ relationship to civilizations’ ideas, cultural developments in the humanities and iconography. Fall. Credit cannot be earned for both ART 100 and ART 110. Prerequisite: acceptance into the Honors Program or permission of instructor. GEP Group A.

**ART 201 Ceramics** 3 cr.
Introduction to ceramic processes, history and aesthetics of ceramic form; an exploration of functional and sculptural ceramics. Studio performance stressed. Two hr. lecture, 2 hr. lab. Every semester.

**ART 202 Graphic Design** 3 cr.
Basic level graphic processes and techniques: Adobe software, Macintosh platform. Information and technology fluency. Visual art and graphic design orientation. Two hr. lecture, 2 hr. lab. Every semester. Tech. Fluency

**ART 209 Ceramics** 3 cr.
A variety of crafts such as textiles, weaving, mosaics, leather, and metalwork. Two hr. lecture, 2 hr. lab. Variable.

**ART 212 Drawing** 3 cr.
Fundamental aspects of drawing with emphasis on composition, techniques, and concept. Variety of media techniques and subjects, exploring conceptual and expressive possibilities; drawing as a description of structures within a spatial environment. Two hr. lecture, 2 hr. lab. Every semester.

**ART 216 Illustration** 3 cr.
Drawing and painting techniques to develop technical proficiency with emphasis on observation, composition and imagination. Emphasis on processes pertaining to illustrated visual imagery in editorial, digital, institutional and scientific/environmental themes. Two hr. lecture, 2 hr. lab. Every semester. Prerequisites: ART 212 and ART 104.

**ART 221 Painting** 3 cr.
Introduction to painting — color, form, shape and texture; problems in formal and expressive relationships. Studio performance stressed. Two hr. lecture, 2 hr. lab. Every semester.

**ART 232 Printmaking** 3 cr.
Introduction to relief, intaglio, planographic and serigraphic processes. Two hr. lecture, 2 hr. lab. Every semester.

**ART 235 Photography** 3 cr.
Introduction to still photographic processes and basic camera use, digital editing, and wet darkroom. Final portfolio and written exam required. Two hr. lecture with studio and lab content. Every semester.

**ART 240 Sculpture** 3 cr.
Introduction to classical and contemporary concepts of form and media of sculpting. Physical properties of structure and the nature of materials. Two hr. lecture, 2 hr. lab. Every semester.

**ART 291 Studio Focus Review** 1 cr.
Review of work in student’s focus area(s). Registration concurrent with second advanced studio in primary focus area. May be attempted no more than three times. Graded P/N. Every semester.

**ART 301 Artistic Traditions: Asia** 3 cr.
Survey of cultures outside the European tradition. An iconographic and aesthetic analysis of Asian traditions: Buddhist, Hindu and Islamic. Fall, even-numbered years. GEP Group F.

**ART 302 Artistic Traditions: Africa and the Americas** 3 cr.
Survey of cultures outside the European tradition. An iconographic and aesthetic analysis of the arts of Africa, Pre-Columbian America and the indigenous populations of North America. Fall, odd-numbered years. GEP Group F.

**ART 307 Computer Graphics** 3 cr.
Introduction to terminology, methods, processes, craft and technology of the computer graphic designer; emphasis on theory and application of the Macintosh computer system. May be taken only one time for credit. Two hr. lecture, 2 hrs. lab. Every semester. Prerequisite: ART 207.

**ART 336 Digital Imaging for the Fine Arts** 3 cr.
Introduction to alternative graphic design practices through the study of contemporary media techniques and output to a variety of printing devices. Students will explore non-traditional applications of materials and various fabrication processes. Two hr. lecture, 2 hr. lab. Every semester.

**ART 360 Western Art History** 3 cr.
Survey from the prehistoric to the modern. The theoretical evolution of classicism and anti-classicism as evidenced in painting, sculpture and architecture. Fall.

**ART 370 Women/Gender and the Visual Arts** 3 cr.
A survey and analysis of the roles of women and gender in artistic production, spectatorship and critical discourse. Painting, sculpture and photography. Spring, odd-numbered years.

**ART 380 19th-Century Art History** 3 cr.
Survey of major artistic developments in Europe and America from the time of the French Revolution until World War I. This course presents the broad context of 19th century art. Fall, even-numbered years.

**ART 402 Advanced Ceramics** 3 cr.
Continued study of clays and glazes, potter’s wheel and handbuilding techniques; critical analysis and research into historical and contemporary trends. At advanced levels, depart-mental majors will be involved in research and development of concepts culminating in a final senior exhibition or an internship. Repeatable no more than 4 times for credit. Two hr. lecture, 2 hr. lab. Every semester. Prerequisite: ART 202 or permission of instructor.

**ART 407 Advanced Graphic Design: Print** 3 cr.
Variety of design problems using Macintosh computers combined with traditional layout and illustration techniques. Emphasis on the historical and functional use of a professional quality portfolio. Repeatable no more than 4 times for credit. Two hr. lecture, 2 hr. lab. Every semester. Prerequisites: ART 207 and ART 307, or permission of instructor.

**ART 408 20th-Century Art History** 3 cr.
Survey of major developments from post-impressionism to post-modernism and the contemporary: Europe and the United States. Spring.

**ART 411 Senior Portfolio** 3 cr.
Continued investigation and development of studio work and concepts, culminating in a professional portfolio. Co-registration in ART 491 required. Every semester. Prerequisite: Passage of studio focus review and senior status. Capstone.
ART 412 Advanced Drawing 3 cr.
Continuation of observational figurative and non-figurative drawing. Emphasis on the development of composition, expression, color, use of media and conceptual content. Two hr. lecture, 2 hr. lab. Every semester. Prerequisite: ART 212.

Processes include digital imaging, digital video and audio production, animation and interface design and scripting. Emphasis on the formal, historical and sociological aspects of interactive design. Repeatable no more than 4 times for credit. Two hr. lecture, 2 hr. lab. Every semester. Prerequisites: ART 207, ART 307, or permission of instructor.

ART 415 Art Criticism 3 cr.
Problems in describing, analyzing, interpreting and evaluating art. History, purposes, conceptual bases and methods of art criticism; critical performance. Spring. Prerequisites: ART 360 or ART 408, 60 credit minimum.

ART 416 Advanced Illustration 3 cr.
Professional applications in drawing and illustration related to traditional and digital technology. Assignments present industry-specific problems, which encourage students to examine the transition from conceptualization to execution. Professional portfolio development. Repeatable no more than 4 times for credit. Two hr. lecture, 2 hr. lab. Every semester. Prerequisites: ART 212 and ART 216, or permission of instructor.

ART 421 Advanced Painting 3 cr.
Continued study of painting and painting materials through individual problem-solving in objective and non-objective painting; critical analysis and research into historical and contemporary trends. At advanced levels, departmental majors will be involved in research and development of concepts culminating in a final senior exhibition or internship. Repeatable no more than 4 times for credit. Two hr. lecture, 2 hrs. lab. Every semester. Prerequisite: ART 212 and ART 216, or permission of instructor.

ART 430 Greek and Roman Art 3 cr.
A social and art historical analysis of Greco-Roman visual representation. Sculpture and painting. Spring, even-numbered years.

ART 432 Advanced Printmaking 3 cr.
Continued study of printmaking processes, refinement of media and individual expression; critical analysis and research into historical and contemporary trends. At advanced levels, departmental majors will be involved in research and development of concepts culminating in a final senior exhibition or internship. Repeatable no more than 4 times for credit. Two hr. lecture, 2 hrs. lab. Every semester. Prerequisite: ART 232 or permission of instructor.

ART 435 Advanced Photography 3 cr.
Expansion of skill sets from ART 235, critical analysis and exploration of photographic media and concepts with professional applications included. Repeatable no more than 4 times for credit. Two hr. lecture with studio and lab content. Every semester. Prerequisite: ART 235 or permission of instructor.

ART 440 Advanced Sculpture 3 cr.
Continued study of functional and non-functional sculpture, and individual expression; critical analysis and research into historical and contemporary trends. At advanced levels, departmental majors will be involved in research and development of concepts culminating in a final senior exhibition or internship. Repeatable no more than 4 times for credit. Two hrs. lecture, 2 hrs. lab. Every semester. Prerequisite: ART 240 or permission of instructor.

ART 452 Ceramic Glaze Research 3 cr.
Exploration of ceramic glaze components, glaze calculation, glaze surfaces and firing temperatures. Two hrs. lecture, 2 hrs. lab. Variable. Prerequisites: ART 202, ART 402 or permission of instructor.

ART 460 Renaissance and Baroque Art History 3 cr.
The evolution of humanism and realism in the quattrocento, manerism in the cinquecento and caravaggism and classicism in the seicento. Fall, odd-numbered years.

ART 490 Special Topics in Art 1-6 cr.
Concepts or media not regularly presented, using special resources. Lecture and studio or lecture only. Repeatable for maximum of 9 credits if topics are substantially different. Variable. Prerequisite: permission of instructor.

ART 491 Senior Review 1 cr.
Graded P/N. Co-registration in ART 411 required. Every semester.

ART 492 Internship Research 3 cr.
Academic component of internship. Requires co-registration in 495. Graded A-F. Every semester.

ART 495 Internship in Art 6 or 12 cr.
Experiential component of internship: guided work experience in conjunction with 492; must directly relate to academic program. Full-time interns register for 3 credits in 492 and 12 credits in 495 and may not enroll in other courses. Part-time interns register for 3 credits in 492 and 6 credits in 495. Graded P/F. Every semester. Prerequisites: senior status, in good academic standing; submission of Internship Agreement form prior to registering; enrollment for a full year as FSU student; permission of focus supervisor and Department Chair; 3 advanced courses in the focus.

ART 499 Independent Study 1-6 cr.
Intensive individual study, staff-directed, in an area of special interest. Repeatable for maximum of 12 credits if topics are substantially different. Prerequisite: permission of instructor in the focus area. Available only to Art & Design majors, Art History minors, Fine Arts minors and Graphic Design minors who have completed their respective focus sequences.

Athletic Training
You cannot receive credit for an ATTR course and the same course previously labeled HEED.

ATTR 206 Introduction to Athletic Training 3 cr.
Provides the student interested in Athletic Training the first extensive exposure to the field. Focuses on the theoretical base of the field as well as introductory injury prevention and management concepts. Every semester.

ATTR 210 Athletic Taping & Bracing Techniques 1 cr.
The art and science of applying athletic tape and braces in the prevention and treatment of athletic injuries. Fall. AT majors only.

ATTR 222 Emergency Medical Techniques in Athl. Training 4 cr.
An introduction to the daily management of the athletic training clinical environment. Fall. AT majors only.

ATTR 233 Clinical Experiences in Athletic Training I 2 cr.
An introduction to the daily management of the athletic training clinical environment. Spring. AT majors only.

ATTR 318 Orthopedic Assessment I: Lower Extremity 4 cr.
General and specific athletic injury assessment procedures. Emphasis is placed on the lower extremity on the spine, pelvis and lower extremity including gait and postural assessment. 3 hrs. lecture, 2 hours lab. AT majors only.
ATTR 319 Orthopedic Assessment II: Upper Extremity  4 cr.
General and specific athletic injury assessment procedures. Emphasis is placed on the upper extremity on the head, abdomen, throat and thorax assessment. 3 hrs. lecture, 2 hours lab. AT majors only.

ATTR 320 Pharmacology and General Medical Conditions  3 cr.
Pathology and clinical information about various general medical conditions commonly seen in the physically active. Spring.

ATTR 322 Clinical Experiences in Athletic Training II  2 cr.
The continued in-depth study of both the theoretical and practical clinical aspects of athletic training. Fall. AT majors only.

ATTR 323 Clinical Experiences in Athletic Training III  2 cr.
The continued in-depth study of both the theoretical and practical clinical aspects of athletic training. Spring. AT majors only.

ATTR 340 Organization & Administration of Athletic Training  3 cr.
Administration and management strategies in athletic training. Human resource management, financial management, facility design and planning, client management, ethics and legal liability issues. Fall. Prerequisite: ATTR 206.

ATTR 408 Therapeutic Modalities in Sports Medicine  4 cr.
The study of both the theoretical and practical usage of various therapeutic modalities. Designed for individuals who routinely treat sports related injuries. 3 hours lecture/2 hrs. lab. Spring. Prerequisite: ATTR 318. AT Majors only.

ATTR 413 Rehabilitation Techniques in Sports Medicine  4 cr.
Various aspects of the rehabilitation process for the physically active or athletic population. Goals, techniques, evaluation methods and specific rehabilitation programs covered. 3 hrs. lecture, 2 hrs. lab. Fall.

ATTR 414 Advanced Rehabilitation Techniques in Athletic Training  3cr
Advanced study in the science and application of safe rehabilitative exercise techniques for both the general population as well the physically active. Hands on manual-based techniques for patients will be the primary emphasis. Fall. Prerequisite: ATTR 413. AT Majors only.

ATTR 422 Clinical Experiences in Athletic Training IV  2 cr.
Summary of CAATE competencies and Role Delineation Study required to prepare for BOC exam. Emphasis is placed on clinical proficiencies/decision making skills. Fall. Prerequisites: ATTR 322 and ATTR 323. AT Majors only.

ATTR 423 Clinical Experiences in Athletic Training V  2 cr.
Summary of CAATE competencies and Role Delineation Study required to prepare for BOC exam. Emphasis is placed on clinical proficiencies/decision-making skills. Spring. Prerequisites: ATTR 322 and ATTR 323. AT Majors only.

ATTR 450 Evidence-Based Practice in Athletic Training  3 cr.
Scientific experimentation vs. anecdotal case description in athletic training. Student learns to systematically find, appraise and use the most current and valid research findings as the basis for clinical decisions. Prerequisites: Senior and permission of instructor.

ATTR 480 Capstone I in Athletic Training  3 cr.
Finalization of the theoretical and clinical application of upper body injury assessment and rehabilitation techniques used by athletic trainers, preparation for BOC exam. Fall.

ATTR 485 Capstone II  3 cr.
Finalization of the theoretical and clinical application of lower body injury assessment and therapeutic modalities used by athletic trainers, athletic nutrition, pharmacology and preparation for BOC exam. Spring. AT majors only.

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**Biology**

BIOL 109 Human Biology and the Environment  4 cr.
Study of the human species with emphasis on the interdependence of humans, other forms of life and the physical environment. Three hrs. lecture, 2 hrs. lab. Not for majors or minors. Every semester. GEP Group C.

BIOL 128 Introduction to Ethnobotany  4 cr.
Introduction into the discipline of ethnobotany focusing on the role of plants in Appalachian and other cultures. Field trips to local parks and visits with people active in the use of plants will provide opportunities for hands-on experience with techniques and methods used by field ethnobotanists. Three hrs. lecture, one 2-hr. lab. Fall.

BIOL 149 General Biology I  4 cr.
Biological principles and concepts. The life processes, development and relationship among organisms. Three hrs. lecture, 2 hrs. lab. Every semester. GEP Group C.

BIOL 159 Honors: General Biology I  4 cr.
Biological principles and concepts. The life processes, development and relationship among organisms. Additional expectations required Three hrs. lecture, 2 hrs. lab. Every Fall. Credit cannot be earned for both BIOL 159 and BIOL 149. GEP Group C

BIOL 160 General Zoology  4 cr.
Biology of animals and evolution of animal diversity. Study of ecological interactions among animals and their physicochemical and biological environments. Three hrs. lecture, 2 hrs. lab. Required for biology majors. Every semester. Prerequisite: BIOL 149.

BIOL 161 General Botany  4 cr.
Botanical concepts and principles about algae and land plants. Emphasis on their origin, evolution, classification of major groups with typical life cycles and characteristics, general morphology and physiology of vascular plants, and plant ecology. Required for biology majors. Three 1-hr. lectures, one 2-hr. lab. Every semester. Prerequisite: BIOL 149.

BIOL 200 Scientific Investigation and Communication  3 cr.
An introduction to the structure, function, and movement of the human body. Three lectures and one two-hour laboratory period per week. Not for majors. Fall. Prerequisite: BIOL 149.

BIOL 230 Wildlife Techniques  3 cr.
Study and management of wildlife species. Capture, marking, physiological indices, food habits and nutrition, sex and age, population and habitat analysis. Current management practices. Two hrs. lecture, 3 hrs. lab. Fall. Not open to students who have credit for former BIOL 330. Prerequisite: BIOL 149.

BIOL 302 Animal Physiology  4 cr.
Mammalian physiology, with emphasis on basic physiology. Three hrs. lecture, one 2-hr. labs. Spring. Prerequisites: BIOL 149 or BIOL 160, CHEM 202.

BIOL 304 Microbiology  4 cr.
Microorganisms, especially their form, structure, reproduction, physiology, metabolism, and identification, will be studied with emphasis on their distribution in nature, their beneficial and detrimental effects on humans, and the physical and
chemical changes they make in the environment. Two hrs. lecture and two 2-hr. labs. Every semester. Prerequisites: BIOL 149 with a "C" or better. Co-requisite: CHEM 201 or BIOL 109/209.

**BIOL 309 General Entomology** 4 cr.
Identification, morphology, physiology, development, geological history, ecology and control of insects. Two hrs. lecture, two 2-hr. labs. Fall, odd-numbered years. Prerequisite: BIOL 160.

**BIOL 310 Cell Biology** 4 cr.
Dynamics of cells and their life processes. Ultrastructure, organization, thermodynamic and metabolic processes. Three hrs. lecture, one 2-hr. lab. Fall. Prerequisites: BIOL 149, CHEM 202. Corequisites: CHEM 311 and CHEM 312 or permission of instructor.

**BIOL 313 Plant Evolution and Diversity** 4 cr.
Origin, evolution and diversity of algae, bryophytes, ferns, gymnosperms and angiosperms. Comparative study of life history, morphology and of representatives of major groups. Two 1-hr. lectures, two 2-hr. labs. Spring of odd-numbered years. Prerequisite: BIOL 161.

**BIOL 321 Anatomy and Physiology I** 4 cr.
Structure and function of the human body. Includes its organization, the musculoskeletal system and the nervous system. Two hrs. lecture and two 2-hr. labs. Fall. Not open to students who have credit for former BIOL 201. Prerequisite: BIOL 149.

**BIOL 322 Anatomy and Physiology II** 4 cr.
Structure and function of the human body. Includes the endocrine, circulatory, respiratory, digestive, excretory and reproductive systems, and human development. Two hrs. lecture and two 2-hr. labs. Spring. Not open to students who have credit for former BIOL 202. Prerequisite: BIOL 321 or permission of instructor.

**BIOL 328 Economic Botany** 3 cr.
Study of plants and the link between plant structure and human’s use of plants. Students will gain an understanding of the form and function of the plant body; plant nomenclature; history of plant use; origins of economically important plants; use of flowers and fruits for food and other purposes; use of roots, stems and leaves for food and other purposes. One hr. lecture, one 4-hr. lab. Spring, odd-numbered years. Recommended: BIOL 128 and 161.

**BIOL 334 General Animal Behavior** 3 cr.
Behavior of animals from an evolutionary approach. Research project required. Two hrs. lecture, one 3-hr. lab. Fall. Prerequisite: BIOL 149 or permission of instructor.

**BIOL 340 General Ecology** 4 cr.
Environmental relationships of plants and animals. Field laboratory experience. Measuring environmental variables in terrestrial and aquatic ecosystems. Two hrs. lecture, one 4-hr. lab. Every semester. Prerequisites: BIOL 160 or 161; CHEM 201; MATH 109/209.

**BIOL 350 Genetics** 3 cr.
Laws and molecular basis of inheritance. Genetic patterns and changes at the molecular, organismal and population levels. Three hrs. lecture. Every semester. Prerequisites: BIOL 160 or 161; CHEM 202 (or CHEM 201 and permission of the instructor); MATH 109/209. Recommended: BIOL 304 and 310, CHEM 311 and CHEM 312.

**BIOL 360 Virology** 3 cr.
The study of viruses. Topics will include viral diversity, structure and classification. This course will focus on the molecular biology of viruses, including important viral protein structures and genetic features. Various mechanisms used by viruses to infect cells will also be explored. Infection cycles and common viral interactions with host cells will be presented. Vaccination and anti-viral therapy will be discussed. Summer. Prerequisite: General Biology (BIOL 149).

**BIOL 401 Genetics Laboratory** 1 cr.
Techniques of collection and analysis of genetic data, including molecular, chromosomal, Mendelian and population genetics. One 2-hr. lab. Spring. Prerequisite or corequisite: BIOL 350.

**BIOL 402 Evolution** 3 cr.
Theories, evidences and mechanisms of evolution. Three hrs. lecture. Fall. Prerequisite: BIOL 149.

**BIOL 403 Plant Physiology** 4 cr.
Higher-plant growth and differentiation. Case-study method. Topics include general differentiation, photometabolism, translocation and water relations. Three hrs. lecture, 3 hrs. lab. Fall of even-numbered years. Prerequisite: BIOL 161.

**BIOL 404 Histology** 4 cr.
Microscopic structure and function of the tissues and selected organs of vertebrates. Basic laboratory preparative techniques and tissue recognition. Two hrs. lecture, two 2-hr. labs. Spring, even-numbered years. Prerequisites: BIOL 160, CHEM 201. Recommended: Upper level course work in Anatomy and Physiology.

**BIOL 405 Dendrology** 3 cr.
Collection, identification and study of native and introduced woody plants in summer and winter conditions. One hr. lecture, one 4-hr. lab. Fall. Prerequisite: BIOL 161.

**BIOL 406 Ornithology** 4 cr.
Anatomy, physiology, behavior, ecology and evolution of birds. Laboratory emphasis on identification of regional birds at the species and family level. Two hrs. lecture, one 4-hr. lab. Binoculars required. Spring. Prerequisite: BIOL 149 or BIOL 160.

**BIOL 407 Biological Systematics** 3 cr.
Principles, concepts, and methodologies used in systematic biology. Methods for reconstructing the evolutionary relationships of plant and animal taxa (including phenetic and cladistic analyses). Procedures for description, classification and analysis of the earth’s biodiversity. Three hrs. lecture. Spring. odd-numbered years.

**BIOL 409 Plant Taxonomy** 3 cr.
Classification of flowering plants, gymnosperms and ferns. Emphasis on collection, identification and preparation of herbarium specimens. One hr. lecture, one 4-hr. lab. Spring. Prerequisite: BIOL 161.

**BIOL 410 Plant Diseases** 3 cr.
Nature, cause and control of disease in plants. Plant pathogens: nematodes, viruses, bacteria and fungi in greenhouse, field and forest plants. Laboratory emphasis on identification and preparation of specimens according to phytopathological principles. Two hrs. lecture, one 2-hr. lab. Variable. Prerequisite: BIOL 161.

**BIOL 411 Invertebrate Zoology** 4 cr.
Structure, physiology, life history and natural history of invertebrate groups. Emphasis on local fauna. Two hrs. lecture, two 2-hr. labs. Spring. odd-numbered years. Prerequisite: BIOL 160.

**BIOL 412 General Parasitology** 4 cr.
Principles of parasite structure, function, life cycles and host-parasite relationships. Two hrs. lecture, two 2-hr. labs. Spring, odd-numbered years. Prerequisites: BIOL 160, CHEM 202.

**BIOL 414 Quantitative Analysis of Vertebrate Populations** 3 cr.
A survey of quantitative techniques used to describe, analyze and model vertebrate wildlife population phenomena and interactions between populations. Two hrs. lecture, one 3-hr. lab. Fall. Prerequisites: MATH 120 or a course in calculus, MATH 109/209; BIOL 160 or 161.
BIOL 417 Ichthyology 3 cr.
The study of fishes, with emphasis on structure and function, development, behavior, ecology and systematics. Two hrs. lecture, one 2-hr. lab. Fall, even-numbered years. Prerequisite: upperclass standing in biology or wildlife/fisheries management.

BIOL 420 Fish Management and Culture 3 cr.
Contemporary problems in fisheries management. The study of fish culture; alternatives of commercial harvest and culture. Field trips. Three hrs. lecture. Spring, odd-numbered years. Prerequisite: senior or graduate standing, MATH 109/209 or permission of instructor.

BIOL 421 Sample Design and Analysis of Plant Communities 3 cr.
Ecology of plant communities in the mid-Atlantic; plant community concepts and attributes; environmental factors influencing the distribution and abundance of plants: light, temperature, fire, soil, water; methods of sampling vegetation; quantitative analysis of vegetation data; multivariate methods of data interpretation including classification and ordination; collection and interpretation of field data; emphasis on modern computer methods. Two hrs. lecture, one 3-hr. lab. Fall. Prerequisites: BIOL 314, BIOL 340.

BIOL 422 Herpetology 3 cr.
The structure, behavior, ecology, evolution and taxonomy of amphibians and reptiles. Laboratory emphasis on identification, anatomy and ecology of local species; techniques of collecting, estimating population sizes, home ranges. Two hrs. lecture, one 3-hr. lab. Spring. Prerequisite: BIOL 160.

BIOL 423 Mammalogy 4 cr.
The structure, taxonomy, behavior, ecology, evolution and public health significance of mammals, and history of the science of mammalogy. Laboratory emphasizes anatomy, identification, capture techniques, habitat analysis, and home-range and population characterization. Three hrs. lecture, one 3-hr. lab. Fall. Prerequisite: BIOL 160 or permission of instructor.

BIOL 424 Comparative Anatom y 4 cr.
Investigation of forest ecology, management, conservation, policy, research and history; silviculture, stand dynamics and improvement, reforestation, soils, disturbances and natural pests and pathogens. Patterns and processes of forest communities. Forest products and measurements. Two hrs. lecture, one 2-hr. lab. Fall. Prerequisite: BIOL 305.

BIOL 425 Forest Ecology and Conservation 3 cr.

BIOL 426 Comparative Anatom y 4 cr.
Emphasis on structural relationships among fish, amphibians, reptiles, birds and mammals based on the evolution and development of organ systems. Dissection of representative chordates. Two hrs. lecture, two 2-hr. labs. Not open to students who have credit for former BIOL 327. Fall. Prerequisite: BIOL 160.

BIOL 427 Ethnographic Field Techniques 3 cr.
Practical training and experience using ethnographic field methods. Introduction to methods ethnographers use including mapping, unobtrusive observation, participant observation, ethnographic and life history interviewing, design and implementation of surveys and questionnaires, and an introduction to participatory research methodologies. A project component is included in the course. Three hrs. lecture, Spring. Even-numbered years. Prerequisite: BIOL 128. Ethnobotany Capstone.

BIOL 430 Introductory Limnology 4 cr.
Inland waters: physical, chemical and biological aspects. An overview of hydrobiology. Laboratory emphasis on basic analysis of data from aquatic environments. Two hrs. lecture, two 2-hr. labs. Fall, odd-numbered years. Prerequisite: BIOL 340.

BIOL 435 Molecular Biology 4 cr.
Modern molecular concepts and techniques such as molecular cell function, DNA replication, PCR, protein synthesis, restriction enzyme analysis, DNA sequencing and DNA fingerprinting. Two hrs. lecture, two 2-hr. labs a week. Spring. Prerequisite: BIOL 310.

BIOL 437 Molecular Biology Seminar 1 cr.
Current topics in molecular biology presented by students, faculty and invited speakers coupled with analysis and discussion. Repeatable for maximum of 4 credits if topics are substantially different. Fall, even-numbered years. Prerequisites: senior standing, BIOL 435. Molecular Biology Capstone.

BIOL 438 Biotechnology Lab 3 cr.
Advanced techniques in molecular biology. Topics vary depending on instructors. Topics may include cell culture methods, PCR and DNA sequencing, immunocytochemistry, electrophoretic separation and analysis. Required for biotechnology concentration. One hr. lecture, two 2-hr. labs. Variable. Prerequisites: junior or senior standing, BIOL 435.

BIOL 439 Environmental Toxicology 3 cr.
Interdisciplinary study of the major classes and properties of pollutants, ecotoxicology testing methods and their effects on living organisms and the ecosystem. Two hrs. lecture, two hrs. lab. Variable. Prerequisites: BIOL 149 and CHEM 202.

BIOL 440 Developmental Biology 4 cr.
Classical and modern study of processes producing structural and functional changes during the development of plants and animals. Three hrs. lecture, two hrs. lab. Variable. Prerequisite: BIOL 160.

BIOL 445 Immunology 4 cr.
Introduction to the complex network of cells and soluble mediators that recognize and react to substances foreign to the individual. Principles of immunity, techniques resulting from the study of this system and pathologies resulting from its malfunction. Two hrs. lecture, two 2-hr. labs. Fall. Prerequisite: BIOL 304 or BIOL 310.

BIOL 450 Ecology and Management of Wildlife Populations 3 cr.
Study of the factors that determine the distribution and abundance of wildlife populations and current management practices used to manipulate wildlife populations. Two-three field trips will be used to gain knowledge of regional management practices. Three hrs. lecture. Fall. Prerequisites: BIOL 340, and one from 406, 423 or 426.

BIOL 456 Advanced Microscopy 4 cr.
Principles and techniques of light microscopy and scanning electron microscopy. Preparation of biological specimens for light microscopy (including immunofluorescence) and scanning electron microscopy. Two hrs. lecture, two 2-hr. labs. Spring, odd-numbered years. Prerequisite: cumulative GPA 3.0 or higher, BIOL 304 or 404, or permission of instructor.

BIOL 460 Forestry Field Practice 3 cr.
A field-oriented overview of basic forestry. Includes field dendrology, silvics, elements of surveying and mapping, orienteering, log scaling, silviculture, timber cruising and wildlife techniques. Numerous field trips to regional forests. Summer Session, odd-numbered years. 1 cr. lecture, 2 cr. lab. Prerequisites: BIOL 305 and BIOL 425.
BIOL 465 Environmental Health 3 cr.
Investigation of the relationship between human exposure to environmental pollutants and resultant adverse health effects. Consideration of epidemiology, exposure assessment, risk assessment and risk management. Variable. Also offered as GEOG 465. Prerequisite: completion of two laboratory science courses.

BIOL 484 Field Experiences in Ethnobotany and Ecology 3 cr.
Unique field course where students gain practical training and experience using ecological and ethnographic field methods. Exploration of environmental impact issues is also part of the course. A research or service learning project is required. Additional travel fees may apply. Variable. Prerequisite: permission of instructor.

BIOL 490 Special Topics in Biology 2 to 4 cr.
A “one time only” course on a special topic selected by the instructor. Variable. Repeatable for maximum of 4 credits if topics are substantially different. Prerequisite: permission of instructor.

BIOL 492 Wildlife, Fisheries and Interpretive Biology and Natural History Seminar 2 cr.
Current topics in Wildlife and Fisheries presented by students, faculty and invited speakers, coupled with analysis and discussion career-related topics relevant to soon-graduating students. For majors in wildlife & fisheries and IBNH. Variable. Prerequisite: senior standing in wildlife/fisheries or Interpretive Biology and Natural History. Pre/Corequisite: BIOL 494 or BIOL 499. Wildlife & Fisheries, & IBNH Capstone.

BIOL 493 Advanced Biology Research 3 cr.
Original student research mentored by a faculty member that will involve literature searches, experimental design, and analysis. Poster presentation methods and results at local, regional or national meeting required as final product. Department of Biology Chair approval before registration for the course. Repeatable for a maximum of 9 credits. Only 3 credits of this course can be used as a Biology elective. Variable. Prerequisite: permission of department chair.

BIOL 494 Field Experiences in Biological Sciences 2 to 6 cr.
Work experience related to the student’s major. Faculty sponsor, project approval and final report by the student required. Variable. Repeatable for maximum of 12 credits. Prerequisites: biology, wildlife & fisheries, or interpretive biology and natural history majors only; junior or senior standing. Biology (Environmental Science concentration) Capstone.

BIOL 496 Seminar in Biology 1 cr.
Current topics in biology presented by students, faculty and invited speakers, coupled with analysis and discussion. Variable. Repeatable for maximum of 4 credits if topics are substantially different. Prerequisite: senior standing. Capstone for Biology and Biology Pre-Health Professions option.

BIOL 497 Readings in Biology 1 cr.
Discussion of readings on selected topics. One period per week. Repeatable to 2 credits. Variable. Repeatable for maximum of 2 credits if topics are substantially different. Prerequisites: junior or senior standing, biology major or minor, permission of the instructor, completion of request form before registering. (The department allows only a total of 2 credits in the readings courses 497 and/or 498.)

BIOL 498 Honors Program — Readings in Biology 1 cr.
Discussion of readings on selected topics. One period per week. Repeatable to 2 credits. Variable. Repeatable for maximum of 2 credits if topics are substantially different. Prerequisites: senior standing, biology major, 3.0 average in major and completion of request form before registering. (The department allows only a total of 2 credits in the reading courses 497 and/or 498.)

BIOL 499 Special Problems in Biology 2 or 3 cr.
Experimental research directed by a staff member. Variable. Repeatable for maximum of 12 credits if topics are substantially different. Prerequisites: 20 credits in biology, junior or senior standing, permission of instructor, approval of the Department Chair, completion of request form before registering.

Business Administration

BUAD 100 Introduction to Business 3 cr.
Introduction to the internal and external environment of contemporary business and a survey of basic concepts, principles, and practices of business organizations. Basic business terminology and concepts for beginning students seeking an introduction to the business world or assistance in making career decisions. Does not count towards business or accounting majors. Every semester.

Business Law

BLAW 291 Legal Environment of Business 3 cr.
The workings and importance of legal institutions; the law as a system of social thought and social action. The analysis and study of the law of contracts, agency, employment, negotiable instruments, real property, personal property, sales and insurance. Credit cannot be earned for both BUAD 291 and BLAW 291. Every semester. Additional prerequisite or corequisite: MGMT 110 for all ACCT, BUAD, and ECON majors (Business Economics Concentration) only.

Business Management

Information Systems

BMIS 320 Advanced Computer Applications in Business 3 cr.
Managerial applications of the microcomputer most often encountered in business. Word processing for report writing, spreadsheets for financial modeling, graphics for presentations, desktop publishing for business use and managerial data base applications using commercial programs. Variable. Prerequisites: MATH 118 and COSC 220 or COSC major.

BMIS 455 Management Information Systems 3 cr.
Relation of MIS to the management functions of planning, control, and decision making. Concepts that underlie MIS: systems management, databases, computers, telecommunications, and general systems design and implementation. Every semester. Prerequisite: MGMT 251.

Chemistry

CHEM 100 Chemistry and Society 4 cr.
Examines the modes of research, the development of modern chemical principles, and the application and subsequent impact of these developments on society. Not intended for natural science majors. Three hrs. lecture, one 2-hr. lab. Every semester. GEP Group C.

CHEM 103 Foundations of Chemistry 3 cr.
Introduction to fundamental concepts, methodology and nomenclature of chemistry, including data analysis, atomic structure, inorganic compounds, chemical equations
and reactions, stoichiometry, states of matter, solutions. No laboratory. Every semester. Prerequisite: Math Level I. Corequisite: DVMT 100/099.

CHEM 113 Honors: Chemistry and Society 4 cr.
Examines the models of research, the development of modern chemical principles and the application and subsequent impact of these developments on society. Both reading and writing components will be more challenging than those in CHEM 100. Credit cannot be earned for both CHEM 100 and CHEM 113. Three hrs. lecture, 2 hrs. lab and 1 hr. recitation. Every semester. Prerequisite: Admission to Honors Program or permission of instructor. GEP Group C.

CHEM 133 General Chemistry for Engineers 3 cr.
A math-intensive lecture-only general chemistry course designed for engineering students. Topics include intermolecular forces, thermodynamics, chemical kinetics, catalysis, chemical equilibria, acid-base equilibria, electro chemistry and nuclear chemistry. Fall. Prerequisites: CHEM 201 or permission of instructor.

CHEM 150 General, Organic and Biochemistry 4 cr.
Survey of key chemistry concepts in general, organic and biochemistry for non-science majors. Three hrs. lecture, one 2-hr. lab. Prerequisite: Math Level 1 required. GEP Group C.

CHEM 201 General Chemistry I 4 cr.
Atomic and molecular structure, theories of covalent and ionic bonding, chemical reactions, states of matter, gas laws, solutions, reaction rates, stoichiometry and thermodynamics. Two hrs. lecture, 2 hrs. discussion and one 2-hr. lab. Every semester. You cannot earn credit for both CHEM 101 and CHEM 201. Prerequisite: C or better in CHEM 103 or placement at Math Level II. Corequisite: MATH 102/119, placement at Math Level III or higher or permission of instructor. GEP Group C.

CHEM 202 General Chemistry II 4 cr.
Acid-base concepts, equilibria, thermodynamics, electrochemistry, reaction rates, coordination compounds and organic, nuclear and descriptive chemistry. Three hrs. lecture, one 3-hr. lab. Every semester. You cannot earn credit for both CHEM 102 and CHEM 202. Prerequisites: CHEM 201 and MATH 102/119.

CHEM 304 Computational Techniques 2 cr.
Introduction to and application of the fundamental methods, tools and techniques essential to solve problems in the physical sciences. Regular topics include statistical, mathematical and computational tools; and data analysis. LabView software as applied to instrumentation. Additional topics explored will augment student needs and supplement area of current interest in science. One hour lecture, one 2-hr. lab integrated. Fall. Also offered as ENES 304 and PHYS 304. Prerequisites: CHEM 201 and CHEM 202 or COSC 240 or ENEE 114 equivalent, or permission of the instructor.

CHEM 305 Research Methods in Chemistry 3 cr.
Introduction to independent research related to chemistry using modern analysis techniques, methods and instrumentation. Searching and critically reading scientific literature. Analysis of safety issues and environmental impact. Spring. Two 3-hr. integrated lecture and lab. Prerequisite: CHEM 312.

CHEM 311 Organic Chemistry I 3 cr.
Chemistry of the compounds of carbon. Classes and nomenclature of compounds, structure, reactions, mechanisms, spectroscopy and stereochemistry. Three hrs. lecture. Every semester. Not open to students who have credit for former CHEM 301. Prerequisites: CHEM 201 and CHEM 202 or equivalent. Corequisite: CHEM 312.

CHEM 312 Organic Chemistry Laboratory I 1 cr.
Introduction to techniques of experimental organic chemistry: separations, purifications, spectroscopy, mechanistic analysis. One 3-hr. lab. Every semester. Not open to students who have credit for former CHEM 301. Prerequisites: CHEM 201 or permission of instructor. GEP Group C.

CHEM 320 Quantitative Analytical Chemistry 4 cr.
Theory, methods and treatment of data pertaining to chemical analysis. Gravimetric, volumetric, potentiometric, electroanalytical and spectrophotometric applications in the laboratory. Three hrs. lecture, one 3-hr lab. Fall. Prerequisites: CHEM 201 and 202, MATH 120 or equivalent or permission of instructor.

CHEM 321 Organic Chemistry II 3 cr.
Continued study of compounds of carbon. Three hrs. lecture. Every semester. Not open to students who have credit for former CHEM 302. Prerequisites: CHEM 311 and CHEM 312 or equivalent.

CHEM 322 Organic Chemistry Laboratory II 1 cr.
Application of techniques of experimental organic chemistry. Organic reactions and synthesis. One 3-hr. lab. Every semester. Not open to students who have credit for former CHEM 302. Prerequisites: CHEM 311 and CHEM 312 or equivalent. Corequisite or prerequisite: CHEM 321.

CHEM 330 Medicinal Chemistry 3 cr.
Mechanism of drug action through interaction with biomolecule targets. Drug discovery, design, and development. Introduction to pharmacokinetics, pharmacodynamics, and quantitative structure-activity relationships. Fall, even-numbered years. Pre-requisites: BIOL 310 and CHEM 311.

CHEM 341 Introduction to Geochemistry 4 cr.
Intro to chemical systems and processes of Earth; basic chemistry principles applied to environmental processes, including, but not limited to distribution of elements, chemical reactions, and geochemical cycles. Applying geochemistry techniques to investigate and examine natural and human-impacted environments. Two hrs. lecture, one 3-hr. lab. Spring. Also offered as GEOG 341. Prerequisite: CHEM 202.

CHEM 394 Peer Mentoring in Chemistry 1 cr.
Preparation of students to participate in mentoring experiences in chemistry. Introduction to topics in teaching and mentoring, including group dynamics and classroom management, pedagogical methodology, assessment of student learning, professional behavior and ethics. Required participation in a mentoring experience in chemistry. Every semester. Prerequisites: CHEM 201 and 202 with a "B" or better; departmental approval.

CHEM 411 Advanced Inorganic Chemistry 4 cr.
Covers the application of symmetry operations and group theory to elucidate the bonding and spectroscopy of transition metal complexes. Selected topics in inorganic reaction mechanisms, photochemistry, catalysis and bio-inorganic chemistry will then be examined using these theoretical approaches. Three hrs. lecture, one 3-hr. lab weekly. Spring, odd-numbered years. Prerequisite: CHEM 321 or permission of instructor.

CHEM 420 Environmental Chemical Analysis 4 cr.
Explores applications of wet chemical, electroanalytical (potentiometric and amperometric), spectrophotometric (UV-Vis, spectrophotometry and AA) and chromatographic (HPLC, GC, GCMS, TLC) techniques for standard and trace analyses of water, soil, and tissue materials. Emphasis on application of standard protocols, development of experimental technique and sample preparation. Two 3 hr. lectures/lab. Spring, even-numbered years. Prerequisites: CHEM 201 and 202.

CHEM 421 Instrumental Analysis 4 cr.
Theory and applications of modern instruments for chemical analysis. Electronics, spectroscopic, electrochemical and chromatographic techniques. Laboratory use of NMR, IR, UV, AA and GC instruments. Three hrs. lecture, one 3-hr. lab. Spring. Prerequisite: CHEM 320 or permission of instructor.
CHEM 425 Pharmacological Ethnobotany 3 cr.
Study of the basic principles of pharmacology, with particular emphasis on drugs of botanical origin. Three hours lecture. Variable. Prerequisite: CHEM 321.

CHEM 438 Advanced Organic Chemistry 3 cr.
Structure and bonding in organic compounds, reactivity, mechanisms of reactions and application to reaction types. Three hrs. lecture. Variable. Prerequisite: CHEM 321.

CHEM 441 Physical Chemistry Lecture I 3 cr.
Application of thermodynamic principles to chemical systems. Gas laws, state functions, calorimetry, phase changes, partial molar properties, equilibrium and other topics. Three hrs. lecture. Fall. Prerequisites: CHEM 320 and 321, MATH 238 and PHYS 215 and 216 or equivalent or permission of instructor.

CHEM 442 Physical Chemistry Lecture II 3 cr.
The development of quantum theory for simple confined particles, one-electron atoms, multi-electron atoms and molecules. Use of quantum theory to understand and interpret results from chemically important spectroscopic techniques. Three hrs. lecture. Spring. Prerequisite: CHEM 441.

CHEM 445 Physical Chemistry Laboratory I 1 cr.
Experimental physical chemistry. One 3-hr. lab. Fall. Prerequisite or corequisite: CHEM 441.

CHEM 446 Physical Chemistry Laboratory II 1 cr.
Continuation of CHEM 445. One 3-hr. lab. Spring. Prerequisite or corequisite: CHEM 442.

CHEM 455 Biochemistry I 3 cr.
The chemistry and metabolism of biological compounds, biochemical thermodynamics, enzyme mechanisms and kinetics. Three hrs. lecture. Fall. Prerequisite: CHEM 311, BIOL 310 or permission of the instructor.

CHEM 456 Biochemistry Laboratory 3 cr.
Qualitative and quantitative laboratory experiments on the nature and properties of biological materials. Two three-hr. labs. Spring. Prerequisites or corequisites: CHEM 322 and 455.

CHEM 457 Biochemistry II 3 cr.

CHEM 460 Environmental Chemistry 3 cr.
An investigation into the chemical nature of the environment. Development of the chemical interactions found in the atmosphere, hydrosphere, lithosphere and biosphere. Energy and energy usage also discussed. Three hrs. lecture. Spring, odd-numbered years. Prerequisites: CHEM 201, 202 and any of the following: BIOL 430, GEOG 432, CHEM 320 or 420.

CHEM 490 Selected Topics in Chemistry 1 to 3 cr.
Specialized topics such as theoretical organic chemistry, spectroscopy, photochemistry, quantum chemistry or stereochemistry. Repeatable for a maximum of 6 credits. Variable. Prerequisite: 24 credits in chemistry or permission of instructor.

CHEM 491 Seminar in Chemistry 1 cr.
Current topics in chemistry presented by students, faculty and invited guests. One period weekly. Required for majors. Every semester. Prerequisites: CHEM 305 and 320.

CHEM 492 Capstone Experience 1 cr.
An integrated senior-year experience that requires students to use their accumulated skills, knowledge and experiences to present their own research and a portfolio demonstrating important laboratory skills. Required for all chemistry majors. Every semester. Prerequisite: CHEM 491, CHEM 493 or CHEM 495 or permission of instructor.

CHEM 493 Advanced Chemical Research 1 to 8 cr.
Original student investigations in analytical, inorganic, physical, organic, and biochemistry involving both library and laboratory work, planned and executed under faculty guidance. A formal, publication-quality report and a seminar presentation are required. Research projects must be approved by the department and the instructor prior to registration in the course. Repeatable for a maximum of 8 credits. Prerequisites: CHEM 305, CHEM 320 and permission of department chair.

CHEM 495 Internship in Chemistry 1 to 6 cr.
Guided work experience. Work must be directly related to academic program. Grade P/F. Variable. Prerequisites: CHEM 305 and CHEM 320, in good academic standing, submission of Agreement Form to Department Chair prior to registering and departmental approval.

CHEM 499 Special Problems in Chemistry 1 to 6 cr.
Methods and techniques of basic research. Repeatable for a maximum of 6 credits. Every semester. Prerequisite: permission of department chair.

Communication Studies

CMST 102 Introduction to Strategic Communication Leadership 3 cr.
Introductory survey of fundamental disciplinary distinctions, theories, and approaches of the communication field, with an emphasis on strategy and civility when presenting self in relational, group, and public communication contexts. Includes practice of human and digital communication strategies to focus individual and collective outcomes, learning, and professional development in the major. Every semester.

CMST 112 Honors: Introduction to Strategic Comm. Leadership 3 cr.
Introductory survey of fundamental disciplinary distinctions, theories, and approaches of the communication field, with an emphasis on strategy and civility when presenting self in relational, group, and public communication contexts. Includes practice of human and digital communication strategies to focus individual and collective outcomes, learning, and professional development in the major. Variable. Prerequisite: admission to Honors Program or written permission of instructor.

CMST 122 Introduction to Public Communication 3 cr.
Introduction to analyzing and responding to public and professional calls to communicate orally for ceremonial, information sharing, persuasive decision making, and marketplace and advocacy purposes. Emphasizes speaking, listening, and rhetoric when delivering individual speeches and participating in public discussions. Every semester.

CMST 215 Collaboration and Team Communication 3 cr.
Principles and practice of communication in small, task-oriented groups. Interaction of task and social dimensions. Problem-solving groups and decision-making principles and methods. Spring. Prerequisite: CMST 102/112 or CMST 122 or permission of instructor.

CMST 225 Foundations of Strategic Messaging 3 cr.
Introduces the common tools, scenarios, and theories used by strategic communication practitioners to craft strategic messages for organizations, public institutions, and marketplace with civility and persuasive responsiveness. Fall. Prerequisite: CMST 102/112 or CMST 122 or permission of instructor.
CMST 300 Communication and Relationships 3 cr.
Addresses the dynamics of relationships with family, friends, romantic partners, and colleagues and how to understand and improve relationships by applying interpersonal communication skills and theories. Fall. Prerequisite: CMST 102/112 or CMST 122 or permission of instructor.

CMST 302 Argumentation and Advocacy 3 cr.
Teaches theories and skills for the analysis, construction, and communication of logical arguments in a variety of decision-making contexts. Both oral and written argumentation are included, as well as a balance of prepared and extemporaneous public speaking. This course focuses on using argumentation as a tool to advocate for political and social change. Spring. Prerequisite: CMST 102/112 or CMST 122 or permission of instructor.

CMST 310 Civic Communication 3 cr.
Offers practical experience in planning events for the department’s Communication Leadership Lab as well as exploration of conceptual frameworks, facilitation processes, and coalition-building outcomes of dialogue and deliberation in organizational and community contexts. Emphasis on applying constructive conversation strategies, collective decision-making processes, theoretical understandings of civility, and strategic advocacy messaging for civic media and other forms of civic engagement. Spring. Prerequisite: CMST 102/112 or CMST 122 or permission of instructor.

CMST 312 Digital Identity and Community 3 cr.
Theoretical and practical analysis of the relationship between mediated and face-to-face communication as an aspect of identity. Includes discussion of power, activism, and effective leadership through language and behavior in mediated and face-to-face communication, including self-awareness of language and individual and communal behavior and how these elements of communication mediate identity and power in society. Spring. Prerequisite: CMST 102/112 or CMST 122 or permission of instructor.

CMST 322 Presentational Communication 3 cr.
Theory and practice of orally and visually presenting information, stories, research outcomes, and advocacy appeals to reach audience-centered goals for online and face-to-face presentation contexts. Emphasizes professional digital identity development, agenda setting, audience interaction management, and adaptable integration of multiple platforms and media important to communication-related research, civic roles, and careers. Fall. Prerequisites: CMST 102/112 or CMST 122, or permission of instructor.

CMST 325 Public Relations Principles 3 cr.
Provides theoretical and practical overview of the public relations process, including planning, execution, and evaluation. Emphasis on news releases, media pitches, backgrounder, features, websites and social media, reports, proposals, newsletters, brochures, public service announcements, and posters. Fall. Prerequisite: CMST 102/112 or CMST 122 or permission of instructor.

CMST 335 Organizational Communication 3 cr.
Theory and analysis of organizational communication, with emphasis on applying practical knowledge in organizational contexts. Includes creation of an organizational portfolio. Fall. Prerequisite: CMST 102/112 or CMST 122 or permission of instructor.

CMST 345 Conflict Management 3 cr.
Theoretical and practical examination of the normal, inevitable nature of conflicts with strategies for managing and resolving conflicts in interpersonal, community, organizational, and global contexts. Spring. Prerequisite: CMST 102/112 or CMST 122 or permission of instructor.

CMST 350 Intercultural Communication 3 cr.
Exploring concepts, theories, and communication skills relevant to understanding and managing cross-cultural conflicts in interpersonal, organizational, regional, and global contexts. Analyzes and develops skills needed to open channels of communication between and among people of diverse backgrounds as students gain an experiential understanding of the interconnections between communication and culture. Fall. Prerequisite: CMST 102/112 or CMST 122 or permission of instructor.

CMST 355 Political Communication 3 cr.
Overview of the role of communication in contemporary political life, including political communication theories, political campaign communication, media and political communication, propaganda, and the role of political communication in promoting a deliberative democracy. Fall, even-numbered years. Prerequisite: CMST 102/112 or CMST 122 or permission of instructor.

CMST 365 Environmental Communication 3 cr.
Development, adaptation, and critical analysis of environmentally themed messages for particular audiences. Variable. Prerequisite: CMST 102/112 or CMST 122 or permission of instructor.

CMST 422 Seminar in Rhetorical Criticism 3 cr.
Criteria and methods of rhetorical analysis of significant public discourse and cultural artifacts. Application to traditional and contemporary modes of public communication. Variable. Prerequisite: CMST 102/112 or CMST 122 or permission of instructor.

CMST 425 Public Relations Strategies 3 cr.
Advanced course in public relations, focusing on practical application of strategies and techniques used when developing campaigns for clients or analyzing case studies. Variable. Prerequisite: CMST 102/112 or CMST 122 and CMST 325 or permission of instructor.

CMST 451 Seminar in Communication Theory 3 cr.
Examination of classical and contemporary concepts and methods by which the human communication process is explored. Application to realistic settings. Variable. Prerequisite: CMST 102/112 or CMST 122 or permission of instructor.

CMST 455 Political Communication 3 cr.
Study of how free speech functions in relation to communication in the United States and the ethical responsibilities of communicators in interpersonal, public, artistic, and professional situations. Capstone. Fall. Prerequisite: CMST 102/112 or CMST 122 or permission of instructor.

CMST 459 Internship in Communication Studies 6 or 12 cr.
Supervised field experience for Communication Studies majors emphasizing professional behavior, communication, and mentoring. Repeatable for maximum of 6 credits. Variable. Prerequisites: Declared major in Communication Studies; CMST 102/112 or CMST 122, CMST 485, and two additional 3-credit CMST courses, plus permission of instructor.

CMST 495 Internship in Communication Studies 6 or 12 cr.
Supervised field experience for Communication Studies majors emphasizing professional behavior, communication, and mentoring. Repeatable for maximum of 6 credits. Variable. Prerequisites: Declared major in Communication Studies; Junior/Senior status, not on probation; minimum 12 cr. and...
2.5 GPA in major; site and position must be approved by department internship director before registering. Corequisite: CMST 492.

CMST 499 Directed Study in Communication Studies 1 to 6 cr.
Intensive study through faculty-directed projects or papers. Hours arranged. Variable. Prerequisite: Permission of Department Chair and relevant faculty member required.

Computer Science & Information Technologies

COSC 100 Introduction to Computer Science 3 cr.
A survey of the historical, technological and societal aspects of computing with a practical component involving contemporary software applications. Topics include past and future computing, hardware, software, computer systems, data representation and processing, and social and ethical concerns of computing. Practical applications include word processors, spreadsheets, graphics packages, email, internet and web page development basics. Every semester. Tech. Fluency.

COSC 101 The Discipline of Computer Science 3 cr.
Survey of the discipline of computer science covering history, hardware development, number systems, boolean logic, algorithm development, programming languages, computability, artificial intelligence, introduction to programming, social implications and ethics. Every semester. Tech. Fluency.

COSC 102 Foundations of Computer Science 4 cr.
Introduction to the foundations of computer science. Topics include memory addressing, computer functions, architectures found in computer science, digital logic circuits, correctness of computer algorithms, finite-state automata, computability, recursion, and Θ-notation and efficiency of algorithms. Three hrs. lecture, 2 hrs. lab. Every semester. Prerequisite: Level III or above on the mathematics placement test, or better in COSC 100 and COSC 101 and a grade of C or better in COSC 240 and corequisite of COSC 102.

COSC 103 The Discipline of Computer Science 3 cr.
A survey of the historical, technological, and societal aspects of computing with a practical component involving contemporary software applications and a programming component using a modern, high-level language. Topics include past and future computing, hardware, software, algorithms, computer systems, data representation and processing, and social and ethical concerns of computing. Practical applications include word processors, spreadsheets, programming languages, graphics packages, email, internet and web page development basics. Credit cannot be earned for both COSC 100 and COSC 110. Fall. Prerequisite: acceptance into the Honors Program or permission of instructor. Tech. Fluency.

COSC 130 Introduction to Programming 3 cr.
Introduction to computer programming; control flow, arrays, variables, functions, file processing; stages of software development. Every semester.

COSC 220 Software Applications for Business 3 cr.
Survey of hardware, introduction to software used in business applications, modern business management system terminology, word processing, spreadsheet, database management systems and network communication software for microcomputers. Every semester. Tech. Fluency.

COSC 240 Computer Science I 4 cr.
Introduces the fundamental concepts of programming. Simple data types, control structures, array and string data structures, algorithms, debugging techniques and the social implications of computing. Emphasizes good software engineering principles and developing fundamental programming skills in the context of a language that supports the object-oriented paradigm. Three hours lecture; two hour lab. Every semester. Credit may not be earned for both COSC 200 and COSC 240. Prerequisites: Grade of C or better in COSC 101 and test at level 3 or above on mathematics placement test or grade of C or better in MATH 102/119 or corequisite enrollment in MATH 102/119.

COSC 241 Computer Science II 4 cr.
Continues introduction to the methodology of programming from an object-oriented perspective. Design and implementation of data structures used in programming such as linked lists, stacks and queues. Internal sorting and searching. Recursion. Performance analysis of algorithms. Three hours lecture; two hour lab. Every semester. Credit may not be earned for both COSC 201 and COSC 241. Prerequisite: Grade of C or better in COSC 240 and corequisite of COSC 102.

COSC 242 Data Structures 3 cr.
Design and implementation of intermediate and advanced data structures and a rigorous introduction to the asymptotic analysis of algorithms. Topics include Huffman coding trees; binary search trees; splay trees; height-balanced binary search trees; general trees; graphs; hash tables; skip lists; multithists; omega, theta and omicron notation; and limits to computation. Research paper and presentation required. Fall. Prerequisites: COSC 100, and a grade of C or better in COSC 101 and a grade of C or better in COSC 130.

COSC 300 Structured Systems Analysis and Design 3 cr.
Analysis and design of information processing systems. Topics include system development life cycle: study phase, design phase, development phase, operation phase. Student will design and analyze a simple system. Every semester. Prerequisite: Grade of C or better in COSC 240 or grade of C or better in COSC 100/110 or COSC 101 and a grade of C or better in COSC 130.

COSC 301 Fundamentals of Computer Networks 3 cr.
Introduction to computer networking using TCP/IP protocol suite. Topics include application layer, transport layer, network layer, data link layer, physical layer and socket programming. Every semester. Prerequisite: COSC 241.

COSC 305 Computer Ethics 3 cr.
Ethical issues related to computing. Includes topics such as responsibility of the computer professional, computerized crime, technology and employment, equitable access to computing, national databases and privacy, software ownership and responsibilities of the computing profession. Every semester. Prerequisite: Grade of C or better in COSC 240; or grade of C or better in COSC 100/110 or COSC 101 and a grade of C or better in COSC 130.

COSC 310 Data Structures and Algorithm Analysis 3 cr.
Design and implementation of intermediate and advanced data structures and a rigorous introduction to the asymptotic analysis of algorithms. Topics include Huffman coding trees; binary search trees; splay trees; height-balanced binary search trees; general trees; graphs; hash tables; skip lists; multithists; omega, theta and omicron notation; and limits to computation. Research paper and presentation required. Fall. Prerequisites: MATH 236 and a grade of C or better in COSC 241.

COSC 315 Advanced Topics in Computer Networks 3 cr.
Introduction to advanced concepts in computer networks. Topics include wireless and socket programming. Every semester. Prerequisite: COSC 241.

COSC 320 Business Programming 3 cr.
Design and implementation of business programming using COBOL. Writing programs to generate reports from sequential data files. Report formatting and paging techniques; edited PIC clauses; control breaks, sorting table and table processing, sequential, indexed and relative files. Variable. Prerequisite: Grade of C or better in COSC 241.

COSC 325 Software Engineering 3 cr.
Techniques and methodologies of software engineering. Topics include quality assurance, software protection and security. Every semester. Prerequisite: Grade of C or better in COSC 241.

COSC 331 Fundamentals of Computer Networks 3 cr.
Introduction to computer networking using TCP/IP protocol suite. Topics include application layer, transport layer, network layer, data link layer, physical layer and socket programming. Every semester. Prerequisite: COSC 241.

COSC 335 Advanced Topics in Computer Networks 3 cr.
Introduction to advanced concepts in computer networks. Topics include wireless and mobile networks, multimedia communication, network security, network management and quality of service. Fall. Prerequisite: Grade of C or better in COSC 331.

COSC 345 The Internet and Multimedia Communications 3 cr.
Introduction to protocols and applications of multimedia communications. Topics include multimedia networks, compression methods, network protocols, end to end multicast and multimedia application. Spring. Prerequisite: Grade of C or better in COSC 331.
COSC 350 Low-Level Programming Concepts 3 cr.
Introduction to assembly language programming and to the architecture of the computer as seen from the programmer’s point of view. Topics include the virtual machine concept, data representation, Boolean operations, the instruction execution cycle, memory management, integer and floating-point arithmetic, low-level procedures, interrupt handling, instruction encoding and the high-level language interface. Every semester. Prerequisite: Grade of C or better in COSC 240.

COSC 365 Digital Logic 4 cr.
Basic switching theory. Design and analysis of combinational logic circuits and synchronous sequential systems. Minimization techniques, Boolean algebra, Karnaugh maps and number systems. Programmable logic and basic computer architecture. Register transfer language. Memory decoding, microprogramming and bus structure and operation. Detailed study of an actual simple minicomputer or microcomputer system. Every semester. Prerequisite: Grade of C or better in COSC 241. COSC 350 recommended.

COSC 380 Computer-Based Information Systems 3 cr.
Computer information systems from a system planning perspective. Topics include digital communication evaluation, distributed resources, distributed processing and decision-making models. Several case studies are analyzed. Fall. Prerequisite: Grade of C or better in COSC 240.

COSC 394 Field Experience for Non-Majors 3 cr.
Work experience in industry, government, or small business providing opportunity for practical application of academic training in computer/information science. Course requirements: (1) minimum of 90 hours of field experience and (2) written report and oral presentation. Previous work experience may not be substituted. May not be applied toward major in Computer Science or Information Systems. Course Work experience in industry, government, or small business providing opportunity for practical application of academic training in computer/information science. Course requirements: (1) minimum of 90 hours of field experience and (2) written report and oral presentation. Previous work experience may not be substituted. May not be applied toward major in Computer Science or Information Systems. Course Work experience in industry, government, or small business providing opportunity for practical application of academic training in computer/information science. Course requirements: (1) minimum of 90 hours of field experience and (2) written report and oral presentation. Previous work experience may not be substituted. May not be applied toward major in Computer Science or Information Systems. Course Work experience in industry, government, or small business providing opportunity for practical application of academic training in computer/information science. Course requirements: (1) minimum of 90 hours of field experience and (2) written report and oral presentation. Previous work experience may not be substituted. May not be applied toward major in Computer Science or Information Systems. Course Work experience in industry, government, or small business providing opportunity for practical application of academic training in computer/information science. Course requirements: (1) minimum of 90 hours of field experience and (2) written report and oral presentation. Previous work experience may not be substituted. May not be applied toward major in Computer Science or Information Systems. Course Work experience in industry, government, or small business providing opportunity for practical application of academic training in computer/information science. Course Work experience in industry, government, or small business providing opportunity for practical application of academic training in computer/information science. Course requirements: (1) minimum of 90 hours of field experience and (2) written report and oral presentation. Previous work experience may not be substituted. May not be applied toward major in Computer Science or Information Systems. Course Work experience in industry, government, or small business providing opportunity for practical application of academic training in computer/information science. Course requirements: (1) minimum of 90 hours of field experience and (2) written report and oral presentation. Previous work experience may not be substituted. May not be applied toward major in Computer Science or Information Systems. Course Work experience in industry, government, or small business providing opportunity for practical application of academic training in computer/information science. Course requirements: (1) minimum of 90 hours of field experience and (2) written report and oral presentation. Previous work experience may not be substituted. May not be applied toward major in Computer Science or Information Systems. Course Work experience in industry, government, or small business providing opportunity for practical application of academic training in computer/information science. Course requirements: (1) minimum of 90 hours of field experience and (2) written report and oral presentation. Previous work experience may not be substituted. May not be applied toward major in Computer Science or Information Systems. Course Work experience in industry, government, or small business providing opportunity for practical application of academic training in computer/information science. Course requirements: (1) minimum of 90 hours of field experience and (2) written report and oral presentation. Previous work experience may not be substituted. May not be applied toward major in Computer Science or Information Systems. Course

COSC 415 Computer Interfacing 3 cr.
Basic digital computer interfacing, combining digital electronics, programming, and computer architecture. Topics include transducers, electronic amplification, D/A and A/D conversion, data sampling, data storage and retrieval, laboratory exercises in discrete and integrated software, survey of commercially available interface devices. Two hrs. lecture and 3 hrs. lab per week. Variable. Prerequisites: PHYS 216 or PHYS 262 and PHYS 315 or PHYS 332, grade of C or better in COSC 240, or permission of the instructor. Also offered as PHYS 415.

COSC 420 Robotics and Computer Control 3 cr.
Introduction to the field of robotics: applications, safety, sensors, Robotics Languages Model for Computer Aided Design (CAD), speech recognition and generation. Integration of robots with artificial intelligence. Variable. Prerequisite: PHYS 215 or PHYS 261, grade of C or better in COSC 240 and permission of the instructor.

COSC 423 Secure Computing 3 cr.
Topics include elementary cryptography, program security, security in general-purpose and trusted operating systems, database security, network security, security administration, and legal/privacy/ethical issues in computer security. Variable. Corequisite: COSC 460.

COSC 435 Network Implementation and Testing 3 cr.
Introduction to implementation and testing of networks. Topics include OSI layers, network topologies, LAN technologies, internetworking, network operating systems, and network file system. Variable. Prerequisites: Grade of C or better in COSC 331 and COSC 365.

COSC 440 Database Management Systems 3 cr.
Introduction to database management systems. Topics include database design, database models such as entity-relationship and normalization. Practical use of data definition languages and data manipulation language of a commercial database management system such as Oracle. Fall. Prerequisite: Grade of C or better in COSC 241.

COSC 444 Introduction to Parallel Computing 3 cr.
Basic knowledge of parallel computing, parallel algorithms and data structures, consistency, speed-up and scalability, shared and non-shared memory models, common parallel programming patterns including task parallelism, unidirected and directed synchronization, data parallelism, divide-and-conquer parallelism, and map-reduce. Spring. Prerequisites: Grade of C or better in COSC 460, or corequisite enrollment in COSC 460.

COSC 445 Network Programming 3 cr.
Introduction to network programming. Topics include computer networks and communication protocols, socket programming, interprocess communication and network application development. Variable. Prerequisite: Grade of C or better in COSC 331.

COSC 450 Programming Language Principles & Paradigms 3 cr.
Features of existing programming languages and underlying concepts. Syntax and semantics, simple statements, grouping of statements, scopes and storage allocations, subroutines. List processing and string manipulation languages. Fall. Prerequisite: Grade of C or better in COSC 310.

COSC 455 Artificial Intelligence 3 cr.
An introduction to knowledge representation and inference. Logic, semantic networks, frames and rule-based. Natural language processing; pattern recognition, pattern association and computer vision. Variable. Prerequisite: Grade of C or better in COSC 241.

COSC 460 Operating Systems Concepts 3 cr.
Process management, scheduling, time slicing, concurrency, mutual exclusion, semaphores, resource management, memory mapping, virtual systems, mass storage, file systems. Case studies of operating systems. Research paper and presentation required. Every semester. Prerequisite: Grade of C or better in COSC 241 and COSC 365.

COSC 465 Computer Systems Architecture 3 cr.
Architecture of large computing systems. Instruction set architecture and RISC. Design of high-speed arithmetic units, I/O subsystems, DMA and channels. Interrupt structures. Horizontal vs. vertical microprogramming. Memory system hierarchy with emphasis on cache, virtual memory and interleaving. Introduction to parallel processing and advanced architectural trends. Variable. Prerequisite: Grade of C or better in COSC 365.

COSC 470 Compiler Design and Implementation 3 cr.
A detailed study of the concepts and techniques used in design and construction of a compiler. Topics include: lexical analysis, syntactic and semantic analysis, intermediate code generation, final code generation and optimization techniques. Each student will be required to design and implement a functional compiler or interpreter for a given language. Variable. Prerequisites: Grade of C or better in COSC 310 and COSC 365, and corequisite enrollment in COSC 485.

COSC 475 Interactive Computer Graphics 3 cr.
Concepts of computer graphics. Terminology and programming primitives, raster vs. vector hardware, interaction devices, software packages, geometrical transformations, two- and three-dimensional viewing, hidden line and surface removal, object hierarchy. Variable. Prerequisite: Grade of C or better in COSC 241.

COSC 480 Knowledge-Based Systems 3 cr.
Concepts of knowledge-based systems with an emphasis on expert systems. Topics include production systems, building of knowledge-based systems and future trends with expert systems. Spring. Prerequisite: Grade of C or better in COSC 241.
Secure Computing and Information Assurance

SCIA 120 Introduction to Secure Computing and Information Assurance 3 cr.
Broad overview of computing security. Importance of securing digital information, operating systems security, secure programming, and secure digital communications. Physical security, social engineering, operating systems security, malware, network security, Internet security, cryptography, security models and practices, distributed applications security, and cloud computing security. Every semester.

SCIA 210 Introduction to Cyber Law 3 cr.
Overview of federal and state laws that impact computer security, information assurance, and other aspects of security. Examines how laws have adapted and/or been implemented in relationship to the digital age and living in an online society. Computer crimes, identity theft, sexual harassment, intellectual property, plagiarism, cyber stalking, medical issues, and financial concerns. Torts, liability, securities, antitrust laws, bankruptcy, and hiring/termination. Every semester.

SCIA 235 Software Security Engineering 3 cr.
Overview of existing processes, standards, life-cycle models, frameworks, and methodologies that support secure software development. Properties of secure software, requirements engineering, architecture and design, construction and testing, system integration/assembly, and governance and management. Threat modeling, defensive programming, web security and human-computer interaction issues that affect security. Spring. Prerequisites: Grade of C or better in COSC 310 and SCIA 120.

SCIA 325 Network Security 3 cr.
Cryptography basics for network security, network-related authentication applications, Email security, IP security, web security, network management security, intruders and malicious software, IDSS and firewalls. Fall. Prerequisites: Grade of C or better in COSC 241 and SCIA 120.

SCIA 340 Secure Databases 3 cr.
Securing data and information, monitoring communications and auditing database environments. RDBMS, SQL, database communications, database authentication, access control in databases, encryption in databases, database auditing, and databases in the cloud. Fall. Prerequisites: Grade of C or better in COSC 240 and SCIA 120.

SCIA 360 Operating System Security 3 cr.
Fundamental principles of operating systems and operational security, including process and resource management, security capabilities and limitations, authentication, security policies, sandbox, software vulnerabilities, and virtualization. Case studies of operating systems. Spring. Prerequisites: Grade of C or better in COSC 241 and SCIA 120.

SCIA 370 Security Policy and Assessment 3 cr.
Information security concepts, security risk management processes, information security lifecycle, security planning and policy, business continuity planning, security assessment and system availability, security review and security audit, security standards. Spring. Prerequisite: Grade of C or better in SCIA 120.

SCIA 425 Software Testing and Assurance 3 cr.
Survey of quality processes and technologies for software development to assure that new software provides sufficient security for the threat environment and functions in the intended manner. Quality and security requirements and specifications; quality in architecture, design, and construction; correctness verification, inspection, and testing techniques; process and product assurance; statistical quality control; and quality management. Fall. Prerequisite: Grade of C or better in SCIA 325.

SCIA 435 Access Control 3 cr.
Access control objectives, formal models and mechanisms, access control of commercial off-the-shelf systems, and security architecture for authorization. Implementation of access control in current systems. Variable. Prerequisite: Grade of C or better in SCIA 335.

SCIA 460 Cloud Computing and Security 3 cr.
Cloud computing basic concepts, architecture, and framework; current popular cloud computing technologies; security challenges and risk facing in cloud computing; concepts, methods, procedures and tools for assuring security in cloud computing. Fall. Prerequisite: Grade of C or better in SCIA 335.

SCIA 470 Computer and Network Forensics I 3 cr.
Forensic tools, methods, and procedures used for investigation of computers; techniques of data recovery and evidence collection, protection of evidence, expert witness skills, and computer crime investigation techniques. Analysis of various file systems and specialized diagnostic software used to retrieve data. Spring. Prerequisites: Grade of C or better in SCIA 210 and SCIA 360, or corequisite enrollment in SCIA 360.
SCIA 471 Computer and Network Forensics II 3 cr.
Forensic methodology, procedures and tools associated with different kinds of cybercrime in a network environment. Importance of network forensic principles, legal considerations, digital evidence controls, and documentation of forensic procedures. Fall. Prerequisite: Grade of C or better in SCIA 470 or permission of instructor.

SCIA 472 Hacking Exposed and Incident Response 3 cr.
Common network attacks, applications of information security concepts, hands-on security assessments of wired and wireless networks, web applications and intrusions, countermeasures to attacks, lifecycle of incident response, real world case studies. Spring. Prerequisites: Grade of C or better in SCIA 210 and SCIA 360.

SCIA 480 Applied Cryptography 3 cr.
Basics of design of secret codes for secure communication, including encryption and integrity verification: ciphers, cryptographic hashing, and public key cryptosystems, mathematical principles underlying encryption, cryptanalysis concepts, and cryptographic protocols. Spring. Prerequisite: Grade of C or better in SCIA 335.

SCIA 485 Emerging Issues and Cyber Warfare 3 cr.
Current issues, trends and challenges in information warfare; high-level analysis of information warfare threats, such as cyber terrorism, espionage, Internet fraud; intelligence activities, cyber ethics, and law enforcement. Fall. Prerequisite: Grade of C or better in SCIA 335.

SCIA 489 Capstone 1 cr.
Creation of professional vita and a portfolio consisting of student’s best examples of programs, projects, and research papers. Integration of curricular concepts into a unified entirety. Administration of degree exit exam. Every semester. Prerequisites: Senior standing, completion of all core courses and a grade of C or better in at least two required advanced courses.

SCIA 491 Seminar in Secure Computing & Information Assurance 1-6 cr.
Group study of advanced topics under faculty supervision; repeatable for maximum of 6 credits if topics are substantially different; up to 3 credits count towards major or minor in Secure Computing & Information Assurance. Variable. Prerequisite: Grade of C or better in core courses and written permission of faculty supervisor. DEPARTMENT APPROVAL REQUIRED PRIOR TO REGISTERING.

SCIA 494 Field Experience in Secure Computing & Information Assurance 3 cr.
Work experience in industry, government, or small business providing an opportunity for practical application of academic training in Secure Computing & Information Assurance. The course requirements are: (1) Minimum of 90 hours of field experience; (2) A written report describing in detail the work performed in the field in conjunction with an oral presentation to interested faculty and students; (3) A project paper on a topic related to the work experience. Previous work experience may not be substituted for this course. Repeatable for maximum of 6 credits if placement sites are different; no more than 3 credits count towards major in Secure Computing & Information Assurance. Every semester. Prerequisites: Junior or senior standing and completion of the core courses in Secure Computing & Information Assurance with a grade of C or better. DEPARTMENT APPROVAL REQUIRED PRIOR TO REGISTERING.

SCIA 499 Individual Problems in Secure Computing & Information Assurance 1-6 cr.
Individual advanced topics under faculty supervision. Repeatable for maximum of 6 credits; up to 3 credits can apply to major or minor in Secure Computing & Information Assurance. Students must submit a written proposal to faculty supervisor and department describing topics, time allocation and limitation, objectives, assignment, and projects. Variable. Prerequisites: Grade of C or better in core courses and written permission of faculty supervisor. DEPARTMENT APPROVAL REQUIRED PRIOR TO REGISTERING.

Criminal Justice

CRJU 490 Advanced Topics in Criminal Justice 1-3 cr.
Selected topics in criminal justice relating to law enforcement or corrections. Does not duplicate any other FSU course. May be repeated for credit if topics are substantially different. Variable. Prerequisite: POSC 324 or permission of instructor.

CRJU 494 Field Experience 6-9 cr.
Guided work experience in a criminal justice agency. Minimum 225 work hours of experience for 6 credits; 339 work hours for 9 credits. Academic component of course consists of at least one writing project and an oral presentation. Variable. Prerequisite: POSC 324 or course equivalent.

Dance

DANC 110 Dance Appreciation 3 cr.
Dance forms, dance personalities, contemporary trends in dance. Every semester. GEP Group A.

DANC 131 Ballet I 2 cr.
Beginning ballet techniques, terminology and history. Fall, even-numbered years.

DANC 154 Jazz I 2 cr.
Beginning jazz dance techniques, history and terminology. Fall, odd-numbered years.

DANC 165 Tap I 2 cr.
Beginning tap technique, history and terminology. Spring, even-numbered years.

DANC 231 Ballet II 3 cr.
Intermediate ballet techniques, history and terminology. Spring, odd-numbered years. Prerequisite: DANC 131 or permission of instructor.

DANC 254 Jazz II 3 cr.
Intermediate jazz techniques, history and terminology. Spring, even-numbered years. Prerequisite: DANC 154 or permission of instructor.

DANC 255 Dance Company I 3 cr.
Application of procedures in auditioning, learning choreography, rehearsals, and production of both individual and company dance pieces as a member of FSU Dance Company culminating in public performances. Participation in all rehearsals and performances required. Lecture/Lab. Repeatable for a maximum of 12 credits. Every semester. Prerequisite: permission of instructor after formal audition.

DANC 265 Tap II 3 cr.
Intermediate tap technique, history and terminology. Fall, even-numbered years.

DANC 305 Improvisation 3 cr.
Exploration of movement designed to enhance creativity, freedom and spontaneity. Fall, even-numbered years.

DANC 309 Composition and Theory 3 cr.
Development of creative process through exploration of choreographic works, movement concepts and compositional concepts. Spring, even-numbered years. Prerequisite: DANC 131, DANC 154, DANC 165 or permission of instructor.
**DANC 342 Contemporary Modern**  
Movement class exploring the fusion of traditional modern dance techniques with contemporary dance. Fall, odd-numbered years. Prerequisite: DANC 131 or permission of instructor.

**DANC 355 Dance Company II**  
Application of procedures in auditioning, learning choreography, teaching choreography, rehearsals, and production of both individual and company dance pieces as a member of FSU Dance Company culminating in public performances. All students are required to compose, cast, teach, and rehearse their dance composition for public performance as part of the Dance Company Concert. Student choreographers are required to meet all deadlines established at the start of the course. Participation in all rehearsals and performances required. Lecture/Lab. Repeatable for a maximum of 12 credits. Every semester. Prerequisite: Three credits of DANC 255 and permission of instructor after formal audition.

**DANC 361 Dance for Musical Theatre**  
Study of dance techniques, styles and genres used in musical theatre productions. Spring, odd-numbered years. Prerequisite: DANC 154, 165 or permission of instructor.

**DANC 382 Dance History**  
History of theatrical dance in Western culture and the role of dance in humankind, a thematic approach. Variable. Prerequisite: DANC 110 or permission of instructor.

**DANC 408 Choreography and Production**  
Procedures for choreographing, producing and directing dance productions. Variable. Prerequisite: 2 credits in dance or permission of instructor.

**DANC 429 Special Topics in Dance**  
Advanced analysis and practice in movement; varying topics. Repeatable for maximum of 6 credits. Prerequisite: 2 credits in dance or permission of instructor.

**DANC 471 Principles of Teaching Dance**  
Theory and practice of dance instruction, including methods and materials. Two lectures and one lab/week. Variable.

**DANC 479 Teaching Practicum**  
Application of theory and skills acquired in DANC 471. The student, under supervision, will teach dance in an authentic setting. Variable. Prerequisite: DANC 471.

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**ECON 200 Basic Economics**  
Introductory survey course covering both Macro and Microeconomics designed to provide minimum competence for majors other than business, accounting and economics. Not open to students who have already completed ECON 201 and ECON 202 with grades of C or above. Every semester. GEP Group D.

**ECON 201 Principles of Economics (Macro)**  
An introduction to Principles of Economics focusing primarily on the forces determining the economy-wide levels of production, employment, and prices. Examines monetary and fiscal policy and alternative views of how the economy should be managed. Every semester. GEP Group D.

**ECON 202 Principles of Economics (Micro)**  
An introduction to Principles of Economics focusing primarily upon individual consumer and producer decision making behavior in various organized market structures; the price system, market performance, efficiency and government policy. Every semester. Prerequisite: ECON 201/211.

**ECON 211 Honors: Principles of Macroeconomics**  
An introduction into the forces at work in the national economy including income, employment, and the monetary system. A variety of written research assignments on current topics in macroeconomics required. Credit cannot be earned for both ECON 201 and 211. Fall. Prerequisite: acceptance into the Honors program or permission of the instructor. GEP Group D.

**ECON 212 Honors: Principles of Microeconomics**  
Examines markets, consumer behavior, market structures, resource pricing, income distribution, and general equilibrium. Spring. Prerequisites: ECON 201 or 211.

**ECON 300 History of Economic Thought**  
The historical evolution of economic doctrines from early times to the present; the relation of economics to social issues. Views and significance of major schools of thought. Spring. Prerequisites: ECON 201/211 and ECON 202/212.

**ECON 301 Labor Economics**  
The theory of labor supply and demand, labor force participation, investment in human capital, compensating wage differentials, government regulation, employment, unemployment, unionism, discrimination, wage-related income transfers and pensions. Spring. Prerequisites: ECON 201/211 and ECON 202/212.

**ECON 302 American Economic History**  
Development from colonial times to the present. The industrial revolution and the impact of technological change on such areas as transportation, agriculture, business organization, unions, the banking system, and public policy. Fall, odd-numbered years. Prerequisites: ECON 200; or ECON 201/211 and ECON 202/212.

**ECON 303 Managerial Economics**  
Applications of micro-economic theory to management practices. Topics may include demand estimation and forecasting; production and cost; pricing in various market structures; and special topics in firm decision making. Fall. Prerequisites: ECON 201/211 and ECON 202/212, and MATH 118 or MATH 220 or MATH 236.

**ECON 306 Money and Banking**  
The nature and functions of money, credit, banking, and the Federal Reserve System. Institutions generating the money supply; the influence of monetary and fiscal policies on economic stability and growth. Every fall. Prerequisites: ECON 201/211 and ECON 202/212.

**ECON 307 Government, Business, & Public Policy**  
Economic aspects of the relation of government and business in the United States; antitrust, economic, and social regulation of business. Spring, even-numbered years. Prerequisites: ECON 200; or ECON 201/211 and ECON 202/212.

**ECON 308 Comparative Economic Systems**  
Analysis of ideology and problems in different economic systems: capitalism, Marxism, and socialism. Comparisons of centrally planned and unplanned economics; free market pricing and direct controls; private enterprise and nationalized industry. Spring, even-numbered years. Prerequisites: ECON 201/211 and ECON 202/212.

**ECON 351 Intermediate Macro-Economics**  
General theory, both Keynesian and post-Keynesian, of the growth of the economy as a whole. Monetary theory, fiscal policy, and review of macroeconomic issues. Fall. Prerequisites: ECON 201/211 and ECON 202/212.

**ECON 352 Intermediate Micro-Economics**  

**ECON 400 International Trade**  
An explanation of the pure theory of international trade and its application to trade policy; comparative advantage; gains from trade; tariffs, quotas, and other barriers to trade. Fall. Prerequisites: ECON 201/211 and ECON 202/212.
ECON 401 International Finance 3 cr.
The theory of international finance and its application to international monetary policy; international monetary and capital movements; the balance of payments and adjustment mechanisms; alternative exchange rate systems. Spring. Prerequisites: ECON 201/211 and ECON 202/212.

ECON 404 Public Sector Economics 3 cr.
Government taxes and expenditures for economic stability and growth; tax equity, efficiency, and incidence; government services; relationship of monetary and fiscal policies. Spring, odd-numbered years. Prerequisites: ECON 201/211 and ECON 202/212.

ECON 405 Economics of Developing Countries 3 cr.
Survey of underdeveloped economies. Theories of economic development and their application; appraisal of programs in selected developing countries. Fall. Prerequisites: ECON 201/211 and ECON 202/212.

ECON 408 Urban and Regional Economics 3 cr.
Focuses on applied economic analysis of the regional economy and areas within the regional economy. Techniques introduced include economic base analysis, shift share analysis and input-output modelling. Fall, even-numbered years. Prerequisites: ECON 201/211 and ECON 202/212.

ECON 410 Resource and Energy Economics 3 cr.
Economic analysis of problems and policies affecting natural resource and energy industries and the related impacts on the environment. Analytical economic framework used to study energy, mineral, forest, and fisheries industries. Spring, odd-numbered years. Prerequisite: ECON 202/212 or permission of the instructor.

ECON 450 Quantitative Economics 3 cr.
Introduction to the use of calculus, matrix algebra, LaGrangian constrained optimization and linear programming in economics. Spring. Prerequisites: ECON 201/211 and ECON 202/212.

ECON 460 Introduction to Econometrics 3 cr.
Applies economic theory, mathematics, and statistical techniques for the purpose of testing hypotheses about economic phenomena, estimating coefficients of economic relationships, and forecasting economic events. Fall. Prerequisites: ECON 201/211, ECON 202/212 and MATH 109/209/110/380.

ECON 490 Special Topics in Economics 1-3 cr.
Applications of economic principles to a variety of specialized topics. Repeatable for maximum of 6 credits if topics are substantially different. Variable. Prerequisites: ECON 201/211 and 202/212 or permission of instructor.

ECON 491 Seminar in Economics 3 cr.
Research papers on a selected theme for critical analysis by members of the seminar. Leadership in discussion expected. Designed primarily for economics majors. Spring. Prerequisite: ECON 351, ECON 352 and ECON 407 or ECON 460; or senior standing. Capstone.

ECON 492 Internship Research Paper 3 cr.
Separately graded academic portion of the internship, required in conjunction with ECON 495. Graded A through F. The entire internship (492 and 495) is for a total of 15 credits for full-time interns and 9 credits for part-time interns. May be counted in the major/minor as an elective. Variable. Corequisite: ECON 495.

ECON 494 Field Experience in Economics 3 cr.
Supervised field experience for Economics majors and minors relating to operations in economic research, business economics, or governmental agencies. A detailed written and oral report on the experience is required. No more than one field experience may be applied towards graduation. Graded A-F. May be counted toward major/minor as an elective. Every semester. Prerequisites: junior or senior standing; minimum of 12 hours in Economics; approval of the department internship committee.

ECON 495 Internship in Economics 6 or 12 cr.
Guided work experience with an academic component. Work must be directly related to academic program. Full-time interns register for 12 credits and may not enroll in any other courses (except 492). Part-time interns register for 6 credits. This experiential component is graded P/F. May not be counted toward major or minor requirements. Variable. Prerequisites: junior or senior standing, in good academic standing; minimum of 12 hours in economics; submission of a completed Internship Agreement Form to the departmental internship director prior to registration. Corequisite: ECON 492.

ECON 499 Individual Problems in Economics 1-6 cr.
Individual research and formal report on a major topic not covered in regular course. Proposal must be submitted prior to registration. Variable. Prerequisites: senior standing, at least 15 hours of economics and consent of department chair.

Educational Professions

EDUC 100 Introduction to Teacher Education 1 cr.
Analysis of education in America and the potential roles to be played both in schools and in the wider community. A preliminary self-assessment of how the students' interests and abilities match the demands of the educational profession. Observations with reflections. Every semester. Required: taken prior to admission to Apprenticeship. Recommended: taken within first 2 semesters at Frostburg State University.

EDUC 200 Teaching & Professional Assessment Laboratory 1 cr.
Recommended to be taken after EDUC 201.

EDUC 201 Students, Teachers and Learning Environments 3 cr.
A study of students, teachers and learning environments, including the philosophical and historical foundations of the American educational system. Basis for further study in education, including topics on legal and ethical issues and diversity. Every semester. Prerequisite: EDUC 100. May be taken Pre-entrance or concurrently with Apprenticeship.

EDUC 202 Foundations of Learning and Instruction 3 cr.
The learning and teaching process in the American educational system. Human growth and development of students birth-21, learning theories and styles, instructional strategies and adaptations. Controlled observations in educational settings. Every semester. May be taken Pre-entrance or concurrently with Apprenticeship. Recommended to be taken after EDUC 201.

EDUC 290 Field Experiences in Education 1 to 3 cr.
Supervised field experiences for teacher education students in school and non-school settings focusing on specific problems identified by students. Repeatable for maximum of 6 credits. Graded P/F. Every semester. Prerequisite: permission of instructor.

EDUC 300 Internship I Teaching & Professional Assessment Lab 1 cr.
EDUC 310 Diversity & Social Justice in Education 3 cr.
Educational diversity, equity and social justice in public education; emphasis on development of individual identity in the context of economic class, religion, ethnicity, race, gender, sexual orientation and other factors; exploration of best practices for teachers and administrators to create inclusive learning environments. Experiential component: minimum of 12 hours of field work in diverse public school settings; some field work options may require additional expenses. Required of all secondary education majors. Spring.

EDUC 316 Early Adolescent Literacy and Learning 3 cr.
The middle school movement, developmental characteristics of middle grades students, teaching in the middle grades, middle grades philosophy and organization. Clinical field experiences. Every semester. Prerequisite: EDUC 100, to be taken Pre-entrance or concurrent with Apprenticeship.

EDUC 325 Educational Technology 3 cr.
Provides opportunities for experiences and practice in using technology tools for educators. Emphasis on the use of technology within the context of accomplishing authentic tasks. Every semester. Must be completed prior to Internship I. Prerequisite: completion of at least 12 credit hours. Tech. fluency.

EDUC 333 Integrated Arts in the Elementary Classroom 3 cr.
Integrated Arts in the Elementary Classroom is designed to prepare candidates to integrate the arts into learning experiences in the elementary classroom. The course includes current theory in arts integration; background information on the elements of the creative arts; experiences with visual art, music and movement, creative writing, children's literature, creative dramatics and puppetry; and planning arts-enhanced lessons appropriate for grades 1-6. Arts integration will be related to multicultural learning, differentiation for student learning, including gifted education, and educational technology. Every semester. Prerequisite: EDUC 100 or permission of instructor.

EDUC 335 Teaching Framework 3 cr.
Analysis of education in America and self-assessment to determine match between abilities and demands of the education profession. Students will write instructional objectives, prepare lesson plans and teach a series of lesson plans to their peers to determine strengths and weaknesses. Initial portfolio development. Fall semester. Prerequisite: Admission to program in the Early Childhood/Elementary program at USMH.

EDUC 340 STEM Education Through a Transdisciplinary Approach 3 cr.
This course incorporates the STEM standards of practice that serve as a foundation for the STEM education principles. Candidates will experience problem-based learning activities and will develop an understanding of research, strategies and design of STEM education in an elementary and middle-grades setting. Candidates will use the foundation of knowledge about STEM, best practices and child development to design instruction and assessment that focus on answering complex questions, investigating global issues and developing solutions for challenges and real-world problems. Spring. Prerequisite: admission to Apprenticeship or permission of instructor.

EDUC 372 Teaching Writing in the Classroom 3 cr.
Focus on the writing instruction in the early-childhood, elementary and middle-school classrooms. Understand writing development and identify the important traits of good writing. Develop knowledge of theoretical and pedagogical perspectives on the writing process as applied to different writing genres and formats, the assessment of student writing and technology integration. Fall, odd years. Prerequisite: ENGL 101 or permission of instructor.

EDUC 376 Special and Multicultural Education 3 cr.
Acquaints students with historical and legislative basis of special education in public schools. Characteristics of exceptional children, including social emotional, sensory, behavioral, physical, cognitive, and language. Understanding of eligibility determination as well as specifically designed instruction needed for equitable access of the curriculum. Understanding the influence of culture on learning and instruction. Every semester. Prerequisite: Admission to Apprenticeship.

EDUC 390 Field Experience in Early Childhood Education 3 cr.
Supervised field experiences for Early Childhood candidates in Head Starts and/or other pre-school settings. Develops knowledge, skills and dispositions of age-appropriate environments. Includes analysis of children’s needs and examines and assesses human and curricular environments. Enables candidates to plan physically and psychologically safe, supportive and healthy learning environments in early childhood settings. Includes some class work. Taken for 3 credit hours during Apprenticeship of the ECE/ELEM major’s professional sequence. ECE specialization. Graded P/F. Every semester. Prerequisite: Admission to Apprenticeship or permission of department.

EDUC 391 Teaching Internship I: Secondary Education 2 cr.
Initial internship practicum at secondary school level. Graded P/F. Every semester.

EDUC 392 K-12 Field Experience 1 to 2 cr.
Teacher assistantship in elementary and secondary settings. Requires 30 days of in-school aide experience at each level. Assignments coordinated with other Internship I courses. Graded P/F. Prerequisite: Admission to Internship I.

EDUC 401 Assistantship Seminar 1 cr.
Analysis of planning, instruction and assessment components of effective teaching at the assistantship level. Management strategies for student behavior, curriculum, material selection and resources. Reflective self and peer evaluation of teaching performance in the classroom. Every semester. Prerequisites: Admission to Apprenticeship and concurrent enrollment in ELED 307.

EDUC 402 Internship I Seminar 1 cr.

EDUC 403 Assessment and Management of Learning 3 cr.

EDUC 404 Leadership Seminar 3 cr.
Development of educational leaders in the classroom, school, community, and profession. Elements of developmentally appropriate planning, instruction, assessment and classroom management and the collection of evidence of candidate’s practices in the final internship. Management strategies for student behavior, curriculum, material and resources. Professional preparation, critical reflection and advocacy emphasized. Every semester. Prerequisite: Admission to Internship II. Capstone.

EDUC 422 The School and Community 3 cr.
Role and participation of the community in public education today. Cooperation between public school and non-school educative agencies in the community. Participation in a field research project required. Variable.

EDUC 434 LOGO: Ed. Programming and Instructional Techniques 3 cr.
Learn about Logo as a language for learning about computers, computer programming and thinking. Emphasis will be on learner-controlled and learner-directed explorations of intellectual problems of interest. Variable.
EDUC 440 STEM Lab 1 cr.
Planning, constructing, and implementing a STEM project during the final internship semester. A mini-portfolio will highlight the candidate’s ability to deliver inquiry-based instruction. Spring. Prerequisite: Admission to Internship II.

EDUC 445 Strategic Reading and Writing in the Middle Grades 3 cr.
The middle school movement, the middle school student and curriculum, teaching in the middle school, middle school organization. Every semester. Prerequisites: Admission to Internship I and EDUC 316.

EDUC 446 Using Databases for Critical Thinking 1 cr.
Use databases in learning to organize, access, manipulate and evaluate information. Learn to find and interpret information, find patterns and make inferences based on established patterns. Develop techniques for using databases in elementary and secondary curricula. Variable.

EDUC 450 Art Education Methods for the Secondary Teacher 3 cr.
Curriculum, goals, content and organization of secondary art education. Theories of visual development and artistic behavior in age-appropriate students; materials, resources and processes for teaching art; classroom management; and technology applications. Two hrs. lecture, 2 hr. lab. Credit cannot be earned for both EDUC 450 and EDUC 308. Fall. Prerequisites: admission to program or permission of the Department Chair; EDUC 392 and EDUC 451 recommended concurrently.

EDUC 451 Art Education Methods for the Elementary Teacher 3 cr.
Curriculum, goals, content and organization of elementary art education. Theories of visual development and artistic behavior in age-appropriate students; materials, resources and processes for teaching art; classroom management; and technology applications. Two hrs. lecture, 2 hr. lab. Credit cannot be earned for both EDUC 451 and EDUC 309. Fall. Prerequisites: admission to program or permission of the Department Chair; EDUC 392 and EDUC 450 recommended concurrently.

EDUC 452 General Music Methods in the Elementary School 3 cr.
Music teaching, emphasizing the elementary school level: materials and techniques of instruction for general music classes; general educational theories and their relevance to music education; computer-assisted instruction and integrated technology; facility with accompanying folk instruments; and exposure to the Orff, Kodaly, and Dalcroze approaches to music education. Required in junior year of all students desiring certification in music. Prerequisite: admission to the Teacher Education Program and junior standing in the Music program.

Music teaching emphasizing the secondary school level: materials and techniques for general music classes, computer-assisted instruction and integrated technology, facility with accompanying folk instruments, historical and philosophic foundations of music education and program development and instructional design. Required in junior year of all students desiring certification in music. Prerequisites: EDUC 354 and admission to the Teacher Education Program.

EDUC 454 Microcomputer Application in Education 3 cr.
Introductory course to familiarize educators with microcomputers. Microcomputers as a teaching tool; innovations, systems of instruction, model programs, matching software to school children’s needs. Every semester. Prerequisite: Program admission or permission of instructor.

EDUC 490 Special Topics in Education 1/2 to 6 cr.
Special workshop on a current topic, as arranged. Repeatable for maximum of 6 credits if topics are substantially different.

EDUC 497 Teaching Internship: K-12 Programs 12 cr.
Supervised practicum in teaching in elementary and secondary schools. Joint supervision by school system and University personnel. Daily, full day for one semester. Graded P/F. Every semester. Prerequisite: Internship II admission.

EDUC 499 Individual Problems in Education 1 to 3 cr.
Independent study under supervision. Research paper on special topic. Requires proposal approval through Dept. of Educational Professions prior to registering. Repeatable for maximum of 6 credits. Every semester, summer.

Early Childhood Education

ECED 150 Early Childhood Foundations 3 cr.
Introduction to profession of early childhood education. Includes growth and development of young children. Examines historic, theoretical and philosophical underpinnings of current early childhood programs. Explores play, learning environments and curriculum. Requires a case study focusing on young children. Every semester. Taken pre-entrance, or concurrent with Apprenticeship, preferred before ECED 293 in the ECE/ELEM major’s professional sequence. Required for ECE/ELEM major.

ECED 293 Early Childhood Learning Environment, Materials and Methods 3 cr.
Examination and assessment of developmentally appropriate environments, materials and methods for young children birth to age eight. Includes planning of physically and psychologically safe and healthy learning environments. Taken during pre-entrance, or concurrent with Apprenticeship in the ECE/ELEM major’s professional sequence. Every semester. It is recommended that ECED 150 be taken prior to ECED 293. Required for ECE/ELEM major.

ECED 431 Early Childhood Education Curriculum Development, Implementation and Assessment 3 cr.
Philosophy and function of early childhood education curriculum. Analysis of children’s needs; planning, implementing and assessing a developmentally appropriate program. Includes use of effective strategies and development of positive supportive relationships. Taken during Internship I of ECE/ELEM major’s professional sequence. Every semester on main campus; every fall at USMH. Required for ECE/ELEM major.

ECED 438 Early Childhood Classroom Management 3 cr.
For the early childhood teacher: advanced teaching skills in nurturing the young child’s social experiences, self-discipline, independence and creativity; arranging play experiences, organizing physical space, communicating with children, child study. Variable.

ECED 442 Administration and Supervision of Early Childhood Programs 3 cr.
Administrative and supervisory responsibilities for the early-childhood educator in providing quality programs for young children. Variable. Prerequisite: permission of instructor.

ECED 443 Adults in the Child’s World 3 cr.
The early childhood educator’s influence on and collaboration with the child’s caregivers, families and communities; the use of local, state and national resources to meet child, family and community educational needs. Development of respectful reciprocal relationships with families and communities. Taken during Assistantship of ECE/ELEM major’s professional sequence. Every semester on main campus; every spring at USMH. Prerequisite: Admission to Assistantship or permission of department.
**Elementary Education**

**ELED 307 Teaching Assistantship**  
1 cr.  
Supervised assisting at the early childhood, elementary and middle school levels. Joint supervision by school system and university personnel. Daily, full-day field clinical experience. Graded P/N. May only be repeated once, upon approval of the program coordinator. Every semester. Prerequisite: Admission to Assistantship; concurrent enrollment in Assistantship courses.

**ELED 471 Mathematics Curriculum, Methods and Assessment**  
3 cr.  
Planning, constructing and organizing curriculum; types of curricula. Methods, materials, content and assessment for teaching P-8 mathematics. Every semester. Prerequisite: Admission to Assistantship; concurrent enrollment in Assistantship courses.

**ELED 472 Language Arts Curriculum, Methods and Assessment**  
3 cr.  
Planning, constructing, and organizing curriculum; types of curricula. Methods, materials, content and assessment for teaching language arts. Fall, even years. Prerequisite: EDUC 100 or permission of instructor.

**ELED 474 Science Curriculum, Methods and Assessment**  
3 cr.  
Planning, constructing, and organizing curriculum; types of curricula. Methods, materials, content and assessment for teaching P-9 science. Every semester. Prerequisite: Admission to Assistantship; concurrent enrollment in Assistantship courses.

**ELED 475 Social Studies Curriculum, Methods and Assessment**  
3 cr.  
Planning, constructing and organizing curriculum; types of curricula. Methods, materials, content and assessment for teaching P-9 social studies. Every semester. Prerequisite: Admission to Assistantship; concurrent enrollment in Assistantship courses.

**ELED 494 Teaching Internship I: P-9**  
6 cr.  
Supervised practicum at the early childhood, elementary and middle school levels. Joint supervision by school system and university personnel. Daily, full-day clinical experience. When taken during the fall semester, includes a multiple-day, beginning-of-school experience. Graded P/N/F. May only be repeated once, upon approval of the program coordinator. Every semester. Prerequisite: Admission to Internship I; concurrent enrollment in Internship I courses.

**ELED 495 Teaching Internship II: P-9**  
9 cr.  
Supervised practicum at the early childhood, elementary and middle school levels. Joint supervision by school system and university personnel. Daily, full-day clinical experience. When taken during the fall semester, includes a multiple day beginning of school experience. Graded P/N/F. May only be repeated once, upon approval of the program coordinator. Every semester. Prerequisite: Admission to Internship II and concurrent enrollment with EDUC 422. Capstone.

**Guidance**

**GU CO 406 Introduction to Guidance**  
3 cr.  
History and philosophy of guidance programs; the role, organization, and methods of guidance. Variable.

**Reading**

**REED 323 Process and Acquisition of Reading**  
3 cr.  
Process of language development, including impact of phonemic awareness, and how the brain responds to reading acquisition. Practical applications of research in language development, acquisition and use. Understanding of the role of experiential background, prior knowledge, motivation and personal significance to emerging readers. Every semester. Prerequisite: Admission to program.

**Secondary Education**

**SCED 410 Secondary Methods and Curriculum**  
3 cr.  
Evolution of the philosophy of secondary education. Current curricula, planning, issues and instructional methodologies in all secondary teaching areas. Required for secondary education majors. Not open to students with credit for former SCED 310. Spring. Prerequisite: Admission to program.

**SCED 411 English in the Secondary School**  
3 cr.  
Subject methods course required for secondary certification in teaching English. Modern trends in curriculum and instruction. Fall. Prerequisite: Admission to Internship I. May be taken concurrently with Internship II.

**SCED 414 Mathematics in the Secondary School**  
3 cr.  
Subject methods course required for secondary certification in teaching mathematics. Modern trends in curriculum and instruction. Fall. Prerequisite: Admission to Internship I. May be taken concurrently with Internship II.

**SCED 415 Methods of Teaching Modern Foreign Languages**  
3 cr.  
A general methods course for foreign-language majors seeking certification at the secondary level or elementary education majors seeking certification in teaching a language at the elementary level. (Does not certify a secondary language major to teach the elementary level.) Fall. Prerequisites: Admission to Internship I. May be taken concurrently with Internship II.
SCED 420 Social Studies in the Secondary School 3 cr.
Subject methods course required for secondary certification in teaching social studies. Modern trends in curriculum and instruction. Fall. Prerequisites: Admission to Internship I. May be taken concurrently with Internship II.

SCED 496 Teaching Internship II: Secondary Education 6-12 cr.
Supervised practicum in teaching at secondary school level. Joint supervision by school system and University personnel. Daily, full day for one semester. Graded P/F. Every semester. Prerequisite: Admission to Internship II.

Special Education

SPED 451 Adapting Instruction in Diverse Classrooms 3 cr.
An understanding of the instructional and social development needs of the disabled and non-disabled students in inclusive classrooms. Special attention to collaboration, technology, legislation, educational programming, instructional strategies, inclusion models and current research related to the students enrolled in secondary school inclusion programs (middle/senior high school) and K-12 programs. Not open to students with credit for former SPED 361. Spring. Prerequisite: appropriate admission.

SPED 461 Characteristics of Exceptional Children 3 cr.
Etiology, diagnosis, physical, emotional and social characteristics of exceptional children, including the gifted. Variable.

SPED 462 Intro. to the Education of Exceptional Children 3 cr.
Understanding the educational needs of exceptional children; preventive and remedial education. Variable.

SPED 463 Teaching Children with Special Needs 3 cr.
Observation, identification and management of children with mild to moderate learning problems. Variable. Prerequisite: permission of instructor.

SPED 481 The Gifted Learner 3 cr.
Study of recent research on characteristics, needs and problems of gifted learners; model programs; future possibilities. Variable. Prerequisite: PSYC 150 or EDUC 201 or permission of instructor.

SPED 482 Curriculum for the Gifted Learner 3 cr.
Theoretical and practical approaches to teaching gifted learners; constructing unique plans for each teacher’s needs. For those who will deal with gifted learners. Variable. Prerequisite: at least one course in curriculum.

Engineering

Engineering Sciences

ENES 098 Introduction to Additive Manufacturing 1 cr.
Introduction to additive manufacturing technology, its application to industry, and the steps involved in rapid prototyping of complex components. One hr. integrated lecture and lab. Spring. Prerequisite: ENES 100. Does not count for credit toward the 120 hours required for graduation.

ENES 099 Introduction to Workshop and Machine Shop 1 cr.
General knowledge of the available resources required for upper level physics and engineering courses. Hands-on and demonstration activities. Strong emphasis on personal safety and procedures while using the department workshop and machine shop space and equipment. Two hrs. integrated lecture and lab. Fall. Does not count for credit toward the 120 hours required for graduation.

ENES 100 Introduction to Engineering Design 3 cr.
FSU Course. Introduction to the engineering design process, computer software for word processing, spreadsheet, CAD and communication skills. Students work as teams to design and build a project. Two hrs. lecture and two hrs. recitation per week. Every semester. Tech. Fluency.

ENES 102 Statics 3 cr.
FSU Course. The equilibrium of stationary bodies under the influence of various kinds of forces. Forces, moments, couples, equilibrium, trusses, frames and machines, beams and friction. Vector and scalar methods are used to solve problems. Three hrs. lecture and one hr. discussion/recitation per week. Spring. Prerequisite: MATH 236.

ENES 220 Mechanics of Materials 3 cr.
FSU Course. Stress and deformation of solids-rods, beams, shafts, columns, tanks, and other structural, machine and vehicle members. Topics include stress transformation using Mohr’s circle; shear and moment diagrams; derivation of elastic curves; and Euler’s buckling formula. Design problems related to this material are given in lab. Fall. Prerequisites: ENES 102, PHYS 261 and a “C” or better in MATH 237.

ENES 221 Dynamics 3 cr.
FSU Course. Systems of heavy particles and rigid bodies at rest and in motion. Force-acceleration, work-energy and impulse-momentum relationships. Motion of one body relative to another in a plane and in space. Two hrs. lecture and two hrs. lab per week. Fall. Prerequisites: PHYS 261, ENES 102 and a “C” or better in MATH 237.

ENES 304 Computational Techniques 2 cr.
Introduction to and application of the fundamental methods, tools and techniques essential to solve problems in the physical sciences. Regular topics include statistical, mathematical and computational tools; data analysis. LabView software as applied to instrumentation. Additional topics explored will augment student needs and supplement area of current interest in science. One hour lecture, one 2-hr lab integrated. Fall. Also offered as CHEM 304 and PHYS 304. Prerequisites: CHEM 201 and 202 or COSC 240 or ENEE 114 equivalent, or permission of the instructor.

ENES 310 Mechatronic and Robotic Design 3 cr.
Components of mechatronics systems and robotics. Control of electromechanical systems. Material handling systems, numerical controlled tools, flexible manufacturing systems. Sensors, transducers, actuators, data acquisition and computer interfacing. Process control systems. Dynamics of electromechanical systems, design considerations and contemporary practical issues. Two hrs. lecture and two hrs. lab activities per week. Fall. Prerequisite: ENME 350 or ENEE 204.

ENES 320 Wind and Solar-Powered Generation System Design 3 cr.
Comparison of wind turbine types. Types of photovoltaic (PV) modules. Grid-connected, backup and off-grid systems. Structure and feasibility of wind and PV generation system. Design considerations related to wind and solar-powered energy generation systems: capacity factor, cost analysis, power quality and environmental issues. Two hrs. lecture and two hrs. lab per week. Variable. Prerequisite: PHYS 263.

ENES 401 Fundamentals of Energy Engineering 3 cr.
Principles of thermodynamics; conventional and alternative energy sources and storage systems. Integration of alternative sources of energy and distributed generation. Energy conservation, environmental impacts of energy use, energy sustainability. Spring. Prerequisite: Physics 263.

ENES 491 Engineering Seminar 3 cr.
Individual reports and group discussions on current topics in engineering and the role of various science fields in engineering. Topics selected jointly by student and instructor. Variable. Repeatable once for credit. Prerequisite: Majors with junior or senior standing.

ENES 495 Engineering Internship 1-4 cr.
A field experience to provide the student with an opportunity to explore career paths in a work setting while applying knowledge learned in the classroom. Throughout the
internship student develops professional skills consistent with the program educational objectives. Student must enroll in the course before starting the workplace experience. Variable, Up to 4 credits, one course credit for 45-hours of work (37.5 hours of clock time) at the internship location. Can be repeated for up to 4 credits. Prerequisites: Junior standing, approval of the department chair.

Electrical Engineering

ENEE 114 Programming Concepts for Engineers 4 cr.
Principles of software development, high-level languages, compiling and linking, pseudo-code, input/output, data types and variables, operators and expressions, conditionals and loops, functions, arrays, pointers, structure data types, memory allocation, introduction to algorithms, software projects, debugging, documentation. Programs will use the C language. Three hrs. lecture and two hrs. recitation per week. Spring. Corequisite: ENEE 100.

ENEE 204 Basic Circuit Theory 3 cr.
Basic circuit elements: resistors, capacitors, inductors, sources, mutual inductance and transformers; their I-V relationships. Kirchhoff's Laws. DC and AC steady-state analysis. Transformers; their I-V relationships. Kirchoff's Laws. DC and AC steady-state analysis. Phasors, node and mesh analysis, superposition, theorems of Thevenin and Norton. Transient analysis for first- and second-order circuits. Three hrs. lecture and one hr. discussion/recitation per week. Spring. Prerequisites: PHYS 262 and MATH 237.

ENEE 206 Fundamental Electric & Digital Circuit Laboratory 3 cr.
Introduction to basic measurement techniques and electrical laboratory equipment (power supplies, oscilloscopes, voltmeters, etc.). Design, construction and characterization of circuits containing passive elements, operational amplifiers and digital integrated circuits. Transient and steady-state response. This course is a prerequisite to all upper-level ENEE laboratories. One hr. lecture and three hrs. lab per week. Spring. Prerequisite: ENEE 244. Corequisite: ENEE 204.

ENEE 241 Numerical Techniques in Engineering 3 cr.

ENEE 244 Digital Logic Design 3 cr.
Gates, flip-flops, registers and counters. Karnaugh map simplification of gate networks. Switching algebra. Synchronous sequential systems. PLAs. Elements of binary arithmetic units. Three hours of lecture and one hour of discussion/recitation per week. Fall. Prerequisite: ENEE 114.

ENEE 246 Analog Electronics 3 cr.
Introduction to the conceptual physical operation of PN-junction diodes, MOSFETs and bipolar transistors. Large signal terminal characteristics of PN junction diodes, bipolar and MOSFET transistors. Digital electronics is covered at the transistor level, including the inverter, NAND and NOR gates. Semiconductor memory. Basic transistor circuit configurations, including the BJT common emitter (CE) and common collector (CC) circuits, and the MOSFET common source (CS) and common drain (CD) configurations. DC bias and small-signal analysis of BJTs and MOSFETs. Simple multitransistor circuits, including the differential-amplifier and the current mirror. Frequency response of simple amplifiers. Fall. Prerequisites: “C” or better in ENEE 204, 206 and 244. Corequisite: ENEE 307 or permission of department chair.

ENEE 307 Electronics Circuits Design Laboratory 2 cr.
I-V properties of diodes and transistors through simple experiments. Analysis, design and construction of digital and analog electronic circuits at the transistor and integrated circuit levels. Operation and design of relevant multi-transistor circuits. BIT forward active operation by study of CE design, bias and small-signal operation. MOS common source operation, study of inverters, NAND and NOR gates. Simulation and analysis of Random Access Memory (RAM). Study of basic transistor configurations and frequency response by building a high-fidelity audio amplifier. Differential amplifiers, active loads, current mirrors and principles of feedback through the construction of opamps from discrete components. Experiments will be tightly aligned to the ENEE 303 lectures. Not open to students who have credit for former ENEE 306. One hr. lecture, three hrs. lab per week. Fall. Prerequisites: “C” or better in ENEE 204, 206 and 244. Corequisite: ENEE 303 or permission of the department chair.

ENEE 313 Introduction to Device Physics 3 cr.
Basic physics of devices, including crystal structure, fields in solids and properties of electrons, and holes, including diffusion and energy distributions. Current flow in Si by drift and diffusion, equations of motion of particles, p-n junction, depletion, fields and potentials, depletion and diffusion capacitance, and current flow under forward and reverse bias. Operation of bipolar junction and metal-oxide field effect transistors, their physical structure, operation thresholds, current flow, capacitance and current-voltage characteristics. Spring. Corequisite: “C” or better in ENEE 204, 206, 244.

ENEE 322 Signal and System Theory 3 cr.
Concept of linear systems, state space equations for linear systems, time and frequency domain analysis of signals and linear systems. Fourier, Laplace and Z transforms. Application of theory to problems in electrical engineering. Fall. Prerequisites: ENEE 204 and MATH 432.

ENEE 324 Engineering Probability 3 cr.
Axioms of probability, conditional probability and Bayes’ rules, random variables, probability distribution and densities, functions of random variables, weak law of large numbers and central limit theorem. Introduction to random processes, correlation functions, spectral densities and linear systems. Applications to noise in electrical systems, filtering of signals from noise, estimation and digital communications. Spring. Prerequisite: ENEE 322.

ENEE 350 Computer Organization 3 cr.
Structure and organization of digital computers. Registers, memory, control and I/O. Data and instruction formats, addressing modes, assembly language programming. Elements of system software, subroutines and their linkages. Three hrs. lecture and one hr. discussion per week. Fall. Prerequisites: “C” or better in ENEE 204, 206 and 244.

ENEE 380 Electromagnetic Theory 3 cr.
Study of electromagnetic fields, Coulomb’s law, Gauss’s law, electrical potential, method of images, boundary value problems, multipole expansion, Biot-Savart law, Ampere’s law, Lorentz force equation, Faraday’s law and Maxwell’s equations. Fall. Prerequisites: PHYS 262 and junior standing. Corequisite(s) MATH 432.

ENEE 381 Electromagnetic Wave Propagation 3 cr.
The electromagnetic spectrum. Review of Maxwell’s equations; the wave equation potentials, Poynting’s theorem, relationship between circuit theory and fields; propagation of electromagnetic waves in homogeneous media and at interfaces; transmission line theory, wave-guides, radiation and antennas. Spring. Prerequisites: PHYS 312 or ENEE 380.

ENEE 408 Capstone Design Project for Electrical Engineers 3 cr.
Culmination of prior course work in electrical engineering. Utilization of modern design tools and methodologies for the design of components or systems under realistic constraints, with particular emphasis on teamwork and oral/written communication. Design problems in contemporary and emerging areas of electrical engineering are assigned to project teams. Spring. Prerequisites: ENEE 481 and permission of department chair. May not be taken at the same time as ENME 410 and PHYS 492.
ENEE 417 Microelectronics Design Laboratory 2 cr.
Senior class capstone project laboratory. The design and building of sophisticated circuits, mainly composed of discrete transistors and integrated circuits. Project-based synthesis of knowledge from varied disciplines within electrical engineering. One hour of lecture and three hours of lab per week. Variable. Prerequisites: “C” or better in ENEE 303, ENEE 307 or permission of the department chair.

ENEE 439 Topics in Signal Processing 1-3 cr.
Selected topics in signal processing. For electrical engineering majors only. Variable. Repeatable up to 6 credits. Co-requisite: ENEE 350. Students in the electrical engineering concentration must initially take this course for 3 credits.

ENEE 445 Introduction to Communication Systems 4 cr.
Introduction to continuous waveform modulation techniques. Introduction to digital modulation techniques, random processes in communication systems analysis, understanding of analog-to-digital and digital-to-analog conversions, sampling and quantization techniques, lab experience using instrumentation equipment commonly used in industry, such as, oscilloscopes, spectrum analyzers, RF signal generators, analog-to-digital and digital-to-analog converters, etc. Two hrs. lecture and two hrs. lab per week. Spring. Prerequisite: ENEE 350.

ENEE 461 Control Systems 4 cr.
Design criteria, characteristics and limitations of modern control systems. Sensors, feedback, PID control. Servomechanisms, control of various physical quantities such as temperature, pressure, liquid level, etc. Dynamics, performance criteria and stability of control systems. Computer-based process control. Errors in control systems. Three hrs. lecture and three hrs. lab per week. Variable. Co-requisites: ENEE 310 and completion of all 100- and 200-level core courses with a “C” or better.

ENEE 475 Power Electronics 3 cr.
Basic principles of power electronics and its applications. Analytical methods, canonical circuit topologies, fundamentals of power semiconductors, snubbing circuits, drive circuits and control methods. Variable. Prerequisite: “C” or better in ENEE 303 or ENME 350.

ENEE 481 Project Development in Electrical Engineering 3 cr.
Introduction to product development in the field of electrical engineering. Selection of a subject for the Capstone Design Project course. Development of a design concept. Preliminary design to prepare a list of materials, parts and equipment needed to build and test a prototype. Codes and standards related to manufacturing and testing of the selected product. Teamwork to prepare a project proposal. Preparation of technical reports and oral presentations to discuss technical, economical, environmental and ethical aspects of the proposed design. Preparation of a proposal for capstone design project. Prerequisites: ENEE 303 and completion of all ENEE 100- and 200-level courses with a “C” or better. May not be taken at the same time as PHYS 491.

ENEE 488 Independent Study in Electrical Engineering 1-4 cr.
Independent study topics on advanced electrical and computer engineering issues. Projects typically involve academic investigations of technical themes that are not addressed in other courses. Study plans tailored to the student’s educational goals but are approved and supervised by faculty. Project must have substantial research activity. Variable. Prerequisite: Senior standing, permission of instructor and the department chair.

ENEE 490 Special Topics in Electrical Engineering 1-3 cr.
Study at the senior level of one of the fields or recent developments in contemporary electrical engineering. Repeatable for a maximum of 6 credits if topics are substantially different. Variable. Prerequisite: permission of department chair.

ENEE 499 Senior Project in Electrical and Computer Engineering 1-5 cr.
Independent research projects on advanced electrical and computer engineering topics. Projects selected by students and faculty and supervised by faculty and other qualified mentors (if applicable). May involve the acquisition of new skills or information. Focus is to conduct an independent investigation of a technical theme leading to a specified project outcome(s). The course must have defined deliverables as a result of the student research. Variable. Prerequisite: Senior standing, permission of instructor and the department chair.

Mechanical Engineering

**For course descriptions of elective courses available in mechanical engineering, please refer to the Clark School of Engineering catalog of the University of Maryland, College Park.

ENME 232 Thermodynamics 3 cr.

ENME 271 Numerical Methods in Engineering 3 cr.
FSU Course. Develop the skills to generate readable, compact and verifiably correct scripts and functions in MATLAB and C++ to obtain numerical solutions to a wide range of engineering models and to display the results with fully annotated graphics. Learn structured programming. Two lectures and two hrs. lab per week. Spring. Prerequisites: PHYS 261, MATH 237.

ENME 272 Introduction to Computer-Aided Design 2 cr.
Fundamentals of CAD, using solid modeling packages (Pro/E, SolidWorks and Autodesk Inventor). Two- and three-dimensional drawing. Dimensioning and specifications. Introduction of CAD-based analysis tools. Students will complete a design project. Prerequisites: ENEE 100 and a “C” or better in Math 237.

ENME 320 Thermodynamics 3 cr.

ENME 331 Fluid Mechanics 3 cr.

ENME 332 Transfer Processes 3 cr.

ENME 350 Electronics and Instrumentation I 3 cr.
FSU Course. Modern instrumentation. Basic circuit design, standard microelectronic circuits. Digital data acquisition and control. Signal conditioning. Instrumentation interfacing. Designing and testing of analog circuits. Laboratory experiments. Two hrs. lecture and two hrs. lab per week. Fall. Prerequisites: A “C” or better in PHYS 262 and
ENME 351 Electronics and Instrumentation II 3 cr.
FSU Course. Continuation of ENME 350. Modern instrumentation. Basic circuit design, standard microelectronic circuits. Digital data acquisition and control. Signal conditioning. Instrumentation interfacing. Designing and testing analog circuits. Laboratory experiments. Two hours lecture and two hours lab per week. Spring. Prerequisites: A "C" or better in ENME 350 and PHYS 263 or ENEE 204.

ENME 352 Introduction to Polymer Engineering and Manufacturing 3 cr.
Introduction to the broad spectrum of issues associated with the science, engineering, manufacturing and processing of polymers, which includes addressing issues of blending of materials, design and production of a polymer formulation and the characterization of material properties. Design problems include producing and characterizing a polymer formulation for advanced materials application. Three hrs. integrated lecture and lab. Spring. Prerequisite: MATH 237.

ENME 361 Vibration, Controls and Optimization I 3 cr.

ENME 366 Ceramic Engineering and Manufacturing 3 cr.
Introduce the engineering and manufacturing of ceramic materials, including traditional clay-based ceramics, modern technical ceramics and glasses. Topics include the nature of engineering particles, formulation methods and consolidation by heat. Prerequisites: ENES 220 and MATH 237 or equivalent.

ENME 371 Product Engineering and Manufacturing 3 cr.

ENME 373 Advanced Computer-Aided Design 3 cr.
Advanced two and three dimensional drawing by using computer-aided design (CAD) software systems, dimensioning; specifications, and tolerance; introduction of basic CAD analysis tools and applications in engineering; students will complete a design project. Prerequisites: PHYS 262 and MATH 432. Junior standing and approval of the department chair.

ENME 382 Engineering Materials & Manufacturing Processes 3 cr.
FSU Course. Basic material structures and properties. Mechanical behavior of materials. Manufacturing processes theory. Materials processing. Quality assurance. Laboratory experiments. Two hours lecture and two hours lab per week. Spring. Prerequisite: A "C" or better in ENES 220.

ENME 391 Statistical Methods for Product & Process Development 3 cr.
FSU course. Integrated statistical methodology for the improvement of products and processes in terms of performance, quality and cost. Designed experimentation. Statistical process control. Software application. Laboratory activities. Fall. Prerequisites: MATH 238 and permission of the department. Credit cannot be earned for ENME 391 and 392.

ENME 392 Statistical Methods for Product and Process Development 3 cr.
UMCP Course. Integrated statistical methodology for the improvement of products and processes in terms of performance, quality and cost. Designed experimentation. Statistical process control. Software application. Laboratory activities. Fall. Prerequisite: MATH 238.

ENME 400 Machine Design 3 cr.
Calculate working stresses, stress concentration, mechanical failure analysis under static and repeated loadings. Design of machine elements such as bearings, springs, gears, cams, and mechanisms. Kinematics of mechanisms. Two hrs. lecture and two hrs. lab per week. Fall. Prerequisite: ENME 361 and ENME 382.

ENME 405 Fundamentals of Materials Engineering 4 cr.
Structure of crystalline solids and imperfections in materials. Electrical, thermal, magnetic, and optical properties of materials. Characterization of materials by X-ray diffraction and scanning electron microscopy. Fall. Prerequisite: ENME 382.

ENME 410 Capstone Design Project for Materials Engineering 3 cr.
Culmination of prior course work in materials engineering. Utilization of modern design tools and methodologies to evaluate a society or industry based problems in Materials Science and Engineering to come up with a strategy to address the problem, with a particular emphasis on teamwork and oral/written communication. Spring. Prerequisites: ENME 481 and permission of department chair. May not be taken at the same time as ENEE 408 and PHYS 492.

ENME 425 Microfabrication 3 cr.
Overview of microfabrication technologies and the science of miniaturization. Microsensors, nanotechnology. Photolithography, dry etching, wet etching, chemical vapor deposition, and physical vapor deposition. Three hrs. integrated lecture and lab. Spring. Prerequisites: Senior standing in physics or engineering or permission of department chair.

ENME 448 Introduction to Nanotechnology: Principle, Technology and Device 3 cr.
Introduction to nanoscale science, engineering and technology. Advanced material systems will be covered, including solar cell, clean fuel, battery, supercapacitor, fuel cell and microbial fuel cell. Device principles include current technology status and new opportunities of nanotechnology for energy device applications. Three hrs. integrated lecture and lab. Fall, even-numbered years. Prerequisites: ENME 382 and MATH 237 or equivalent.

ENME 462 Vibration, Controls and Optimization II 3 cr.

ENME 467 Introduction to Nanomaterials: from Synthesis to Application 3 cr.
Practical aspects of nanoscale materials synthesis and utilization. Various approaches for the synthesis and characterization of nanoparticles, nanowires, and nanotubes, and their application and devices. Three hrs. integrated lecture and lab. Fall, odd-numbered years. Prerequisites: ENME 382 and MATH 237 or equivalent.

ENME 472 Integrated Product and Process Development 3 cr.

ENME 481 Project Development in Materials Engineering 3 cr.
Introduction to product development in the field of materials engineering. Selection of a subject for the Capstone Design Project course. Development of a design concept.
Preliminary design to prepare a list of materials, parts and equipment needed to build and test a prototype. Codes and standards related to manufacturing and testing of the selected product. Teamwork to prepare a project proposal. Preparation of technical reports and oral presentations to discuss technical, economical, environmental and ethical aspects of the proposed design. Preparation of a proposal for capstone design project. Prerequisites: ENME 382. May not be taken at the same time as PHYS 491.

ENME 488 Special Problems in Mechanical Engineering 3 cr.
Advanced problems in mechanical engineering with special emphasis on mathematical and experimental methods. Repeatable for maximum of 6 credits if topics are substantially different. Variable. Prerequisite: permission of department.

English

Writing
ENGL 100 Publication Practicum 1-2 cr.
Writing for and editing the campus literary magazine. Open to all students. (1-2 credits per semester: repeatable to 4 credits). Spring.

ENGL 101 First-Year Composition 3 cr.
Addresses the processes of composition and develops intermediate skills in writing essays with an argumentative edge. Based on readings for diverse audiences, it prepares students for writing documented essays. Every semester. Students may not withdraw unless withdrawing from the University. Core Skill 1.

ENGL 107 English Praxis 1-3 cr.
Practical application of writing skills and/or literary analysis. Every semester. Departmental approval. Repeatable for a maximum of 3 credits if topics are substantially different.

ENGL 111 Honors: First-Year Composition 3 cr.
Development of intermediate skills in writing based on readings for general audiences. Preparation for honors-level courses. Credit cannot be earned for both ENGL 101 and ENGL 111. Every semester. Prerequisite: enrollment in the Honors Program. Core Skill 1.

ENGL 197 Career Paths in English 1 cr.
Introduction to career paths in English. Explanation of what it means to be an English major or minor at FSU. Discussion of opportunities for involvement within the department, university and community for internships, independent studies, publications, advising, related minors, employment and student organizations. Every fall.

ENGL 215 Grammar for Writing 3 cr.
Systematic study of English grammar, including parts of speech, components of sentences, phrases, clauses, sentence patterns and punctuation. Emphasis on application of grammatical principles to student writing. Variable, but normally offered during Intersession and Summer sessions only. Does not fulfill Core Skill 1 or 2, although the credits may be used to fulfill the 120 hr. minimum toward graduation. MAY NOT BE USED TO SATISFY THE REQUIREMENTS FOR THE MAJOR OR MINOR IN ENGLISH.

ENGL 300 Critical Writing About Literature 3 cr.
Introduction to literary theory to develop critical perspectives on literary works and provide flexible writing strategies. Advanced writing about literature. Required of English majors and minors. Readings involve literary analysis and criticism. Spring. Prerequisites: C or better in ENGL 101 or 111. Prior literature course at the 200-level required. Core Skill 2.

ENGL 308 Social Sciences Advanced Composition 3 cr.
Development of advanced skills in writing based on reading for social science audiences. Preparation of extended papers; attention to research tools and documentation. Students may receive credit for only one of the following: 308, 309, 310 or 312. Every semester. Prerequisites: C or better in ENGL 101 or 111; and at least 42 credits or permission of Chair. Core Skill 2.

ENGL 309 Advanced Composition: Humanities 3 cr.
A special advanced composition course which fulfills all of the reading and writing requirements of English 308 and 310, but centers research on topics appropriate to the humanities. Development of advanced writing skills. Extensive and research-based papers; attention to research tools and documentation. Students may receive credit for only one of the following: 308, 309, 310 or 312. Fall. Prerequisites: C or better in English 101 or 111; and at least 42 credits or permission of instructor. Core Skill 2.

ENGL 310 General Advanced Composition 3 cr.
Development of advanced skills in writing. Students may receive credit for only one of the following: ENGL 308, 309, 310 or 312. Every semester. Prerequisites: C or better in ENGL 101 or 111; and at least 42 credits or permission of Chair. Core Skill 2.

ENGL 312 Honors: Advanced Composition 3 cr.
Development of advanced skills in writing. Both reading and writing assignments more challenging than those in other Advanced Composition courses (ENGL 308, 310). Credit cannot be earned for more than one of the following: ENGL 308, 309, 310 or 312. Variable. Prerequisites: C or better in ENGL 101 or ENGL 111, at least 42 credits, and enrollment in Honors Program. Core Skill 2.

ENGL 330 Business Writing 3 cr.
Basic writing for business and para-professional occupations. Writing resumés, job applications, memos and reports, and other kinds of business writing. Every semester. Prerequisites: C or better in ENGL 101 or 111; and at least 42 credits or permission of Chair. Core Skill 2.

ENGL 334 Creative Writing: Fiction 3 cr.
Major elements of fiction writing: style, characterization, point of view, structure, pacing, conflict. Class critiques of student work. Every semester. Prerequisite: C or better in ENGL 101 or 111.

ENGL 335 Creative Writing: Poetry 3 cr.
Major elements of poetry: imagery, metaphor, theme, form. Both lyric and narrative poetry. Class critiques of student work. Fall. Prerequisite: C or better in ENGL 101 or 111.

ENGL 336 Journalistic Writing 3 cr.
Introduction to the journalism industry, including citizen journalism. Effective, responsible, and deadline-driven news gathering, reporting, and editing. Specialized demands of straight news, feature stories, and the public-relations profession. Every semester. Prerequisite: C or better in ENGL 101 or 111.

ENGL 338 Technical Writing 3 cr.
Principles and practice of writing related to science, industry and government. Effective style, organization and mechanics of writing reports. Every semester. Prerequisites: C or better in ENGL 101 or 111; and at least 42 credits or permission of Chair. Core Skill 2.

ENGL 339 Scientific Writing 3 cr.
Introduction to formats, prose, and style specifications for Natural Science curricula. Focuses on language, research, critical analysis and interdisciplinary impact of scientific discoveries. Variable. Prerequisites: C or better in ENGL 101/111; at least 42 credits or permission from Chair. Core Skill 2.
ENGL 355 Socially Networked Journalism 3 cr.
Gathering, writing, and disseminating news via social-networking platforms. Introduction to online beat coverage. Logistical and ethical challenges of the 24-hour news cycle. Spring, odd-numbered years. Prerequisite: C or better in ENGL 101 or 111.

ENGL 360 Creative Nonfiction 3 cr.
Personal prose writing about factual material, including memoirs, political commentary and arts criticism. Spring, even-numbered years. Prerequisite: C or better in ENGL 101 or 111.

ENGL 402 Editing and Production 3 cr.
Design, layout, and editing techniques for professional publications. Reinforcement of copy editing and proofreading skills. Variable. Prerequisite: ENGL 300, 308, 309, 310, 330 or 338.

ENGL 430 The Composing Processes 3 cr.
A survey of theory and research on the composing processes. Fall. Prerequisite: 6 hrs. of writing courses, including one from the 300 writing series offered by the English department.

ENGL 434 Advanced Fiction Writing 3 cr.
Continued study of fiction writing through advanced individual work on short stories, a novel, or a novella. Within a workshop setting, students will work toward producing publishable-quality fiction and learn how to approach publishers and editors. Fall. Prerequisite: ENGL 334 or permission of instructor.

ENGL 435 Advanced Poetry Writing 3 cr.
Continued study of poetry writing through advanced individual work on lyrical, dramatic, and narrative poems. Within a workshop setting, students will work towards publishable-quality poetry. Spring. Prerequisite: ENGL 335.

ENGL 436 Advanced News and Feature Writing 3 cr.
Skills in gathering and writing news. Techniques of New Journalism and writing for magazines. Spring. Prerequisite: ENGL 336 or permission of instructor.

ENGL 438 Applied Digital Writing 3 cr.
Introduction to writing within various digital genres of the Internet and other multimedia systems; use of multimedia tools in conjunction with writing; analysis of existing media online. Variable. Prerequisite: ENGL 101, 111, or equivalent. Tech. Fluency.

ENGL 460 Form and Theory of Fiction and Poetry 3 cr.
In-depth study of the techniques and methods employed by major writers of fiction and poetry, including consideration of structure, language, form, voice, theme, point of view and character. Fall. Prerequisite: ENGL 334 or 335.

ENGL 470 Senior Workshop 3 cr.
An integrated senior-year experience that requires students to use their accumulated skills, knowledge, and creative impulses to complete a final creative writing portfolio of publishable quality. Course includes tutorials, workshops, marketing and submission of original work, and final readings. Spring. Prerequisite: ENGL 434 or 435.

ENGL 491 Practicum in the Teaching of Writing 3 cr.
Supervised opportunity to act as a learning mentor. Study of approaches to teaching writing. Emphasis on practice and experience. Repeatable for up to 12 credit hours. Only 3 hours may be counted towards English major or minor. Every semester. Prerequisites: C or better in one of the following: English 300, 308, 309, 310, 312, 330, 338 or 339; departmental approval.

ENGL 492 Internship Seminar 1 cr.
Academic component of internship. Requires co-registration in 495. Graded A-F. Credit for 492 may be counted toward major. Every semester.

ENGL 494: Field Experience in Writing 1-3 cr.
Requires three work-hours per week per credit of practical writing experience in an approved, supervised, professional setting. Every semester. Repeatable for a maximum of 6 credits if experience is substantially different. Three credits required for Journalism minor. Prerequisites: Junior or senior standing and permission of the faculty coordinator.

ENGL 495 Internship in English 6-12 cr.
Experiential component of internship: guided work experience in conjunction with 492; must directly relate to academic program. Full-time interns register for 12 credits in 495 and 1 credit in 492. Part-time interns register for 6 credits in 495 and 1 credit in 492. English 495 is graded P/F. Every semester. Prerequisites: junior or senior status, in good academic standing; submission of Internship Agreement form to internship director prior to registering; major or minor in English, or minor in Public Relations, Journalism or Film Studies.

**Literature and Language**

ENGL 150 Introduction to Literature 3 cr.
A thematic study of literature, looking across genres and cultures at contemporary topics. Continued development of writing skills. Every semester. GEP Group B.

ENGL 207 Introduction to Film Studies 3 cr.
A cross-cultural examination of film with a focus on developing critical skills and formal approaches to cinematic analysis through such concepts as genre, cinematography, camera movement and sound. Weekly film viewing. Fall. Prerequisite: C or better in ENGL 101 or 111 or equivalent.

ENGL 208 Film and American Culture 3 cr.
Critical investigation of popular American movies, emphasizing the role films have historically played in projecting, reflecting and challenging cultural values and beliefs. Weekly film screening. Spring, even-numbered years. Prerequisite: C or better in ENGL 101 or 111 or equivalent.

ENGL 221 Intro. to Literature/Intermediate Composition 3 cr.
Critical reading of expository prose and significant poetry, drama, and fiction from a variety of cultures and eras, with emphasis on developing intermediate writing skills. Preparation of short papers and essay exams. Graded A-F. A passing grade (D or better) satisfies the GEP Group B requirement for ENGL 150. Students meeting the competencies of Freshman Composition purchase three credits for ENGL 101. Students in 221 may thus fulfill both the core skill (ENGL 101, when the credits are purchased) and the GEP Group B requirement of ENGL 150, or they may fulfill only one, or neither. Every semester. Open only to students never enrolled in ENGL 101 or ENGL 111. Students may not withdraw unless withdrawing from the University. Core Skill 1 and/or GEP Group B.

ENGL 231 African American Literature 3 cr.
Critical examination of major African American writings. Spring, even-numbered years. Prerequisite: C or better in ENGL 101 or 111 or equivalent. GEP Group F.

ENGL 250 Honors: Comparative Literature 3 cr.
Literature generated by the cross-cultural interface of Western countries with areas that have reclaimed their national identities since World War II. Credit cannot be earned for both ENGL 150 and ENGL 250. Variable. Prerequisite: acceptance into the Honors Program or permission of instructor. GEP Group B.

ENGL 260 British Literature: Beowulf to Present 3 cr.
A survey of British literature from Beowulf to the present. Includes major works from each period to provide historical perspective. Designed for English majors and minors. Spring. Prerequisite: C or better in ENGL 101 or 111.
ENGL 261 Literature of the United States: Pre-Colonial to Present 3 cr.
A survey of U.S. literature from pre-colonial times to the present. Includes works from each period to provide historical perspective. Designed for English majors and minors. Fall. Prerequisite: C or better in ENGL 101 or 111.

ENGL 270 European & Neo-European Literature 3 cr.
Works, in translation, important to European and Neo-European cultures, such as selections from the Old Testament, the literature of ancient Greece and Rome, Italian, French, Spanish, German, Russian, etc., literatures. Fall of odd-numbered years. Prerequisite: C or better in ENGL 101 or 111 or equivalent.

ENGL 271 Asian & African Literature 3 cr.
Including works, in translation, from Asian and African cultures, such as the major works of the Middle East, India, the African nations, China, and Japan. Fall of even-numbered years. Prerequisite: C or better in ENGL 101 or 111 or equivalent.

ENGL 276 Adolescent Literature 3 cr.
Definition, classification, and analysis of adolescent literature and its value. Contemporary and classical works appropriate for or written especially for adolescents. Spring. Prerequisite: C or better in ENGL 101 or 111 or equivalent.

ENGL 280 Mythology and Literature 3 cr.
Greco-Roman literature, American Indian legends, and myths from diverse cultures examined in a literary and socio-cultural context. Variable. Prerequisite: C or better in ENGL 101 or 111 or equivalent.

ENGL 281 Literature Intro Film 3 cr.
Critical examination of how literary works are translated into film, analyzing the means by which the director and others (actors, cinematographers, editors) interpret the literary work being adapted. Weekly film viewing. Variable. Prerequisite: C or better in ENGL 101 or 111 or equivalent.

ENGL 282 Shakespeare on Film 3 cr.
A critical examination of Shakespeare's plays on film, considering the films as interpretations and adaptations. The emphasis will be both literary - how the films interpret and revise Shakespeare's drama - and cultural - what do these films reveal about the culture that produced them. Weekly film viewing. Fall, odd-numbered years. Prerequisite: C or better in ENGL 101 or 111 or equivalent.

ENGL 290 Topics in Language and Literature 3 cr.
A selected aspect of language or literature. May be taken more than once for credit if subtitle is different. Repeatable for a maximum of 6 credits if topics are substantially different. Variable. English 101 or 111 must be taken concurrently with or prior to ENGL 290.

ENGL 306 English Language Structure and Development 3 cr.
A study of the grammars and grammatical aspects of English as well as of history of language development over the centuries, language use in society, language change, and language acquisition and processing. Spring. Prerequisite: C or better in ENGL 101 or 111.

ENGL 340 Shakespeare 3 cr.
A selection from the histories, comedies, major tragedies, and problem plays or romances. Fall. Prerequisite: C or better in ENGL 101 or 111.

ENGL 344 Film Theory 3 cr.
Critical survey of world film with an emphasis on theoretical schools and movements. Three hours discussion with a weekly film viewing. Spring, odd-numbered years. Prerequisite: ENGL 101 or 111 or equivalent or permission of instructor.

ENGL 345 Film Genre 3 cr.
An extended examination of a single film genre, focusing on the narrative frameworks, conventions and themes particular to that genre. Three hours discussion with a weekly film viewing. Fall, even-numbered years. Prerequisite: C or better in ENGL 101 or 111 or equivalent.

ENGL 371 Literature of the Middle Ages 3 cr.
Literature of the Anglo-Saxon and Medieval periods. Variable. Prerequisite: C or better in ENGL 101 or 111 or equivalent.

ENGL 372 Early Modern Literature 3 cr.
Literature from the Early Modern Period or Renaissance (16th-17th centuries). Focus on British writers with attention to the literature of the discovery of the New World. Variable. Prerequisite: C or better in ENGL 101 or 111 or equivalent.

ENGL 373 Literature of the Enlightenment 3 cr.
Literature of 1650-1750 on both sides of the Atlantic that represents movements toward philosophical, spiritual, scientific, social, and personal enlightenment. Variable. Prerequisite: C or better in Engl. 101 or 111 or equivalent.

ENGL 374 Literature of the Age of Revolution 3 cr.
Literature of the mid and late eighteenth century on both sides of the Atlantic. Variable. Prerequisite: C or better in ENGL 101 or 111 or equivalent.

ENGL 375 Romanticism 3 cr.
Literature of Romantic movement in the 19th century, with attention to major themes of Romantic and Transcendental writers, on both sides of the Atlantic. Variable. Prerequisite: C or better in ENGL 101 or 111 or equivalent.

ENGL 376 Realism and Naturalism 3 cr.
Literature of the later 19th century from both sides of the Atlantic. Prerequisite: C or better in ENGL 101 or 111 or equivalent.

ENGL 377 Modernism 3 cr.
Literature of the turn of the twentieth century to WWII from both sides of the Atlantic. Prerequisite: C or better in ENGL 101 or 111 or equivalent.

ENGL 378 Postmodernism 3 cr.
Literature written after WWII from both sides of the Atlantic. Prerequisite: C or better in ENGL 101 or 111 or equivalent.

ENGL 379 Postcolonial Literature 3 cr.
Literatures of former British and other European colonies from the second half of the twentieth century through the present, with emphasis on issues such as colonialism, nationalism, and modernity. Variable. Prerequisite: C or better in ENGL 101 or 111 or equivalent.

ENGL 418 Second Language Acquisition: Theory & App. 3 cr.
Introduction to theories of how children and adults learn second languages, with application to conducting research or to teaching/tutoring children and adults who are second language learners (principally English as a second language). Fall, even-numbered years.

ENGL 431 World Drama I: Premodern 3 cr.
World drama from the 5th Century B.C. Greeks to the late 19th century. Representative dramatists and forms from both the West and the East. Multicultural emphasis on the use and development of drama. Fall, even-numbered years. Prerequisite: C or better in ENGL 101 or 111; ENGL 150/250 or THEA 106 or permission of instructor. Also offered as THEA 431.
ENGL 432 World Drama II: 20th Century  3 cr.
World drama during the 20th century. Representative dramatists and forms from both the West and East. Multicultural emphasis on the variety of dramatic forms. Variable.
Prerequisites: C or better in ENGL 101 or 111; ENGL 150/250 or THEA 106 or permission of instructor. Also offered as THEA 432.

ENGL 440 Literature of the Environment  3 cr.
Critical, multi-cultural and historical study of literature of the environment, emphasizing the variety of attitudes toward the land in essays and poetry. Variable.
Prerequisite: C or better in ENGL 101 or 111.

ENGL 450 Women and Literature  3 cr.
A cross-cultural study of womanhood as portrayed by male and female writers over the centuries. Variable.
Prerequisite: C or better in ENGL 101 or 111.

ENGL 471 Seminar in Critical Theory  3 cr.
Study of literary critical theory and application to an independent student project.
Required of English majors in the literature concentration. Fall. Prerequisites: C or better in ENGL 101 or 111; senior status.

ENGL 480 Senior Seminar in English  3 cr.
Integration of previous course material and student's own experience in the discipline for a critical analysis of a topic in literature. Topics will vary. Senior thesis required. Variable.
Prerequisite: C or better in ENGL 101 or 111.

ENGL 489 English Capstone  3 cr.
Conversion of students' working portfolios, accumulated during their careers as English majors, into "best works" collections for professional application and departmental assessment purposes. Other assessment activities possible. Fall.
Prerequisite: senior status.

ENGL 490 Selected Topics in English  3 cr.
A select aspect or body of literature of limited scope and topical interest. Subject varies; see Academic Schedule for specific titles. Repeatable for a maximum of 6 credits if topics are substantially different. Variable.
Prerequisite: C or better in ENGL 101 or 111.

ENGL 493 The Shakespeare Festival  1-3 cr.
Supervised experiential-learning opportunity to participate in FSU's Shakespeare Festival. Experience mentoring high school students in the community, helping them read, understand, and present an interpretation of a scene from Shakespeare. Repeatable for up to 9 credits.
Prerequisites: ENGL 282 or ENGL 340, or permission of instructor; departmental approval.

ENGL 499 Independent Study  1-3 cr.
Guided reading and/or writing projects. Repeatable for a maximum of 6 credits if topics are substantially different. Variable.
Prerequisites: permission of the department chair and a faculty director, normally given only to majors of junior or senior standing with at least a B average in the major.

Reading Improvement and Development

ENGL 105 Critical Reading  3 cr.
The reading process: development of literal comprehension and critical analysis in various content areas. Fall.
Students required to enroll in this course based upon results of the reading placement test administered by the University may not withdraw unless withdrawing from the University.

Exercise and Sport Science

EXSS 103 Foundations of Exercise & Sport Science  3 cr.
The study of both the history and philosophy of exercise and sport science. Emphasis placed on the subdisciplines of athletic training and health/fitness. Every semester.

EXSS 115 Methods of Group Exercise Instruction  3 cr.
Leadership and technical skills for safe and effective group exercise programs. Every semester.

EXSS 175 Foundations of Resistance Training  1 cr.
An introduction to resistance training program design. Emphasis will be on proper exercise technique and functional progressions for a variety of body areas. Every semester.

EXSS 200 Nutrition  3 cr.
Principles of nutrition. The effect of food habits on family health. Nutritional requirements for different stages of human development. Application to various economic levels and social backgrounds. Every semester. GEP Group C.

EXSS 300 Advanced Human Nutrition  3 cr.
Assessment of in-depth study of macro- and micro nutrition digestion, including absorption, metabolism, excretion, inter-relationships, and requirements in normal individuals; effects of processing and technological alterations on nutritional quality of food and the bioavailability of nutrients. Variable.
Prerequisite: EXSS 200.

EXSS 303 Biomechanics for Exercise and Sport Science  3 cr.
Mechanics of human motion – muscles and joints. Application of mechanical principles to the study of human movement in exercise and daily life. Biomechanical relationships in the upper and lower extremities, and the vertebral column. May not be taken by students who have credit for HPED 301. Every semester.
Prerequisite: BIOL 321.

EXSS 305 Care and Prevention of Athletic Injuries  3 cr.
Introduction to athletic injury management. Emphasis on prevention and care of muscular skeletal injuries. Every semester.

EXSS 306 Organization & Administration of Exercise & Sports Science  3 cr.
Effective administration and management strategies in exercise and sport science. Human resource management, financial management, facility design and planning, client management issues and legal liability issues addressed. Emphasis on athletic administration, athletic training and health/fitness management. Every semester.

EXSS 315 Nutrition for the Physically Active  3 cr.
Advanced study in the science and application of nutrition for both the general population as well the physically active. Spring.
Prerequisite: EXSS 200.

EXSS 330 Exercise Epidemiology  3 cr.
Provides understanding of how leisure-time physical activity can be effectively promoted to enhance people's longevity and quality of life. For upper-level undergraduates who are being introduced to exercise epidemiology for the first time. Variable.

EXSS 341 Psychology of Physical Activity  3 cr.
Concepts related to psychology and physical activity. Theory-to-practice approach on how social variables influence motor behavior and how physical activity affects the psychological make up of the individual. Spring. Every semester.
Prerequisite: PSYC 150.
EXSS 401 Physiology of Exercise 3 cr.
Exercise and the circulatory, respiratory and nervous systems; efficiency of muscular work; fatigue; age, sex and body type. May not be taken by students who have credit for PHEC 406. Every semester. Prerequisite: BIOL 322.

EXSS 410 Advanced Strength Training 3 cr.
The study of the principles and practices of advanced strength training. Emphasis on the practical application of this knowledge to both athletic performance and a health/wellness setting. Every semester. Prerequisites: EXSS 175 and EXSS 303.

EXSS 411 Evaluation and Prescription in Fitness 3 cr.
In-depth examination of evaluation of and components applicable to the development of exercise programs. Every semester. Prerequisite: EXSS 401.

EXSS 430 Training for Peak Performance 3 cr.
The study of High-Performance Training Techniques in order to improve human performance measures. Emphasis is on functional movement patterns, corrective exercise, and improvements in athletic performance. Variable. Prerequisites: EXSS 303 and EXSS 401.

EXSS 435 Lifespan Health and Fitness 3 cr.
An examination of factors that influence health and fitness across the lifespan including methods, services and resources to access and optimize the health and fitness of individuals and cohorts. Every semester.

EXSS 482 Field Experience in Exercise & Sport Science 1-6 cr.
Field experience in Exercise & Sport Science. Sites of study may vary. Repeatable for a maximum of 6 credits. Every semester. Prerequisite: Permission of instructor.

EXSS 492 Seminar in Exercise & Sport Science 3 cr.
A separately graded component of the Exercise & Sport Science internship, required in conjunction with EXSS 495. This course will address worksite issues encountered during the internship experience. Every semester. Co-requisite EXSS 495.

EXSS 495 Internship in Exercise & Sport Science 9 cr.
Special work experiences related to the Exercise & Sport Science academic program. Full-time students must register for a minimum of 9 credit hours of internship. Graded P/F. Exercise and Sport Science Capstone. Every semester. Co-requisite EXSS 492. Prerequisites: EXSS 410 and EXSS 411; completion of all prerequisite major coursework with a C or better in all major courses; senior status; attendance at informational meeting in semester prior to internship; submission of application during semester prior to internship. You cannot receive credit for an EXSS course and the same course previously labeled PHEC or HEED.

FINA 301 Introduction to Personal Financial Planning 3 cr.
Overview of elements in the personal financial planning process: goal identification and budgeting, tax management, insurance planning and risk management, investments planning, retirement income and benefits, and issues in estate planning. Fall.

FINA 303 Principles of Finance 3 cr.
Introduction to basic principles of the three traditional divisions of finance: financial markets and institutions, investment and portfolio analysis, and corporate finance. Does not count for accounting majors. Spring. Prerequisites: core skill requirement in mathematics, ACCT 211 and ECON 200 or ECON 201/211.

FINA 370 Corporate Finance 3 cr.
Principles of financial management within business enterprises. Basics of financial analysis, stocks and bonds valuation, capital budgeting, capital structure decisions, dividend policy, and working capital management. Every semester. Prerequisites: MATH 116 or MATH 220, ACCT 211, ECON 201/211 and ECON 202/212. Prerequisite or corequisite: ACCT 212.

FINA 371 Insurance Planning and Risk Management 3 cr.
The nature of risk and its effect on the business enterprise. Various types of insurance, underwriting practices, actuarial and contractual problems, and government regulations. Spring.

FINA 375 Financial Institutions Management 3 cr.
Concepts of financial intermediation, characteristics of institutions within the financial services industry, regulation, and financial innovation. Management of liquidity, credit, interest rate, and other risks in a global economic environment. Fall. Prerequisite: FINA 370.

FINA 377 Retirement Income Planning 3 cr.
Retirement income savings planning. Characteristics of various pension plans. Management of defined contribution plans and defined benefit plans, investment of pension assets and performance evaluation of pension funds. Fall. Prerequisites: ACCT 312 or FINA 301 or 303 or 370.

FINA 381 Principles of Real Estate 3 cr.
Industry principles and factors influencing the real estate business. Contracts, deeds, valuation, financing, and government regulation. Fall.

FINA 405 Short-term Financial Management 3 cr.
Traditional analytical techniques and new approaches to liquidity management. Working capital accounts (cash, receivable, inventory and accounts payable management) and topics such as bank relations, off balance sheet financing, variance analysis models, improved liquidity indicators, and hedging techniques. Variable. Prerequisite: FINA 370 or FINA 476.

FINA 420 Entrepreneurial Finance 3 cr.
Introduction to financial issues relevant to small and emerging businesses, with special emphasis on sourcing capital. Analysis of the financial needs of new business ventures, profit management and cash flow analysis, entrepreneurial capital budgeting, accessing government sources of financing, working capital management, long-term financial policy, as well as external expansion through mergers and acquisitions. Spring. Prerequisite: FINA 370.

FINA 451 Estate Planning & Advanced Topics in Financial Planning 3 cr.
Study and application of the legal, tax, and human factors surrounding the efficient transfer of property including property ownership, probate, wills, intestacy, trusts, federal estate and gift taxation, contemporary techniques in individual estate planning, industry regulation and ethical practices for the estate planner. Synthesis of the financial planning process and discussion of advanced topics in financial planning. Variable. Prerequisites: Two from FINA 371, FINA 377, FINA 475 and ACCT 420.

FINA 475 Securities Investment 3 cr.

FINA 476 Financial Management 3 cr.
Financial planning and performance evaluation in the business enterprise; obtaining and investing funds. Case-study approach to financial decision-making: basic financial analysis, working capital management, capital budgeting, long-term financing,
leasing, mergers, acquisitions, and bankruptcy. Not open to students who have credit for the former BUAD 376. Every semester. Prerequisites: FINA 370 or ACCT 312.

FINA 477 International Financial Management 3 cr.
Analysis of financial management in a multinational enterprise. Multinational working capital management, management of foreign exchange risks, translation and transaction exposure, participation in global financial markets, multinational capital budgeting, and political risks. You cannot receive credit for both FINA 477 and FINA 470. Fall. Prerequisite: FINA 370 or ACCT 312.

FINA 479 Financial Policy 3 cr.
Advanced topics in corporate financial policy. Extensive case study and readings-based approaches to developing and implementing financial policy. Short-term financial planning, advanced capital budgeting, valuation of the firm, long-term strategic financial planning and issues of corporate restructuring. Spring. Prerequisites: FINA 370 and one from FINA 375 or FINA 475 or FINA 476. Finance Capstone.

FINA 490 Special Topics in Business Administration – Finance 3 cr.
A detailed study of a limited topic, problem, or period. Topics vary from semester to semester. Fall. Prerequisites: 90 credits and 18 hrs. of business administration course work.

FINA 494 Internship in Finance 3 or 6 cr.
Guided work experience in finance with business, nonprofit, or government organizations. Minimum of 135 clock hours of experience for 3 credits or 270 for 6 credit hours. Academic components include but not limited to one internship paper for 3 credits or two internship papers for 6 credit hours, internship log, and site supervisor's evaluation of the student's performance. Previous experiences are not acceptable for credit. Maximum of 6 credit hours. A 6 credit Internship choice counts as one elective course. Repeatable for maximum of 6 credits. Every semester. Prerequisites: junior or senior standing; department chair's approval.

FINA 499 Independent Study in Finance 1-3 cr.
Research and report on a specific topic not covered by regularly rostered courses. Topic will be defined by the student in conjunction with faculty sponsor. Proposals must be approved prior to registration. You cannot receive credit for both a BMIS course and the same course formerly labeled BUAD. Repeatable for maximum of 6 credits. Every semester. Prerequisites: 18 credits of business administration course work, 90 credits and permission of department chair.

Foreign Languages & Literature

Intercultural Studies

MDFL 111 Intercultural Understanding 3 cr.
The study of the concept of Culture as well as its multiple manifestations and the case study of three diverse peoples. Team taught. Variable. GEP Group F.

Special Topics

MDFL 190 Selected Topics in Foreign Lang. and Literature 3 cr.
A variable topic in a foreign language, literature, or culture other than French or Spanish such as Italian, Japanese, German, Arabic or Chinese. Specific title listed in course schedule. Repeatable for a maximum of 15 credits if topics are substantially different. Variable.

MDFL 290 Selected Topics in Foreign Language & Literature 1-4 cr.

Literature in Translation

MDFL 211 Introduction to World Literature I 3 cr.
Literary masterpieces in translation, illustrating spiritual, social, and esthetic life from ancient times through the Renaissance. Guest lectures in various literatures. Variable. Prerequisite: ENGL 101 or 111.

MDFL 212 Introduction to World Literature II 3 cr.
Literary masterpieces in translation from the 17th century to the present. Guest lectures in various literatures. Variable. Prerequisite: ENGL 101 or 111.

MDFL 301 Latin American Women's Issues 3 cr.
Study of the history and realities of Latin American women from the colonial period through contemporary Latin America. Variable. GEP Group F.

MDFL 407 Latin American and Spanish Film 3 cr.
A study principally of the most recent films from Latin America and Spain. Taught in English (may not be taken to satisfy the Spanish major). Not open to students with credit for SPAN 407. Two hrs. lecture and two hrs. lab. Variable.

MDFL 417 World Film 3 cr.
A study of the principal films from around the world. The course is organized geographically and chronologically. Variable. Prerequisite: junior or senior standing or permission of the instructor.

Linguistics

LING 301 Introduction to Language 3 cr.
Introduction to the study of language. The nature of language; language families; techniques of linguistic analysis; linguistic change. Conducted in English. Variable.

French

FREN 101 Basic Elements of French I 3 cr.
Fundamental skills: listening, speaking, reading, writing. Emphasis on active performance. Fall. GEP Group B.

FREN 102 Basic Elements of French II 3 cr.
Continued development of basic skills. Emphasis on active performance. Language laboratory. Spring. Prerequisite: FREN 101.

FREN 211 French Grammar, Composition, and Conversation I 3 cr.
Intensive grammar, oral command of the language, introduction to expository writing. Variable.

FREN 212 French Grammar, Composition & Conversation II 3 cr.
Sequel to FREN 211. Variable.
FREN 250 Overview of French Language and Culture 3 cr.
Survey of French language through study of major aspects of French and Francophone cultures. Serves as a gateway to advanced study in French. May be taken concurrently with a 300-level course. Fall. Prerequisite: FREN 212 or equivalent.

FREN 330 Advanced Conversation 3 cr.
Emphasis on development and strengthening of oral-aural skills. Listening and speaking activities, simulation and role playing, phonetics and pronunciation practice. Extensive use of authentic audio and video materials, both recorded and live. Not open to students who have received credit for former FREN 311. Fall. Prerequisite or corequisite: FREN 250 or equivalent.

FREN 331 Advanced Composition 3 cr.
Emphasis on advanced grammar and reading and writing skills. Reading of authentic newspaper and magazine articles and current and relevant materials in the social sciences and other content areas. Not open to students who have received credit for former FREN 312. Spring. Prerequisite or corequisite: FREN 250 or equivalent.

FREN 332 French for the Professions 3 cr.
Vocabulary, reading, writing, and speaking for contact with the French professional world. Use of role-plays, authentic French business materials, analysis of French professional sectors, culture, and etiquette. Spring. Prerequisite or corequisite: FREN 250 or equivalent.

FREN 335 Intro. to French Literary Texts 3 cr.
Introduction to the current methodologies of literary analysis through the chronological study of selected works and works from the Medieval period to the modern era. Not open to students who have received credit for former FREN 315. Variable. Prerequisite or corequisite: FREN 250 or equivalent.

FREN 336 French Civilization Through Film and Literature 3 cr.
Broad survey of French history from the Renaissance to present day through analysis of French and Francophone film tradition, focusing on a specific, enduring theme of Francophone culture, and incorporating major literary works. Emphasis on oral skills with some supplementary reading in French. Every other fall beginning 2006. Prerequisite or corequisite: FREN 250 or permission of instructor.

FREN 410 French Poetry and Drama 3 cr.
Masterpieces of French poetry and drama in esthetic and cultural context. Every other spring beginning Spring 2007. Prerequisite: FREN 250 or equivalent.

FREN 411 French Fiction, Non-Fiction and Film 3 cr.
Masterpieces of French fiction, non-fiction and film in esthetic and cultural context. Every other spring beginning Spring 2006. Prerequisite: FREN 250 or equivalent.

FREN 430 Individual and Society in Francophone World 3 cr.
Analysis of a problem or theme of French individual and social identity within the French social science and philosophical traditions. Every other fall beginning Fall 2006. Prerequisite: FREN 250.

FREN 431 Translation 3 cr.
Theory and practice of oral interpretation and written translation from French to English, using real-life examples from social sciences, commerce, natural sciences, media, and the law. Every other fall beginning Fall 2005. Prerequisite: FREN 250 or permission of instructor.

FREN 490 Special Topics in French Language and Literature 3 cr.
A selected topic such as an author or work, a genre or theme, translation or interpreting. Repeatable for a maximum of 9 credits if topics are substantially different. Variable. Prerequisite: FREN 250 or equivalent.

FREN 493 Senior Seminar in French Literature 3 cr.
Capstone in French literature incorporating dossier of written work, oral presentation, extended reading and critical analysis of French literary text or director of multiple films. Prerequisite: 90 credits or permission of department chair.

FREN 495 Internship in French 6-12 cr.
Guided work experience in a French speaking organization either in the US or abroad. Graded P/F. The credit is not applicable toward the major. Every semester and summer. Prerequisites: junior or senior status, major or minor in French, and permission of department.

FREN 496 Senior Seminar in French Professional Studies 3 cr.
Capstone in French Professional Studies incorporating dossier of written work, oral presentation, and internship or research project. Prerequisite: 90 credits or permission of department.

FREN 498 Readings in French 1 to 4 cr.
Intensive readings and a term paper. Repeatable for a maximum of 6 credits if topics are substantially different. Variable. Prerequisite: FREN 250 or equivalent.

FREN 499 Individual Problems in the French Language 1 to 4 cr.
Individual research or activity requiring submission of a final paper or completed project. Repeatable for a maximum of 6 credits if topics are substantially different. Variable. Prerequisite: FREN 250 or equivalent.

Spanish

SPAN 101 Basic Elements of Spanish I 3 cr.
Fundamental skills: listening, speaking, reading, writing. Emphasis on active performance. Every semester. GEP Group B.

SPAN 102 Basic Elements of Spanish II 3 cr.

SPAN 211 Spanish Grammar, Composition, & Conversation I 3 cr.
Intensive grammar, oral command of the language, introduction to expository writing. Variable.

SPAN 212 Spanish Grammar, Composition, & Conversation II 3 cr.
Sequel to SPAN 211. Variable.

SPAN 250 Overview of Spanish Language & Culture 3 cr.
Survey of Spanish language through study of major aspects of Spanish and Latin American cultures. Serves as a gateway to advanced study in Spanish. May be taken concurrently with a 300-level course. Every semester. Prerequisite: SPAN 212 or equivalent.

SPAN 330 Spanish for Practical Communication I 3 cr.
Emphasis on development and strengthening of oral-aural skills. Listening and speaking activities, simulation and role playing, phonetics and pronunciation practice. Extensive use of authentic audio and video materials, both recorded and live. Not open to students who have received credit for former SPAN 311. Variable. Prerequisite or corequisite: SPAN 250 or equivalent.

SPAN 331 Spanish for Practical Communication II 3 cr.
Development of fundamental writing skills through review of specific grammatical topics and analysis of significant reading selections. Conducted entirely in Spanish. Not open to students who have received credit for SPAN 312. Variable. Prerequisite or corequisite: SPAN 250 or equivalent.
SPAN 332 Spanish for the Professions I 3 cr.
Emphasis on intensive conversation and acquisition of vocabulary pertinent to the professions while focusing on the Spanish-speaking professional culture. Conducted in Spanish. Variable. Prerequisite or corequisite: SPAN 250 or equivalent.

SPAN 333 Introduction to Culture and Civilization of Spain 3 cr.
Spanish culture: political, literary, economic, social, and artistic life in Spain. Not open to students who have received credit for former SPAN 313. Variable. Prerequisite or corequisite: SPAN 250 or equivalent.

SPAN 334 Introduction to Culture & Civilization of Latin America 3 cr.
Latin American culture: political, literary, economic, social, and artistic life in Latin America. Not open to students who have received credit for former SPAN 314. Variable. Prerequisite or corequisite: SPAN 250 or equivalent.

SPAN 335 Introduction to Study of Spanish Literature 3 cr.
Esthetics of Spanish poetry, fiction, and drama. Not open to students who have received credit for former SPAN 315. Variable. Prerequisite or corequisite: SPAN 250 or equivalent.

SPAN 350 Spanish Phonetics and Pronunciation 3 cr.
Introduction to Spanish phonetics with the objective of improving pronunciation and intonation in Spanish. Students will learn terminology for classifying Spanish sounds as well as basic phonetic transcription with an introduction to the International Phonetic Alphabet (IPA). Variable. Prerequisite or corequisite: SPAN 250 or equivalent.

SPAN 407 Latin American and Spanish Film 3 cr.
A study principally of the most recent films from Latin America and Spain. 2 hours lecture and 2 hours lab. Not open to students with credit for MDFL 407. Variable. Prerequisite: Two 300-level Spanish courses.

SPAN 408 Comparative Grammar and Translation 3 cr.
Comparative study of English and Spanish grammar and lexicon and basic Spanish-to-English translation. Prerequisite for SPAN 436 Spanish–English Translation. Variable. Prerequisites: Two 300-level Spanish courses or permission of instructor.

SPAN 409 Hispanic Literature 3 cr.
Survey of literature in Spanish from the Golden Age to the present. Representative figures and major literary developments. Variable. Prerequisite: SPAN 250 and two 300-level Spanish courses.

SPAN 430 Advanced Reading & Conversation 3 cr.
Emphasis on comprehension and conversation skills by focusing on a list of readings. Grammar is covered in the readings. Variable. Prerequisite or corequisite: SPAN 250 or equivalent.

SPAN 431 Advanced Reading & Composition 3 cr.
Emphasis on comprehension, interpretation, and written skills by focusing on a list of readings. Grammar is covered in the readings. Variable. Prerequisite or corequisite: SPAN 250.

SPAN 432 Spanish for the Professions II 3 cr.
Strategies to effectively read and write specialized documents for a variety of professions, taking into account the Spanish or Spanish-American cultural context. Conducted entirely in Spanish. Variable. Prerequisite or co-requisite: SPAN 250.

SPAN 436 Spanish–English Translation 3 cr.
Introduction to translation theory and method, with a specific focus on Spanish to English translation. Students will practice these theories and methods through both in-class and out-of-class translation assignments. Variable. Prerequisite: SPAN 408.

SPAN 489 Capstone in Spanish 3 cr.
Capstone experience in Spanish language and cultures, incorporating an oral presentation, dossier of written work, faculty assessment of language and cultural proficiency, and articulation of goals for the use of the language and culture in professional setting. Fall. Prerequisite: 90 credits or permission of instructor.

SPAN 490 Special Topics in Spanish Language & Literature 3 cr.
A selected topic such as an author or work, a genre or theme, translation or interpreting. Repeatable for a maximum of 9 credits if topics are substantially different. Variable. Prerequisites: two 300-level Spanish courses and permission of instructor.

SPAN 495 Internship in Spanish 6-12 cr.
Guided work experience in a Spanish speaking organization either in the US or abroad. Graded P/F. The credit is not applicable toward the major. Every semester and summer. Prerequisites: junior or senior status, major or minor in Spanish, and permission of department.

SPAN 498 Readings in Spanish 1-4 cr.
Intensive readings and a term paper. Repeatable for a maximum of 6 credits if topics are substantially different. Variable. Prerequisites: three 400-level Spanish courses and permission of instructor.

SPAN 499 Individual Problems in Spanish Language 1-4 cr.
Individual research or activity requiring submission of a final paper or completed project. Repeatable for a maximum of 6 credits if topics are substantially different. Variable. Prerequisite: three 300-level Spanish courses and permission of instructor.

Geography

GEOG 103 Physical Geography 4 cr.
Earth-sun relations, map reading and interpretations, landforms, elements of weather and climate, and climate regions. Three hrs. lecture and 2 hrs. lab. Every semester. GEP Group C.

GEOG 104 Human Geography 3 cr.
Systematic consideration of factors influencing the distribution of human beings in relation to population dynamics and migration, economic development and urbanization, and cultural diversity. Every semester. GEP Groups D or F.

GEOG 110 World Regional Geography: Cultural Diversity 3 cr.
Earth’s natural and cultural diversity, their interconnections and their dynamic processes examined in each major world region. Variable. GEP Group D or F.

GEOG 113 Honors: Physical Geography 4 cr.
Earth-sun relations, map reading interpretation, landforms, elements of weather and climate, and climate regions. Three hrs. lecture, 2 hrs. lab, and four Saturday field trips. Variable. Credit cannot be earned for both GEOG 103 and GEOG 113. Prerequisite: acceptance into the Honors Program or permission of instructor. GEP Group C.

GEOG 114 Honors: Human Geography 3 cr.
Systematic consideration of factors influencing the distribution of human beings in relation to population dynamics and migration, economic development and urbanization, and cultural diversity. Credit cannot be earned for both GEOG 104 and GEOG 114. Spring. Prerequisite: acceptance into the Honors Program or permission of instructor. GEP Group D or F.
GEOG 150 Earth, Wind and Fire: An Environmental Science Approach to Natural Hazards and Disasters 3 cr.
Survey of the environmental science of natural hazards and disasters, including floods, hurricanes, volcanoes, earthquakes, landslides and global climate change. Discussion of impacts to society caused by hazards and disasters, and human activities increasing hazards and disasters. Consideration of the risk of disasters and hazards. Variable.

GEOG 205 Descriptive Meteorology 3 cr.
A process-oriented approach to the study of the atmosphere, weather variables and measurement, radiation, clouds and precipitation, atmospheric stability, air masses and severe weather. Principles of weather forecasting. Also offered as PHSC 205. Fall. GEOG 103 recommended.

GEOG 207 Physical Geology and Geomorphology 4 cr.
A process-oriented approach to develop a fundamental understanding of geology and geomorphology. Experimental laboratory and field experiences of subsurface and surficial interactions with tectonic, hydrologic and atmospheric processes. Two hrs. lecture and 2 hrs. lab. Not open to students who have credit for former GEOG 307. Fall. Prerequisite: GEOG 103/113 or permission of instructor.

GEOG 208 Earth System History 4 cr.
Chronology of the Earth's history from hypothesized origins through the Holocene. Paleogeography, paleoecotones, and floral and faunal evolution. Lab study of sediments, fossils as indicators of rock age and environment, and geologic maps and structure sections. One field trip may be required. Three hrs. lecture and 2 hrs. lab. Not open to students who have credit for former GEOG 308. Spring. Prerequisite: GEOG 103 (or 113) or permission of instructor.

GEOG 209 People, Places and Landscapes of Appalachia 3 cr.
Physical, historical and human processes that have influenced and shaped the spatial distributions of Appalachia. Fall. Prerequisite: GEOG 103/113 or GEOG 104/114 or GEOG 110 or permission of instructor.

GEOG 222 Introduction to Cities 3 cr.
Study of the forces that shape contemporary cities. Discussion of efforts to improve the social and physical environments of cities. Variable. Prerequisite: GEOG 104/114 or GEOG 110.

GEOG 275 Fundamentals of Geographic Data Handling 3 cr.
Exploring sources, characteristics and types of geospatial data. Discussion of techniques for manual and automated handling of geographically referenced information. Two hrs. lecture and 2 hrs. lab. Every semester. Prerequisites or corequisites: GEOG 103 (or 113) and MATH 109/110, or MATH 119 or Math 220 or a higher-level math course or placement at Math Level III, or permission of instructor.

GEOG 300 Economic Geography 3 cr.
The distribution of world economic activities. Agriculture, mining, the manufacturing industries, trade and transportation. Fall. Prerequisite: GEOG 104/114 or GEOG 110 or sophomore standing.

GEOG 301 Geography of North America 3 cr.
Major national and geographic regions of the United States, Canada and Mexico. Relationship between natural and economic factors. Fall, odd-numbered years. Prerequisite: GEOG 103/113 or GEOG 104/114 or GEOG 110 or permission of instructor.

GEOG 302 Geography of Maryland 3 cr.
A geographic analysis of the state. Spring. Prerequisite: GEOG 103/113 or GEOG 104/114 or GEOG 110 or permission of instructor.

GEOG 310 Fundamentals of Cartography 3 cr.
The art and science of compiling and producing thematic maps as a medium for communication and research. Emphasis is on map design, symbolization and data classification through desktop mapping and map animation software applications. Two hrs. lecture and 2 hrs. lab. Every semester. Prerequisites: GEOG 103/113 or GEOG 104/114 or GEOG 110; GEOG 275 or permission of instructor.

GEOG 317 Principles of Geographic Information Science 4 cr.
An examination of the basic theory, concepts, data structures, operations and applications of geographic information systems (GIS) as a science. Lectures supplemented by computer-based laboratory exercises. Three hrs. lecture and 2 hrs. lab. Fall. Prerequisites: GEOG 275 or permission of instructor. GEOG 310 recommended.

GEOG 320 Geography of Latin America 3 cr.
Physical and human processes that explain the spatial patterns and landscapes of Latin America. Variable. Prerequisite: GEOG 103/113 or GEOG 104/114 or GEOG 110 or permission of instructor.

GEOG 324 Urban Geography 3 cr.
Introduction to land use and planning issues facing North American metropolitan areas. Discussion of historic growth patterns, housing trends and urban problems. Fall, even-numbered years. Prerequisite: GEOG 104/114 or GEOG 110 or sophomore standing.

GEOG 330 Global Climate Change 3 cr.
“What causes Earth’s climate to change?” is one of the most important questions of our time. This course includes an evaluation of the natural and anthropogenic factors that cause a change in global and regional climates. Modern climate change, future climate scenarios, policy, and mitigation strategies will also be explored. Spring, even-numbered years. Prerequisite: GEOG 103/113.

GEOG 335 Oceanography 3 cr.
Basic principles of oceanographic science and discussion of the role of oceans in global environmental systems. Variable. Also offered as SCIE 335. Prerequisites: GEOG 103 (or 113), BIOL 149 and completion of a college-level mathematics course.

Origin and processes of soil formation, change with time and environmental factors including use, identification and delineation on the landscape, and interpretation and usage of soil surveys. Two hrs. lecture and 2 hrs. lab. Field session. Not open to students who have credit for former GEOG 440. Fall. Prerequisite: GEOG 103/113 or permission of instructor. GEOG 207 completion or co-registration strongly recommended.

GEOG 341 Introduction to Geochemistry 4 cr.
Intro. to chemical systems and processes of Earth; basic chemistry principles applied to environmental processes, including, but not limited to, distribution of elements, chemical reactions, and geochemical cycles. Applying geochemistry techniques to investigate and examine natural and human-impacted environments. Two hrs. lecture, one 3-hr. lab. Variable. Also offered as CHEM 341. Prerequisite: CHEM 202.

GEOG 360 Food Systems 3 cr.
Geographic examination of the production, distribution and consumption of food. Cultural and spatial foundations of the global food system and its impacts on human and natural systems. Sustainable food systems. Fall, odd-numbered years. Prerequisite: GEOG 104/114 or GEOG 110 or permission of instructor.

GEOG 380 Research Methods in Geography 3 cr.
Examines qualitative and quantitative methods for handling geo-spatial data. Design of geographic research, approaches to data collection and synthesis, inferential and descriptive geo-spatial statistics, application of statistical software, and presentation
of findings. Two hrs. lecture and 2 hrs. lab. Spring. Prerequisites: GEOG 275 and 9 hrs. of
goography or permission of instructor.

GEOG 400 Geography of Asia 3 cr.
Cultural, economic and physical transformation of East, South and Southeast Asia. Variable. Prerequisite: GEOG 103/113 or GEOG 104/114 or GEOG 110.

GEOG 401 Geography of Europe 3 cr.
Physical, historical and cultural features that have shaped the current landscapes of Europe. Three hrs. lecture. Spring, odd-numbered years. Prerequisite: GEOG 103/113 or GEOG 104/114 or GEOG 110 or permission of instructor.

GEOG 402 Geography of Northern Eurasia 3 cr.
Physical and human processes that explain the spatial patterns and landscapes of Russia, Ukraine, Mongolia and adjacent states. Variable. Prerequisite: GEOG 103/113 or GEOG 104/114 or GEOG 110 or permission of instructor.

GEOG 403 The Geography of Sub-Saharan Africa 3 cr.
Cultural, economic, physical and political potentials of Sub-Saharan Africa. Complex spatial patterns that define the Sub-Saharan African landscape. Fall, even-numbered years. Prerequisite: GEOG 103/113 or GEOG 104/114 or GEOG 110 or permission of instructor.

GEOG 404 Geography of the Middle East and Central Asia 3 cr.
Physical and human processes that shaped the current landscapes and societies of North Africa, the Middle East, the Islamic republics of the former Soviet Union and Afghanistan. Variable. Prerequisite: GEOG 103/113 or GEOG 104/114 or GEOG 110 or permission of instructor.

GEOG 405 Physical Climatology 3 cr.
Overview of the physical processes that define Earth’s global climate. Movement of energy and water throughout the climate system, global circulation, distribution of climate types, natural and anthropogenic controls of climate, land-atmosphere interactions, spatial and temporal patterns, climate variability and change, and analysis of climate data. Two hrs. lecture and 2 hrs. lab. Fall. Prerequisite: GEOG 103/113. GEOG 205/PHSC 205 and MATH 109 recommended.

GEOG 406 Management and Conservation of Natural Resources 3 cr.
Current problems associated with the use and misuse of natural resources. Fall. Prerequisites: GEOG 103/113 and GEOG 104/114 or GEOG 110 or permission of instructor.

GEOG 407 Political Geography 3 cr.
Geographic factors affecting national identity and the present development of countries. Consideration of the spatial organization of political units at the international and domestic scale. Spring, even-numbered years. Prerequisite: GEOG 104/114 or GEOG 110 or junior standing.

GEOG 410 Locational Analysis 3 cr.
Theories and methods of analyzing and explaining the spatial location of economic activities. Emphasis on theoretical, methodological and practical issues. The relationship between consumer behavior and the location of industrial and service facilities is examined. Spring, even-numbered years. Prerequisite: GEOG 104/114 or GEOG 110 or junior standing.

GEOG 413 Remote Sensing — Image Interpretation 3 cr.
Fundamental principles of remote sensing and image interpretation applications in geography; the remote sensing process, Earth surface energy/matter interactions, photogrammetry basics, color theory and digital image display, introductory digital image processing and a survey of image types including panchromatic, color-infrared, multispectral, thermal and radar. Two hrs. lecture and 2 hrs. lab. Spring. Prerequisite: GEOG 275 or permission of instructor.

GEOG 420 Topics in the Mapping and Geospatial Sciences 3 cr.
A project-based course covering advanced topics in the mapping sciences and geospatial intelligence. Topics may include digital image processing, advanced cartographic design and/or geospatial analyses. Two hrs. lecture/discussion and 2 hrs. lab per week. May be repeated for up to 6 hours provided the topics are different. Fall. Prerequisites: GEOG 275, GEOG 310, GEOG 317 and GEOG 413 or permission of instructor.

GEOG 421 Regional Planning 3 cr.
Contemporary topics in regional planning and development. Group and individual projects and research. Variable. Prerequisite: GEOG 222 or permission of instructor.

GEOG 425 Geography of Transportation 3 cr.
The linkages and flows of goods, services and people from area to area. The influence of various transportation modes in the historical development of regions; the role of transportation planning in shaping future metropolitan and regional settlements. Spring, odd-numbered years. Prerequisite: GEOG 104/114 or GEOG 110 or junior standing.

GEOG 427 Geography of Languages and Religions 3 cr.
Languages and religions examined from a geographic perspective. Emphasis placed on the five geographic themes of culture region, cultural diffusion, cultural integration, cultural landscape and cultural ecology. Spring, odd-numbered years. Prerequisite: GEOG 104/114 or GEOG 110 or junior standing. (GEP Group F).

GEOG 430 Surface Water Hydrology 4 cr.
Physical principles governing occurrence and movement of water, including precipitation, evaporation and transpiration, runoff, infiltration, soil water movement and stream channel morphology. Lab/field experience with stream gauging, infiltration measurement, soil hydraulic conductivity, flow frequency analysis and related phenomena. Human influence on surface water hydrology. Three hrs. lecture and 2 hrs. lab. Spring. Prerequisite: GEOG 103/113 or permission of instructor.

GEOG 431 Quaternary Environments 3 cr.
An examination of theoretical concepts and multi-proxy physical evidence to establish the history and scale of environmental changes during the last 2.5 million years. Reconstruction techniques will include geomorphological mapping, sedimentology, pollen analysis and radiometric dating. Two hrs. lecture and 2 hrs. lab. Field component required. Spring, even-numbered years. Prerequisites: GEOG 103 (or 113) and GEOG 207 or 208, or permission of instructor.

GEOG 432 Groundwater Hydrology 3 cr.
Principles governing the physical and chemical nature of water below the Earth’s surface, including fundamental concepts of groundwater flow, water-rock interaction and groundwater-surface water interactions. Exploration of human influence on the groundwater environment. Variable. Prerequisites: GEOG 207 and MATH 220 or MATH 236, or permission of instructor.

GEOG 433 Surveying and Field Techniques 3 cr.
Theory of measurements, computation and instrumentation; field work, use of Global Positioning Systems (GPS) and compilation of topographic base maps; evaluation of errors; profiling, grading, slope and grade stakes. Fieldwork will include use of a variety of instruments. One hr. lecture and 4 hrs. lab. Variable. Recommended: GEOG 275.

GEOG 435 Field Experiences in Geography 1-6 cr.
Examination and analysis of physical and/or human geography in the field. Variable. Repeatable for a maximum of 6 credits provided that locations are different. Field sites may vary from year to year. Prerequisite: permission of instructor.

GEOG 441 Soil Analysis 3 cr.
Physical and chemical characteristics of soils as they relate to suitability for plant growth and reproduction. Laboratory and field testing of soil and soil-forming
material. Physical properties of soil, moisture relationships, organic matter content and chemical constituents. Two hrs. lecture and 2 hrs. lab/field session. Spring, even-numbered years. Prerequisite: GEOG 340 or permission of instructor.

**GEOG 445 Biogeography** 3 cr.
Patterns of plant and animal distributions in the landscape are stressed and are considered in light of historical, environmental and biotic influences. Historical development of contemporary regional distributions, survey of world biomes and the importance of disturbance and human-induced changes on biotic distributions are considered. Variable. Prerequisite: GEOG 103 (or 113) or BIOL 149. BIOL 340 is recommended.

**GEOG 450 Urban Planning** 3 cr.
City planning: needs assessment, land use suitability, policy and design. Participation in limited scope planning projects. Variable. Prerequisite: GEOG 324 or permission of instructor.

**GEOG 452 Rural Geography**
Issues related to rural places, including population, livelihoods, environmental concerns, and trends. Topics may include exploration of rural geography concepts and research; examination of social, cultural, and environmental issues for rural areas and small towns; and concerns related to sustainability of rural livelihoods and communities. Spring, even-numbered years. Prerequisite: GEOG 104/114 or GEOG 110 or permission of instructor.

**GEOG 454 Geography of Tourism** 3 cr.
A review of the geographical distribution of tourism, travel patterns and tourism impacts on natural environments and local populations. Variable. Prerequisite: GEOG 104/114 or GEOG 110 or permission of instructor.

**GEOG 455 Tourism Planning** 3 cr.
Planning activities associated with the development and marketing of tourism activities. Consideration of both business and leisure travel. Group project focus. Variable. Prerequisite: GEOG 454.

**GEOG 460 Natural Hazards in the Physical Environment** 3 cr.
Study of hazards to human society arising from wind, water and earth either independently or from human activities. Perception, prevention and mitigation of hazards; spatial distribution and impact on global populations. Fall. Prerequisite: GEOG 103 or permission of instructor.

**GEOG 469 Principles of Atmospheric Science** 3 cr.
Introduction to forecasting, weather models, and physical dynamics of the atmosphere. Large-scale processes and horizontal flow, small-scale processes and the vertical dimension, Newton’s laws of Motion, conservation of mass and energy, radiation, thermodynamics, and angular momentum. Spring of odd numbered years. Prerequisite: GEOG 205/PHSC 205 or GEOG405 and MATH109, or permission of instructor. MATH119 recommended.

**GEOG 470 Environmental Restoration** 4 cr.
Principles and methods for soil and water management related to surface land disturbances. Methods for calculating storm runoff and erosion, design of flow conveyances and water detention basins, and computer assisted modeling. Three hrs. lecture and 2 hrs. lab. Variable. Prerequisites: Completion of GEOG 103 and GEOG 275, or permission of the instructor.

**GEOG 471 Engineering for Land Development** 3 cr.
Basic engineering techniques used in designing landforms, drainage systems, and roadways for land development projects. An overview of project development, equipment and management strategies. Two hrs. lecture, 2 hrs. lab. Spring. Prerequisites: Completion GEOG 103 and GEOG 275, or permission of the instructor.

**GEOG 472 Environmental Planning** 3 cr.
Principles and methods used in environmental assessments and site analysis. Students will prepare an environmental impact statement, site development plan or mine reclamation plan. Two hrs. lecture, 2 hrs. lab. Variable. Prerequisite: GEOG 103 (or 113) or permission of the instructor. Capstone for Environmental Analysis and Planning major.

**GEOG 473 Environmental Law** 3 cr.
A survey of federal and state environmental laws and regulations. History and role of environmental regulation related to air and water pollution, waste disposal and resource development. Fall. Prerequisite: GEOG 103/113 or junior standing.

**GEOG 475 Advanced Geomorphology** 3 cr.
Investigation of the synergy between the processes of aeolian (wind), hydrologic (water), tectonic (geologic) and the cryosphere (snow and ice) that shape the surface of the Earth. Exploration and classification of landforms by laboratory and field data utilizing and undertaking techniques such as; geomorphological mapping, sedimentology, environmental evidence and numeric models. Field trips to apply and practice data collection methodologies are required. Two hrs. lecture, 2 hrs. lab. Spring, odd-numbered years. Prerequisites: GEOG 103 (or 113) and GEOG 207 or 208 or permission of instructor.

**GEOG 477 Advanced Geology** 3 cr.
An in-depth examination of the Earth’s origin, interior, and crustal materials: the geologic processes which have built up, deformed, weathered and eroded the crust throughout deep time: the environmental interrelationships between humans and geologic processes and resources. By examining relating evidence of geologic processes, it is possible to examine the factors that initiate, drive and determine planetary evolution. Field component required. Two hrs. lecture, 2 hrs. lab. Spring, even-numbered years. Prerequisite: GEOG 207, or permission of the instructor.

**GEOG 480 The Geographic Perspective** 3 cr.
The historical development of geographic thought with an emphasis on how geographers structure research questions. Spring. Prerequisite: junior standing and 18 hours of geography completed.

**GEOG 481 Geography Capstone** 1 cr.
Creation of a portfolio comprised of student work that demonstrates achievement of the established learning goals for the Geography major. Every semester. Prerequisite: Senior standing or permission of department chair.

**GEOG 482 Senior Project (I)** 3 cr.
First stage of the Senior Project, preparation and development of project design, identification of appropriate research methods, detailed project plan, initial background research (literature review) and preliminary data collection. Presentation in written report. Graded A/F. Every semester. Prerequisite: Senior standing, minimum 15 hours of geography, GEOG 380 or permission of instructor.

**GEOG 483 Senior Project (II)** 3 cr.
Concluding stage of the Senior Project. Collection, presentation, analysis, interpretation, discussion and conclusions of original research by written thesis and oral exhibition. Graded A/F. Every semester. Prerequisite: GEOG 482.

**GEOG 485 Senior Project** 1 cr.
Capstone project in Urban and Regional Planning. Completion of independent project with public presentation of findings. Grade P/F. Every semester. Corequisite: GEOG 421 or GEOG 450.

**GEOG 486 Earth Science Capstone** 1 cr.
Capstone portfolio in Earth Science. Collection of students’ work that demonstrates achievement of established learning goals for Earth Science program. For professional application. Every semester. Prerequisite: Senior standing or permission of department chair.
**Global Business**

**INTR 330 International Business**
3 cr.
Introduction to foreign commerce; survey of the environmental, economic, political and social constraints on doing business abroad; discussion of issues and problems facing managers when firms do business with and within foreign countries. Credit cannot be earned for both INTR 330 and BUAD 330. Fall. Prerequisite: 42 credits.

**INTR 490 Special Topics in Global Business**
3 cr.
Research or applied experience on an announced selected topic. Topics vary from semester to semester. Variable. Repeatable for a maximum of six credits if the topics are substantially different. Prerequisites: 75 credits and permission of instructor.

**Health & Wellness Education**

**HPED 103 Foundations of Physical Education**
3 cr.
Theories and practices guiding instructional planning in physical education. Foundational knowledge for FSU physical education content and pedagogy courses. Fall. Prerequisite: Major in Health and Wellness Education.

**HPED 104 Foundations of Health Education**
3 cr.
Introduction to theories and practices guiding professional health educator responsibilities and competencies in a skills-based health education program. Spring. Prerequisite: Major in Health and Wellness Education.

**HPED 101 Teaching Fitness**
3 cr.
Content and pedagogy related to teaching fitness in elementary and secondary physical education. Fall. Prerequisite: HPED 103.

**HPED 102 Teaching Tactical Games I**
3 cr.
Content and pedagogy related to teaching invasion games and target games in elementary and secondary physical education using the tactical games model. Spring. Prerequisite: HPED 103.

**HPED 103 Teaching Tactical Games II**
3 cr.
Content and pedagogy related to teaching net/wall games and striking/fielding games in elementary and secondary physical education using the tactical games model. Fall. Prerequisites: HPED 103, HPED 202.

**HPED 204 Teaching Dance and Gymnastics**
3 cr.
Content and pedagogy related to teaching dance and gymnastics in elementary and secondary physical education. Spring. Prerequisite: HPED 103.

**HPED 205 Teaching Outdoor Adventures and Group Initiatives**
2 cr.
Content and pedagogy related to teaching outdoor adventures and group initiatives in elementary and secondary physical education. Fall. Prerequisite: HPED 103.

**HPED 208 Inclusion Strategies in Health Education**
1 cr.
Differentiating instruction for students in health education. Includes a field experience. Fall. Prerequisite: HPED 104.

**HPED 230 Assessment Design in Health & Physical Education**
3 cr.
Cognitive, affective and psychomotor domain assessments for health and physical education following national and state standards. Follows Bloom's Revised Taxonomy. Spring. Prerequisite: HPED 104.

**HPED 232 Teaching Substance Abuse and Safety & Violence Prevention**
2 cr.
Content and theory in the teaching of drug addiction and prevention education, safety and violence prevention in a skills-based school health education program. Includes instruction on awareness and prevention of sexual abuse and assault. Fall. Prerequisite: HPED 104.

**HPED 233 Teaching Family Life and Human Sexuality & Mental & Emotional Health**
3 cr.
Content and theory in the teaching of family life and human sexuality and mental and emotional health in a skills-based school health education program. Spring. Prerequisite: HPED 104.

**HPED 234 Teaching Disease Prevention and Control and Healthy Eating**
3 cr.
Content and theory in the teaching of disease prevention and control and healthy eating in a skills-based school health education program. Fall. Prerequisite: HPED 104.

**HPED 301 Applied Biomechanics**
3 cr.
Mechanics of human motion – muscles and joints. Emphasis on the teaching of various physical principles through the study of human motion. Biomechanical relationship in the upper and lower extremities, and the vertebral column. Spring. Prerequisite: BIOL 211.

**HPED 309 Wellness and the Whole Child**
3 cr.
Principles and practices of educating the whole child within the Whole School, Whole Community, Whole Child (WSCC) Model. Emphasis on skills-based health education at the elementary school level. Topics include social-emotional learning (SEL), infusing movement into Common Core lessons, school wellness policies, and teaching sensitive topics. Every semester, summer.
**Health**

**HEED 100 Personal Wellness** 2 cr.
Students will be assisted in developing an understanding of and appreciation for the importance of including lifelong wellness practices and physical activities in their daily lives. Students plan, implement and evaluate own wellness plan. Every semester.

**HEED 485 Internship in Health Promotion** 9 cr.
Special work experiences related to the health promotion academic program. Full-time students must register for a minimum of 9 credit hours of internship. Graded P/F. Variable. Prerequisite: Completion of 90 credit hours or more with a “C” or better in the concentration and senior status.

**Health Promotion**

You may not receive credit for both a HLTH course and the same course formerly labeled HEED or PHEC.

**HLTH 101 Community Health Promotion** 3 cr.
Introduction to the profession, theories, and practice of health promotion. Spring.

**HLTH 125 Health and Culture** 3 cr.
An examination of personal and community health issues and problems as experienced across the cultural landscape of the United States. Fall. GEP Group F.

**HLTH 330 Epidemiology of Health** 3 cr.
Examination of the contributions of lifestyle, genetics, environmental and social factors, and health care access to health and well-being of individuals and populations. Fall. Prerequisite: HLTH 101.

**HLTH 405 Sexuality** 3 cr.
Content and topics related to sexual and reproductive health relative to the individual and society. Every semester.

**HLTH 430 Methods & Materials for Health Promotion** 3 cr.
Development of skills to formulate program goals, delineate program objectives, employ a variety of educational techniques, select resources, and integrate behavior change strategies for individual and population-based health education and promotion programs. Fall. Prerequisites: Senior standing.

**HLTH 435 Health Promotion Programming** 3 cr.
Development and application of skills in planning, implementation, and evaluation of multi-level health promotion programs. Variable. Fall. Prerequisite: Senior standing.

**HLTH 483 Field Experience in Community Health Education** 6 cr.
Field experience in community health education. Sites of study may vary. Offered as needed. Prerequisite: permission of instructor.

**Health Science**

**HSCI 101 Medical Terminology** 3 cr.
Discussion of medical terminology, symbols and abbreviations, and the application of this new language in the field of health care. Focus is on medical vocabulary and being able to construct terms using word parts such as roots, suffixes and prefixes as they relate to body structure and function. Fall and summer. Online.

**HSCI 425 Biostatistics** 3 cr.
Introduction to statistical methods used in public health, epidemiology, and clinical trials. Applications of probability, descriptive statistics, hypothesis testing, and regression analysis to biomedical data. Experimental design and ethical
considerations. Use of statistical software. Fall, even-numbered years. Prerequisites: BIOL 149 and either MATH 109/110 or MATH 280, or permission of instructor.

**HSCI 491 Health Science Seminar** 1 cr.
Demonstration of disciplinary knowledge in a seminar format of one topic or area of health science selected by the instructor. Repeatable for maximum of 4 credits if topics are substantially different. Fall. Prerequisite: senior standing. Health Science Capstone.

## History

**HIST 100 The Contemporary World in Historical Perspective** 3 cr.
A consideration of major historical developments of the last century in diverse areas of the world that illuminate contemporary problems. Every semester. GEP Group B or F.

**HIST 103 History of the United States to 1876** 3 cr.
Survey of the political, social, economic, and diplomatic trends in United States history from 1492 until 1876. Fall.

**HIST 104 History of the United States, 1876 to the Present** 3 cr.
Survey of the political, social, economic, and diplomatic trends in United States history from 1876 to the present. Spring.

**HIST 111 Honors: The Contemporary World in Historical Perspective** 3 cr.
A consideration of major historical developments of the last century in diverse areas of the world that illuminate contemporary problems. Both reading and writing assignments are more challenging than those in HIST 100. Credit cannot be earned for both HIST 100 and HIST 111. Every semester. Prerequisite: enrollment in the Honors Program or permission of the instructor. GEP Group B or F.

**HIST 113 World History to 1500** 3 cr.
Survey of Western and Non-Western Civilizations and cultures from the earliest times to 1500. Fall.

**HIST 114 World History, 1500-1900** 3 cr.
Survey of Western and non-Western Civilizations and cultures from 1500 to 1900. Spring.

**HIST 290 Special Topics in History** 3 cr.
A study of an historical topic, problem, or period allowing for more specific focus and greater depth than is possible at the 100-level. Variable. Repeatable for maximum of 6 credits if topics are substantially different.

**HIST 299 Writing and Research in History** 3 cr.
The study and practice of the techniques of historical research and writing. Completion of this course with a C or better is required for final admission to the History major. Fall. Prerequisite: complete at least one of HIST 103/104/113/114 and enroll concurrently with or soon after completing at least one 300–400 level course.

**HIST 301 Traditional Africa** 3 cr.
The African pre-colonial states: their governments, economic systems, cultural patterns, achievements, and relations with other African and non-African peoples. Also offered as AAST 300. Spring.

**HIST 303 History of Latin America to 1825** 3 cr.
Earlier Latin American history: Aztecs, Incas, and Mayas, the Age of Conquest, the colonial period and the struggle for independence. Variable.

**HIST 304 History of Latin America, 1825 to the Present** 3 cr.
Later Latin American history: the development of the Latin American nations from independence until the present. Variable.

**HIST 306 Medieval Europe** 3 cr.
A topical survey of European history and Europe's interactions with its neighbors from the 5th century to about 1300. The environmental, economic, social, political, and cultural factors that made for a distinctive civilization in Europe and provided the foundations for future developments in European history. Variable.

**HIST 307 Renaissance and Reformation Europe** 3 cr.
The political, economic, and cultural transformation of Europe from medieval (1300) to early modern (1600). Emphasis on cultural innovation (Renaissance) and religious diversity and conflict (Reformation). Variable.

**HIST 308 Europe, 1600-1815** 3 cr.
European history from 1600 through Napoleons. The political, social, economic, and cultural development of Europe from a traditional society to the beginnings of the modern period. Variable.

**HIST 310 Ancient Greece and Rome** 3 cr.
Bronze Age, Archaic, and Classic civilizations of Greece; Alexander and Hellenistic era; early Italy and the Etruscans; Roman republic and empire; fall of Rome. A balance of political, cultural, socio-economic aspects, and interactions with neighboring peoples. Variable.

**HIST 341 The Modern and Contemporary Middle East** 3 cr.
The religious and secular history of the Middle East from the late 19th century to the present era. National and international aspects of the region before, during, and after the Western imperial thrust into the area. Variable.

**HIST 353 Contemporary Africa** 3 cr.
The 20th-century emergence of representative African nations; the achievements of these nations; their current political, economic, and social problems. Variable.

**HIST 360 Modern and Contemporary Asia** 3 cr.
The rising spirit of nationalism, colonial resistance movement, reactions of the imperial powers, and the emergence of new nations against the background of the old cultures. The economic, political, social, and diplomatic implications of the change. Variable.

**HIST 376 Modern Europe** 3 cr.
European history in the modern period, from the Napoleonic era (1799-1815) to present day, with particular attention to geographic, historical, political and economic distinctions between western and eastern Europe. Variable.

**HIST 403 Imperial Russia** 3 cr.
The political, economic, social and cultural history of the Russian empire, from its roots in the nineth-century Kievan state to its fullest expansion under the last Romanov tsar, Nicholas II. Variable.

**HIST 404 Revolutionary and Soviet Russia** 3 cr.
Russia since the revolution of 1905: political developments, both domestic and foreign; economic system, organization; social and cultural evolution. Variable.

**HIST 409 World Environmental History** 3 cr.
Survey of the changing relationships between humans and the natural world from the 15th century to the present. Global study of the changing economic, social, cultural, and environmental human perspectives over time, as well as consideration of how humanity has been shaped by the natural world. Variable.
HIST 418 Native Peoples of the Americas 3 cr.
Survey of the history of Native American peoples in the Western Hemisphere from pre-Columbian times to the present. The impact of Europeans on native societies and cultures and the natives’ relationships with the emerging nation-state. Variable. GEP Group F.

HIST 419 A History of Terrorism 3 cr.
The study of terrorism, or conspiratorial political violence that targets the few to gain the attention of the many, in historical context. A consideration of political, economic, social and cultural factors in the evolution of terrorism as a global phenomenon. Variable.

HIST 420 Green: Environment and Economy in US History 3 cr.
Environmental history of colonial America and the United States (1607–Present). Particular attention paid to the impact of economic development on the natural world, the politics of conservation, and the changing ecology of daily life. Variable.

HIST 421 Public History 3 cr.
An introduction to the ideas and methods of public history, emphasizing practical application of research, writing and critical thinking skills in the public sector. Variable.

HIST 431 Women in the United States 3 cr.
The history of women in colonial North America and the United States from the pre-contact period to the present, emphasizing the varieties of women’s experiences and the importance of race, ethnicity and class differences. Topics include the family and motherhood, women’s education, women’s labor, women’s involvement in political and social movements, and expressions and regulations of female sexuality. Variable.

HIST 432 Women’s Issues in World History 3 cr.
The historical study of the major issues affecting women’s lives in the modern age (18th-21st centuries) and across multiple cultures. Variable. GEP Group F.

HIST 433 History of Korea 3 cr.
Survey of Korean history from the foundations of society on the peninsula to modern times. Looks at how Koreans have utilized their historical memory to define themselves. Variable.

HIST 434 History of Maryland 3 cr.
Survey of Maryland history from its founding until the present. Variable.

HIST 435 History of Mexico 3 cr.
The development of Mexican society from the pre-Columbian period to the present. The Aztec and Mayan civilizations, the implanting of Spanish control, the origins of the Mexican Revolution and its long-range impact. Variable.

HIST 436 Latin American Revolutions 3 cr.
Twentieth-century revolutions in Latin America. Theories of revolution, the causes, leaders and followers, post-revolutionary developments and the international consequences of Latin American revolutions. Variable.

HIST 437 History of India 3 cr.
The philosophical, political, economic, and diplomatic evolution of India from antiquity until the present. Variable.

HIST 438 History of China 3 cr.
Social, political, economic, and diplomatic aspects from the prehistoric and early dynastic era to the current age. Variable.

HIST 439 History of Japan 3 cr.
Social, political, economic, and diplomatic aspects from the prehistoric and early dynastic era to the current age. Variable.

HIST 440 Colonial North America, 1492-1754 3 cr.
From the beginning of contact between Europeans and Native Americans in North America, examining Spanish, French, Dutch, English, and African influences in the establishment of American colonies. European backgrounds, religious developments, economic development, growth of slavery, regional differences, relations with indigenous peoples, and evolution of cultures. Variable.

HIST 441 Revolutionary America, 1755-1799 3 cr.
From the beginning of the French and Indian War to the Adams Presidency. Focusing on the transformation of British rule following the French and Indian War, development of anti-imperial protest, revolution and independence, crises of the 1780s, formation of the United States Constitution and its political and economic consequences in the 1790s. Variable.

HIST 442 The Early American Republic, 1800-1848 3 cr.
From the Jeffersonian revolution of 1800 to the Mexican-American War. Topics include the conflict between Hamiltonian and Jeffersonian philosophies of government; the evolution of American political parties; the rise of and reaction to Jacksonian populism; social, economic, and cultural conflicts over slavery, abolitionism, Indian removal, transportation, westward expansion, and the growing sectional divide. Variable.

HIST 443 Military History 3 cr.
The historical study of military history and warfare in the American and world context, emphasizing wars, battles, and military history of battle. Variable.

HIST 444 United States in the 20th Century, 1945-Present 3 cr.
The Truman, Eisenhower, and Kennedy Years; the Cold War and McCarthyism; the various 1960s civil rights struggles and countercultural movements; Johnson and Vietnam; Nixon and Watergate; the Reagan era; and more recent key events in international relations. Variable.

HIST 445 Gilded Age America, 1877-1913 3 cr.
From the presidency of Hayes through the Progressive Era: the labor movement, growth of the city, immigration, imperialism, art and architecture, and politics. Variable.

HIST 446 United States in the 20th Century, 1914-1945 3 cr.
The home front during World War I, postwar reaction, the 1920s, the Stock Market Crash, the Great Depression, the New Deal, and American society during World War II. Variable.

HIST 447 The U.S. in the 20th Century, 1945-Present 3 cr.
The Truman, Eisenhower, and Kennedy Years; the Cold War and McCarthyism; the various 1960s civil rights struggles and countercultural movements; Johnson and Vietnam; Nixon and Watergate; the Reagan era; and more recent key events in international relations. Variable.

HIST 448 America and the Vietnam War 3 cr.
An interdisciplinary study of the origins, development and consequences of the United States involvement in Vietnam from 1950-1975, with emphasis on political and social history. Variable.

HIST 449 Genocide and Mass Violence 3 cr.
Genocides of the modern era from that of the Herero of German Southwest Africa (early 20th century) to that of Darfur in the Sudan (early 21st century). Variable.

HIST 450 The American West 3 cr.
The West from the Mississippi River to the Pacific, including Alaska, emphasizing the 19th century. Spanish exploration; the fur empire; Indian assimilation and extinction; the cowboy’s frontier; mining frontier; women in the West; the myth of lawlessness; the West in art, literature, and song; the 20th century West. Variable.
HIST 481 Experiential History/International  
3 cr.
Experiential exploration of various topics in international history through student re-enactment using role playing/game models. Taught in rotation by interested faculty. Repeatable for a maximum of 6 credits if topics are substantially different. Variable.

HIST 482 Experiential History/Americas  
3 cr.
Experiential exploration of various topics in Americas history through student re-enactment using role playing/game models. Taught in rotation by interested faculty. Repeatable for a maximum of 6 credits if topics are substantially different. Variable.

HIST 484 Practicum in History  
3 cr.
Practical experience in public history through placement with an organization or agency for the purpose of completing a specific project. May be repeated once for credit in a different placement. Variable. Repeatable for maximum of 6 credits if placement sites are substantially different.

HIST 485 Seminar in History  
3 cr.
Topics in history presented by students, faculty, and invited guests. Individual research (senior thesis) with interim reports and formal presentation of paper. Discussion leadership expected. Spring. Prerequisite: completion of HIST 299 with a C or better and senior standing. Capstone.

HIST 488 Special Topics in International History  
3 cr.
A detailed study of a limited topic, problem, or period in European/African/Asian history. Topics vary from semester to semester. Variable. Repeatable for maximum of 6 credits combined of HIST 489 and HIST 390 if topics are substantially different.

HIST 489 Special Topics in History of the Americas  
3 cr.
A detailed study of a limited topic, problem, or period of North or South American history. Topics vary from semester to semester. Variable. Repeatable for maximum of 6 credits if topics are substantially different.

HIST 492 Internship Seminar  
3 cr.
Academic component of internship. Requires co-registration in 495. Graded A-F. Normally Summer. Prerequisite: junior or senior status, in good academic standing, submission of Internship Agreement form to internship director prior to registering.

HIST 493 Internship in History  
6-12 cr.
Experiential component of internship: guided work experience in conjunction with 492; must directly relate to academic program. Full-time interns register for 12 credits in 495 and 3 credits in 492 and may not enroll in other courses. Part-time interns register for 6 credits in 495 and 3 credits in 492. Graded P/F. Normally Summer. Prerequisites: junior or senior status, in good academic standing, submission of Internship Agreement form to internship director prior to registering.

HIST 498 Readings in History  
3 cr.
Directed readings in some specialized area or topic of history. The topic must relate to an upper level history course previously taken in that area. Normally limited to seniors majoring in history with at least a 3.0 GPA in all history courses. Permission of advisor, instructor, and chair of the department must be secured during the preceding semester. In exceptional circumstances, may be repeated once for credit. Intersession and Summer. Repeatable for maximum of 6 credits.

HIST 499 Individual Research in History  
3 cr.
The preparation of a research paper under the direction of the History Department. The topic must relate to an upper level history course previously taken in that area. Normally limited to seniors majoring in history with at least a 3.0 GPA in all history courses. Permission of advisor, instructor and chair of department must be secured during the preceding semester. In exceptional circumstances, may be repeated once for credit. Intersession and Summer. Repeatable for maximum of 6 credits.

Information Technology

ITEC 312 Human-Computer Interaction  
3 cr.
Basic concepts of human-computer interaction, human factors, performance analysis, cognitive processing, usability studies, human-centered software, accessibility, emerging technologies, developing effective interfaces. Fall. Prerequisites: Grade of C or better in COSC 130 and PSYC 150/151.

ITEC 315 Programming  
3 cr.
Fundamental data structures including the use of stacks, queues, graphs and trees; fundamental programming constructs including basic syntax and semantics; object oriented programming; algorithms and problem solving; event-driven programming; recursion. Every semester. Prerequisites: Grade of C or better in COSC 100/110 or grade of C or better in COSC 101 and COSC 130 or permission of the instructor.

ITEC 345 Database Systems I  
3 cr.
Introduction to principles of database development focusing on major business functions and benefits of databases, database planning, database models, database design, and database applications. Learn how to approach a real world database project, convert the project requirement to a design and finally implement using a commercial database management system. Every semester. Prerequisite: Grade of C or better in ITEC 315.

ITEC 355 Network Implementation  
3 cr.
Foundations of networking, LANs, WANs, service providers, packets, hubs, routers, switches, Internet protocols, layered models, physical layer, security, and application areas. Every semester. Prerequisite: Grade of C or better in COSC 102 and ITEC 315.

ITEC 360 Operating Systems  
3 cr.
Fundamentals of operating systems including both Unix and Windows operating systems; architecture and organization; computing infrastructure; enterprise deployment software; firmware; hardware; installation; maintenance; administrative activities; administrative domains. Every semester. Prerequisites: Grade of C or better in COSC 102 and ITEC 315.

ITEC 410 Diversity in the Global Information Technology  
3 cr.
Issues and influences that information technology (IT) has had on the global society and culture. Changing nature of work, education, government, culture, and society around the world; place of professionals entering the global IT workforce. Global ethical issues such as intellectual property rights, computer-related crime, privacy concerns, public policy issues, and IT influences on global economics. Variable. Prerequisite: Grade of C or better in COSC 305.

ITEC 414 Knowledge Management  
3 cr.
Basic concepts, skills, tools, techniques, and practices of knowledge management in the context of information sciences and information technology. Technologies including intranets, groupware, web logs, content management systems, and collaborative tools in both individual and organizational contexts. Use these KM technologies, review case studies, research methods of knowledge organization, and analyze and evaluate KM processes and systems. Variable. Prerequisite: Grade of C or better in ITEC 315.

ITEC 442 Electronic Commerce  
3 cr.
Develop knowledge of E-commerce concepts and terminology. E-marketplaces, E-commerce economic impacts, market research, company-centric B2B, E-supply chain, corporate portals, E-government, E-learning. Introduction to implementing an E-commerce system. Every semester. Prerequisite: Grade of C or better in ITEC 315 or COSC 241.
ITEC 445 Database Systems II  
Advanced topics such as database security, importing and exporting data, creating indexes and views, script writing, and performing administrative tasks on a database server. An advanced project implementation is required. Fall. Prerequisite: Grade of C or better in ITEC 345.

ITEC 452 Network and Administration Security  
Basic network management, network configurations; routing fundamentals, basic router troubleshooting; introduction to network security; protocols for security services; securing network systems and applications: email security, web security, IP security and VPN, remote secure login, security in routing, firewalls. Fall. Prerequisite: Grade of C or better in ITEC 355.

ITEC 462 Emerging Issues and Technologies  
Introduction to emerging issues, technology forecasting and analysis; overview of emerging issues and leading technologies in information technology and how they impact information systems, users, the IT labor force and society. Variable. Prerequisite: Grade of C or better in ITEC 360.

ITEC 470 Security and Risk Management  
Security issues, issues management processes, architecture and models; risk analysis and management; security planning, analysis and safeguards; security policies development and administration; contingency planning, incidence handling and response; security standards and certification processes. Spring. Prerequisite: At least 72 credits earned or permission of the instructor.

ITEC 472 Ethical Hacking  
Common network attacks methodologies, hands-on penetration testing technologies on wired and wireless networks, and web applications, countermeasures to attacks, customized security scripting and real-world case studies. Every spring. Prerequisite: Grade of C or better in ITEC 355.

ITEC 475 Computer and Cyber Forensics  
Fundamental issues and concepts of computer forensics; aspects of computer and cyber crime; methods to uncover, protect, exploit, and document digital evidence; tools, techniques, and procedures to perform computer and cyber crime investigation. Spring. Prerequisite: Grade of C or better in ITEC 355 or ITEC 360.

ITEC 480 Project Management  
Basic concepts, skills, tools, techniques, and practices of project management in the context of information technology planning and managing information technology projects. Basic phases of the project management life-cycle: Initiating, Planning, Executing, Controlling, Closing. Fundamental project management knowledge areas: Integration, Scope, Time, Cost, Quality, Human Resources, Quality, Risk, and Procurement. Practical experience via usage of project management software tools. Spring. Prerequisites: At least 72 credits earned or permission of the instructor.

ITEC 489 Capstone  
Creation of professional vita, formation of portfolio consisting of student’s best examples of programs and research papers. Amalgamation of curricular concepts into a unified entirety. Every semester. Prerequisites: At least 72 credits earned and completion of all core courses and a grade of C or better in at least two required advanced courses.

ITEC 491 Seminar in Information Technology  
Group study of advanced topics under faculty supervision; up to 3 credits can apply to major or minor in information technology. Repeatable for a maximum of 6 credits if topics are substantially different; up to 3 credits count towards major or minor. Variable. Prerequisites: Grade of C or better in core courses and written permission of faculty supervisor. DEPARTMENT APPROVAL REQUIRED PRIOR TO REGISTERING.

ITEC 494 Field Experience in Information Technology  
Work experience in industry, government, or small business providing an opportunity for practical application of academic training in information technology. The course requirements are: (1) Minimum of 50 hours of field experience; (2) A written report describing in detail the work performed in the field in conjunction with an oral presentation to interested faculty and students; (3) A project paper on a topic related to the work experience. Previous work experience may be substituted for this course. More than one field experience may be completed, but the number of credits applied to an information technology major is limited to 3. Repeatable for maximum of 6 credits if placement sites are different; up to 3 credits count in the major. Every semester. Prerequisites: Junior or senior standing (at least 60 credits earned) and completion of the core courses in information technology with a grade of C or better. DEPARTMENT APPROVAL REQUIRED PRIOR TO REGISTERING.

ITEC 499 Individual Problems in Information Technology  
Individual study of advanced topics under faculty supervision; up to 3 credits can apply to major or minor in information technology. Students must submit a written proposal to faculty supervisor and department describing topics, time allocation and limitation, objectives, assignment, and projects. Repeatable for maximum of 6 credits; up to 3 credits count towards major or minor. Variable. Prerequisites: Grade of C or better in core courses and written permission of faculty and supervisor. DEPARTMENT APPROVAL REQUIRED PRIOR TO REGISTERING.

Integrated Math/Science

SCIE 320 Integrated Science  
Introduction to underlying principles and themes common to all scientific disciplines including biology, physics, chemistry, earth science and astronomy. Appropriate mathematical topics integrated into all aspects of course. Includes laboratory activities, field experiences and computer exercises; exploration of current software, multi-media, instrumentation and telecommunication; application of technology to science emphasized. Three 2 hr. lecture/lab/discussion. Variable. Prerequisites: BIOL 149, MATH 207 and PHSC 203 or permission of instructor.

SCIE 321 Integrated Science/Mathematics  
Continuation of Integrated Science with emphasis on mathematical modeling. Application of technology to science and mathematics emphasized. Collaboration with students at sister institutions using electronic media encouraged. Two 2-hr. lecture/lab/discussion. Variable. Prerequisite: SCIE 320 or permission of instructor.

SCIE 335 Oceanography  
Basic principles of oceanographic science and discussion of the role of oceans in global environmental systems. Fall, even-numbered years. Also offered as GEOG 335. Prerequisites: GEOG 103(or 113), BIOL 149 and completion of a college-level mathematics course.

SCIE 400 Issues in Context: From Specialist to Generalist  
Interdisciplinary capstone research seminar led by a team of science, mathematics and education faculty. Students work cooperatively on extended project dealing with a complex societal problem of scientific and technological import. Upon conclusion of study, a policy recommendation will be written and delivered in public form. Active engagement in project design, implementation, analysis and reporting. Variable. Prerequisites: two lab science courses including PHSC 203; MATH 207; and junior standing; or permission of instructor.
Interdisciplinary Studies

**IDIS 150 First-Year FSU Colloquium** 3 cr.
Fostering a Sense of Understanding through exploration of a current issue, theme, problem, person or persons, cultural or historical period, world area or national region, or other unifying principle through interdisciplinary study, discussion and activities. Every semester. To be completed within first 45 hours or soon after transfer if applicable. GEP Group E.

**IDIS 155 Introduction to Sustainability Studies** 3 cr.
Introduction to sustainability as a field of study and a career. Consideration of environmental, economic and social equity aspects of sustainable living. Group practicum project. Three hr. lecture, two Saturday group projects required. Also offered as SUST 155. Every semester. GEP Group E.

**IDIS 160 Science, Technology and Society** 3 cr.
Interdisciplinary examination of models of research, development of science and technology, and application and subsequent impact of developments on society and the environment. Every semester. GEP Group C.

**IDIS 191 Freshman Project** 3 cr.
Continuation of fall semester FSU Connections learning communities for first-year students. Real-world or laboratory application of theoretical constructs and interdisciplinary perspectives acquired by students enrolled in FSU Connections the previous fall. Student projects will culminate in a product (e.g., video presentation, display, artistic work, etc.) presented to the University community at the end of the semester. Spring. Prerequisites: first-year standing, learning community member during the previous fall semester and permission of instructors.

**IDIS 350 Advanced FSU Colloquium** 3 cr.
Fostering a Sense of Understanding through exploration of a current issue, theme, problem, person or persons, cultural or historical period, world area or national region, or other unifying principle through interdisciplinary inquiry and research. Every semester. To be completed after earning 45 hours. GEP Group E.

**IDIS 495 Interdisciplinary Experience** 1-12 cr.
Supervised field experience. Academic requirements include proposal and application, log/journal; paper/report; and site supervisor performance appraisal. Repeatable for up to 12 credits. Every semester.

Honors Program

Repetition of Honors Program courses requires the permission of the Honors Program Director.

**IDIS 151 Honors: First-Year Colloquium** 3 cr.
Fostering a Sense of Understanding through exploration of a current issue or other unifying principle through interdisciplinary study, discussion and activities. Activities emphasize student discussions of assigned readings, oral and written reports. Topics vary. You cannot receive credit for both IDIS 151 and IDIS 150. Repeatable for maximum of 6 credits if topics are substantially different. Prerequisites: Participation in the Honors Program and junior or senior standing or permission of the instructor(s). GEP Group E.

**IDIS 351 Honors: Advanced FSU Colloquium** 3 cr.
Fostering a Sense of Understanding through exploration of a current issue, theme, problem, person or persons, cultural or historical period, world area or national region, or other unifying principle through interdisciplinary study, discussion and activities. To be completed after earning 45 hours. Activities emphasize student discussions of assigned readings, oral and written reports. Topics vary. You cannot receive credit for both IDIS 351 and IDIS 350. Repeatable for maximum of 6 credits if topics are substantially different. Prerequisites: Participation in the Honors Program and junior or senior standing or permission of the instructor(s). GEP Group E.

**IDIS 491 Honors Seminar** 3-6 cr.
An interdisciplinary study of a particular topic. Activities emphasize student discussions of assigned readings, oral and written reports. Topics vary. Repeatable for maximum of 9 credits if topics are substantially different. Prerequisites: Participation in the Honors Program and junior or senior standing or permission of the instructor(s).

**IDIS 493 Honors Thesis** 3 cr.
Individual research or other individualized learning experience on a specific topic initiated by the student. Course requirements include submission of a final paper or completed project. Pre-registration includes submission of a proposal prior to the end of the preceding semester. Proposal must be approved by the faculty member sponsoring the thesis and the Honors Program Advisory Group. See Honors Program Handbook for additional information. Repeatable for maximum of 6 credits if topics are substantially different. Prerequisites: Participation in the Honors Program, junior or senior standing and proposal approval.

International Studies

**INST 150 Introduction to World Religions** 3 cr.
A comparative introduction to the major world religions in their historical, social, political and cultural contexts. Every semester. GEP Group F.

**INST 200 Introduction to International Studies** 3 cr.
An introductory study of the diverse areas of the world with a focus on contemporary issues and conflicts. Every semester. GEP Group F.

**INST 490 Special Topics in International Studies** 3 cr.
In-depth exploration of a unique topic related to the multidisciplinary field of international studies. Repeatable for a maximum of 6 credits if the topics are substantially different.

**INST 491 Seminar in International Studies** 3 cr.
In-depth examination of topics in international studies through presentations, discussions and the preparation of a seminar paper. Spring. Prerequisites: completion of International Studies core courses and six hours in an area of focus, or permission of the instructor. ENGL 308 is recommended. Capstone.

**INST 492 Internship Seminar** 3-6 cr.
Academic component of internship. Requires co-registration in INST 495. Full-time interns register for 6 credits in 492 and 9 credits in 495 and may not enroll in other courses. Part-time interns must register for 3 credits in 492 and 6 credits in 495. Graded A-F. Normally summer.

**INST 495 Internship in International Studies** 6-9 cr.
Experiential component of internship in conjunction with INST 492. Guided work experience must directly relate to student’s academic program. Full-time interns register for 9 credits in 495 and 6 credits in 492 and may not enroll in other courses. Part-time interns must register for 6 credits in 495 and 3 credits in 492. Graded P/F. Normally summer. Prerequisites: junior or senior standing. GPA of 3.0 recommended; coordinator’s approval of internship required before registering.
Leadership Studies

LEAD 101 Introduction to Leadership Studies 3 cr.
Examines fundamental principles of the emerging discipline of Leadership Studies and develops basic skills for effective leadership in group, organization, and community contexts. Variable.

LEAD 301 Organizational Leadership 3 cr.
Examines traditional and contemporary leadership theories and their application to current leadership challenges in organizations. Variable. Prerequisite: CMST 102 or 122 or permission of instructor.

LEAD 401 Citizen Leadership 3 cr.
Rhetorical and experiential exploration of leadership related to civic engagement and social change that addresses justice and democracy challenges. Focus is on development of practical understandings of interpersonal, team, and global leadership, particularly in community contexts. Variable. Prerequisite: CMST 102 or 122 or permission of instructor.

LEAD 499 Independent Study 4 cr.
Individualized learning experience on a specific leadership topic, culminating in a written paper. Prior to the semester of the project, the student must submit a preliminary proposal to the Coordinator of the Leadership Studies minor, who will assign a mutually agreeable instructor to supervise the student’s project. Variable. Repeatable for maximum of 4 credits.

Liberal Studies

LBST 450 Senior Self-Assessment 1 cr.
Completion of a narrative self-assessment assessing the focus area, program of study, and courses taken. Portfolio presentation. P/F grade. Every semester. Repeatable until passed. Prerequisite: Senior standing. Capstone.

LBST 494 Field Experience in Liberal Studies 3-6 cr.
Completion of a work experience as part of focus in Liberal Studies. Work experience must relate directly to academic program. P/F. Prerequisites: Junior or senior standing. By 12th week of the semester prior to experience, student must submit an application including (1) proposal, (2) letter of acceptance from proposed agency indicating direct supervisor and total number of hours to be worked, (3) agreement to keep a written record of hours worked and reflective journal of each day worked.

LBST 499 Directed Study 3 cr.
Capstone opportunity for Liberal Studies majors: seminar, readings course or independent study. Paper required. Repeatable for up to 6 credits. Every semester. Permission of LBST coordinator required.

Life-Cycle Facilities Management

LCFM 103 Applied CAD 3 cr.
Students will be introduced to basic Computer-Aided Drafting techniques to create and read construction drawings. The course prepares students to utilize AutoCAD (CAD) and Building Information Modeling (BIM) in a coordinated, integrated and consistent approach within the Architecture, Engineering and Construction Industry. Spring.

LCFM 200 Physical Sciences and Materials 4 cr.
Provides an effective outline of the first essential knowledge of the basic principles and concepts of Physics, Chemistry, Materials, and Earth Science. This interdisciplinary course is designed for the science and non-science major, who are interested in applied material science, in order to provide students with an understanding of some of the methods, ideas and accomplishments in the field of Physical Sciences & Materials and their role in the development of civilization. This course can be taken by any major and it has no math requirement. 3 hours lecture; 1-hour lab. Fall.

LCFM 201 Building Materials 4 cr.
Covers the nature, composition, properties, characteristics, and applications of common building materials. The course focuses on principles for the selection of building materials, by providing guidance on the development and production of building materials, in view of life-cycle impacts. A laboratory experience is included and focuses on the analysis and testing of selected construction materials. Fall. Prerequisite: LCFM 200.

LCFM 202 Construction Methods of Structures and Infrastructures 3 cr.
Covers the fundamentals of construction equipment and machinery planning and utilization for large infrastructural projects and architectural components, by investigating the latest technologies, capabilities and real-world applications. Topics such as handling of construction economics, earthworks, soil and rock classification and processing are discussed. Safety procedures and life-cycle considerations are thoroughly explained. Spring.

LCFM 203 Systems Life-Cycle Cost Analysis 3 cr.
Estimated cost of developing, producing, deploying, maintaining, operating and disposing of a system over its life-cycle (from cradle to grave). Covers the life-cycle phases of an asset, project, or product from the acquisition to end-of-life. Methods and tools available for the selection and comparison of project alternatives that fulfill the same performance requirements but differ with respect to initial costs and operating costs, in order to select the one that maximizes net savings. Spring. Prerequisite: ECON 201.

LCFM 204 Durability of Materials 3 cr.
Durability features, methods and estimation techniques for the assessment of deterioration mechanisms of building materials, including concrete, steel, wood, asphalt, masonry and Fiber-Reinforced-Polymer (FRP) composites. The course focuses on tools and methodologies to effectively estimate materials service life and life-cycle implications. Materials diagnosis and remediation measures are investigated. Regulations, standards, specifications, guidelines, and design codes currently available and in development are also discussed. Spring. Prerequisite: LCFM 200.

LCFM 301 Structures in a Resilient World 3 cr.
Review of basic structural principles for structural systems. Basic concepts and design examples are reviewed without in-depth mathematical derivations. Understanding of national, regional, and local infrastructure policies, emphasizing the ability to analyze networks and the environmental and boundary conditions in the context of the structure or infrastructure. Ultimately, students will apply the theory of critical structures resilience to a real-world structure or infrastructure, through a course project package. Scope of the project is to design a structure or infrastructure that address the relevant technical, social, environmental, political and financial dimensions that make a structure more resilient. Fall. Prerequisite: LCFM 201.

LCFM 302 Facility and Maintenance Scheduling 3 cr.
This course covers the basics of planning and scheduling industrial and construction projects, for the continuous life-cycle improvement. Workforce and equipment productivity, optimal resources allocation, preventive maintenance, maintenance cost control, coordination of maintenance schedules with production schedules, and performance improvement are throughout discussed. Fall. Prerequisite: LCFM 202.

LCFM 303 Contracts and Bidding 3 cr.
This course covers the basics of legal aspects, administration, and logistics relevant in the construction industry. Delivery methods, construction contracts, surety bonds, insurance techniques, labor law, and essential techniques for accurate cost estimating and effective bidding are deeply investigated and discussed. Students will be exposed to codes, standards, laws, and regulations crucial for up-to-date managers willing to run a business. Fall. Prerequisite: BLAW 291.
LCFM 304 Environmental Building Systems 3 cr.
The course provides students with tools and methods for planning and building with efficient, sustainable, mechanical, and electrical systems. Concepts such as building envelope and assemblies, plumbing, fixtures and pipes, safety systems, fire safety, emergency and signal systems are discussed. Modern practices and developments within electrical, lighting, telecommunications, plumbing, HVAC, and conveyors systems are throughout investigated, in view of a sustainable design. Spring. Prerequisite: LCFM 201.

LCFM 305 Project Management for Life-Cycle Facilities 3 cr.
Students will be introduced to the efficient planning and controlling of projects. Best practices of life-cycle project management, techniques of work planning, control and evaluation to achieve project goals are investigated. Course will intensively focus on resource allocation, and performance tracking tools that allow project managers to maximize productivity and profits, by reducing waste and minimize expenditures. Spring. Prerequisite: LCFM 203.

LCFM 306 Estimating Life-Cycle Facilities in Context of Climate Change Realities 3 cr.
Generation and selection of life-cycle cost-efficient solutions among valid design alternatives. Long-term performance analysis of facilities under environmental and material constraints. Methods and tools to develop life-cycle cost analyses and elaboration of technical life-cycle cost reports. A course project package is included in the course. Spring. Prerequisite: LCFM 203.

LCFM 401 Sustainable Building Design 3 cr.
Drivers and foundations of sustainable building design. Integrated planning and design, life-cycle view of projects, resource selection and optimization, protection of the natural environment, toxics and pollutants elimination, durability and quality of the construct. Fundamentals and drivers of green building policies, along with current code regulations and impacts. Evaluation of the environmental impacts of structures and infrastructures operations. Innovative design, green construction practices, and their economic feasibility. Case studies will be investigated, and a course project package is included in the course. Fall. Prerequisite: LCFM 201.

LCFM 402 Emerging Technologies in Climate Change Context 3 cr.
Current emerging technologies in construction such as robotics, drones, artificial intelligence, 3D printing, the next step for big data, and the impact of digital technology on money and markets. Related technical practices for the proper management of innovation in construction. Extensive and advanced readings, research, and writing assignments are also included. Fall. Prerequisite: LCFM 201.

LCFM 403 Risk Management 3 cr.

LCFM 404 Life-Cycle Assessment of Building Materials 3 cr.
Environmental sustainability metrics and tools to qualitatively and quantitatively assess the environmental credentials accumulated during any project and/or product life-cycle. This course enables students to develop a full understanding of the frameworks, principles, techniques, and applications of life-cycle assessment (LCA). A course project package is included in the course in order to expose students to apply the knowledge acquired from theory through the use of professional software and databases that address social and environmental impacts. Spring. Prerequisite: LCFM 201.

LCFM 405 Negotiation Strategies 3 cr.
This course is structured in a way to offer hands-on and in-depth information on business negotiation strategies. The course will provide students with practical real-world examples, to better explain many of the negotiation concepts and offers a skills-based approach to complex, yet commonly occurring negotiating situations, such as negotiating with agents, mediation and arbitration, negotiating via email and conference calls, negotiating with competitor companies, and of course, negotiating cross culturally. Spring. Prerequisite: LCFM 303.

LCFM 485 Life-Cycle Facilities Management Capstone 3 cr.
Finalization of the theoretical and practical knowledge gained through the four years. Culmination of prior course work in Life-Cycle Facilities Management. Utilization of modern software, methodologies, and design tools to structure, design, operate, maintain, and dispose of a project from cradle to grave. Spring. Prerequisites: LCFM 204, LCFM 301, LCFM 302, LCFM 305, LCFM 306, and permission of program coordinator.

LCFM 495 Life-Cycle Facilities Management Internship 3 cr.
Supervised field experience for Life-Cycle and Facilities Management majors. Repeatable for up to 12 credits. Prerequisites: LCFM 204, LCFM 301, LCFM 302, LCFM 305, LCFM 306, and permission of program coordinator.

Management
You cannot receive credit for both a MGMT course and the same course formerly labeled BUAD.

HMGT 396 Hospitality Management Special Topics 3 cr.
A detailed study of a limited topic in an area of the hospitality industry. Topics vary semester to semester. Repeatable for maximum of 12 credits if topics are substantially different. Courses provided at foreign exchange partner university. Variable. Prerequisite: HMGT 101 offered by UMES.

MGMT 110 Career and Professional Development I 1 cr.
Introduction to the professional aspects of a career in one of the majors or concentrations offered by the College of Business. Every semester. Prerequisite: Declared major or minor in a College of Business discipline or permission of department.

MGMT 251 Management of Organizations 3 cr.
The practice of managing in today’s dynamic environment, the purpose and processes of organizations, managing individuals and groups in organizations. Emphasis is placed on skills needed for managerial success. Credit cannot be earned for both MGMT 251 and MGMT 351. Every semester. Prerequisite: 24 credits. Additional prerequisite or corequisite: MGMT 110 for all ACCT, BUAD and ECON majors (Business Economics Concentration) only.

MGMT 310 Career and Professional Development II 2 cr.
Provides professional advice for students ending their academic careers and getting ready to embark on professional careers. Also addresses the need for cultural competency and the complexities of managing a business across different cultures. Every semester. Prerequisites: Declared major in a College of Business discipline, 70 credits and C grade or better in MGMT 110.

MGMT 315 New Business Ventures 3 cr.
Examines the problems and challenges of creating and managing a small business. Emphasis on the development and implementation of a business idea, and the practical aspects of starting and managing a small business and its functional components: accounting, finance, management and marketing. Every semester. Prerequisite: 42 credits.

MGMT 355 Operations Management 3 cr.
Introduction to the operations function of a business. Relation between value and efficient operations, forecasting, capacity planning, management of supply chain and materials, quality issues and project management. Every semester. Prerequisites: a grade of C or better in MATH 109/209/110/380, MGMT 251.
MGMT 356 Leadership and Human Behavior 3 cr.
Introduction to leadership theories and concepts; emphasis on applications of leadership qualities and human skills required for managerial success and organizational effectiveness. Every semester. Prerequisite: 42 credits.

MGMT 357 Human Resources Management 3 cr.
Effective utilization of human resources in organizations: Emphasis on principles, practices and legal aspects of job analysis, recruitment and selection, training, performance appraisal, compensation, safety and health, employer-employee rights, union-management relations; current issues in the field. Every semester. Prerequisite: a grade of C or better in MGMT 251.

MGMT 359 Quality Management 3 cr.
The Quality Management concept; relationship between quality and competitiveness; developing a quality culture through establishing a customer focus, employee involvement and empowerment, team building, education and training; quality tools; implementing quality management. Every semester. Prerequisite: a grade of C or better in MGMT 251.

MGMT 360 Business Ethics and Social Responsibility 3 cr.
Business ethics; the relationship of business with society; stakeholder relationships and the social responsibility of business to various constituencies; social, ethical and public policy issues affecting business and the managerial approaches for dealing with these issues. Not open to students who have credit for former BUAD 380 or 480. Every semester. Prerequisite: 42 credits.

MGMT 425 Entrepreneurial Business Plan 3 cr.
Opportunity assessment and feasibility analysis, as well as implementation, deal structure and operations for entrepreneurially-minded FSU students. Each topic is approached from a pragmatic perspective. Class discussions and assignments are based upon live experiences. The lecture, readings and speakers all reflect that purpose. Spring. Prerequisite: MGMT 315.

MGMT 450 International Management 3 cr.
Study of international and comparative management theories, concepts, and practices; managing in a global environment, cross-cultural management practices, managing human resources in international corporations, unique challenges in managing multinational organizations and contemporary issues facing global managers. Spring. Prerequisite: INTR 330 or MGMT 251.

MGMT 452 Staffing and Development 3 cr.
The role of human resource professionals at every stage of the employment process from prehiring to postfiring, staffing policies, internal and external recruitment, HR development strategies and training program development, career management, outplacement programs. Fall. Prerequisite: MGMT 357.

MGMT 456 Compensation Management 3 cr.
The principles of compensation management, job analysis and evaluation, establishment and administration of pay systems, employee benefits, executive compensation. Fall. Prerequisite: MGMT 357.

MGMT 457 Labor Relations 3 cr.
The role of management and unions in our society, labor-management problems and their resolution, the collective bargaining process, the legal framework of labor-management relations, administration of the labor contract. Every semester. Prerequisite: MGMT 357 or major in Law and Society.

MGMT 485 Business Policy and Strategy 3 cr.
Strategy and policy formulation and implementation; effects on various levels of management. Integrating the functions of the enterprise within the social, political, legal and economic environment. A case-study approach requiring both written and oral presentations of case problems. Every semester. Prerequisites: 90 credits and 18 hrs. of business administration, including a grade of C or better in MGMT 251, MKTG 261 and FINA 370 or FINA 476. Accounting, General Management, Human Resource Management, International Business, Small Business/Entrepreneurship Capstone.

MGMT 490 Special Topics in Business Administration - Management 3 cr.
A detailed study of a limited topic, problem or period. Topics vary from semester to semester. Repeatable for maximum of 6 credits if topics are substantially different. Variable. Prerequisites: 90 credits and 18 hrs. of business administration course work.

MGMT 494 Internship in Management 1 - 12 cr.
Guided work experience in management for business, nonprofit or government organizations. Minimum of 45 clock hours of experience for each credit. Academic components include: internship paper, internship log/journal, and site supervisor’s evaluation of the student’s performance. Previous experience not acceptable for credit. Repeatable for maximum of 12 credits. Every semester, winter and summer sessions. Prerequisites: Sophomore standing; department chair's approval.

MGMT 499 Independent Study in Management 1 - 3 cr.
Research and report on a specific topic not covered by regularly rostered courses. Topic will be defined by the student in conjunction with faculty sponsor. Proposals must be approved prior to registration. Repeatable for maximum of 4 credits. Every semester. Prerequisites: 18 credits of business administration course work, 90 credits and permission of department chair.

Marketing

You cannot receive credit for both a MKTG course and the same course formerly labeled BUAD.

MKTG 261 Principles of Marketing 3 cr.
Introduction to basic marketing concepts, strategy and terminology. Focus on understanding marketing as the process of planning and executing the conception, pricing, promotion and distribution of ideas, goods and services. Key concepts include relationship marketing, consumer behavior, global marketing and marketing research. Every semester. Prerequisite or corequisite: MGMT 110 for all ACCT, BUAD and ECON majors (Business Economics Concentration) only.

MKTG 363 Advertising 3 cr.
Focus on planning and managing advertising as a promotional tool to meet marketing goals, understanding the role of advertising in an organization’s integrated marketing communication program, emphasizing strategic planning as a means to effectively communicate with consumers, creating primary demand, selecting and evaluating media in the context of environmental factors related to advertising. Every semester. Prerequisite: a grade of C or better in MKTG 261.

MKTG 364 Branding Strategy 3 cr.
Explores the complexities in development, sustainability, and leverage of a brand; it provides fundamental understanding of how to build, measure, and manage a brand, including: the key elements of crafting and driving brand strategy, creating brand equity, and delivering greater financial results for improved consumer loyalty. Fall. Prerequisite: a grade of C or better in MKTG 261.

MKTG 365 Professional Selling and Relationship Management 3 cr.
Fundamentals of professional selling, including the selling process from pre-approach to post-sale service. Emphasis on the selling process, managing sales personnel and
MKTG 366 Consumer Behavior 3 cr.
Overview of individual and organizational decision-making in the purchase, consumption and disposition of goods and services. Examine factors influencing consumers' decision-making, including internal forces of perception, motivation, learning, personality, lifestyle and attitudes and external forces of culture, demographic, social class, reference group and family. Every semester. Prerequisite: a grade of C or better in MKTG 261.

MKTG 460 Global Marketing 3 cr.
Study the impact of globalization, multilateral trade agreements and national culture and their effect on marketing environment and strategic marketing decision-making. Specific topics include international product adaptation, cross-cultural consumer behavior, multinational distribution, international pricing and integrated marketing communication in the global marketplace. Spring. Prerequisite: a grade of C or better in MKTG 261.

MKTG 462 Marketing Research 3 cr.
Students design a marketing research project, sample the population, collect and analyze data, and interpret the findings. There is an emphasis on performing basic statistical analysis using a hand-held calculator as well as statistical software. Every semester. Prerequisites: a grade of C or better in MKTG 261 and MATH 109/110/380.

MKTG 465 Marketing Strategies 3 cr.
Market analysis, product/service planning, channels of distribution, pricing and promotional decision-making, analysis of environmental constraints and market opportunities using a case-based approach to learning. Every semester. Prerequisites: a grade of C or better in MKTG 261 and MKTG 366.

MKTG 466 Services Marketing 3 cr.
Examines the challenges of marketing services and the importance of the service “product” in the economy. Includes the nature of the service “product” in different industries and the role of customer service. Fall. Prerequisite: a grade of C or better in MKTG 261.

MKTG 467 Digital and Social Media Marketing 3 cr.
Explores emerging business models and examines digital marketing strategy in the new media landscape, specifically an understanding of major digital platforms, like: website, digital display, search engine, social media, and mobile marketing. Use digital and social media to plan, execute, and measure marketing efforts for greater customer engagement. Variable. Prerequisite: a grade of C or better in MKTG 261.

MKTG 469 Marketing Plans Development 3 cr.
Development of complete and formal marketing plan for an existing or new business or an existing or new consumer product/service. Structure encompasses all aspects of contemporary marketing planning from situational analysis, survey research, to action plans, implementation and control. Every semester. Prerequisites: MKTG 366, 462, 465. Marketing Capstone.

MKTG 490 Special Topics in Business Administration – Marketing 3 cr.
A detailed study of a limited topic, problem or period. Topics vary from semester to semester. Fall. Prerequisites: 90 credits and 18 hrs. of business administration course work.

MKTG 494 Internship in Marketing 3 or 6 cr.
Guided work experience in marketing with business, nonprofit or government organizations. Minimum of 135 clock hours of experience for 3 credits or 270 for 6 credits. Academic components include, but not limited to, one internship paper for 3 credits or two internship papers for 6 credit hours, internship log and site supervisor’s evaluation of the student’s performance. Previous experiences are not acceptable for credit. Maximum of 6 credit hours. A 6-credit Internship choice counts as one elective course. Repeatable for maximum of 6 credits. Every semester. Prerequisites: junior or senior standing; department chair’s approval.

MKTG 499 Independent Study in Marketing 1 - 3 cr.
Research and report on a specific topic not covered by regularly rostered courses. Topic will be defined by the student in conjunction with faculty sponsor. Proposals must be approved prior to registration. Repeatable for maximum of 4 credits. Every semester. Prerequisites: 18 credits of business administration course work, 90 credits and permission of department chair.

Mass Communication

MCOM 100 Digital Audio Workshop 1 cr.
Beginning tools and techniques for creating relevant digital audio content for distribution. Repeatable for maximum of 3 credits. Variable.

MCOM 101 FSU-TV3 Television Workshop 1 cr.
Hands-on television experience. Serve as technical personnel for student, faculty, and/or staff-produced content. Repeatable for maximum of 3 credits. Variable.

MCOM 105 Digital Media and Media Literacy 3 cr.
Examination of effects and impact of digital media on contemporary life and society. Attention given to the historical evolution of storytelling, contemporary developments, and professional expectations. Every semester.

MCOM 205 Mobile Media Production 3 cr.
Principles and practices of mobile media production. Focus on tools and techniques for gathering and creating strategic audio, video, and graphic content for a variety of storytelling applications. Attention given to audience impact and accessible digital technology. Every semester. Prerequisite or co-requisite: MCOM 105 or permission of instructor.

MCOM 213 Digital Audio Production 3 cr.
Examines the theories and technology used in digital audio production for podcasting, music, radio, and television. Attention given to techniques for recording, editing, mixing, and exhibiting industry-quality sound. Two hrs. lecture, 2 hrs. lab. Every semester.

MCOM 246 Media Research Methods 3 cr.
Examination of both academic and applied research methods used in the digital media industry. Attention given to strengths and weaknesses of qualitative and quantitative approaches. Every semester. Prerequisite: MCOM 105.

MCOM 250 Announcing and Performance 3 cr.
Development of skills required of the individual performer in the preparing, announcing, and narrating of various types of materials for digital media. Variable.

MCOM 287 Single-Camera Production 3 cr.
Principles and practices of digital field production. Focus on storytelling, visual composition, lighting and sound, production, planning, and operation of digital video equipment. Emphasis on shooting and editing for multi-platform applications. Not open to students who have credit for MCOM 311. Two hrs. lecture, 2 hrs. lab. Fall. Prerequisite: MCOM 205.

MCOM 301 Multi-Media Workshop 3 cr.
Techniques in creating multimedia content. Digital audio/video editing techniques and streaming media techniques and practices considered. Variable. Prerequisite: MCOM 205, MCOM 287, and MCOM 213.
MCOM 313 Advanced Digital Audio Production 3 cr.
Development of advanced skills in multiple aspects of audio production. Recording and mastering various types of audio projects. Utilization of digital editing equipment for multi-platform distribution. Fall. Prerequisite: MCOM 213 or permission of instructor.

MCOM 316 Digital Media Management and Programming 3 cr.
Organization, management, and multi-platform distribution of digital media content and industries. Attention given to issues such as affiliation, programming, advertising, sales, staffing, regulation, and audiences. Variable. Prerequisite: MCOM 105 and MCOM 246.

MCOM 326 Writing for Electronic Media 3 cr.
Fundamental instruction and practice in writing for digital media, specifically television, radio, and multi-platform communication. Attention given to the impact of social media on the public and media professionals. Every semester. Prerequisite: MCOM 105 and MCOM 205, or permission of instructor.

MCOM 346 Communication Theory 3 cr.
Prominent theories and research that explain media and human communication processes and effects. Every semester. Prerequisites: MCOM 105 and MCOM 246 or CMST 102 or CMST 122.

MCOM 350 Episodic Scriptwriting 3 cr.
This course will cover techniques for generating ideas, the drafting process, classical screenplay structure, conflict, characterization, dialogue, how to write visually, how to analyze your own work as a screenwriter, dealing with notes/feedback, scene structure, rewriting, and other tools of the trade. Spring of odd-numbered years. Prerequisites: MCOM 105 and MCOM 326.

MCOM 356 Promotional Media Strategies 3 cr.
Exploration of creative strategies and tactics that could be used to promote a product, service, person, or organization. A promotional campaign for a client will be researched, designed, developed, and presented by students. Variable. Prerequisites: MCOM 326 or permission of the instructor.

MCOM 388 Multi-Camera Production 3 cr.
Techniques and skills necessary to utilize multi-cameras in a variety of studio productions. Introduction to production process, planning, filming, live editing, and recording. Not open to students who have credit for MCOM 212. Two hrs. lecture, 2 hrs. lab. Fall. Prerequisite: MCOM 205 and MCOM 287.

MCOM 447 Media Law and Regulations 3 cr.
Survey of both constitutional and administrative laws, regulations and public policies that govern the United States’ media systems. Every semester. Prerequisites: MCOM 105, 60 hours and good academic standing, or permission of instructor.

MCOM 450 Business of Digital Media Production 3 cr.
Study and implementation of production planning for various campus and/or community projects, combined with an introduction to business aspects of the industry, including budgets; grant writing; business plans; client interactions; and soft skills such as professionalism, problem-solving, and communication. Spring of even-numbered years. Prerequisites: Junior or senior standing and permission of instructor.

MCOM 465 Digital Audio Promotion and Production 3 cr.
Study of tools and techniques for creating professional quality audio content. Attention given to promotional techniques and online platforms. Spring. Prerequisite: permission of instructor.

MCOM 485 Digital Media Aesthetics and Criticism 3 cr.
Study of the aesthetic principles guiding development of media products. Critical viewing and analysis of media texts. Emphasis on visual media. Every semester. Prerequisites: MCOM 105 MCOM 346, and a C or better in GEP Advanced Writing (Core Skill 2) or permission of instructor.

MCOM 486 Media and Society 3 cr.
In this course we will study the relationship between media, culture, and society, with special emphasis on entertainment, news, advertising, and public relations. Specifically, the course will investigate the social, cultural, and political consequences of, and the role media plays in, the production, reception, and representation of race, class, gender, and sexuality. Every semester. Prerequisites: MCOM 105, MCOM 246 and MCOM 346.

MCOM 487 Advanced Single-Camera Production 3 cr.
Skills required to create advanced field productions, with an emphasis on documentary production, editing, and post-production techniques. Two hrs. lecture, 2 hrs. lab. Spring. Prerequisites: MCOM 205, MCOM 287, and MCOM 387 or permission of instructor.

MCOM 488 Advanced Multi-Camera Production 3 cr.
Techniques and skills necessary to utilize multi-cameras in a variety of studio and field productions. Two hrs. lecture, 2 hrs. lab. Variable. Repeatable for a maximum of 6 credits if roles are substantially different. Prerequisites: MCOM 205, MCOM 287, MCOM 387 or permission of instructor.

MCOM 490 Special Topics in Digital Media 3 cr.
Research or applied experience on an announced selected topic. Repeatable if topics are substantially different. Variable. Prerequisite: permission of instructor.

MCOM 492 Digital Media Internship Project 3 cr.
Academic component of internship experience, in conjunction with MCOM 495. You can earn no more than 18 credits of internship hours (MCOM 492 and MCOM 494 and MCOM 495 combined) during your academic career. Graded A through F. Every semester. Corequisite: MCOM 495.

MCOM 494 Digital Media Internship 1-3 cr.
Supervised field experience for Mass Communication majors. Participation in the communication operations of a commercial, governmental, or educational organization. You can earn no more than 18 credits of internship hours (MCOM 492 and MCOM 494 and MCOM 495 combined) during your academic career. Every semester. Prerequisites: Junior or senior status, declared major in mass communication, minimum 12 cr. in mass communication and 2.5 overall GPA or permission of instructor; Internship Agreement Form approved by department internship director before registering. Students should not contact prospective internship sites until they consult with their advisor.

MCOM 495 Extended Internship 3, 6, 9 or 12 cr.
Supervised field experience for Mass Communication majors. Participation in the communication operations of a commercial, governmental or educational organization. Graded P/F. You can earn no more than 18 credits of internship hours (MCOM 492 and MCOM 494 and MCOM 495 combined) during your academic career. Every semester. Corequisite: MCOM 492. Prerequisites: Junior or senior status, declared major in mass communication, minimum 12 cr. in mass communication and 2.5 overall GPA or permission of instructor; Internship Agreement Form approved by department internship director before registering. Students should not contact prospective internship sites until they consult with their advisor.

MCOM 498 Senior Seminar in Digital Media 3 cr.
Integrated experience requiring students to use accumulated skills and knowledge. Integration of previous course material and reflections on one’s own experiences in the field is expected. Priority given to students who need the course to graduate in the semester registered. Every semester. Prerequisites: 75 credits, 2.0 overall GPA and approved focus or minor or permission of instructor. Capstone. Prerequisite: MCOM 447 and MCOM 485.
MCOM 499 Directed Study 1-6 cr. 
Departmentally recommended and approved intensive study in media. Hours arranged. Every semester. Repeatable for maximum of 9 credits. No more than 6 hours can be counted toward one professional focus. Prerequisite: permission of sponsoring faculty member and appropriate administration.

Mathematics

DVMT 095 Pre-Algebra Mathematics 3 cr. 
Primary focus is to improve students' basic math skills. Concepts of arithmetic, geometry, units of measure and elementary algebra. Students may not withdraw unless withdrawing from the University. Completion of this course will meet the prerequisites for MATH 104, MATH 109/209 or DVMT 100/099. Graded P/F. Every semester. Does not fulfill Core Skill 3, nor may the credits be used to fulfill the 120 hr. minimum toward graduation. MAY NOT BE USED TO SATISFY THE REQUIREMENTS FOR MAJOR OR MINOR IN MATHEMATICS. Note: Students are placed in this course based upon results of Mathematics Placement Test administered by the University.

DVMT 099 Intermediate Algebra 3 cr. 
Introduction to the fundamental aspects of algebra, including properties of the real number system; integer arithmetic; operations with positive and negative exponents; variables and linear equations; graphing; second degree equations; factoring; operations with positive, negative and fractional exponents; and quadratic equations. Completion of this course will meet the prerequisites for MATH 119 and 118. Graded A, B and F. Every semester. Does not fulfill Core Skill 3, nor may the credits be used to fulfill the 120 hr. minimum toward graduation and the grades will not be used in the calculation of the GPA used for graduation or University Honors. Credit cannot be earned for both DVMT 100 and DVMT 099.

MATH 104 Introduction to Mathematical Problem Solving 3 cr. 
Introduction to problem solving with emphasis on strategies applied to algebra, geometry and data analysis. Every semester. Variable. Prerequisite: A passing score on the Mathematics Placement Test administered by the University or DVMT 095. MAY NOT BE USED TO SATISFY THE REQUIREMENTS FOR A MAJOR OR MINOR IN MATHEMATICS. MAY BE USED TO FULFILL CORE SKILL 3.

MATH 109 Elements of Applied Probability and Statistics 3 cr. 
For the non-math major; less rigorous than MATH 380. Elementary probability theory; collection, organization and analysis of data; descriptive statistics; the normal and binomial distributions; introduction to inferential statistics; and applications. Every semester. Prerequisite: a passing score on the Mathematics Placement Test administered by the University or DVMT 095. MAY NOT BE USED TO SATISFY THE REQUIREMENTS FOR A MAJOR OR MINOR IN MATHEMATICS. MAY BE USED TO FULFILL CORE SKILL 3.

MATH 110 Honors: Elements of Appl. Probability and Statistics 3 cr. 
Introduction to statistics, with emphasis on probability theory and inferential statistics. More rigorous and broader than MATH 109/209. Use of the computer as a tool in statistical analyses. Probability theory, sampling distributions, estimation, hypothesis testing, parametric and nonparametric tests, correlation, regression and analysis of variance. Written research project required. Credit cannot be earned for both MATH 109/289 and MATH 110/219. Spring. Prerequisite: acceptance into the University Honors Program or permission of the instructor. MAY NOT BE USED TO SATISFY THE REQUIREMENTS FOR A MAJOR OR MINOR IN MATHEMATICS. MAY BE USED TO FULFILL CORE SKILL 3.

MATH 118 Applied Mathematics for Business 3 cr. 
Intended for students in business and accounting. Topics in basic and intermediate algebra, with an introduction to calculus from a computational and intuitive point of view: linear, quadratic, exponential and logarithmic functions; linear regression; derivatives. Applications to business emphasized. Every semester. Prerequisite: A passing score on the Mathematics Placement Test administered by the University or a grade of B or better in DVMT 100/099. MAY NOT BE USED TO SATISFY THE REQUIREMENTS FOR A MAJOR OR MINOR IN MATHEMATICS.

MATH 119 College Algebra 3 cr. 
Functions and their graphs, inverse functions, solutions of equations and inequalities, polynomial and rational functions, exponential and logarithmic functions, systems of equations and matrices. Every semester. Prerequisite: A passing score on the Mathematics Placement Test administered by the University or a grade of B or better in DVMT 100/099. MAY NOT BE USED TO SATISFY THE REQUIREMENTS FOR A MAJOR OR MINOR IN MATHEMATICS. MAY BE USED TO FULFILL CORE SKILL 3.

MATH 120 Pre-Calculus Mathematics 3 cr. 
Topics needed for the study of calculus: functions, analytic geometry and selected topics from algebra and trigonometry. For students who plan to study the sequence MATH 236, MATH 237, MATH 238. Every semester. Prerequisite: A passing score on the Mathematics Placement Test administered by the University or a grade of B or better in MATH 102/119. MAY NOT BE USED TO SATISFY THE REQUIREMENTS FOR A MAJOR OR MINOR IN MATHEMATICS. MAY BE USED TO FULFILL CORE SKILL 3.

MATH 200 An Introduction to Discrete Mathematics 3 cr. 
A study of discrete mathematical structures. Topics include elementary set theory, functions, relations, recursion, logic, methods of proof, graph theory, combinatorics, probability. Variable. MAY NOT BE USED TO SATISFY THE REQUIREMENTS FOR A MAJOR OR MINOR IN MATHEMATICS.

MATH 206 Problem Solving for Elementary Teachers I 3 cr. 
Heuristics of problem solving, set theory, functions, estimation, measurement, numeration systems, rational numbers and elementary number theory. Emphasis on students constructing and expanding their mathematical knowledge using modern technologies and pedagogies to investigate questions and solve problems. Learning activities include collecting and analyzing data from simple experiments, identifying mathematical models for the data and using these models to make predictions which can then be tested. Admission priority will be given to Early Childhood Education and Elementary Education majors. Every semester. Prerequisite: a grade of C or better in either MATH 102/119 or MATH 109/209. MAY NOT BE USED TO SATISFY THE REQUIREMENTS FOR A MAJOR OR MINOR IN MATHEMATICS.

MATH 207 Problem Solving for Elementary Teachers II 3 cr. 
A continuation of MATH 206. Basic concepts of geometry, including measurement ideas, probability and statistics. Technological tools such as spreadsheets, geometric software and statistical packages will be used. Admission priority will be given to Early Childhood Education or Elementary Education majors. Every semester. Prerequisite: C or better in MATH 206. MAY NOT BE USED TO SATISFY THE REQUIREMENTS FOR A MAJOR OR MINOR IN MATHEMATICS.

MATH 220 Calculus for Applications I 3 cr. 
An applications-oriented approach to differential and integral calculus, for the student who desires a course more intuitive than Calculus I, II, III. Credit may not be earned for both MATH 220 and MATH 236. Every semester. Prerequisite: A passing score on the Mathematics Placement Test administered by the University or a grade of C or better in MATH 102/119. MAY NOT BE USED TO SATISFY THE REQUIREMENTS FOR A MAJOR OR MINOR IN MATHEMATICS.
MATH 221 Calculus for Applications II 3 cr.
Continuation of MATH 220. Credit may not be earned for both MATH 221 and MATH 237. MAY NOT BE USED TO SATISFY THE REQUIREMENTS FOR A MAJOR OR MINOR IN MATHEMATICS.

MATH 236 Calculus I 4 cr.
Limits and continuity, the derivative, antiderivatives and definite integrals. Credit may not be earned for both MATH 236 and MATH 226. Every semester. Prerequisite: A passing score on the Mathematics Placement Test administered by the University or a grade of C or better in MATH 120. MAY BE USED TO FULFILL CORE SKILL 3.

MATH 237 Calculus II 4 cr.
Techniques and applications of integration, introductory differential equations, infinite series. Credit may not be earned for both MATH 237 and either MATH 227 or MATH 228. Every semester. Prerequisite: a grade of C or better in MATH 236.

MATH 238 Calculus III 4 cr.
Vectors, functions of several variables, vector functions, partial derivatives, multiple integration, line and surface integrals. Credit cannot be earned for both MATH 238 and MATH 320. Every semester. Prerequisite: a grade of C or better in MATH 237.

MATH 280 Introductory Applied Statistics and Data Analysis 3 cr.
An introduction to applied data analysis, designed to enable students to effectively collect data, describe data, and make appropriate inferences from data. Students are expected to communicate effectively about statistical results and to use a statistical software package for data analysis. Fall semester. Prerequisite: MATH 120, MATH 220, OR MATH Level-3.

MATH 315 Foundations of Mathematics 3 cr.
Theory of sets; mathematical logic; quantifiers; methods of proof in mathematics. Fall. Prerequisite: A grade of C or better in MATH 237.

MATH 340 Fundamental Concepts of Geometry 3 cr.
Experimental and informal geometry, properties of plane and space figures, geometric constructions, proof. Variable. Prerequisite: MATH 207. MAY NOT BE USED TO SATISFY THE REQUIREMENTS FOR A MAJOR OR MINOR IN MATHEMATICS.

MATH 350 Linear Algebra I 3 cr.
Systems of linear equations, matrices and linear transformations, determinants and vector spaces. Spring. Prerequisite: MATH 236 or MATH 220 or concurrent enrollment in MATH 236 or MATH 220.

MATH 380 Introduction to Probability and Statistics 3 cr.
Discrete probability theory with statistical applications. Counting techniques; random variables; distributions; expectations; hypothesis testing and estimation, with emphasis on discrete models. Spring. Prerequisite: MATH 220 or MATH 226 or permission of instructor.

MATH 425 Introduction to Real Analysis 3 cr.
Topology of real numbers; sequences, cluster points, continuity, theory of differentiation and integration; elements of measure theory; infinite series. Fall, even. Prerequisite: MATH 238 and MATH 315.

MATH 426 Introduction to Complex Analysis 3 cr.
Analytic functions; Cauchy's Theorem; Taylor and Laurent series; meromorphic functions; residue theory; conformal mapping. Variable. Prerequisite: MATH 238 and MATH 315.

MATH 427 Combinatorics and Graph Theory 3 cr.
General enumeration techniques, elements of graph theory, matrix representations of graphs and applications of graph theory. Variable. Prerequisite: MATH 237.

MATH 437 Introduction to Probability and Statistics 3 cr.
A deeper study of probability and statistics than MATH 380. Continuous probability distributions and their statistical applications. Variable. Department for up-to-date schedule. Prerequisites: MATH 380, MATH 207.

MATH 440 Modern College Geometry 3 cr.
An introductory synthetic study of geometry: finite, absolute, affine, Euclidean, hyperbolic, elliptic, and projective geometries. Spring. Prerequisites: MATH 237 and MATH 315.

MATH 451 Modern Higher Algebra 3 cr.
Basic study of the structure of groups and rings: isomorphism theorems; special kinds of rings; additional topics. Fall. Prerequisites: MATH 237 and MATH 315.

MATH 452 Linear Algebra II 3 cr.
Basic study of vector spaces and their relationships to matrix algebra: the algebra of linear transformations, linear functionals and dual spaces, inner product spaces and decomposition theorems. Fall, odd. Prerequisites: MATH 238 and MATH 350.

MATH 460 Introductory Topology 3 cr.
The topology of Euclidean space; homeomorphisms and quotient maps; connectedness; compactness; topological surfaces; simplicial complexes and surfaces; the Euler characteristic. Variable. Prerequisites: MATH 238 and MATH 315.

MATH 461 History of Mathematics 3 cr.
Historical development of mathematics and its concepts. Contributions of individuals and societies to the development of mathematics. Spring, even. Prerequisite: MATH 237.

MATH 465 Theory of Numbers 3 cr.
Divisibility; Diophantine equations; congruences; sums of squares; additional topics. Spring, odd. See department secretary for up-to-date schedule. Prerequisites: MATH 237 and MATH 315.

MATH 470 Mathematical Models and Applications 3 cr.
Model-building processes, the assumptions underlying mathematical models and the generation and interpretation of results from models. Theory and illustrative applications of modeling. Analyses of models constructed by students. Spring. Prerequisites: MATH 237 or permission of instructor.

MATH 480 Probability and Statistics 3 cr.
A deeper study of probability and statistics than MATH 380. Continuous probability distributions and their statistical applications. Variable. Department for up-to-date schedule. Prerequisites: MATH 238, MATH 380, or permission of instructor.

MATH 490 Selected Topics in Mathematics 3 cr.
A specialized topic or recent development in mathematics. May be taken more than once if the topics are substantially different. Does not duplicate any other course offered by the Department of Mathematics. Repeatable for maximum of 6 credits if topics are substantially different. Variable. Prerequisite: MATH 238 or permission of instructor.
MATH 491 Seminar in Mathematics 3 cr.
Individual reports and group discussions on mathematical topics and applications, review of important topics in the undergraduate curriculum, assessment exam. Written report and presentation required. Fall. Mathematics majors only. Prerequisites: senior status or permission of instructor. Capstone.

MATH 492 Internship Seminar 3 cr.
Academic component of internship. Requires co-registration in MATH 495. Graded A-F.

MATH 495 Internship in Mathematics 6 or 12 cr.
Experiential component of internship: guided work experience in conjunction with MATH 492; must directly relate to academic program. Full-time interns register for 12 credits in MATH 495 and 3 credits in MATH 492 and may not enroll in other courses. Part-time interns register for 6 credits in MATH 495 and 3 credits in MATH 492. Graded P/F. Prerequisites: good academic standing; submission of Internship Agreement form to internship director prior to registering; completion of MATH 236, 237, 238 and four math courses at 300 or 400 level (or enrollment in the fourth 300 or 400 math course) at time of applying; GPA of at least 3.0 in math; and any requirements of the sponsoring agency. MAY NOT BE USED TO SATISFY THE REQUIREMENTS FOR A MAJOR OR MINOR IN MATHEMATICS.

MATH 499 Individual Study in Mathematics 1-3 cr.
Individual research performed under supervision, culminating in a written paper or completed project. Repeatable for maximum of 6 credits if topics are substantially different. Enrollment by permission of the department.

Music

Music Theory

MUSC 100 Introduction to Music Theory 2 cr.
Primary focus is to improve students' basic knowledge of Music Theory to progress into the Music Theory (MUSC 102) and Aural Skills (MUSC 104) sequence. May not be used to satisfy requirements for the music major or minor. Note: Students are placed in this course based upon results of a Music Theory Placement Exam given by the Department of Music. Spring.

MUSC 101 Music Fundamentals 2 cr.
Learn the basic elements of music, including rhythm, pitch, notation, scales, key signatures, dynamics, intervals, chords and music terminology. Begin to facilitate individual music making on pitched and unpitched instruments. For non-music majors. Every semester.

MUSC 102 Tonal Analysis I 3 cr.
Introduction to the vertical and linear dimensions of tonal music. Review of musical fundamentals, in which students will be expected to demonstrate facility and speed in naming and spelling basic tonal materials. Introduces traditional contrapuntal exercises, basic diatonic harmony, and the construction of formal phrase units. Required for music majors and minors. Note: Students are placed in this course based upon results of a Music Theory Placement Exam given by the Department of Music. Fall. Prerequisite: concurrent enrollment in MUSC 104: Aural Musicianship I, except by permission of instructor.

MUSC 103 Tonal Analysis II 3 cr.
Continued study of tonal harmony and voice leading, both through written work and analysis. Continued focus mostly on diatonic harmony; begin to explore techniques of tonicization and modulation. Required for music majors and minors. Spring. Prerequisites: MUSC 102 and MUSC 104 or permission of instructor. Concurrent enrollment in MUSC 105: Aural Musicianship II, except by permission of instructor. Tech. fluency.

MUSC 104 Aural Musicianship I 2 cr.
First in the sequence that emphasizes strategies for accurate and expressive reading, singing, and dictation using elementary rhythms and diatonic pitch materials in treble and bass clefs. All harmonic, melodic, rhythmic, and formal procedures build on materials mastered in MUSC 102. Required for music majors and minors. Meets 100 minutes per week. Fall. Prerequisite: Concurrent enrollment in MUSC 102: Tonal Analysis I, except by permission of instructor.

MUSC 105 Aural Musicianship II 2 cr.
Complete the aural understanding of diatonic harmony, introduces the experience of simple modulations, and facilitates mastery of rhythmic gestures necessary for performance of common-practice European art music. Alto clef will be introduced with emphasis on rapid and accurate reading, along with associated transpositions. All harmonic, melodic, rhythmic, and formal procedures build on materials mastered in MUSC 103. Required for music majors and minors. Meets 100 minutes per week. Spring. Prerequisites: MUSC 102 and MUSC 104 or permission of the instructor. Concurrent enrollment in MUSC 103: Tonal Analysis II, except by permission of the instructor.

MUSC 169 Music Theory for Musical Theatre Voice 2 cr.
Introduction to the vertical and linear dimensions of tonal music as it applies specifically to Musical Theatre. Review of musical fundamentals, in which students will be expected to demonstrate facility and speed in naming and spelling basic tonal materials. Introduces basic diatonic harmony and the construction of formal phrase units. Students are placed in this course based on the results of a music theory placement exam given by the Department of Music. Required for Musical Theatre Minors. Fall. Prerequisites: Admission to the Musical Theatre minor and concurrent enrollment in MUSC 104: Aural Musicianship I, except by permission of the instructor.

MUSC 204 Tonal Analysis III 3 cr.
Completes the study of 18th and early 19th-century tonal procedures. Explores the meaning of chromaticism in tonal music through examination of tonicization and modal mixture, emphasizing composers' use of these chromatic techniques within large-scale movement organization. Two large-scale analysis projects will include: 1) graphic analysis, 2) its role in representing students' deeper understanding of linear and harmonic motions, and 3) how this understanding impacts performance decisions. Required for music majors. Fall. Prerequisites: MUSC 103 and MUSC 105 or permission of instructor. Concurrent enrollment in MUSC 206: Aural Musicianship III, except by permission of instructor.

MUSC 205 Tonal Analysis IV 3 cr.
Further application of techniques from MUSC 204 with an emphasis on analysis of musical structure and style in Western civilization. Primary focus on written and analytical applications to large formal structures and their relationship to performance. Required for music majors. Spring. Prerequisites: MUSC 204 and MUSC 206 or permission of instructor. Concurrent enrollment in MUSC 207: Aural Musicianship IV, except by permission of instructor.

MUSC 206 Aural Musicianship III 2 cr.
Continuation of MUSC 105 with emphasis on tenor clef and its associated transpositions, a systematic introduction to chromatic processes in tonal music, various problems associated with changing meter signatures and polyrhythms, and perception of tonal processes in complete movements composed in larger forms. All harmonic, melodic, rhythmic, and formal procedures build on materials mastered in MUSC 204. Required for music majors. Meets 100 minutes per week. Fall. Prerequisites: MUSC 103 and MUSC 105 or permission of the instructor. Concurrent enrollment in MUSC 204: Tonal Analysis III, except by permission of the instructor.

MUSC 207 Aural Musicianship IV 2 cr.
Continuation of MUSC 206 with further emphasis on aural musicianship curriculum. Completes the formal study of common-practice tonal relationships and large formal structures. Introduction to reading and performing music in asymmetrical meters, and
Music History and Literature

MUSC 106 History of Rock 3 cr.
An introduction to the appreciation and understanding of contemporary musical styles, artists, groups and trends. Rock, hip-hop, country and pop music are some styles that may be discussed. Every semester. GEP Group A.

MUSC 110 Music Appreciation 3 cr.
Introduction to the appreciation and understanding of music. Every semester. GEP Group A.

MUSC 117 Music of Africa, Asia and the Americas 3 cr.
Introduction to musical traditions and practices of various African societies, China, India, Indonesia, Japan and Latin-influenced countries in Central and South America (including Caribbean nations). Every semester. GEP Group A or F.

MUSC 250 Gender and Sexuality in Music 3 cr.
An examination of popular and art music by and from the perspective of gender and sexuality. Variable. GEP Group F.

MUSC 308 Music History I: Music of the Baroque and Classical Periods 2 cr.
A survey of musical style from Baroque through the Classical period. Analysis, listening, discussion set in a cultural context. Spring.

MUSC 309 Music History II: Music of the Romantic and Modern Periods 2 cr.
A survey of musical style from the Romantic through the Contemporary (21st century) periods. Analysis, listening, discussion set in a cultural context. Fall.

MUSC 311 Jazz History 3 cr.
Exploration of the roots and development of jazz as an American art form from the late 19th to 21st century; discussion of influences from Africa, South America and Europe; discussion of important artists, genres and style characteristics of instrumental and vocal jazz. Fall. GEP Group F.

MUSC 313 Music History III: Music of the Medieval and Renaissance Periods 2 cr.
A survey of musical style from the Gregorian chant through the Renaissance period. Analysis, listening, discussion set in a cultural context. Spring.

MUSC 346 Opera and Art Song Literature 2 cr.
A survey overview of opera and art song repertoire, with particular emphasis on opera arias, English and Italian oratorio and art song, German lieder, and French mélodies. Required for vocal performance majors. Prerequisite: MUSC 210 and MUSC 211. 150 minutes.

MUSC 412 History of Musical Theatre 3 cr.
Evaluate and compare a variety of musicals from the 19th century to present-day Broadway. Examine artists who have contributed to the development of musical theatre. Identify historical and cultural references. 150 minutes of instruction per week. Also offered as THEA 412. Fall. GEP Group F.

MUSC 493 Senior Research 1 cr.
In-depth investigation of a specific aspect of music history, music theory or music literature. Preparation and performance of a Senior Lecture Recital combining discussion of research with performance of supporting repertoire. Graded P/F. Every semester.

Music Teaching

MUSC 125 Introduction to Music Education 3 cr.
Provide students with overview of principles and practices of music education in today’s schools. This course is a prerequisite for professional education courses in music education. Includes observation of regular classrooms and music instruction at all levels of P-12 education. Every spring.

MUSC 232 Music Field Experience .5 cr.
Observation of P-12 music classrooms and aiding teachers at the elementary level and secondary level as instructed. Graded P/F. Every semester. Prerequisites: MUSC 125 and fingerprinting on file with the Department of Educational Professions.

MUSC 310 Basic Principles of Conducting I – Choral 3 cr.
Introduction to the basics elements of choral and instrumental conducting. Involves study and practice of techniques of conducting, including conducting patterns, methods of interpretation, rehearsal techniques, performance practice and style, and score analysis. Emphasis on choral, combined choral and instrumental scores. Required for all Performance Specializations and P-12 Teacher certification option majors. Credit cannot be earned for both MUSC 404 and MUSC 310. Fall. Prerequisite: MUSC 205 or permission of instructor.
MUSC 350 Music and Creative Interaction for the Elementary Classroom Teacher 3 cr.
Classroom use of music skills for children from pre-school through sixth grade. Emphasizes the elements and skills of music and provides opportunity to develop and apply teaching strategies to the teaching of music through moving, singing, listening, playing, reading, creating and creative interaction. Designed for the elementary education major. Every semester. Prerequisite: sophomore standing.

MUSC 358 The Business of Music & Arts Management 3 cr.
Provides an in-depth overview of the field of Music Business and Arts Management. Management theory and practice as it is applied in the world of the arts. Mission and vision, organizational structure and leadership, facilities design and planning, technology and the arts, marketing and promotion, operations, development, legal issues and arts advocacy. Fall.

MUSC 360 Special Topics in Music 1-2 cr.
A focused, in-depth study on a musical topic. Does not duplicate any other course offered by the Department. Repeatable for maximum of 4 credits if topics are substantially different. Prerequisite: permission of Department Chair.

MUSC 398 Experiential Learning in Music 1-3 cr.
Provide hands-on learning opportunities combining the intersection between foreign travel, cultural awareness and literacy, music history, cultural exchanges, and musical performance. Students will prepare for and participate in a performance tour or competition domestically or internationally, and undertake study and experiences that promote student investigation into the integration of music and other academic disciplines in a global society. Variable. Co-requisite: Enrollment in the ensemble or course to which the experiential learning experience will be directly related.

MUSC 410 Basic Principles of Conducting II – Instrumental 3 cr.
A continuation of Basic Principles of Conducting I. Emphasizes baton technique, score reading and analysis, and rehearsal procedures. Emphasis on instrumental scores. Required for P-12 certification. Credit cannot be earned for both MUSC 303 and 410. Spring. Prerequisite: MUSC 310.

MUSC 411 Marching Band Techniques 2 cr.
The techniques of show planning, preparation, presentation: precision movement, music selection and arranging. Fall. Prerequisite: permission of instructor.

MUSC 413 Vocal Pedagogy 2 cr.
The various schools of vocal technique. Designed to prepare the prospective teacher of private and class voice. Spring, alternate years. Prerequisite: minimum of 2 yrs. of vocal study and the ability to play simple piano accompaniments.

MUSC 452 Choral Music Methods K-12 3 cr.
Materials and techniques of choral instruction, computer-assisted instruction and integrated technology, and choral performance at all levels of public music education. Required of all music majors in the music teacher education program. Spring. Prerequisites: MUSA 287 and MUSA 415.

MUSC 453 Instrumental Music Methods K-12 3 cr.
Materials and techniques of instrumental music instruction, computer-assisted instruction and integrated technology, and instrumental performance at all levels of public music education. Required of all instrumental majors in teacher education. Spring. Prerequisites: MUSA 287 and MUSA 415.

MUSC 494 Music Industry Practicum
Experiential component of the Music Industry Track. Practical application of skills developed in advance courses. Work on departmental music productions required as part of studio crew. Hands-on work with sound systems, recording, stage managing, event production and promotion. Repeatable for credit each semester of enrollment. Every semester. Prerequisite MUSC 358, MUSC 356.

MUSC 495 Internship in Music Industry 6-12 cr.
Guided work experience with an academic component. Work must be directly related to academic program. Students may not enroll in other courses without permission. Must be taken concurrently with MUSC 492. Senior standing, concurrent enrollment in MUSC 492 and permission of instructor.

MUSC 499 Individual Research in Music 1-6 cr.
Intensive individual study in an area of special interest under the direction of a faculty member. Repeatable for maximum of 6 credits. Variable. Prerequisites: MUSA 287 and MUSA 415; permission of Department Chair.

Applied Music

MUSA 101 Student Recital Attendance 0.5 cr.
Experience in musical performance and literature through concert attendance. Required for all music majors and minors. Repeatable for credit each semester of enrollment. Every semester.

MUSA 104 Class Piano I 1 cr.
Basics of keyboard technique for students with little or no piano experience. Designed to lead toward successful completion of the piano proficiency examination. Meets 100 minutes per week. Fall. Prerequisite: permission of instructor; enrollment preference given to music majors/minors.

MUSA 105 Class Piano II 1 cr.
Continuation of MUSA 104. Designed to lead toward successful completion of the piano proficiency examination. Meets 100 minutes per week. Spring. Prerequisite: MUSA 104 or permission of instructor; enrollment preference given to music majors/minors.

MUSA 106 Class Voice I 1 cr.
Fundamentals of voice production: breath management, resonance and diction. Individual voice diagnosis and application of vocal principles. Vocal exercises and song literature for the development of a singing technique. Meets 100 minutes per week. Variable. Prerequisite: permission of instructor.

MUSA 107 Class Voice II 1 cr.
Continuation of MUSA 106. Meets 100 minutes per week. Variable. Prerequisite: MUSA 106 or permission of instructor.

MUSA 108 Class Instruments I: Strings 1 cr.
Class instruction in the standard string instruments, designed to prepare future instrumental teachers at all levels of the public schools. Meets 100 minutes per week. Fall. Prerequisite: permission of instructor; enrollment preference given to music majors/minors.

MUSA 111 Class Guitar I 1 cr.
Fundamentals of guitar technique for students with little or no guitar experience. Music reading, rudiments of theory, melodic playing and accompaniment. Students provide their own instrument. Meets 100 minutes per week. Fall.

MUSA 112 Class Guitar II 1 cr.
For students who read music and have had some previous experience with the guitar. Melodic and accompaniment styles. Meets 100 minutes per week. Spring. Prerequisite: MUSA 111 or permission of instructor.

MUSA 116-123 Private Instruction 1 cr.
Individual instruction in voice, piano, organ, strings, guitar, woodwinds, brass or percussion as a minor performance specialty; 30-minute lesson each week. Repeatable for credit each semester of enrollment. Performance for a faculty jury at the end of
MUSA 125 Musical Theatre Voice 1 cr.
Individual instruction in voice specifically for students in the Musical Theatre minor. 30-minute lesson each week. Minors are required to perform in at least one student recital. Performance for a faculty jury at the end of each semester in lieu of a final examination. Repeatable for credit each semester of enrollment. Every semester. Prerequisite: concurrent enrollment in an ensemble (MUSC 315, MUSC 319, MUSC 327, MUSC 329, MUSC 330, MUSC 331, MUSC 335, MUSC 336, MUSC 337, MUSC 339 or MUSC 340); permission of instructor; audition required.

MUSA 286 Sophomore Evaluation – Music Studies 0 cr.
Sophomore evaluation that demonstrates musical performance and academic ability to continue in the major concentration or track. Perform two or three contrasting works for the music faculty. Required of all music majors. Repeatable only by permission of department chair. P/F only. Every semester. Prerequisites: permission of instructor; completion of MUSC 205, MUSC 207 and MUSA 415.

MUSA 356-363 Private Instruction 2 cr.
Individual instruction in voice, piano, organ, strings, guitar, woodwinds, brass or percussion as a major performance specialty; 60-minute lesson each week. Music majors are required to perform in at least one student recital. Performance for a faculty jury at the end of each semester in lieu of a final examination. Repeatable for credit each semester of enrollment. Every semester. Prerequisites: concurrent enrollment in an ensemble (MUSC 315, MUSC 319, MUSC 327, MUSC 329, MUSC 330, MUSC 331, MUSC 335, MUSC 336, MUSC 337, MUSC 339 or MUSC 340); permission of instructor; audition required.

MUSA 389 Non-degree Recital 1 cr.
Preparation and performance of a recital that is not required for the degree being sought. Graded P/F. Every semester. Prerequisites: Permission of department chair. All students must be concurrently enrolled in MUSA 300-level private instruction.

MUSA 390 Junior Recital 1 cr.
Junior Recital for the Bachelor of Arts or Science Music Degree. Preparation and performance of the junior recital. Graded P/F. Every semester. Prerequisites: MUSA 287 and MUSA 415, and junior recital clearance. All students must be concurrently enrolled in MUSA 300-level private instruction.

MUSA 490 Senior Recital 1 cr.
Senior Recital for the Bachelor of Arts or Science Music Degree. Preparation and performance of the senior recital. Performance majors must also have successfully completed their junior recital (MUSA 390). Graded P/F. Every semester. Prerequisites: MUSA 287 and MUSA 415 and senior recital clearance. Must be concurrently enrolled in MUSA 300-level private instruction. Vocal and Instrumental Performance, Music Teaching Capstone.

Ensembles

MUSC 215 Beginning Improvisation 1 cr.
Development of beginning jazz improvisational skills, including modal and traditional chord progressions through vocal and instrumental performance. Fall. Prerequisite: MUSC 214.
MUSC 216 Advanced Improvisation 1 cr.
Development of advanced improvisational techniques in modern jazz styles. Bebop, hard bop, cool jazz and post-bop and other post-1945 genres will be discussed. Focus on bebop, jazz minor, diminished, and pentatonic scales, creating melodic tension on dominant chords, chord substitution patterns, Coltrane melodies and jazz storytelling. Further exploration and rhythmic techniques applicable to comping and soloing. Spring. Prerequisite: MUSC 215.

MUSC 315 Piano Ensemble 1 cr.
Study, rehearsal and performance of piano ensemble literature. Meets 100 minutes per week. Every semester. Prerequisite: permission of instructor; audition required.

MUSC 319 University Chorale 1 cr.
A select mixed chorus performing a wide variety of choral literature from all historical periods of music history. Open to all students and may include multiple performances throughout the semester, both on and off campus. Meets 150 minutes per week. Every semester. Special instruction fee.

MUSC 321 Opera Workshop 1 cr.
Designed to enhance the vocal art by exploring different aspects of performance. The skills covered will culminate in the performance of opera scenes or a complete operatic performance. Meets 150 minutes per week. Every semester. Prerequisite: permission of instructor; audition required.

MUSC 327 Jazz Orchestra 1 cr.
Performance of the standard jazz repertoire in a big band format. Meets 150 minutes per week. Every semester. Prerequisite: permission of instructor; audition required.

MUSC 329 Marching Band 1 cr.
Performs at home football games and regional exhibitions. Meets 150 minutes per week. Band camp prior to start of fall semester. Extra rehearsals on Friday and Saturday before home football games. Open to all students. Fall. Prerequisite: permission of instructor; audition required.

MUSC 330 Wind Ensemble 1 cr.
Concert literature selected from both contemporary and traditional wind ensemble repertoire. Meets 150 minutes per week. Every semester. Prerequisite: permission of instructor; audition required.

MUSC 331 Brass Ensemble 1 cr.
Study, rehearsal and performance of brass literature. Meets 100 minutes per week. Every semester. Prerequisite: permission of instructor; audition required.

MUSC 335 String Ensemble 1 cr.
Study, rehearsal and performance of string literature – principally the string quartet. Every semester. Prerequisite: permission of instructor; audition required.

MUSC 336 Guitar Ensemble 1 cr.
Study, rehearsal and performance of guitar ensemble literature. Meets 100 minutes per week. Every semester. Prerequisite: permission of instructor; audition required.

MUSC 337 Woodwind Ensemble 1 cr.
Study, rehearsal and performance of woodwind instrument literature – principally clarinet, flute and saxophone quartets and woodwind quintets. Meets 100 minutes per week. Every semester. Prerequisite: permission of instructor; audition required.

MUSC 339 Percussion Ensemble 1 cr.
Study, rehearsal and performance of percussion ensemble literature. Meets 150 minutes per week. Every semester. Prerequisite: permission of instructor; audition required.

MUSC 340 Chamber Singers 1 cr.
A highly select group of 24-32 singers performing a wide variety of choral literature designed to promote individual musicianship, advanced techniques and quality of ensemble. Significant number of performances each semester, both on and off campus. Meets 150 minutes per week. Special instruction fee. Every semester. Prerequisite: permission of instructor; audition required.

MUSC 370 Vocal Jazz Ensemble 1 cr.
A highly select group of 8-12 singers performing vocal jazz literature in all relevant jazz styles. The course will include the study of vocal improvisation, transcription, listening skills, and vocal performance. Significant number of performances each semester, both on and off campus. Meets 150 minutes per week. Every semester. Special instruction fee. Prerequisite: permission of instructor; audition required.

NURS 401 Health Assessment 3 cr.
Comprehensive holistic assessment theory and concepts, inclusive of physical, emotional, cultural, nutritional, spiritual, and social assessment skill sets. Specific skills include, but are not limited to, interviewing and history-taking skills, physical exam skills, and the identification of data-based health problems via integrated lab modules within the course. ILL 2 hrs. lecture, 1 hr. lab. Spring and summer. Prerequisites: Admission to the RN to BSN program and EXSS 200.

NURS 402 Nursing Research and Evidence-Based Practice 3 cr.
Theory and methods of qualitative and quantitative research provide basic knowledge for reading and understanding nursing research. Theory and concepts of evidence-based nursing practice, including formulating a clinical problem, identifying sources of evidence, using clinical guidelines, disseminating evidence, and motivating for change based on scientific evidence. Three hrs. lecture. Every semester. Prerequisites: Admission to the RN to BSN program and MATH 109.

NURS 403 Elements of the Professional Nursing Role 3 cr.
Implementation of the professional nursing role within the rapidly changing healthcare system. Identifying shifting demographic and social trends while maintaining caring and compassionate values. Focuses on concepts such as patient-centered care; interdisciplinary collaboration; elements of safe, quality care; nursing diversity in roles, organizations, and culture; and finally professional identity and image. Three hrs. lecture. Every semester. Prerequisite: Admission to the RN to BSN program or permission of Program Coordinator.

NURS 404 Nursing Informatics 3 cr.
Prepares the nurse to integrate and translate selected technologies and their application, the electronic health record, and policies governing privacy, confidentiality and security as it relates to complex decision making and the promotion of safe, quality and effective care. Three hrs. lecture. Every semester. Prerequisites: Admission to the RN to BSN program; Tech. Fluency.

NURS 405 Ethics in Contemporary Nursing Practice 3 cr.
Application of ethical decision-making in current nursing practice. Critical elements consist of discovery of individual ethical viewpoint and framework including individual biases; principles and legal concepts; and examination of contemporary ethical issues such as genomics, patient and employee rights, healthcare ethics and organizational committees. Three hrs. lecture. Every semester. Prerequisite: Admission to the RN to BSN program.

NURS 406 Leadership for Quality and Safety 3 cr.
Examination of leadership skills necessary to understand and develop a culture of quality and safe patient care. Concepts include decision-making, conflict resolution, communication, motivation, organizational structure, resource management, quality
improvement processes and instruments, and tools for safeguarding patients. These concepts form the basis for examination of quality improvement approaches, nurse sensitive indicators, and safety principles, in addition to national quality and safety initiatives. Three hrs. lecture. Summer and fall. Prerequisites: Admission to the RN to BSN program; prerequisite or co-requisite: MGMT 356.

**NURS 407 Health Finance** 3 cr.
Conceptual and practical issues related to health care economics, finances and budgeting, including accounting, business planning, cost/benefit analysis, managing financial resources and other management tools for the nurse administrator. Three hrs. lecture. Spring and Summer. Prerequisites: Admission to the RN to BSN program.

**NURS 410 Contemporary Psychiatric Nursing Practice** 3 cr.
Uses the biopsychosocial model to provide a contemporary holistic framework for delivering nursing care to individuals and families living within tumultuous societies. An emphasis on the recovery model is presented throughout the course materials. Current advances in psychiatric care, psychiatric nursing care and nursing education are presented. Three hrs. lecture. Variable.

**NURS 412 Women's Health in Global Perspectives** 3 cr.
Examines major global health topics related to women through the lens of policy, health promotion, and research. Introduction to the vast diversity of determinants of health and disease for women around the world. Analysis of current and emerging global health concerns, including maternal and child well-being, violence against women, cross border concerns and infectious diseases. Three hrs. lecture. Variable.

**NURS 490 Special Topics in Nursing** 1-6 cr.
Exploration of specialized topics in nursing. Topics vary from semester to semester. Repeatable for a maximum of 6 credits if topics are substantially different. Every semester. Prerequisites: Admission to the RN-BSN Program and permission of Program Coordinator.

**NURS 491 Population-Focused Nursing Practice** 3 cr.
Introduction to the role of the professional nurse in promoting health and preventing disease in the community health setting. Epidemiological, sociological and environmental concepts examined with a focus on the health status of aggregates. The course consists of a community health assessment/analysis in theory and presentation, case studies and examinations. 3 hrs. lecture. Every semester. Prerequisites: Admission to the RN to BSN program and Program Coordinator permission; corequisite NURS 495.

**NURS 495 Population-Focused Nursing Practice Practicum** 3 cr.
Experiential component of practicum. Students will prepare a proposal for a community health nursing clinical experience and work directly with a preceptor upon approval of the instructor and program coordinator. Additional community clinical opportunities will be offered. 135 total hours for clinical practicum; average of 9 hours per week. Offered every semester. Graded. Prerequisites: Admission to the RN to BSN program and Program Coordinator permission. Co-requisite NURS 491.

**NURS 496 Capstone Project** 2 cr.
Represents the synthesis of theoretical and clinical knowledge and skills for the professional baccalaureate-prepared nurse. Focuses on critical thinking, professional collaboration and community engagement in the planning and implementation of a project designed to meet an identified health need. Every semester. Prerequisites: Admission to the RN-BSN Program and permission of the Program Coordinator; prerequisites NURS 401, 402, 403, 404, 405, 406, 491 and 495; corequisites NURS 491 and 495.

**NURS 499 Independent Study** 1-6 cr.
Independent study of specialized problems in nursing. Problems vary from semester to semester. Repeatable for a maximum of 6 credits if problems are substantially different. Every semester. Prerequisites: Admission to the RN-BSN Program and permission of Program Coordinator.

**Orientation**

**ORIE 101 Introduction to Higher Education** 1 cr.
Orientation of incoming students to academic and social contexts of college life. Nature and process of higher education; educational and career planning; learning skills; support services. Required of all first-time students, including transfer students with fewer than 13 semester hours of transfer credit. Students may not withdraw from the course unless they are withdrawing from the University.

**Philosophy**

**PHIL 100 Critical Thinking** 3 cr.
How to assess claims and arguments in accordance with rational standards using distinct methods and procedures; discussion of the importance of developing a critical thinking disposition, along with the philosophical and psychological barriers to doing so. Yearly.

**PHIL 101 Introduction to Philosophy** 3 cr.
Philosophical approaches to three major content areas: personal relationships (e.g., friendship), social-political structures (e.g., democracy), worldviews (e.g., the problem of God). Every semester. GEP Group B.

**PHIL 102 Contemporary Ethical Problems** 3 cr.
Ethical issues such as abortion, euthanasia and physician-assisted suicide, the death penalty, censorship of pornography and hate speech, sex and marriage, social and economic justice, world hunger and global poverty, the environment and the treatment of animals. Every semester. GEP Group B.

**PHIL 111 Honors: Introduction to Philosophy** 3 cr.
Philosophical problems such as the meaning of existence, freedom and determinism, body versus mind, the existence of God, the human person and human relationships. Credit cannot be earned for both PHIL 101 and PHIL 111. Variable. Prerequisite: acceptance into Honors Program or permission of instructor. GEP Group B.

**PHIL 112 Honors: Contemporary Ethical Problems** 3 cr.
Contemporary ethical issues such as abortion, euthanasia and physician-assisted suicide, the death penalty, censorship of pornography and hate speech, sex and marriage, social and economic justice, world hunger and global poverty, the environment and the treatment of animals. Credit cannot be earned for both PHIL 102 and PHIL 112. Variable. Prerequisite: acceptance into Honors Program or permission of instructor. GEP Group B.

**PHIL 300 Logic** 3 cr.
The study of formal reasoning, including classical logic, modern symbolic logic, the system of natural deduction and quantification theory. Variable.

**PHIL 301 Ethics** 3 cr.
Theoretical issues concerning the nature, status and content of morality and its role in personal and social life. Yearly. Recommended: 3 cr. in philosophy.

**PHIL 302 Philosophy of Religion** 3 cr.
A study of religious experience, religious language, and the question of a rational basis for religious belief. Variable. Recommended: 3 cr. in philosophy.
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**PHIL 303 Philosophy of Art**  
Analysis of the nature of art and its creation, appreciation, and criticism; the major theories of art. Variable. Recommended: 3 cr. in philosophy

**PHIL 304 Social Philosophy**  
Issues arising out of the relationship between individuals and society. Themes such as social values, law, and the ideal of justice. Fall. Recommended: 3 cr. in philosophy.

**PHIL 305 Criminal Justice Ethics**  
Ethical issues confronting the criminal justice system and its occupational players – criminalization, policing, courts and corrections. Fall. Recommended: 3 cr. in philosophy.

**PHIL 306 Science on Trial**  
A study of the logical structure of the natural sciences. Topics such as the nature of scientific evidence, scientific explanation and the objectivity of scientific knowledge. Variable. Recommended: 3 cr. in philosophy

**PHIL 308 Political Philosophy**  
Issues arising out of the relationship between individuals and the state. Issues associated with the ongoing transformation of national states and the relationship between the states, international finance and the global community. Themes such as power, authority, democracy, law, rights, political ideologies, globalization and terrorism. Variable. Recommended: 3 cr. in philosophy. GEP Group F.

**PHIL 310 Classics of Western Philosophy**  
Select examination of classic works of Western philosophy, including representatives from the Ancient Period, the Medieval Period, the Modern Period and/or the Contemporary Period. Yearly. Recommended: 3 cr. in philosophy.

**PHIL 311 Asian and African Philosophy**  
A study of the major concepts of Indian philosophy with an emphasis on Hinduism and Buddhism, Chinese philosophy with an emphasis on Confucianism and Taoism, and African philosophy with an emphasis on the community orientation of ethics and philosophical anthropology. Variable. Recommended: 3 cr. in philosophy. GEP Group F.

**PHIL 313 Biomedical Ethics**  
Ethical issues in medicine and biomedical research. Such problem areas as the physician/patient relationship, patients' rights and professionals' obligations, human experimentation, genetics and reproductive technologies, and social justice and health care. Spring. Recommended: 3 cr. in philosophy.

**PHIL 314 Business Ethics**  
Ethical issues in business. Such problem areas as the morality of capitalism, the social responsibility of business, the concept of corporate responsibility, business and the environment, the rights and responsibilities of employees, whistleblowing, the ethics of advertising, multinational corporations, feminist and minority concerns about business. Variable. Recommended: 3 cr. in philosophy.

**PHIL 315 Philosophy and the Environment**  
A philosophical investigation of environmental issues. Anthropocentric, ecocentric, individualist and ecofeminist approaches to the environment as well as perspectives from many cultures and religions. Connections between environmental science, ethics and aesthetics in a historical context will be made. Variable. Recommended: 3 cr. in philosophy.

**PHIL 316 The Meaning of Life**  
Issues concerning the meaning of life. Such issues as the various meanings of the phrase “the meaning of life,” the dependence of a meaningful life on the existence of God and/or an afterlife, the absurdity of life and how life ought to be lived. Variable. Recommended: 3 cr. in philosophy.

**PHIL 318 Skepticism & Knowledge**  
Investigation of fundamental issues concerning our ability to come to know the true nature of the world and the relation between our cognitive faculties and this world. Consideration not only of traditional answers from historical and contemporary authors, but also recent work challenging the traditional approach itself, including work in feminist epistemology and non-objectivist conceptions of knowledge. Variable. Recommended: 3 cr. in philosophy.

**PHIL 319: Philosophy of Existentialism**  
Origins of existential thought in Kierkegaard and its subsequent development in Heidegger, Jaspers, Marcel, Sartre, Merleau-Ponty and Ricoeur. Such concepts as existence, historicity, freedom and consciousness. Variable. Recommended: 3 cr. in philosophy.

**PHIL 409 Philosophy and Women**  
Topics will include philosophical views of and by women, an examination of the extent to which gender related values underlie and permeate philosophical method and theory, and an examination of ways in which gender interrelates with other social categories such as race, ethnicity and class. Variable. Recommended: 3 cr. in philosophy or WMST 201. GEP Group F.

**PHIL 410 Philosophy of Law**  
Leading issues in the philosophy of law. Such topics as the nature of law and its relation to morality, the concept of responsibility and the justification of punishment. Highly recommended for those interested in the theory of legal concepts and legal reasoning. Spring. Recommended: 3 cr. in philosophy.

**PHIL 452 Seminar in Contemporary Metaphysics**  
Contemporary approaches to problems in both special and general metaphysics. Problems in special metaphysics such as free will, personal identity, mind-body and immortality. Problems in general metaphysics such as universals, substance, change and time. Credit cannot be earned for both PHIL 452 and PHIL 412. Variable. Prerequisite: 15 cr. in philosophy or permission of instructor. Capstone.

**PHIL 455 Seminar in Philosophy**  
An in-depth exploration in a seminar format of some area or philosophy of some philosophical problem or topic selected by the instructor. Repeatable for maximum of 6 credits if topics are substantially different. Variable. Prerequisite: 15 cr. in philosophy or permission of instructor. Capstone.

**PHIL 490 Special Topics in Philosophy**  
In-depth analysis of a topic, selected by instructor, for development thematically or historically. Repeatable for maximum of 6 credits if topics are substantially different. Variable. Recommended: 3 cr. in philosophy.

**PHIL 492 Internship Project in Philosophy**  
Academic component of internship experience; co-registration in PHIL 495 required. Mainly planning of the field experience, focusing on the philosophical/ethical issues associated with the work situation, and completion of a written report on the field experience. Graded A through F. Internship is optional. Every semester and summer. Prerequisites: junior or senior status, major in philosophy and permission of department.

**PHIL 495 Internship in Philosophy**  
Guided work experience; co-registration in PHIL 492 required. Directly related to academic program and intended to enhance the student's ability to navigate her/his way into the global workplace. Graded P/F. Internship is optional and credit is not applicable toward the major or minor. Every semester and summer. Prerequisites: junior or senior status, major in philosophy, and permission of department.
PHIL 498 Practicum in Philosophy 1-6 cr.  
Supervised experiential learning project involving practical application of philosophy. Repeatable for maximum of 6 credits if projects are substantially different. Variable. Prerequisites: 12 cr. in philosophy and permission of department.

PHIL 499 Individual Research in Philosophy 1-6 cr.  
Independent study of a philosopher, period, movement, or problem, initiated by student in consultation with instructor. Repeatable for maximum of 6 credits. Variable. Prerequisites: 12 cr. in philosophy and permission of instructor.

Physical Education

One-credit activity courses meet twice a week for a semester or four periods per week for a quarter.

PHEC 109 Lifetime Fitness and Wellness 3 cr.  
In this course you will participate in a variety of group fitness activities that will emphasize cardiovascular fitness, flexibility, and muscular strength and endurance. Lecture sections on basic principles related to exercise, wellness and nutrition will be included. The student will develop a general understanding of the relationships among proper exercise technique, nutrition, health and wellness. Every semester.

PHEC 124 Basketball 1 cr.  
Fundamental skills of basketball. Every semester.

PHEC 126 Soccer 1 cr.  
Fundamental skills of soccer. Spring.

PHEC 129 Tennis 1 cr.  
Fundamental skills of tennis. Spring, odd-numbered years.

PHEC 230 Golf 1 cr.  
Fundamental skills of golf. Spring, odd-numbered years.

PHEC 250 Beginning Swimming 1 cr.  
Basic swimming skills and water safety. Open to beginning swimmers only. Fall.

PHEC 251 Intermediate Swimming 1 cr.  
Swimming strokes and aquatic skills required for qualification as a good swimmer. Spring.

PHEC 350 Red Cross Lifeguarding 1 cr.  
Red Cross lifeguarding techniques. Three periods per week. Every semester. Prerequisite: ability to swim a quarter mile.

PHEC 351 Water Safety Instruction 2 cr.  
Course is designed to certify instructor candidates to teach water safety and swimming courses. Three periods per week. Every semester. Prerequisite: Life Saving certificate.

PHEC 360 Theory of Track and Field 3 cr.  
Concepts, advanced strategies and organization and administration of a track and field program. Fall.

PHIL 361 Theory of Football 3 cr.  
Concepts, advanced strategies, and organization and administration of a football program. Spring.

PHIL 362 Theory of Baseball 3 cr.  
Concepts, advanced strategies and organization and administration of a baseball program. Fall.

PHIL 364 Theory of Basketball 3 cr.  
Concepts, advanced strategies and organization and administration of a basketball program. Fall.

PHIL 365 Theory of Volleyball 3 cr.  
Concepts, advanced strategies and organization and administration of a volleyball program. Spring.

PHIL 366 Theory of Soccer 3 cr.  
Concepts, advanced strategies, and organization and administration of a soccer program. Spring.

PHIL 405 Psycho-Social Foundations of Sport 3 cr.  
Study of human behavior during participation in sport; role of sport in society; psychological characteristics of sport performers; people and organizations who control sport. Every semester.

PHIL 412 Principles of Coaching 3 cr.  
Introduces students to learning about coaching education and the responsibilities of the coach. Every semester.

PHIL 415 The Black Athlete in American Society 3 cr.  
A study of African-American involvement in sport from slavery to the present, investigating the people, events and conditions which affected sport in both the black society and the American society at large. Variable.

PHIL 420 Sport Law and Ethics 3 cr.  
Legal implications of tort and liability law for coaches; case studies in sport ethics, fair play and morality in sport; athletic eligibility and gender equity. Fall.

PHIL 450 Aquatics and Pool Management 3 cr.  
Advanced course in teaching, supervising all levels of swimming and diving instruction, and training competitive swimmers. Administration of swimming pools; staff, program, budget, facilities, safety, pool sanitation. Spring.

PHIL 480 Field Experience in Athletic Training 1-6 cr.  
Field experience in athletic training. Sites of study may vary. Offered as needed. Repeatable for maximum of 6 credits if placement sites are different.

PHIL 481 Field Experience in Coaching 1-6 cr.  
Field experience in coaching. Sites of study may vary. Repeatable for maximum of 6 credits if placement sites are different. Every semester.

PHIL 490 Special Topics in Health and Physical Education 1-6 cr.  
The special topics course allows for unique or distinctive study such as clinics, workshops or course work dealing with a current topic related to health and physical education. It is arranged on a needs basis. Repeatable for maximum of 6 credits if topics are substantially different.
PHSC 100 Cosmic Concepts 3 cr.
A descriptive approach to the major physical concepts developed over the past four centuries and their relationship to the historical and philosophical context in which they arose. Emphasis will be on the origin, meaning, significance, and limitations of these concepts. Every semester. PHSC 100 AND PHSC 101 required for GEP Group C.

PHSC 101 Measurement 1 cr.
A laboratory experience in observation, measurement, graphical analysis, and discovery in Physical Science. Designed for non-science majors. One two-hour laboratory per week. Every semester. Prerequisite or corequisite: PHSC 100. GEP Group C.

PHSC 201 Physical Science I 3 cr.
Physical phenomena and their role in modern society: the basic concepts of classical physics and their application. Students weak in mathematics should take MATH 104 before enrolling. Variable.

PHSC 202 Physical Science II 3 cr.
Continuation of Physical Science I with emphasis on the basic concepts of modern physics and chemistry. Students weak in mathematics should take MATH 104 before enrolling. Variable. Prerequisite: PHSC 201.

PHSC 203 Physical Science 4 cr.
Physical phenomena and their role in modern society: basic concepts of physics, chemistry, and astronomy, with energy and environment as the unifying theme. Three hrs. lecture and 3 hrs. lab. Every semester. Intended for education majors. GEP Group C.

PHSC 205 Descriptive Meteorology 3 cr.
Aspects of the atmosphere, weather variables, radiation, clean and dirty air, clouds and precipitation, atmospheric electricity, and weather forecast and modification. Field work included. Also offered as GEOG 205. Variable.

PHSC 210 Descriptive Astronomy 3 cr.
Aspects of the sky, the history and early development of astronomy, the solar system, stars, galaxies, cosmology, life beyond the earth, and current topics in astronomy. Lectures, planetarium demonstrations, and field work. Fall.

PHSC 211 Descriptive Astronomy Laboratory 1 cr.
Introductory lab course of sky observing with the unaided eye and simple instruments: outdoor daytime observing and the planetarium simulation of the night sky. Designed for the non-science major. One 2-hr. lab per week. Variable. Corequisite or prerequisite: PHSC 210.

PHSC 210 The Solar System 3 cr.
Solar and planetary discoveries since 1971, as revealed by NASA space probes. The solar atmosphere and the planets' magnetic fields; atmospheres and surfaces of the terrestrial planets; rings and atmospheres of the giant planets; major satellites; and the origin of the solar system. Variable. Prerequisite: PHSC 210.

PHSC 230 The Search for Life Beyond Earth 3 cr.
General survey of conditions across the universe; nature and probable origin of terrestrial life; possibilities of life for the other planets in our solar system; and the likelihood and techniques of contacting or communicating with intelligences beyond our solar system. Variable.

PHSC 240 Descriptive Acoustics of Music and Hi-Fidelity 3 cr.
Introductory acoustics course. The physical principles underlying the production, perception, and reproduction of music. Variable.

PHSC 290 Selected Topics in Physical Science 3 cr.
A selected topic of current interest in physical science. Repeatable for maximum of 6 credits if topics are substantially different. Variable.

PHSC 315 Digital Electronics 4 cr.
A lab-oriented course with emphasis on computer applications, including registers, counters, interfacing, and arithmetic circuits. Three hrs. lecture and 3 hrs. lab. Variable. Prerequisite: COSC 100.

PHSC 444 Metaphysics and Modern Physics 3 cr.

PHYS 215 General Physics I 4 cr.
Non-calculus introduction to the theoretical and experimental foundations of physics, topics to include mechanics and heat, the fundamental concepts, principles, and laws of physics. Three hrs. lecture and 3 hrs. lab. Either an introduction to the field for prospective majors or a self-contained survey for others. Fall. A familiarity with high school mathematics including algebra and geometry is assumed. GEP Group C.

PHYS 216 General Physics II 4 cr.
A continuation of PHYS 215. Non-calculus introduction, topics to include electricity, magnetism, and light. The fundamental concepts, principles, and laws of physics. Three hrs. lecture and 3 hrs. lab. Spring. Prerequisite: PHYS 215.

PHYS 261 Principles of Physics I: Mechanics, Waves and Oscillations 4 cr.
Calculus-based introduction to the theoretical and experimental foundations of physics focusing on mechanics, waves and oscillations. Topics to include kinematics, dynamics, energy, momentum, rotational dynamics, statics, fluids, gravity, waves, oscillations and acoustics. Intended primarily for physical science, engineering and math majors. Six hours of integrated lecture/lab/discussion per week. Fall. Corequisite: MATH 236. GEP Group C.

PHYS 262 Principles of Physics II: Thermodynamics, Electricity and Magnetism 4 cr.
Calculus-based introduction to the theoretical and experimental foundations of physics focusing on thermodynamics, electricity and magnetism. Topics to include heat, kinetic theory, the four laws of thermodynamics, heat engines, electrostatics, electrodynamics, magnetostatics, electromagnetic induction and circuits. Six hours of integrated lecture/lab/discussion per week. Spring. Prerequisite: PHYS 261. Corequisite: MATH 237.
PHYS 263 Principles of Physics III: Light and Modern Physics 4 cr.
Calculus-based introduction to the theoretical and experimental foundations of physics focusing on light and modern physics. Topics to include Maxwell’s equations, geometrical optics, physical optics, special relativity, wave-particle duality, quantum physics, atomic physics and cosmology. Six hours of integrated lecture/lab/discussion per week. Fall. Prerequisites: PHYS 262 and MATH 237.

PHYS 264 Principles of Physics IV: Modern Physics 3 cr.
Calculus-based introduction to the theoretical and experimental foundations of physics focusing on modern physics. Topics to include atomic physics and quantum physics. Four hours of integrated lecture/lab/discussion per week. Spring. Prerequisites: PHYS 262 and MATH 237.

PHYS 300 Introductory Astrophysics 3 cr.
Application of physics and mathematics to astrophysics. Celestial mechanics, stellar structure, and stellar evolution. Fall, even-numbered years. Prerequisites: PHYS 216 or PHYS 262, and MATH 237, or permission of instructor.

PHYS 302 Computational Techniques 2 cr.
Introduction to and application of the fundamental methods, tools and techniques essential to solve problems in the physical sciences. Regular topics include statistical, mathematical and computational tools; data analysis. LabView software as applied to instrumentation. Additional topics explored will augment student needs and supplement area of current interest in science. One hour lecture, one 2-hr lab integrated. Fall. Also offered as CHEM 304 and ENES 304. Prerequisites: CHEM 201 and 202 or COSC 240 or ENEE 114 equivalent, or permission of the instructor.

PHYS 310 Classical Mechanics 4 cr.

PHYS 311 Thermodynamics 3 cr.
Introduction to thermodynamics. Thermodynamic properties of matter. Three laws of thermodynamics, cycles, reactions, mixtures. Not open to students who have received credit for former PHYS 282 or ENME 232. Fall, even-numbered years. Prerequisite: PHYS 264.

PHYS 312 Electricity and Magnetism 4 cr.
Classical theory of electricity and magnetism using the techniques of vector calculus. Electrostatics, magnetostatics, polarized media, currents and their associated fields, and Maxwell’s equations. Fall. Prerequisite: PHYS 263 and junior standing. Corequisite: MATH 432.

PHYS 313 Optics 3 cr.
The nature and propagation of light, including reflection, refraction, diffraction, coherence, and interference, treated from the point of view of electromagnetic theory. Introduction to quantum optics. Spring, odd-numbered years. Prerequisite: PHYS 263.

PHYS 320 Experimental Physics 2 cr.
Application of contemporary methods and instruments to the experimental observation and measurement of classical and modern physical phenomena. Experiments chosen from mechanics, heat, thermodynamics, acoustics, electricity, magnetism, optics, and modern physics. Two 3-hr. labs. Fall. Prerequisite: PHYS 264.

PHYS 331 Analog Electronics 4 cr.
Basic principles of modern electronic devices, including DC and AC circuit analysis, diodes and power supplies, amplifier characteristics, op amps, transistors and transistor amplifiers, waveform generators. Six hours integrated lecture and lab. Not open to students with credit for PHYS 316. Fall. Prerequisites: PHYS 216 or PHYS 262, MATH 236, or permission of instructor.

PHYS 332 Digital Electronics 4 cr.
Basic principles of digital electronic devices, including TTL and CMOS logic families, gates, flip-flops, counters, registers, memory devices, displays, D to A and A to D converters, digital instruments, elementary computer interfacing techniques. Six hours integrated lecture and lab. Spring. Prerequisite: PHYS 216.

PHYS 335: Energy Generation and Conservation 3 cr.
A quantitative introduction to present energy fuels, energy generation, renewable energy sources, the consequences to the environment and global prospects for the next few decades. Variable. Prerequisite: MATH 236.

PHYS 340 Audio Engineering 3 cr.
Basic principles of audio engineering including acoustics, electroacoustic devices, electronic components for audio-engineering, audio measurements, audio electronic circuits and equipment, and audio recording and playback. Includes elements of both analog and digital audio. Two hrs. lecture, 2 hrs. lab. Fall, even-numbered years. Prerequisites: PHYS 263 and MATH 237 or permission of the instructor.

PHYS 350 Practical Solar Energy 4 cr.
Introduction to the principles of solar energy and how to install actual systems. Three hrs. lecture and 2 hrs. lab. Variable. Not open to students who have credit for former PHSC 350. Corequisite: PHYS 263.

PHYS 410 Theoretical Mechanics 3 cr.
Lagrangian and Hamiltonian formulation of mechanics with applications, the theory of small oscillations, the theory of wave motion in solids, reflection of waves, and mechanics of continuous fluids. Variable. Prerequisites: PHYS 310 and MATH 432.

PHYS 412 Theoretical Electromagnetism 3 cr.
Theory of the magnetic properties of matter, Maxwell’s equations with applications to wave propagation in isotropic and anisotropic media, scattering of electromagnetic waves, physics of the plasma state, fields and radiation from moving charges. Variable. Prerequisites: PHYS 312 and MATH 432.

PHYS 415 Computer Interfacing 3 cr.
Basic digital computer interfacing, combining digital electronics, programming, and computer architecture. Topics include transducers, electronic amplification, D/A and A/D conversion, data sampling, data storage and retrieval, laboratory exercises in discrete and integrated software, survey of commercially available interface devices. Two hrs. lecture and three hrs. lab. Variable. Prerequisites: COSC 240, PHYS 216 or PHYS 262, and PHSC 315 or PHYS 332 or permission of instructor. Also offered as COSC 415.

PHYS 417 Quantum Physics 3 cr.
The breakdown of classical mechanics and the development of quantum theory, the foundations of the Schroedinger Equation, the uncertainty principle, quantum systems in one dimension, angular momentum, spin, and atomic physics. Fall, odd-numbered years. Prerequisite: PHYS 264. Corequisite: MATH 432.

PHYS 420 Introduction to Computational Physics 3 cr.
Introduction to the methods of computational physics. Explores some of the basic techniques and ideas used to solve physics problems with the aid of computers. Students develop computer programs in a high-level programming language to solve specific problems. Topics include examples from several fields of engineering such as mechanics, heat transfer, fluid dynamics, electricity and acoustics. Variable. Prerequisites: PHYS 310, MATH 236, or permission of department chair.
PHYS 436 Mathematical Physics 3 cr.
Topics in mathematical methods: finite differences, Fourier series, partial differential equations, complex variables, and conformal mapping with physical applications. Spring. Prerequisites: MATH 432 and PHYS 216 or PHYS 262, or permission of instructor.

PHYS 440 Acoustics 3 cr.
Introduction to the theory of wave motions. Production, properties, measurements, and applications of sonic and ultrasonic waves. Spring, even-numbered years. Prerequisite: PHYS 263.

PHYS 490 Special Topics 1-3 cr.
Study at the senior level of one of the fields or recent developments of contemporary physics, such as ultrasonics, musical acoustics, atmospheric physics, astrophysics, or radiation physics. Repeatable for maximum of 6 credits if topics are substantially different. Variable. Prerequisite: permission of instructor.

PHYS 491 Seminar 2 cr.
Individual reports and group discussions on current topics. Subject matter selected jointly by student and instructor. Preparation of proposal for a research project. Review of basic concepts in mechanics, electrodynamics, thermodynamics, and atomic physics. Repeatable 1 time for credit. Fall. For physics majors with junior or senior standing. May be repeated once for credit. May not be taken at the same time as ENES 491.

PHYS 492 Capstone Senior Research and Seminar 2 cr.
Under the direction of a faculty member, students engage in independent research. Research culminates in a paper and formal public seminar. Spring. Prerequisite: PHYS 491 or permission of instructor. Capstone. May not be taken at the same time as ENEE 408 and ENME 410.

PHYS 495 Physics Internship 1-4 cr.
A field experience to provide the student with an opportunity to explore career paths in a work setting while applying knowledge learned in the classroom. Throughout the internship student develops professional skills consistent with the program learning goals. Student must enroll in the course before starting the workplace experience. Variable, up to 4 credits. One course credit for 45-hours of work. (37.5 hours of clock time) at the internship location. Can be repeated up to 4 credits. Prerequisites: Junior standing, approval of the department chair.

PHYS 499 Special Projects 2-4 cr.
Advanced lab projects for the superior student. Project chosen by the student in consultation with a member of the Department; may be a theoretical problem. Independent search of the pertinent literature, formulation of the experimental method, conducting the investigation, and the preparation of a report. Repeatable for maximum of 8 credits. Variable. Prerequisite: permission of Chair of Department.

Political Science

POSC 110 Introduction to American Politics 3 cr.
Interaction of the public and government in making American public policy. Processes and institutions of American national government; political parties and elections; public opinion and media; constitutional, legal, and cultural context. Every semester. GEP Group D.

POSC 112 Honors Introduction to American Politics 3 cr.
Accelerated study of the politics of a democratic society in a constitutional, legal, and cultural context. Major institutions (Congress, president, courts, bureaucracies) of U.S. national government; political behavior of the public. Computer-based data analysis; prior computer experience not necessary. Credit cannot be earned for both POSC 110 and POSC 112. Variable. Prerequisite: acceptance into the Honors Program or permission of the instructor. GEP Group D.

POSC 113 Introduction to World Politics 3 cr.
Exploration of the major issues in world politics including evolution of the international system, political actors in world politics, patterns of conflict and cooperation, power, nationalism, international political economy, and international organizations. Every semester. GEP Group D.

POSC 114 Honors Introduction to World Politics 3 cr.
Accelerated study of major issues in world politics including evolution of the international system, political actors in world politics, patterns of conflict and cooperation, power, nationalism, international political economy, and international organizations. Credit cannot be earned for both POSC 113 and POSC 114. Fall. Prerequisite: Acceptance into the Honors Program or permission of the instructor. GEP Group D.

POSC 131 Introduction to Comparative Politics 3 cr.
Comparative analysis of representative political systems including: the effect of legal, institutional and social structures on policy; interaction of domestic politics and the global system. Every semester. GEP Group D or Group F.

POSC 133 Public Administration 3 cr.
Exploration of the administrative functions of US government; focus on national government; comparisons with private sector; emphasis on issues of efficiency. Every semester. Not open to students who have credit for former POSC 351. Prerequisites: POSC 110/112 or POSC 113/114 or permission of instructor.

POSC 250 Research Methods 3 cr.
Development of the analytical skills necessary to evaluate political research and political phenomena including formulating and assessing research questions, measuring concepts, finding appropriate evidence, and evaluating existing literature. Take before enrolling in 300 or 400 level departmental courses. Every Semester. Not open to students who have credit for former POSC 351. Prerequisite: POSC 110/112 or permission of instructor.

POSC 321 American State and Local Politics 3 cr.
Local, county, and state governments in the U.S., with emphasis on Maryland. Role of states in the federal system. Every semester. Prerequisite: POSC 110/112 or permission of instructor.

POSC 323 Public Administration 3 cr.
Exploration of the administrative functions of US government; focus on national government; comparisons with private sector; emphasis on issues of efficiency. Every semester. Not open to students who have credit for former POSC 351. Prerequisites: POSC 110/112 or permission of instructor.

POSC 324 Criminal Justice Systems 3 cr.
Structure, function, and social impact of criminal legal systems; “law” and “justice.” Participants in the legal process: police, prosecuting and defense attorneys, judges, jurors, correctional officials, litigants, the press. State, national, and international comparisons; proposals for reform. Every semester. Not open to students who have credit for former POSC 354. Prerequisite: POSC 110/112 or permission of instructor.

POSC 330 Politics of Africa 3 cr.
Examination of the economic and political development of modern African states. Topics include the impact of colonization, theories of development, theories of integration into the contemporary global economic system and the process of state building. The focus will be on selected countries as case studies. Variable. Prerequisite: POSC 113/114 or POSC 131; POSC 131 preferred.

POSC 331 Politics of Latin America 3 cr.
Examination of the development of political and economic systems in Latin America. Topics include the effects of colonization, the application of theories of development, approaches to integration into the contemporary global economic system and patterns of state building. The focus will be on selected countries as case studies. Variable. Prerequisite: POSC 113/114 or POSC 131; POSC 131 preferred.
POSC 332 Politics of Middle East 3 cr.
Examination of political and economic development of modern Middle Eastern states. Topics include the impact of colonization, approaches to development and modernization, integration into the world economy, regional politics of inclusion and global exclusion. The focus will be on selected countries as case studies. Variable. Prerequisite: POSC 113/114 or POSC 131; POSC 131 preferred.

POSC 333 Politics of Europe 3 cr.
Examination of the structures of governments, ideologies, policies, and contemporary issues and problems facing the states of Europe and the European Union. Spring. Prerequisite: POSC 113/114 or POSC 131; POSC 131 preferred. Students who previously received credit for POSC 333 cannot receive credit for this course.

POSC 336 The Politics of Food 3 cr.
Comparative analysis of government policies concerning the production and regulation of food, the use of food as a weapon, a commodity, and statement of political values. The globalization of food and its impacts on state policies and the role of governmental and non-governmental actors on global food security. Spring. Prerequisite: POSC 113 /114 or POSC 131.

POSC 341 International Organization 3 cr.
Structure and activities of international organizations as mechanisms of foreign policy and international and transnational cooperation. Security concerns; international political economy; economic development and integration; human rights. Spring. Prerequisite: POSC 113/114 or POSC 131.

POSC 342 Foreign Policy of the United States 3 cr.
Formulation and conduct of U.S. foreign policy; key agencies, inter-branch relations; decision-making models. Societal and international influences on U.S. foreign policy behavior. Fall. Prerequisite: POSC 113/114 or POSC 131.

POSC 352 Interest Groups 3 cr.
Organization and activities of modern interest groups; impact of interest groups on public policy. Interest group formation, recruitment of members, internal organization, role in election campaigns, lobbying. Variable. Prerequisite: POSC 110/112 or permission of instructor.

POSC 353 Public Program Evaluation 3 cr.
Examination of current techniques in program evaluation. Emphasis will be placed on the policy cycle and the role that program evaluation does, can and should play in politics. Variable. Prerequisite: POSC 110/112 or permission of instructor.

POSC 355 Public Budgeting 3 cr.
Examination of the role that budgeting plays in state, local and national level politics. Investigation of current prevailing and recent historical techniques of budgeting. Exploration of current issues involving the interplay of politics and budgeting. Variable. Prerequisite: POSC 110/112 or permission of the instructor.

POSC 358 American Public Policy 3 cr.
Application of analytical tools to American public policy areas. Comparison of strengths and weaknesses of markets and governments; techniques for framing policy questions; exploration of currently policy areas through simulations and analysis. Not open to students who have credit for former POSC 458. Every year. Prerequisite: POSC 110/112 or permission of instructor.

POSC 361 Public Opinion and Political Behavior 3 cr.
How the ordinary citizen relates to politics, particularly in the U.S. Positions on basic issues; polls and surveys; formation of attitudes; ideology; participation and voting; propaganda and the media; public impact on government policy. Computer-based data analysis; prior computer experience not necessary. Variable. Prerequisite: POSC 110/112 or permission of instructor.

POSC 362 Political Parties and Elections 3 cr.
Organization and activities of modern political parties. Evolution of party systems in the United States; role in election campaigns; impact on public policy. Comparison to other political systems. Variable. Prerequisite: POSC 110/112 or permission of instructor.

POSC 363 Media and Politics 3 cr.
Effects of mass media, particularly television, on American politics and society; use of the media by politicians; nature and impact of news reporting; media and the socialization process; freedom of the press. Variable. Prerequisite: POSC 110/112 or permission of instructor.

POSC 365 Women and Politics 3 cr.
Examination of the changing political role of women in the United States. Political attitudes and values; voting; candidacy; and behavior of elected officials. Comparison across U.S. subcultures. Variable. Prerequisite: POSC 110/112 or permission of instructor.

POSC 370 Introduction to Political Thought 3 cr.
Introduction to the major thinkers and perspectives in Western political thought. Exploration of the seminal ideas of human nature, the nature of the state, and the good life that form the theoretical underpinnings of current political perspectives such as conservatism, liberalism, socialism, and fascism. Every year. Prerequisites: POSC 110/112, POSC 113/114 or POSC 131 or permission of instructor.

POSC 421 American Legislative Politics 3 cr.
Legislative politics in the U.S.; historical role of legislatures in American politics. Relations between legislatures and constituencies; congressional elections; internal formal and informal structures of Congress; congressional decision-making. Variable. Prerequisite: POSC 110/112 or permission of instructor.

POSC 422 Constitutional Law 3 cr.
Study of the U.S. Supreme Court as an institution within the American political system; the U.S. Constitution as defined in the principal decisions and opinions of the U.S. Supreme Court; the U.S. Supreme Court’s interpretation of the powers of three branches of federal government and the relationship between federal and state government. Every semester. Prerequisite: POSC 110/112 or permission of instructor.

POSC 423 Civil Rights and Liberties 3 cr.
The U.S. Constitution as defined in the principal decisions and opinions of the U.S. Supreme Court; the scope of individual rights and equal protection in relation to the powers of the national and state government. Every semester. Prerequisite: POSC 110/112 or permission of instructor.

POSC 427 The American Presidency 3 cr.
Analysis of the modern American presidency and the president’s interaction with the bureaucracy and Congress in making foreign and domestic policy. Evolution of the president’s role; executive office and White House staff; presidential power; personality; executive leadership and decision making. Variable. Prerequisite: POSC 110/112 or permission of instructor.

POSC 431 Russian Politics 3 cr.
The structure, functions and dynamics of the Russian political system since the collapse of the Soviet Union. Topics include economic policy, democratization, ethnic politics, and the role of Russia in international security, economic, and political fora. Fall. Prerequisite: POSC 113/114 or POSC 131 or permission of instructor; POSC 131 preferred.

POSC 435 Model Organization of American States 3 cr.
Detailed examination of the structure, functions, procedures, and issues associated with contemporary international organizations through preparation for and participation in the Model Organization of American States. Every year. Not open to students who have credit for former POSC 445. Prerequisite: POSC 341 and permission of instructor.
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POSC 441 Theory and Practice of International Relations 3 cr.
Current theoretical approaches to the study of international relations; foreign policy analysis; designing approaches for international problem solving; international negotiation. Fall. Prerequisites: POSC 113/114 or POSC 131 or permission of the instructor.

POSC 442 National Security Policy 3 cr.
Historical evolution of U.S. National Security Policy since 1945. Social construction of the national interest within the policy-making process; defense policy; resource issues; and counterterrorism. Spring. Prerequisite: POSC 113/114 or POSC 131 or permission of instructor.

POSC 443 Transnational Terrorism and Counterterrorism 3 cr.
Sociological roots of religious terrorism; intellectual history and the evolution of the global Salafist movement; history of U.S. government efforts to counter global Salafist terrorism; development of counterterrorism policy recommendations. Variable. Prerequisite: POSC 113/114 or POSC 131 or permission of instructor.

POSC 450 Environmental Public Policy 3 cr.
Development of the analytical tools required to understand and assess current environmental policy with the application of these tools to current environmental issues at the regional, national and international level. Variable. Prerequisite: POSC 110/112 or permission of instructor.

POSC 462 Personality and Politics 3 cr.
Politics from a psychological perspective. The phenomenon of political leadership; biographical study of political leaders; psychological and cultural factors in individual and mass political behavior. Variable. Prerequisite: POSC 110/112 or permission of instructor.

POSC 470 Seminar in Political Thought 3 cr.
Development of political reasoning through careful consideration of the original works of political theorists, including such topics as the ideal political community and “natural right.” Impact of these ideas on the development of the modern political ideologies of conservatism, liberalism, socialism and fascism. Repeatable for maximum of 6 credits if topics are substantially different. Variable. Prerequisite: POSC 370 or permission of instructor.

POSC 471 American Political Thought 3 cr.
Analysis of the fundamental political ideas underlying the American political experience and an exploration of how these ideas have been applied and developed over time and how they relate to current debates in American politics. Variable. Not open to students who have credit for former POSC 424. Prerequisite: POSC 110/112 or permission of instructor.

POSC 489 Law and Society Capstone 1 cr.
Demonstration of disciplinary knowledge through an examination of major topics and concepts in the field; preparation and presentation of an essay examining selected topics in the major. Prerequisites: at least 75 credits earned; at least five 300- and/or 400-level courses in the Law and Society Program.

POSC 490 Capstone Seminar in Political Science 1 cr.
Preparation of a portfolio of student work demonstrating research and analytical capabilities; development of written work synthesizing major points from previously conducted research; development of oral and visual presentation skills. Every semester. Prerequisite: Completion of at least 75 credits; five 300 or 400 POSC courses.

POSC 491 Seminar in Political Science 3 cr.
Lectures, discussions, student reports, research techniques, criticism, interpretation. Individual research (senior thesis) on a common topic, with interim reports and final formal presentation of paper. Variable. Repeatable for maximum of 6 credits if topics are substantially different. Prerequisite: written permission of instructor.

POSC 492 Internship Seminar 3 or 6 cr.
Academic component of internship; requires co-registration in POSC 495. Full-time interns register for 6 credits 492 (and 9 cr. 495), part-time interns 3 credits 492 (and 6 cr. 495). Graded A through F; elective credit in POSC major. Every semester.

POSC 495 Internship in Political Science 6 or 9 cr.
Experiential component of internship: guided work experience in conjunction with POSC 492; must directly relate to student’s academic program. Full-time interns register for 9 credits 495 and 6 credits 492 and may not enroll in any other courses. Part-time interns must register for 6 credits 495 and 3 credits 492. Graded P/F; general elective credit - does not count toward POSC major. Every semester. Prerequisites: junior or senior standing, not on probation; departmental approval of internship before registering.

POSC 498 Readings in Political Science 1-6 cr.
Directed readings in a specialized area or topic of political science. Topic ordinarily relates to an upper level political science course previously taken in that area. Regular conferences with instructor. Typically limited to seniors majoring political science with at least a 3.0 GPA in all political science courses. Repeatable for maximum of 6 credits if topics are substantially different. Every semester. Prerequisite: written permission of instructor and department chair.

Psychology

PSYC 150 General Psychology 3 cr.
Introduction to the methodology, theories, and applications of the science of animal and human behavior. Every semester. GEP Group D.

PSYC 151 Honors: General Psychology 3 cr.
Introduction to the scientific study of human and animal behavior. Basic research findings, methodology, and theoretical, social, and ethical issues. Oral presentations and written reports on outside readings in psychology required. Credit may not be earned for both PSYC 150 and PSYC 151. Fall. Prerequisite: acceptance into the University Honors Program or permission of instructor. GEP Group D.

PSYC 155 Critical Thinking and Scientific Inquiry 3 cr.
Introduction to the theory and practice of critical thinking with a focus on how these relate to psychological and other scientific thinking. Related topics covered include creative thinking, problem solving, judgment, decision making, skeptical inquiry, and scientific thinking as they apply to behavior and mental processes. Every semester. Prerequisites: PSYC 150/151 or permission of instructor.

PSYC 197 Introduction to the Profession of Psychology 1 cr.
Explanation of the profession of psychology. Detailed examination of what it means to be a psychology major at FSU. Identification of opportunities available within the department and university. Preliminary examination of both career and graduate school opportunities available to psychology majors. Graded P/F. Every semester. Not open to students who have credit for former PSYC 297. Prerequisites: PSYC 150/151 with a “C” or better and declared major in psychology, or permission of instructor. Recommended for Psychology Majors within the first 45 credits.

PSYC 201 Research Methods in Psychology 3 cr.
Introduction to the scientific method as applied to behavioral data. Naturalistic observation, surveys and correlational studies; statistical topics. Should be taken immediately after completing PSYC 150/151. Every semester. Not open to students who have credit for former PSYC 300. Prerequisite: PSYC 150/151.
PSYC 208 Introduction to Lifespan Development 3 cr.
Survey of human development from conception to death, emphasizing biological, cognitive, and socio-emotional development. An overview for understanding how humans change across the lifespan. Less depth than PSYC 210 or PSYC 212. Variable. Prerequisite: PSYC 150/151 with a “C” or better.

PSYC 210 Child Development 3 cr.
Detailed review of the biological, cognitive, and socio-emotional aspects of development, from conception through childhood. More depth than PSYC 208. Every semester. Prerequisite: PSYC 150/151 with a “C” or better.

PSYC 212 Adolescent and Adult Development 3 cr.
Detailed review of the biological, cognitive, and socio-emotional aspects of development, from adolescence until maturity. More depth than PSYC 208. Every semester. Prerequisite: PSYC 150/151 with a “C” or better.

PSYC 213 Psychology of Adjustment 3 cr.
Explores the concept of psychological adjustment by relating it to students’ everyday lives. Relevant psychological theory and research presented on a variety of topics including self-concept, values, person perception, interpersonal attraction, sexuality, problems in adjustment and psychotherapy. Variable. Prerequisite: PSYC 150/151 with a C or better.

PSYC 214 Intro to Geropsychology 3 cr.
Study of older adult development (65+). Covers physical and psychological changes, developmental transition from middle adulthood, health and mental health care, cognitive change, caregiving, personality, work and adjustment to retirement, and changing relationships in older adulthood. Fall. Prerequisite: PSYC150/151 with a “C” or better.

PSYC 220 Psychology of Women 3 cr.
Explores women’s psychological development and experience. Covers sex roles and how society’s attitudes about girls and women affect female self-concept, personality, relationships and work experience. Topics also include women of color, sexual harassment, gender roles and work experience. Spring. Prerequisite: PSYC 150/151 with a “C” or better.

PSYC 225 Death and Dying 3 cr.
Examination of the individual’s attitudes and reactions toward death and dying and one’s own mortality. Social and psychological processes affecting attitudes and reactions are explored. Variable. Prerequisite: PSYC 150/151 with a “C” or better.

PSYC 270 Psychological Perspectives of Human Sexuality 3 cr.
Describes psychological aspects of human sexual behavior and attitudes. Covers historical and current research techniques used to study sexuality; theories of sexual attraction, love and behavior; sexuality across the lifespan; physical and psychological aspects of sexual response; and variations in sexual attitudes, orientations and practices. Variable. Prerequisite: PSYC 150/151 with a “C” or better.

PSYC 290 Psychological Issues and Practices 1-4 cr.
A special content area or group of issues selected by the Department and announced in the preceding semester. Admission competitive. See the department for the criteria. Three hrs. seminar format. Repeatable for maximum of 9 credits if topics are substantially different. Variable. Prerequisite: PSYC 150/151 with a “C” or better.

PSYC 301 Statistical Methods in Psychology 3 cr.
The nature of scientific method, explanation and theory. Experimental and quasi-experimental design and statistical analysis. Every semester. Prerequisite: PSYC 201 with a “C” or better.

PSYC 303 Psychology of Couples 3 cr.
The psychology of intimate relationships. Variable. Prerequisite: PSYC 150/151 with a “C” or better or permission of instructor.

PSYC 306 Sensation and Perception 3 cr.
Psychological and physiological approaches to the study of how information from the senses is processed, organized, and interpreted. Applied to understanding art and everyday experience. Variable. Prerequisite: PSYC 150/151 with a “C” or better.

PSYC 314 Theories of Personality 3 cr.
General survey of the principal theories and research concerning the nature and development of personality. Fall. Not open to students with credit for former PSYC 414. Prerequisites: PSYC 150/151 with a “C” or better. Recommended PSYC 208/210/212.

PSYC 317 Abnormal Psychology 3 cr.
In-depth examination of psychological disorders. Relevant research and evidence-based treatment are discussed. Spring and Intercession. Not open to students with credit for former PSYC 417. Prerequisite: PSYC 150/151 with a “C” or better. Recommended PSYC 208/210/212.

PSYC 318 Social Psychology 3 cr.
Theories, methods and applications of social psychology. A survey of the social and interpersonal factors influencing an individual’s behavior. Topics include attitudes, person perception, interpersonal relations, group dynamics, social roles and conformity. Fall. Not open to students with credit for former PSYC 418. Prerequisite: PSYC 150/151 with a “C” or better.

PSYC 325 African American Psychology 3 cr.
Surveys African American psychology. Relevant psychological theory and research presented on a variety of topics including: family and individual relationships, the role of the Black Church, the impact of discrimination and oppression, and racial identity. Variable. Prerequisites: Prerequisite: PSYC 150/151 with a “C” or better. GEP Group F.

PSYC 340 Forensic Psychology 3 cr.
Examination of the interaction between psychology and the law including eyewitness testimony, expert testimony, why criminals commit crimes, criminal profiling, psychology’s role with the police, false memories, interrogations, the insanity defense, domestic violence, sexual abuse, discrimination and hate crimes, the death penalty, treatment of the criminal. Variable. Prerequisite: PSYC 150/151 with a “C” or better.

PSYC 345 Animal Learning and Cognition 3 cr.
Exploration of the cognitive abilities of nonhuman animals. Topics include classical and operant conditioning, memory, communication, social learning, and primate cognition. Fall. Prerequisite: PSYC 150/151 with a “C” or better.

PSYC 347 Industrial/Organizational Psychology 3 cr.
Explores how psychological theory, methods and research are used to help understand, predict and influence people’s behavior in the work place. Considers personnel psychology, organizational psychology and consumer psychology. Variable. Prerequisite: PSYC 150/151 with a “C” or better.

PSYC 385 Group Counseling 3 cr.
Study of group processes including power dynamics, curative factors, patterns of member interaction, leadership and stages of group development. Variable. Prerequisites: PSYC 150/151 with a “C” or better or permission of instructor.

PSYC 386 Pharmacology of Chemical Dependence 3 cr.
Research and theory concerning psychoactive drugs. Various drug classifications, their biological, psychological and social effects on the human organism and the environment, especially alcohol and other frequently abused drugs. Every semester. Prerequisite: PSYC 150/151 with a C or better.
PSYC 387 Addictions Treatment Delivery 3 cr.
Addresses the practice dimensions necessary for addiction counselors. Within each dimension, student introduced to the knowledge, skills and attitudes conducive to appropriate addiction service delivery. Variable. Prerequisites: PSYC 150/151 with a "C" or better or permission of instructor.

PSYC 388 Topics in Substance-Related and Addictive Disorders 3 cr.
Practical application of research and theory of addiction counseling. Overview of treatment related issues, including assessment and diagnosis. Variable. Prerequisites: PSYC 150/151 with a "C" or better or permission of instructor.

PSYC 389 Ethics for the Addiction Counselor 3 cr.
Addresses legal and ethical considerations for addiction counselors. Differences and similarities among addiction and other helping professionals discussed. Variable. Prerequisites: PSYC 150/151 or permission of instructor.

PSYC 394 Learning Mentor in Psychology Field Experience 3 cr.
Supervised opportunity to act as a learning mentor. Strategies for assisted learning. Repeatable for maximum of 12 credits. Only 3 credits may be counted towards psychology major or minor. Every semester. Prerequisites: PSYC 150/151 with a "C" or better; submission of application; departmental approval.

PSYC 397 Career Planning in Psychology 2 cr.
Advanced exploration of the individual in choosing a career path in or related to psychology. Examine personal values, interests and skills; use a vocational inventory. Study resume or graduate application writing, job or graduate school search, and interview preparation. Graded P/F. Every semester. Prerequisites: PSYC 197 and at least 45 credits or permission of instructor.

PSYC 404 Psychology of the Exceptional Child 3 cr.
Developmental characteristics of exceptional children. Topics include attitudes towards exceptional children, pertinent laws, classroom management, and psychological treatment. Fall. Prerequisites: PSYC 210 or 212, or permission of instructor.

PSYC 406 Theories of Counseling 3 cr.
Wide range of theories that have been proposed to understand the helping process, traditional to postmodern, along with ways to integrate the various theories. Emphasizes multicultural perspectives and evidence-based practice. Fall. Prerequisite: PSYC 150 or 151.

PSYC 408 Tests and Measurements 3 cr.
Psychological and educational tests, their validity, reliability, scale transformations, norms, and standardization. Administration, uses, and interpretation of various instruments of assessment. Fall. Prerequisite: PSYC 150/151 with a C or better.

PSYC 409 Human Learning and Cognition 3 cr.
An examination of human cognitive processes including human learning, memory and recall, attention processes, information processing, problem solving, thinking and reasoning, language acquisition and communication. Every semester. Prerequisite: PSYC 150/151 with a C or better.

PSYC 410 Individual Counseling: Evidence-Based Practices 3 cr.
Approaches in individual counseling/psychotherapy demonstrated by empirical research to be most effective. Self-reflections, role playing, and skill-development exercises. Ethics, multicultural issues, and stages of change. Every semester. Prerequisite: PSYC 150/151.

PSYC 420 Physiological Psychology 3 cr.
Characteristics of the nervous and endocrine system and their relationship to human and animal behavior. Fall. Prerequisites: PSYC 150/151 with a "C" or better. Recommend BIOL 109 or 149.

PSYC 430 Health Psychology 3 cr.
Scientific study of biopsychological processes related to health states. Includes prevention and treatment of illness, mind/body connection, influence of social and physical environments on our health, and health belief models. Behavioral components of health risk factors and improvement of the health care system are addressed. Course topics biologically based with introduction to applied perspectives. Variable. Prerequisite: PSYC 150/151 with a "C" or better.

PSYC 440 Survey of Family Psych. and Intervention Issues 3 cr.
General survey of the principal theories and research about family interaction patterns and interventions with families. Includes systems approaches, family life cycle development, social forces affecting families, and mental health issues including substance abuse/dependency. Not intended to prepare students to provide family therapy. Summer or Intersession. Prerequisites: PSYC 208 or 210 or 212 or permission of instructor.

PSYC 445 Research Applications in Animal Behavior and Cognition 3 cr.
Overview of research methods used to examine the behavior and cognitive abilities of nonhuman animals. Research projects designed to provide first-hand experience conducting behavioral research with animals. Spring. Prerequisites: Submission of application, PSYC 345, and permission of instructor.

PSYC 450 Multicultural Counseling Issues 3 cr.
Introduction to the issues of gender, class, race, culture, sexual orientation, and physical ability, as these variables may influence their ability to be present and counsel individuals who are different from themselves. Students will examine between and within group differences in light of various social, cultural, historical, and political contexts. The goals of this course are to increase student awareness of self and others as cultural beings and gain knowledge about various cultural groups in the United States. Variable. Prerequisite: PSYC 150/151 with a C or better.

PSYC 470 Research Methods Applications 3 cr.
Application of univariate and multivariate research methods and statistical procedures to analyze data from research projects in psychology and related fields. Instruction in computer data analysis and professional presentation to prepare students for work and graduate study. Variable. Prerequisites: PSYC 301 with a "C" or better and at least 75 credits. Capstone.

PSYC 481 History and Systems of Psychology 3 cr.
Historical foundations of the discipline of psychology. Survey of recent and current systems of theoretical ideas in psychology. Attention to the roots of the discipline in philosophy and science; consideration of the work of great psychologists and their associated systems. Variable. Prerequisites: PSYC 150/151 with a "C" or better and at least 75 credits. Capstone.

PSYC 485 Behavioral Approaches to Human Problems 3 cr.
Extensive examination of behavior therapy principles and strategies/procedures. Spring. Prerequisite: PSYC 150/151 with a "C" or better.

PSYC 488 Environmental Psychology 3 cr.
Influences of natural and human-built environments on human behavior and how humans influence environments. Personal space and crowding, environmental stressors, psychological aspects of sustainability. Natural, residential, urban,
educational and workplace environments. Variable. Prerequisites: PSYC 150/151 with a "C" or better.

**PSYC 489 Abnormal Child Psychology**  3 cr.
In-depth examination of child/adolescent psychological disorders. Relevant research and evidence-based treatment are discussed. Fall. Prerequisites: PSYC 208 or 210 or 212; at least 45 credits or permission of instructor.

**PSYC 490 Special Topics in Psychology**  1-4 cr.
Either a practicum to develop psychological skill, or a content-oriented course to provide a critical appraisal of a selected topic, as announced. Does not duplicate any other course offered by the Department of Psychology. Four credits when 5 contact hrs. are required (such as 2 hrs. lab and 3 hrs. lecture). Repeatable for maximum of 9 credits if topics are substantially different. Variable. Prerequisite: PSYC 150/151 with a "C" or better.

**PSYC 491 Seminar in Psychology**  3 cr.
Oral reports on a selected topic presented and discussed by students in a group setting. Written reports may also be required. Attendance at all seminar meetings expected. Repeatable for maximum of 9 credits if topics are substantially different. Variable. Prerequisite: PSYC 150/151 with a "C" or better.

**PSYC 492 Internship Seminar**  3 cr.
Academic component of internship; requires co-registration in PSYC 495. Full-time interns register for 3 credits of 492 (and 12 credits 495); part-time interns, 3 credits 492 (and 6-11 credits 495). Graded A-F. Every semester. Prerequisites: see PSYC 495. Capstone Internship option.

**PSYC 495 Internship in Psychology**  6-12 cr.
Experiential component of internship. Full-time interns register for 12 credits in 495 and may not enroll in other courses. Part-time interns register for 6-11 credits in 495 and 3 credits of 492. Graded P/F. Every semester. Prerequisites: At least 75 credits; submission of Internship Agreement form to internship director prior to registering; departmental approval.

**PSYC 497 Senior Seminar**  3 cr.
An integrated senior-year experience. Requires students to use accumulated skills, knowledge, and ethical sensitivity to critically analyze a new and/or controversial issue in psychology. Integration of previous course material and reflections on one's own experiences expected. An integrative research paper/project required. Repeatable for maximum of 9 credits if topics are substantially different. Every semester. Prerequisites: PSYC 150/151 with a "C" or better and at least 75 credits. Capstone.

**PSYC 498 Readings in Psychology**  1-6 cr.
Directed reading on a specific topic designed for the individual student. Summaries of readings and conclusions as a formal written report to be filed with the department. Not to duplicate any other course offered by the department. Departmental approval (granted only under extraordinary circumstances) required to enroll for more than 3 credit hrs. per semester. Repeatable for maximum of 9 credits if topics are substantially different. Every semester. Prerequisites: PSYC 150/151 and a written proposal approved by the sponsoring faculty member and Department Chair.

**PSYC 499 Psychology Projects**  1-6 cr.
Directed research, practicum, or other individualized learning experience on a specific topic. Formal written report to be filed with the department. Projects primarily of readings are not acceptable (see PSYC 498), nor are projects conducted in a group setting (see PSYC 490 or 491); not to duplicate any other course offered by the department. Departmental approval (granted only under extraordinary circumstances) required to enroll for more than 3 credit hrs. per semester. Repeatable for maximum of 9 credits if topics are substantially different. Every semester. Prerequisites: PSYC 150/151 with a "C" or better and a written proposal approved by the sponsoring faculty member and Department Chair.

**PSYC 506 Theories of Counseling**  3 cr.
Wide range of theories that have been proposed to understand the helping process, traditional to postmodern, along with ways to integrate the various theories. Emphasizes multicultural perspectives and evidence-based practice. Fall. Prerequisite: Instructor approval.

**PSYC 510 Individual Counseling: Evidence-Based Practices**  3 cr.
Approaches in individual counseling/psychotherapy demonstrated by empirical research to be most effective. Self-reflections, role-playing, and skill-development exercises. Ethics, multicultural issues, and stages of change. Every semester. Prerequisite: Instructor approval.

**Recreation and Parks Management**

**RECR 100 Leisure and the Diverse American Culture**  3 cr.
Examines diversity within American culture through the study of leisure and related influences on physical and mental wellness throughout the lifespan. Spring. GEP Group F.

**RECR 201 Introduction to Recreation and Parks**  3 cr.
Appreciation of recreational activities in our culture. History and philosophy of the recreation and park movement and the value of leisure in society today. Every semester.

**RECR 221 Introduction to Therapeutic Recreation**  3 cr.
An overview of services, agencies and programs designed to meet the developmental and recuperative recreational and leisure needs of individuals with disabilities. Variable.

**RECR 230 Introduction to Sport Management**  3 cr.
An introduction to the profession of sports management along with the legal, sociocultural, historical, political, and psychological concepts related to the sport industry. The scope of the industry and professional skill areas needed within the industry are reviewed. Fall.

**RECR 280 Recreation Leadership**  3 cr.
Leadership techniques involved in recreation and park settings, including leadership in small and large groups. Every semester.

**RECR 321 Therapeutic Recreation Practices and Procedures**  3 cr.
Overview of the history, philosophy, therapeutic recreation processes, theories and concepts related to leisure, play and service delivery options for specific disabilities and diagnoses in a therapeutic recreation setting. Variable.

**RECR 332 Sport Media and Communication**  3 cr.
Introduction to the many ways in which individuals, media outlets, and sport organizations work to create, disseminate, and manage messages to their constituents through the strategic communication model. The diversity of sports communication and strategies within sports industry are reviewed, analyzed, and applied. Spring.

**RECR 342 Park and Facility Design**  3 cr.
Study of park and recreation areas including acquisition, design and operating policies. Fall.

**RECR 382 Program Planning**  3 cr.
Planning principles used in the development of recreation programs and leisure experiences. Fall.
RECR 384 Special Event Management 3 cr.
Basic elements of special event management including: human resource management and organization structure, the arts and entertainment industry, event planning, event marketing, box office and ticket management, contract negotiation, financial management for special events, liability issues and program evaluation. Field trips required. Spring.

RECR 388 Research Methods in Recreation and Parks 3 cr.
Evaluation and research techniques within recreation and parks organizational operations. Spring.

RECR 390 Outdoor Adventures 3 cr.
Wilderness and survival activities. Hiking, backpacking, survival swimming, orienteering, fitness activities, outdoor first aid and emergency skill, physical and emotional challenges, preserving the outdoors. Self-inventory of physical history required. Variable.

RECR 393 History and Philosophy of Outdoor Recreation 3 cr.
Philosophical basis of the historical, ethical, moral, social and aesthetic issues surrounding outdoor recreation. Fall.

RECR 394 Environmental Interpretation 3 cr.
Explores principles and practices of environmental interpretation of outdoor recreation resources. Course content is designed to facilitate understanding of philosophical foundations of interpretation and applied methods for leading nature hikes and children's programs and developing interpretive trails. Program promotion, the development of displays and brochures and other relevant topics. Spring.

RECR 421 Client Assessment and Evaluation in Therapeutic Recreation 3 cr.
Individual intervention treatment plans, including the assessment, intervention techniques and protocols for treatment plans, and evaluation of the effectiveness of the treatment plan for community and clinical settings. Variable. Prerequisites: RECR 221 and RECR 321.

RECR 422 Administration and Supervision of Therapeutic Recreation 3 cr.
A comprehensive overview of all aspects of administration and the therapeutic recreation profession to include therapeutic recreation program design, safety, risk management, human resources, training, family interaction, use of community resources, agency accreditation, professional certification and organizational involvement. Variable. Prerequisites: RECR 221 and RECR 321.

RECR 423 Advanced Facilitation Methods for Clinicaland Community Setting in Therapeutic Recreation 3 cr.
An overview of concepts and interaction techniques used in the provision of goal-oriented therapeutic recreation services. Included are counseling techniques, leadership and cultural competency instructional techniques appropriate for use in treatment, leisure education and recreation participation. Variable. Prerequisites: RECR 221 and RECR 321.

RECR 430 Sport Promotion 3 cr.
Exploration and application of the best practices in promotion and sales ranging from tickets to sponsorship, prepare a sales force, retain and upsell existing products to customers, use sponsorships as a sales incentive, and service and activate sponsorships through various sales mediums. Fall.

RECR 432 Computer Mediated Communication in Sports 3 cr.
Exploration and application of the best practices in computer based marketing and promotion ranging from social media, blogging to email along with the evaluation process to determine the return-on-investment of resources. Variable.

RECR 440 Organization and Administration of Recreation and Parks 3 cr.
Management and administration of recreation and parks agencies, including financial management process, strategic planning, decision-making and alternative funding used within the profession. Spring. Prerequisite: 40 credits or permission of instructor.

RECR 443 Issues and Risk Management in Recreation and Parks 3 cr.
Current issues and risk management, including legal liability in the recreation and parks field. Spring. Prerequisite: 60 credits or permission of instructor.

RECR 448 Principles of Ecotourism 3 cr.
Explores the foundational principles, organization and management of ecotourism. Various nature-based tourism and ecotourism settings will be analyzed to compare operations, facilities, personnel and programming. Discussion of the management of ecotourism focuses on business planning, site development, operator responsibilities and best practices. Variable.

RECR 480 Field Experience in Recreation and Parks 1-6 cr.
Practical experience in recreation and parks management. Site of study may vary. Repeatable for maximum of 6 credits if placement sites are different. Every semester. Prerequisite: Permission of instructor.

RECR 490 Special Topics in Recreation and Parks 1-6 cr.
Unique or distinctive study such as clinics, workshops or course work dealing with a current topic related to recreation and parks management. Arranged as needed. Repeatable for maximum of 6 credits if topics are substantially different.

RECR 491 Practicum and Professional Seminar 3 cr.
Provide students with human resource knowledge from the hiring, application processes, training, and customer service. Provide employment and internship search skills and application process for internships. Course is completed prior to the internship. Spring. Prerequisites: RECR 382, 75 credits, and GPA of 2.0 or permission of instructor.

RECR 492 Internship Project 3 cr.
Academic component of internship. Register concurrently with RECR 495. Every semester. Prerequisites: RECR 491, junior or senior status, completion of core courses in major or permission of the instructor. Capstone.

RECR 495 Internship in Recreation 9-12 cr.
Guided work experience directly related to student's academic program. Normally, students may not take additional course work and should register concurrently with RECR 492. Graded P/F. Every semester. Prerequisites: junior or senior status, completion of core courses in major or permission of the instructor.

RECR 497 Out-of-Class Requirements 0 cr.
Students are required to attend one state, regional or national conference during their junior or senior year; to have a current certification in CPR and first aid; and to complete 80 hours of professional experience beyond the curriculum before graduation. Graded NR/P. Every semester.

RECR 499 Individual Study in Recreation and Parks 1-6 cr.
Individual research performed under the supervision of a faculty member. Every semester. Repeatable for maximum of 6 credits if topics are substantially different. Variable. Prerequisite: permission of the department chair.
Social Science

**SOSC 350 Honors Seminar: Values and Social Change**  
3 cr.  
The impact of social change on behavior in various cultures, providing a perspective on social change in the United States. Prerequisites: acceptance into Honors Program;<br>permission of instructor.

**SOSC 490 Topics in Social Science**  
3 cr.  
Interdisciplinary study of a special topic in the social sciences. Fall. Prerequisites: completion of introductory courses and progress on concentration plus written permission of social science coordinator. Capstone.

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Social Work

**SOWK 305 Racial and Cultural Minorities**  
3 cr.  
Analysis of minority-majority group situations, their causes and consequences.  
Minorities in the United States. Also offered as SOWK 305. Every semester. Not open to students who have credit for former SOCI 220, SOCI 320. Prerequisite: SOCI 100 or 111. GEP Group F.

**SOWK 306 The Sociology of African Americans**  
3 cr.  
A critical study of the organization of African-American society, its development, the endogenous structures and social processes that compose and define it, and its relationship to and interaction with the people and social forces external to it. Variable. Also offered as SOCI 306. Prerequisite: SOCI 100 or 111.

**SOWK 310 Statistics for Social Science**  
3 cr.  
Study of social scientific applications of univariate, bivariate, and multivariate statistical techniques with emphasis on their logic, interpretation, and application. Three hours lecture, one hour lab. Every semester. Also offered as SOCI 310. Prerequisite: Completion of GEP math requirement.

**SOWK 311 Basic Research Methods**  
3 cr.  
Techniques of research design: testing of hypotheses, sampling, data collection, measurement, and elementary statistical analysis. Research project required. Every semester. Prerequisite or corequisite: SOCI 310 or SOWK 310. Prerequisite: three courses in social work or permission of the department.

**SOWK 364 Marriage and Family Relationships**  
3 cr.  
Courtship, marriage, and family relationships. Current family patterns and the feasibility of the various alternatives to marriage. Every semester. Prerequisite: SOCI 100 or 111. Also offered as SOCI 364.

**SOWK 370 Introduction to Social Welfare and Social Work**  
3 cr.  
Introduction to social welfare and social work, including philosophy, history, and methods. The more significant aspects of social welfare ideology and the impact of established programs on meeting human need. Every semester. Prerequisite: SOCI 100 or 111, sophomore standing, or permission of the department.

**SOWK 371 Social Policy**  
3 cr.  
Analysis of contemporary social welfare programs, services, policies, and issues. Social welfare systems and their relation to other institutions in society. Every semester. Prerequisites: SOWK 370, POSC 110 or POSC 112, SOC 200 (may be taken as a corequisite), or permission of the department.

**SOWK 374 Child Welfare Social Services**  
3 cr.  
The concept of child welfare, its historical perspective, changing nature, and contemporary policies, programs, and services. Variable. Prerequisite: SOWK 370 or permission of the Department.

**SOWK 375 Human Behavior and the Social Environment I**  
3 cr.  
Analysis of the interrelationships of culture, society, and the development and behavior of the individual. Focus on life span development from prenatal to death. Every semester. Prerequisites: SOCI 100 or SOCI 111. Prerequisite or corequisite: PSYC 150 or PSYC 151, BIOL 109 or Health Science Administration major.

**SOWK 377 Human Behavior and the Social Environment II**  
3 cr.  
Examines the development of individual and group behavior from an ecological systems perspective. The course fosters an understanding of the total person by integrating knowledge gained in other liberal arts courses. Every semester. Prerequisites or corequisites: SOWK 305, SOWK 371, and SOWK 375.

**SOWK 379 Foundations for Generalist Practice**  
3 cr.  
Basic procedures in social work: verbal and nonverbal communication, listening, observing, developing relationships, interviewing, and recording. Every semester. Prerequisite: SOWK 370 or permission of the Department.

**SOWK 468 Sociology of Later Life**  
3 cr.  
The dimensions of aging, including the aging process, the implications of increasing life expectancy, and societal reactions to the aged. Variable. Prerequisite: SOCI 100 or SOCI 111. Also offered as SOCI 468.

**SOWK 470 Generalist Practice with Individuals and Families**  
3 cr.  
Beginning theories and techniques of social work intervention within social systems utilizing an eclectic, ecological, problem-solving approach. Every semester. Prerequisites: SOWK 377 and SOWK 379 or permission of the Department. Enrollment limited to Social Work majors.

**SOWK 471 Generalist Practice with Communities and Organizations**  
3 cr.  
Advanced theories and techniques of social work intervention within social systems utilizing an eclectic, ecological, problem-solving approach. Every semester. Prerequisites: SOWK 377 and SOWK 379. Prerequisites or corequisites: SOWK 470 and SOWK 473. Enrollment limited to Social Work majors.

**SOWK 473 Generalist Practice with Groups**  
3 cr.  
Study of interpersonal dynamics that occur in a broad range of groups including support groups, psychoeducational groups, interdisciplinary teams, committees, and social action groups. The course emphasizes the development of core practice skills to facilitate the functional work of such groups. Prerequisites: SOWK 377 and SOWK 379. Prerequisite or corequisite: SOWK 470. Enrollment limited to Social Work majors.

**SOWK 490 Special Topics in Social Work**  
1-3 cr.  
Either a practicum to develop social work skills, or a content-oriented seminar to explore a topic of relevance to the Social Work profession. Does not duplicate any other course offered by the Department. Topics rotate each time the course is offered. Students may suggest topics and projects to the Department Chair. Variable. Repeatable for maximum of 6 credits if topics are substantially different. Prerequisite: SOWK 370 and permission of the instructor.

**SOWK 492 Social Work Seminar**  
3 cr.  
Professional capstone course to integrate classroom and field experience. Required co-registration in SOWK 495. Graded A-F. Every semester. Enrollment limited to Social Work majors. Prerequisites: SOWK 471, senior standing, and completion of all prerequisite major and GEP course work. Capstone.

**SOWK 495 Internship in Social Work**  
12 cr.  
Sociology

SOCI 100 Introduction to Sociology  3 cr.
Systematic introduction to the study of society. Basic concepts, methods of study, and theories about societal structures and processes. Every semester. Not open to students who have credit for former SOCI 201. GEP Group D.

SOCI 111 Honors: Introduction to Sociology  3 cr.
Basic sociological analysis through simulations, selected readings, discussions, and special topics projects. Four hrs. lecture and lab projects. Credit may not be earned for both SOCI 100 and SOCI 111. Every semester. Not open to students who have credit for former SOCI 211. GEP Group D.

SOCI 200 Social Problems  3 cr.
Description and analysis of conditions that societies define and treat as social problems. Analysis of selected problems. Every semester. Not open to students who have credit for former SOCI 301. Prerequisite: SOCI 100 or SOCI 111.

SOCI 203 Sociology of Deviant Behavior  3 cr.
Analysis of various forms of deviance in contemporary society, its functions and dysfunctions, and society’s response. Every semester. Not open to students who have credit for former SOCI 303. Prerequisite: SOCI 100 or SOCI 111.

SOCI 224 Cultural Anthropology  3 cr.
Survey of the study of human behavior in simpler tribal and peasant societies as well as in complex civilizations. Emphasis on social change. Fall. Not open to students who have credit for former SOCI 324. (GEP Group F)

SOCI 305 Racial and Cultural Minorities  3 cr.
Analysis of minority-majority group situations, their causes and consequences. Minorities in the United States. Every semester. Not open to students who have credit for former SOCI 220 or 320. Prerequisite: SOCI 100 or SOCI 111. Also offered as SOWK 305. GEP Group F.

SOCI 306 The Sociology of African Americans  3 cr.
A critical study of the organization of African-American society, its development, the endogenous structures and social processes that compose and define it, and its relationship to and interaction with the people and social forces external to it. Variable. Also offered as SOWK 306. Prerequisite: SOCI 100 or 111.

SOCI 307 African Americans in Appalachia  3 cr.
Examines the rich legacy of African Americans in Appalachia beginning with the Civil War era and ending with the contemporary world. Chronologically arranged and interdisciplinary in perspective, the course features the way in which African Americans have been active agents in shaping regional culture, politics, and economics. Fall. Prerequisite: SOCI 100/111.

SOCI 310 Statistics for Social Science  3 cr.
Study of social scientific applications of univariate, bivariate, and multivariate statistical techniques with emphasis on their logic, interpretation, and application. Three hours lecture, one hour lab. Every semester. Prerequisite: completion of GEP math requirement. Also offered as SOWK 310.

SOCI 311 Basic Research Methods  3 cr.
Techniques of research design: testing of hypotheses, sampling, data collection, measurement, and elementary statistical analysis. Every semester. Prerequisite or corequisite: SOCI/SOWK 310. Prerequisite: three courses in sociology or permission of instructor.

SOCI 312 Applied Social Research  3 cr.
Collection and analysis of data to study applied social research problems. Research project, or participation in current research projects, required. Variable. Prerequisite: SOCI/SOWK 310 and SOCI/SOWK 311, or permission of instructor.

SOCI 322 Social Demography  3 cr.
A study of the measurement, analysis and explanation of population size, distribution, composition, changes and problems. Variable. Prerequisite: SOCI 100 or SOCI 111.

SOCI 325 Community Analysis  3 cr.
A critical appraisal of community research, including comparisons of folk, rural, urban, and suburban studies; analysis of local institutional patterns; and specific community factors such as stratification, power, and collective actions. Variable. Prerequisite: SOCI 100 or SOCI 111.

SOCI 326 Sociology of Rural Life  3 cr.
Characteristics of rural population, social structure, and institutional arrangements and changes. Variable. Prerequisite: SOCI 100 or SOCI 111.

SOCI 328 Sociology of Urban Life  3 cr.
A study of the city, its role in history, the problems of today, and prospects for the future. Emphasis on urbanism as a way of life. Variable. Prerequisite: SOCI 100 or SOCI 111.

SOCI 332 Collective Behavior and Social Movement  3 cr.
Analysis of relatively episodic, unstructured, and unconventional forms of social behavior and their consequences. Variable. Prerequisite: SOCI 100 or SOCI 111.

SOCI 334 Gender and Social Life  3 cr.
The social construction of gender and gender-based inequalities. Focus on contemporary American society but other cultures included. Variable. Prerequisite: SOCI 100 or SOCI 111.

SOCI 340 Criminology  3 cr.
The social causes and consequences of criminal behavior. Criminal law, the police, courts, and correctional institutions. Every semester. Prerequisite: SOCI 200 or SOCI 203.
SOC 341 Race and Crime 3 cr.
Examines the connections between race and crime in society, issues related to the
courts, police, and incarceration and the impact on different races and ethnicities in
America. Variable: Prerequisite: Soci 100/111 or permission of the instructor.

SOC 345 Sociology of the Environment 3 cr.
Examines the ambivalent relationship between human society and the natural world.
Frames contemporary concerns of environmental crisis within an investigation of
societies’ multifaceted attitudes toward and interactions with the natural landscape,
looking at the social dimensions of the surrounding natural and human-made
environments. Spring. Prerequisite: Soci 100/111.

SOC 350 Folklore in Appalachia 3 cr.
The study of human creativity and tradition as a reflection of Appalachian culture,
community, and place. Approach is expansive, providing students opportunity to
study, document, and value their own cultural traditions and heritage. Variable.
Prerequisite: Sophomore standing.

SOC 362 Sociology of Religion 3 cr.
A comparative study of the social organization and development of religious groups.
The interrelations between religion and other facets of society and social behavior.
Spring. Prerequisite: Soci 100 or Soci 111.

SOC 364 Marriage and Family Relationships 3 cr.
Courtship, marriage, and family relationships. Current family patterns and the
feasibility of the various alternatives to marriage. Every semester. Prerequisite: Soci
100 or Soci 111. Also offered as SOWK 364.

SOC 366 Social Inequality 3 cr.
The theory of stratification or inequality in society; relevant social policy. Emphasis on
American society and current social programs addressing inequality. Variable.
Prerequisite: Soci 100 or Soci 111.

SOC 367 Sociology of Medicine 3 cr.
Organizations, personnel, issues, and problems in medical care. Social influences on
health and illness. Variable. Not open to students who have credit for former Soci 467.
Prerequisite: Soci 100 or Soci 111.

SOC 420 Animals in Human Society 3 cr.
Students will develop an understanding of how sociological perspectives and theories
are used to explore the role of non-human animals in society. Students will study
animal/human interaction in several major social institutions – family, health, politics,
economy, religion and sports, utilizing a service learning approach. Variable.
Prerequisite: Soci 100 or 111.

SOC 425 Work and Occupations 3 cr.
An analysis of the role of work in society and the sociological importance of work. An
examination of different occupations in society. Variable. Prerequisite: Soci 100 or Soci
111.

SOC 433 Sociology of Education 3 cr.
Examines how social institutions and individuals’ experiences within these institutions
affect educational processes and social development. Topics include the public school
systems of modern industrial societies, including the expansion of higher, further,
adult, and continuing education. Variable. Prerequisite: Soci 100/111 or permission of
the instructor.

SOC 436 Sociological Aspects of Mass Communication 3 cr.
The social development of the mass media, societal influences upon them, and their
effects upon society. Variable. Prerequisite: Soci 100 or 111 or by permission of
instructor.

SOC 442 Juvenile Delinquency 3 cr.
The social causes and consequences of juvenile delinquency. Juvenile law, the police,
courts, and correctional institutions. Every semester. Prerequisite: Soci 340 or POSC 324
or permission of instructor.

SOC 443 The American Correctional System 3 cr.
The philosophies of punishment and corrections. Analysis of programs and their
effectiveness for punishment and rehabilitation of convicted criminals. Every semester.
Prerequisite: Soci 340 or POSC 324 or permission of instructor.

SOC 450 Classical Sociological Theory 3 cr.
Survey of sociological thought since Comte and its relevance to modern sociology.
Construction of theory by students themselves. Fall. Prerequisite: 12 hrs. in Sociology or
permission of instructor.

SOC 451 Contemporary Sociological Theory 3 cr.
Survey of contemporary sociological thought since the mid-20th century and its
relevance to modern sociology. Construction of theory by students themselves. Spring.
Prerequisite: Soci 450; 12 hrs. of Sociology or permission of instructor.

SOC 456 Women, Health and Healing 3 cr.
A feminist examination and analysis of women’s experiences with health and illness,
including women’s roles in health care systems as patients and care providers.
Variable. Not open to students who have credit for former Soci 368. Prerequisite: Soci
100 or Soci 111 and junior or senior standing or permission of instructor.

SOC 468 Sociology of Later Life 3 cr.
The dimensions of aging, including the aging process, the implications of increasing
life expectancy, and societal reactions to the aged. Variable. Prerequisite: Soci 100 or
Soci 111. Also offered as SOWK 468.

SOC 490 Special Topics 3 cr.
In-depth analysis of a topic selected by the instructor; may be repeated for up to 6
credits if topics are substantially different. Variable. Repeatable for maximum of 6
credits if topics are substantially different. Prerequisites: 6 credits of sociology or
permission of the instructor.

SOC 491 Seminar in Sociology 3 cr.
Advanced studies in selected topics. Individual study and research for class reports.
Formal paper required. Variable. Repeatable for maximum of 6 credits if topics are
substantially different. Prerequisite: permission of instructor. Capstone.

SOC 492 Internship Seminar/Research Paper 3 cr.
Academic component of internship. Required co-registration in 495. Graded A-F. Every
semester.

SOC 495 Internship in Sociology 6 or 12 cr.
Experiential component of internship; guided work experience in conjunction with
492; must directly relate to academic program. Full-time interns register for 12 credits
in 495 and 3 credits in 492 and may not enroll in other courses. Part-time interns
register for 6 credits in 495 and 3 credits in 492. Graded P/F. Every semester.
Prerequisites: Junior or senior status; 18 hours in sociology; 2.0 GPA in major and overall;
attendance at orientation meeting in semester prior to internship; submission of
internship application by fifth week of semester prior to internship; application includes
(1) resume, (2) proposal, (3) letter of acceptance from proposed agency.

SOC 498 Readings in Sociology 1-3 cr.
Open to any upper level student who submits a proposal, prior to the semester of
study, to the professor who will supervise the work. Department Chair’s written
approval of the proposal is required. Formal report of study is required and filed. Every
semester. Repeatable for maximum of 6 credits if topics are substantially different.
Prerequisite: permission of instructor.
**SDCI 499 Individual Problems in Sociology** 1-3 cr.
Special research project open to any upper-level student who submits a proposal, prior to the semester of the project, to the professor who will supervise the project. Department Chair’s written approval of the project is required. Formal report of the study is required and filed. Every semester. Repeatable for maximum of 6 credits if topics are substantially different. Prerequisite: permission of instructor.

**Sustainability Studies**

**SUST 155 Introduction to Sustainability Studies** 3 cr.
Introduction to sustainability as a field of study and a career. Consideration of environmental, economic and social equity aspects of sustainable living. Group practicum project. Three hr. lecture, two Saturday group projects required. Also offered as IDS 155. Every semester. GEP Group E.

**SUST 246 Sustainability in Action** 3 cr.
Practical aspects of sustainability are considered at the individual, household and community level. Challenges and opportunities for more sustainable decision making are examined. Required field trip. Prerequisite: SUST 155.

**SUST 350 Sustainable Agriculture** 3 cr.
Hands-on learning of sustainable agriculture methods as a field of study and a career. Field and practical studies of soils, crops, season extension, plant nutrition, pests and diseases, composting, tractors and equipment, marketing and business management. Numerous field trips to local farms practicing diverse methods. 3 credits. Summer. Prerequisite: SUST 155 or permission of instructor.

**SUST 455 Seminar in Sustainability Studies** 3 cr.
Integration of environmental, economic and social equity issues relating to sustainability. Individual seminar project demonstrating multidisciplinary approaches to sustainability. Group practicum project. Three hrs. lecture, two Saturday group projects required. Spring. Prerequisite: SUST 155 or permission of instructor.

**SUST 494 Field Experience in Sustainability Studies** 3 cr.
Eight work-hours per week of supervised sustainability work experience in an approved professional setting. Evaluative paper on the experience is required. Prerequisites: SUST 155 and junior or senior standing. Permission of the instructor and Sustainability Studies coordinator.

**Theatre**

**THEA 102 Shop Practicum** 1 cr.
Practical application of principles of technical theatre. Work on departmental productions required in the scene shop, costume shop, or on electric crew. Minimum of 45 clock hours required. Repeatable for credit each semester of enrollment. Every semester.

**THEA 103 Front of House Practicum** 1 cr.
Practical application in the principles of theatre management and administration. Work as part of Front of House crew on departmental productions. Minimum of 45 clock hours required. Repeatable for credit each semester of enrollment. Every semester.

**THEA 104 Production Crew Practicum** 1 cr.
Practical application in the principles of theatre production. Work on departmental theatre productions required as part of a production crew. Minimum of 45 clock hours required. Repeatable for credit each semester of enrollment. Every semester.

**THEA 105 Performance Practicum** 1 cr.
Practical application of principles of acting. Work on departmental productions as a member of a show’s cast. Minimum of 45 clock hours required. Repeatable for credit each semester of enrollment. Every semester.

**THEA 106 Introduction to Theatre** 3 cr.
Basic elements of theatre: play, playwright, performer, director, audience, designer, and technicians. Survey of theatrical forms from ancient times to the present day. Every semester. GEP Group A.

**THEA 107 Introduction to Theatrical Vision** 3 cr.
A general study of design for the theatre aimed at an understanding and facility in visual thinking, visual communication, and visual evaluation. Covers general design terminology, basic design research, basic design skills and introduction to theatre styles and conventions. Two 75-minute lectures and one 75-minute or two-and-a-half-week evening lab consisting of practical experience in design shops and performance spaces. Every semester. GEP Group A.

**THEA 110 Introduction to Acting** 3 cr.
Introductory preparation for acting through developmental exercises. Every semester.

**THEA 202 Stage Management** 3 cr.
Study of the responsibilities of theatrical stage managers. Training in techniques through the pre-production, design, rehearsal, technical process and performance. Spring even-numbered years. Prerequisite: THEA 107 or permission of instructor.

**THEA 203 Costume Technologies** 3 cr.
Introduction of the use of costume crafts in theatre. Course will focus on patterning, draping, construction and fitting of costumes. Practical experience required in the costume shop working on departmental productions. Fall odd-numbered years. Prerequisite: THEA 107 or permission of instructor.

**THEA 204 Stagecraft** 3 cr.
Fundamentals of scenery construction and knowledge of technical theatre through practical experience. Attention also given to drafting techniques, theatre rigging and knots. Practical experience required in the scene shop for the construction of Department productions. Every Fall.

**THEA 206 Modern American Playwrights** 3 cr.
An introductory survey of representative American plays and playwrights of the 20th century with attention to the evolution of Modern American Theatre and analysis of the efforts of the playwright and theatrical professionals. Spring. Prerequisite: ENGL 101/111.

**THEA 207 Theatre CAD** 3 cr.
Computer assisted design (CAD) for theatre. An introduction to theatre drafting and graphic standards. An introduction to Vectorworks: Spotlight software and its use as a design and drafting tool for the theatre industry. Fall odd-numbered years. Prerequisite: THEA 107 or permission of instructor.

**THEA 208 Acting: Basic Principles and Application** 3 cr.
An introduction to and exploration of the basic principles of various modern acting methods through lecture, exercises and the practical application of these methods. Fall. Prerequisites: THEA 110 and permission of instructor.

**THEA 210 Voice and Movement** 3 cr.
Introduction to voice and movement for the stage. Development of vocal and physical awareness and expression through fundamental exercises for voice and body and study of the anatomy and physiology of vocal production. Fall. Prerequisite: THEA 110 or permission of instructor.
THEA 211 Voice and Movement II 3 cr.
Advanced study in voice and movement with emphasis on stage movement and physicality. Focus on engaging and connecting body and voice during performance. Spring. Prerequisite: THEA 210 or permission of instructor.

THEA 304 Sound Design 3 cr.
Study of sound design as it pertains to the world of theatre. Including script analysis, realized and conceptual design practices, paperwork, sound editing, practical training with sound systems and consoles, and the use of sound editing and playback software. Fall even-numbered years. Prerequisite: THEA 107 or permission of instructor. Recommended: THEA 204.

THEA 305 Scene Design 3 cr.
Techniques of scenic design; scenic styles and forms; aesthetic principles including ground plan, front and rear elevations, rendering, and building of models. Script analysis, rendering skills and model building will be a focus. Fall even-numbered years. Prerequisite: THEA 107 or permission of the instructor. Recommended: THEA 204.

THEA 306 Stage Lighting Design 3 cr.
Lighting as an aesthetic: theory and practice; paperwork; software; types of equipment; use, deployment, and innovations. Practical experience required working in designs shops and with University Theatre productions. Spring odd-numbered years. Prerequisite: THEA 107 or permission of instructor. Recommended: THEA 204.

THEA 307 Costume Design 3 cr.
Studio course in design of costumes for theatre and film. Study of visual interpretation of plays through character analysis. History of dress; fashion; styles, fabric, and study of basic elements of design. Emphasis will be on performing research, rendering styles and skill, and communicating design concepts to the costume shop as well as the production team as a whole. Spring even-numbered years. Prerequisite: THEA 107 or permission of the instructor. Recommended: THEA 204.

THEA 308 Directing 3 cr.
Basic techniques for directing with practice in interpretation and staging of plays from the modern era. Spring. Prerequisite: THEA 106, 107, 206.

THEA 310 Voice and Speech 3 cr.
Development of voice and speech aimed at producing effortless, spontaneous, healthy, and clear speech for performance. Exploration of organs of speech and speech phonemes through study and application of the International Phonetic Alphabet. Fall. Prerequisite: THEA 210 or permission of instructor.

THEA 311 Stagecraft II 3 cr.
Study in theatre fabrication techniques for scenery and properties construction. Study of advanced technical procedures including welding materials, wood joinery, practical construction problem solving, and rigging for the theatre. Emphasis on the practices and development of skills through projects. Requirements include assignments on scenic construction for Department productions. Spring, even-numbered years. Prerequisites: THEA 107 and THEA 204 or permission of instructor.

THEA 315 Creative Dramatics 3 cr.
Creative dramatic activity for learning and self-development of the child. Laboratory experience in supervising creative dramatic activity. Variable. Prerequisite: permission of instructor.

THEA 318 Acting: Analysis and Performance 3 cr.
A further exploration through lecture, exercises and scene work of various modern acting techniques with an emphasis on character development, script analysis and scene study. Fall. Prerequisite: THEA 208 or equivalent.

THEA 335 Acting in Simulation 3 cr.
Training in the field of actor simulation. Students will learn to be simulation actors using common approaches found in acting training, including physical movement, improvisation, observation, and character history and development. Students will learn to portray characters for interdisciplinary collaborations and give feedback to other learners. Prerequisites: THEA 110 and Permission of Instructor. Every Spring.

THEA 340 Theatre Management 3 cr.
Business management of theatre organization; budget and finances, play leasing and promotion, box office. Variable. Prerequisite: permission of instructor.

THEA 350 Playwriting 3 cr.
Study of the basic elements of a practice in writing for the theatre. Action, conflict, character and dialogue will be explored through building-block exercises which culminate in the writing of a one-act play. Variable. Repeatable no more than 2 times for credit. Prerequisites: ENGL 101/111, THEA 206 and permission of instructor.

THEA 360 Stage Combat 3 cr.
Intensive study of safety and performance techniques required for staging violence in the theatre. Students will work with combat elements while also dealing with dramatic narrative. Fall even-numbered years. Prerequisite: THEA 208, THEA 210 or permission of instructor.

THEA 400 Theatre Production 3 cr.
Practical application of the principles of theatre production on the advanced level, involving participation in actual productions, classes and workshops of university-affiliated professional theatre. Repeatable no more than 3 times for credit. Variable. Prerequisite: permission of department. Theatrical Studies Capstone and Production Capstone-Technical.

THEA 407 Topics in Production Techniques 2 or 3 cr.
Detailed techniques concerning a particular production subject announced in advance. Lecture and practical laboratory. Repeatable no more than 3 times for credit. Variable. Prerequisite: permission of instructor.

THEA 408 Advanced Directing 3 cr.
Advanced techniques for directing, with practice in interpretation and staging of plays from both modern and period styles. Credit cannot be earned for both THEA 325 and THEA 408. Variable. Prerequisite: THEA 308.

THEA 409 Marketing Yourself as a Designer and/or Technician 3 cr.
Workshop for preparing the designer and/or technician to transition to the professional world. Emphasis on resumes and cover letters, techniques, portfolio review, and website construction. Juried presentation of theatrical design/technical portfolio and resume. Spring, even-numbered years. Prerequisites: THEA 107 and permission from instructor.

THEA 410 Dialects 3 cr.

THEA 412 History of Musical Theatre 3 cr.
Evaluate and compare a variety of musicals from the 19th century to present-day Broadway. Examine artists who have contributed to the development of musical theatre. Identify historical and cultural references. 150 minutes of instruction per week. Also offered as MUSC 412. GEP Group F. Every fall.
THEA 420 Marketing Yourself as an Actor 3 cr.
An introduction to the business of acting and instruction in specific methods and strategies that the actor can implement to advance his/her career. Spring. Prerequisite: THEA 318 and permission from instructor.

THEA 421 Advanced Acting: Analysis and Performance of Shakespeare 3 cr.
Application of Stanislavski-based methods to the works of Shakespeare. Textual analysis, scansion, rhetorical structure, in-depth exploration, voice and body work. In-depth explorations of text, technique and character through targeted exercises employed each class. Students then required to independently utilize a variety of these exercises in performance of assigned speeches. Credit cannot be earned for both THEA 319 and 421. Fall. Prerequisite: THEA 318 or equivalent. Acting Track Capstone.

THEA 425 History of the Theatre I 3 cr.
Survey of theatrical history from pre-historic origins to English Restoration with emphasis on the conventions of theatre. Includes treatment of historical background, dramatic forms, play analysis, plays and playwrights, and theatrical spaces in the various periods. Fall, odd-numbered years. Prerequisite: THEA 106.

THEA 426 History of the Theatre II 3 cr.
Survey of theatrical history from Jacobean Age to mid-20th century with emphasis on contextual literary theories and practices. Includes treatment of historical background, dramatic forms, plays and playwrights, and the physical theatre of the various movements. Spring, even-numbered years. Prerequisite: THEA 106.

THEA 428 Women Through Theatre 3 cr.
Seminar providing an historical survey of women's participation in theatre, examination of images of women in dramatic literature, and exploration of the contemporary world of women in theatre and related fields. Variable.

THEA 430 Auditioning for Theatre 3 cr.
Introduction to the particular art of auditioning for various theatre venues and to the application of some of its components, including handling audition anxiety, selecting audition material, preparing for auditions, audition etiquette, audition wardrobe and various audition situations. Spring. Prerequisites: THEA 318, 319, 320 and permission of instructor.

THEA 431 World Drama I: Premodern 3 cr.
World Drama from the 5th century B.C. Greeks to the late 19th century. Representative dramatists and forms from both the West and the East. Multicultural emphasis on the use and development of drama. Spring, odd-numbered years. Prerequisite: ENGL 150/250 or THEA 106 or permission of instructor. Also offered as ENGL 431.

THEA 432 World Drama II: Twentieth Century 3 cr.
World drama during the 20th century. Representative dramatists and forms from both the West and East. Multicultural emphasis on the variety of dramatic forms. Variable. Prerequisites: C or better in ENGL 101 or 111; ENGL 150/250 or THEA 106 or permission of instructor. Also offered as ENGL 432.

THEA 450 Experiments in Scripting and Staging 3 cr.
Creating scripts from existing sources, both narrative and non-narrative, with emphasis on traditionally non-dramatic/non-theatrical material. Staging experimental performances of the scripts. Variable. Prerequisites: THEA 308 and permission of instructor.

THEA 457 Children's Theatre Production 3 cr.
A workshop/rehearsal/performance course in children's theatre. Students will prepare a one-act play for presentation at FSU and area elementary schools. This piece will be designed for, rehearsed and toured by the members of the class during the semester. Course may be repeated more than once. Every Fall. Permission of instructor required.

THEA 460 Physical Comedy 3 cr.
Intensive study of the techniques, theories and basic principles of comedy. Students will create physical comedic theatre through exercises and practical application of these methods. Fall odd-numbered years. Prerequisites: THEA 208, THEA 210 and THEA 308 or permission of instructor.

THEA 465 Projects in Theatrical Design 3 cr.
Advance design project in scenery, lighting, sound and costumes involving participation in actual department productions from concept to performance on stage. Working in design shops required with weekly presentations to the instructor. Repealtable no more than 3 times for credit. Every semester. Prerequisites: THEA 305, 306 or 307, and written permission of the instructor. Production Capstone – Design.

THEA 466 Projects in Directing 1-3 cr.
Direction of a play for public performance through the FSU University Theatre Program. For advanced students, who must submit a formal proposal at least 6 months in advance. Project approval by departmental committee also is required. Repeatable no more than two times for credit. Variable. Prerequisites: THEA 110, 107, 206 and 308 (Theatrical Studies Capstone).

THEA 489 Special Topics in Acting 3 cr.
Study and performance of scenes from important nonrealistic forms of drama: premodern, contemporary, or experimental. Variable. Prerequisite: permission of instructor.

THEA 490 Special Topics in Theatre Arts 3 cr.
Research or applied experience on an announced selected topic. Repeatable for maximum of 18 credits if topics are substantially different. Variable. Prerequisite: permission of instructor.

THEA 492 Internship Project 3 cr.
Academic component of internship experience, in conjunction with THEA 495. Graded A through F. Prerequisite: permission of department.

THEA 493 Field Work in Theatre Practice 1 to 3 cr.
Participation in production and/or management in an approved theatre or in an organization in a related communication field. Participants in a university-affiliated professional theatre may be eligible. Repeatable for maximum of 9 credits if topics are substantially different. Variable. Prerequisite: permission of department.

THEA 495 Internship in Theatre 6 or 12 cr.
Experiential component of internship: guided work experience directly related to student’s academic program. Full-time interns register for 12 credits in 495 and 3 credits in 492, and may not enroll in any other courses. Part-time interns must register for 6 credits in 495 and declared major in theatre, minimum 12 cr., and 2.5 GPA in major; Internship Agreement Form approved by department before registering.

THEA 499 Directed Study 1 to 6 cr.
Intensive study through faculty-directed projects or papers. Hours arranged. Repealtable for maximum of 9 cr. Variable. Prerequisite: permission of department chair (Theatrical Studies Capstone).

Women’s Studies
For descriptions of other Women’s Studies courses, refer to the description of the Women’s Studies minor and appropriate departmental course listings.

WMST 201 Introduction to Women’s Studies 3 cr.
A multicultural and multidisciplinary survey of the traditional assumptions about women. Students will gain an understanding of the intersection of gender with race,
class, ethnicity, religion, and sexual orientation, and issues of ability/disability. Fall.
GEP Group F.

**WMST 490 Special Topics in Women's Studies** 3 cr.
In-depth analysis of a topic in Women's Studies selected by the instructor; may be repeated for a maximum of 6 credits if topics are substantially different. Variable. Recommended: WMST 201.

**WMST 491 Seminar in Women's Studies** 3 cr.
A synthesizing experience on selected topics in Women's Studies. Variable. Prerequisite: WMST 201 or permission of instructor.

**WMST 494 Practicum in Women's Studies** 1-6 cr.
A Women's Studies related work experience at an approved site. A formal written report must be filed with the Women's Studies faculty supervisor. Variable. Graded P/F. Prerequisites: WMST 201, and two Women's Studies electives, and permission of program coordinator.

**WMST 499 Independent Study** 1-3 cr.
Directed research, practicum or other individualized learning experience on a specific topic in Women's Studies. Formal written report to be filed with the Women's Studies faculty supervisor. Variable. Prerequisites: WMST 201 and permission of program coordinator.
Personnel Register

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Pamela Williams, B.A., St. Joseph College; M.L.S., Kent State University, M.A., Frostburg State University.

Kurt F. WolFE, Jr., B.S., Frostburg State University; M.A., Ph.D., University of Maryland.

WayNE a. Yoder, B.A., Goshen College; M.S., Ph.D., Michigan State University.

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2020-2021

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Policies

Credit-by-Exam and Other Non-traditional Learning

Following is a list of the types of examinations and other non-traditional learning experiences that Frostburg State University will accept for credit towards a degree. Students will receive elective or required credit depending on the content of the test or other experience evaluated. As of May 2017, the programs listed here are the only forms of non-traditional credit accepted. Participants should consult the Admissions Office (301.687.4201) or the Associate Provost (301.687.4212) for the most up-to-date information.

<table>
<thead>
<tr>
<th>Source</th>
<th>Score or Transcript Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advanced Placement Program (CEEB)</td>
<td>3 or higher</td>
</tr>
<tr>
<td>CLEP</td>
<td>Minimum score varies by subject area with no score lower than 50 accepted</td>
</tr>
<tr>
<td>International Baccalaureate</td>
<td>4 or higher on each standard/subsidiary or higher level exam</td>
</tr>
<tr>
<td>College Courses at High School</td>
<td>If credit is recorded on a college transcript</td>
</tr>
<tr>
<td>Departmental Exams from Other Colleges</td>
<td>If credit is recorded on a college transcript</td>
</tr>
<tr>
<td>Military Credit</td>
<td>If equivalent to courses in FSU’s curriculum</td>
</tr>
<tr>
<td>Portfolio Credit from Other Colleges</td>
<td>If credit is recorded on a college transcript</td>
</tr>
<tr>
<td>FSU Special Departmental Exams</td>
<td>See following list of tests currently available</td>
</tr>
</tbody>
</table>

Credit-by-Exam Policies

In addition to earning credit at FSU or transferring course credit from other accredited institutions, you may acquire credits through examination. The examinations accepted include Advanced Placement Examinations, College Level Examination Program (CLEP), International Baccalaureate exams and special departmental examinations.

Recording of Credits

The grade AP, CL, IB, or CE (depending on the test) will appear on your transcript to indicate that the credits were earned by examination. Credit may be earned within your major as well as in general college and elective courses. Credit by exam will not be used in computing your cumulative grade point average.

General Limitations

To earn credit by examination, you must be currently enrolled at Frostburg State University as a full-time or part-time student.

An examination cannot be used to remove a failure in a course completed at Frostburg or elsewhere.
An examination cannot be used to remove a low grade earned in a course completed at Frostburg or elsewhere.
An examination may not be repeated or retaken in order to earn a higher score.

College Level Examination Program (CLEP)

CLEP is administered by the College Entrance Examination Board. See the address in the Advanced Placement section, or consult http://www.collegeboard.org/clep.

The examinations consist of college-level general and subject examinations designed to measure knowledge acquired through means other than college course work.

The examinations stress understanding, the ability to perceive relationships, and a grasp of basic principles and concepts. General examinations are designed to measure general learning, often referred to as general education. Subject examinations are designed to measure achievement in the area of specific course or subject.

Procedures

Procedures are identical with those noted above for Advanced Placement Examinations.

Advanced Placement Examinations

Advanced Placement Examinations are available through the College Entrance Examination Board of the Educational Testing Service, Princeton, New Jersey 08540; www.collegeboard.org/ap.

You may receive credit by examination for grades of 3, 4 or 5 on the College Board Advanced Placement Examinations.

Procedures

1. Make arrangements to take the Advanced Placement Examination at the appropriate time. Pay the examination fee to the appropriate agency.

Your official score must be sent directly by the testing agency to the Associate Provost. After you enroll at the University, you must request that your score be evaluated, and, if the score is high enough for credit to be given, reported to the Registrar’s Office.

The credit will be recorded on your transcript without charge.

International Baccalaureate Programme

The International Baccalaureate Programme (IB) is a rigorous two-year curriculum offered in select secondary schools throughout the world. In order to receive college credit for IB, you must sit for the examination in each subject of study and ask IB to send an official transcript to FSU’s Associate Provost.

Contact International Baccalaureate North America; toll free 1.866.826.4262; Fax 604.733.8970; www.ibo.org.
Special Departmental Examinations

After paying a $25 testing fee for each departmental exam, you may take a special examination in place of any course for which credit by examination has been established. If you pass the examination, the course will be waived, and you may receive credit for it by paying an additional processing fee. The department determines passing standards, as well as eligibility standards, if applicable. Students currently or formerly enrolled in a course are ineligible to take a special departmental exam to exempt from the same course.

Advanced Placement Tests (AP)

Following is the list of Advanced Placement Tests evaluated. Tests without course equivalency/credit listed may be accepted, but are not yet evaluated. Minimum score required is 3, unless otherwise noted.

<table>
<thead>
<tr>
<th>Title of Exam</th>
<th>FSU Course Equivalent(s)</th>
<th>Credit Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art HistoryScore of 3 or 4:</td>
<td>ART 100 Art Appreciation</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Score of 5:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ART 111 Honors: Art Appreciation</td>
<td>3</td>
</tr>
<tr>
<td>Biology</td>
<td>BIOL 149 General Biology I</td>
<td>4</td>
</tr>
<tr>
<td>Calculus AB* Score of 3:</td>
<td>MATH 120 Pre-Calculus Mathematics</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Score of 4 or 5:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>MATH 236 Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>* FSU does not give credit for sub-scores.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Calculus BC Score of 3:</td>
<td>MATH 236 Calculus I</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Score of 4 or 5:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>MATH 236 Calculus I</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>MATH 237 Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>Cambridge Capstone Seminar Score of 3 or 4:</td>
<td>IDIS 150 First-Year FSU Colloquium</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Score of 5:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>IDIS 151 Honors: First-Year FSU Colloquium</td>
<td>3</td>
</tr>
<tr>
<td>Cambridge Capstone Research Project Score of 3:</td>
<td>IDIS 195</td>
<td>3</td>
</tr>
<tr>
<td>Cambridge A Level Global Score of 3 or 4: Perspectives and Research</td>
<td>IDIS 150:First-Year FSU Colloquium</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>andIDIS 195</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Score of 5:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>IDIS 151 Honors: First-Year FSU Colloquium</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>andIDIS 195</td>
<td>3</td>
</tr>
<tr>
<td>Chemistry Score of 3 or 4:</td>
<td>CHEM 201 General Chemistry I</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Score of 5:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CHEM 201 General Chemistry I</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>CHEM 202 General Chemistry II</td>
<td>4</td>
</tr>
<tr>
<td>Computer Science Score of 3 or 4:</td>
<td>COSC 195 Computer Science Elective</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Score of 5:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>COSC 240 Computer Science</td>
<td></td>
</tr>
<tr>
<td>Computer Science Principles Score of 3:</td>
<td>COSC 195 Computer Science Elective</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Score of 4 or 5:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>COSC 101 The Discipline of Computer Science</td>
<td>3</td>
</tr>
<tr>
<td>Economics: Macro Score of 3 or 4:</td>
<td>ECON 201 Principles of Economics (Macro)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Score of 5:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ECON 211 Honors: Principles of Macro Economics</td>
<td>3</td>
</tr>
<tr>
<td>Economics: Micro Score of 3 or 4:</td>
<td>ECON 202 Principles of Economics (Micro)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Score of 5:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ECON 212 Honors: Principles of Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>English Language &amp; Composition Score of 3 or 4:</td>
<td>ENGL 101 Freshman Composition</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Score of 5:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ENGL 111 Honors: Freshman Composition</td>
<td>3</td>
</tr>
</tbody>
</table>

Procedures
2. Request permission from the Department Chair to be evaluated for credit in a particular course.

Pay a $25 administrative testing fee at the University & Student Billing Office.

The Department Chair assigns an appropriate faculty member to evaluate you. In some cases, the department offers the exam on a regularly scheduled basis. See the list that follows.

The faculty member evaluates your work according to quantitative and qualitative standards previously established by the department — for example, by an oral or written examination or by performance.

If the faculty member’s evaluation reveals that your achievement is equal or superior to that of a student passing the course in a traditional way, the department will report the grade of CE to the Registrar’s Office on the form for granting course approval to students.

Pay a processing fee of $10 per credit hour to get the credit recorded on your transcript.

You may take such exams only once.
<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>English Literature &amp; Composition Score of 3:</td>
<td></td>
</tr>
<tr>
<td>ENGL 101 Freshman Composition</td>
<td>3</td>
</tr>
<tr>
<td>Score of 4:</td>
<td></td>
</tr>
<tr>
<td>ENGL 101 Freshman Composition</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 150 Introduction to Literature</td>
<td>3</td>
</tr>
<tr>
<td>Score of 5:</td>
<td></td>
</tr>
<tr>
<td>ENGL 111 Honors: Freshman Composition</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 250 Honors: Comparative Literature</td>
<td>3</td>
</tr>
</tbody>
</table>

| Environmental Science                     |         |
| IDIS 160 Science, Technology and Society  | 3       |

| European History                          |         |
| HIST 195 History Elective                 | 3       |

| French Language                           |         |
| FREN 101 Basic Elements of French I       | 3       |
| FREN 102 Basic Elements of French II      | 3       |

| French Literature                         |         |
| FREN 195 French Elective                  | 3       |

| German Language                           |         |
| MDFL 195 Foreign Language Elective        | 6       |

| Government & Politics: Comparative        |         |
| POSC 131 Introduction to Comparative Politics | 3    |

| Government & Politics: U.S. Score of 3 or 4: |         |
| POSC 110 Introduction to American Politics | 3       |
| Score of 5:                                  |         |
| POSC 112 Honors: Introduction to American Politics | 3    |

| Human Geography Score of 3 or 4:          |         |
| GEOG 104 Human Geography                  | 3       |
| Score of 5:                                |         |
| GEOG 114 Honors: Human Geography           | 3       |

| International, English Language/APIEL     |         |
| Not accepted                              |         |

| Latin Literature                          |         |
| Evaluated at student request              |         |

| Latin, Virgil                             |         |
| Evaluated at student request              |         |

| Music Theory Score of 3 Minimum:          |         |
| MUSC 102 Theory I                         | 3       |

| Aural SubScore of 3 Minimum:              |         |
| MUSC 104 Aural Skills I                   | 1       |

| Physics 1 Score of 3:                     |         |
| PHSC 100 Cosmic Concepts                  | 3       |
| PHSC 101 Measurement                      | 1       |
| Score of 4 or 5:                          |         |
| PHYS 215 General Physics I                | 4       |

| Physics 2 Score of 3:                     |         |
| PHSC 100 Cosmic Concepts                  | 3       |
| PHSC 101 Measurement                      | 1       |

| Physics C: Electricity & Magnetism Score of 3: |         |
| PHSC 100 Cosmic Concepts                    | 3       |
| PHSC 101 Measurement                        | 1       |

| Physics C: Mechanics Score of 3:            |         |
| PHSC 100 Cosmic Concepts                    | 3       |
| PHSC 101 Measurement                        | 1       |

| Psychology Score of 3 or 4:                |         |
| PSYC 150 General Psychology                | 3       |
| Score of 5:                                |         |
| PSYC 151 Honors: General Psychology         | 3       |

| Spanish Language                          |         |
| SPAN 101 Basic Elements of Spanish I       | 3       |
| SPAN 102 Basic Elements of Spanish II      | 3       |

| Spanish Literature                        |         |
| SPAN 195 Spanish Elective                 | 3       |

| Statistics Score of 3 or 4:               |         |
| MATH 109 Elements of Appl. Prob. & Statistics | 3    |
| Score of 5:                               |         |
| MATH 110 Honors: Elements of Appl. Prob. & Statistics | 3    |

| Studio Art: Drawing                       |         |
| ART 212 Drawing                           | 3       |

| Studio Art: 2D Design                     |         |
| ART 104 Two-Dimensional Design            | 3       |

| Studio Art: 3D Design                     |         |
| ART 105 Three-Dimensional Design          | 3       |

| U.S. History                              |         |
| HIST 103 History of the United States     | 3       |
| HIST 104 History of the United States     | 3       |

| World History                             |         |
| HIST 114 World History                    | 3       |
### International Baccalaureate Exams (IB)

Following is the list of International Baccalaureate Exams currently evaluated. Exams without course equivalency/credit listed may be accepted, but are not yet evaluated. Minimum score required is 4 on the Standard or Higher Level exam unless otherwise noted.

<table>
<thead>
<tr>
<th>Title of Exam</th>
<th>FSU Course Equivalent(s)</th>
<th>Credit Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Language A1</td>
<td>Score of 4 or 5 (Standard):</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ENGL 101 Freshman Composition</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Score of 6 or 7 (Standard):</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ENGL 111 Honors: Freshman Composition</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ENGL 250 Honors: Comparative Literature</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Score of 4 (Higher Level):</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ENGL 101 Honors: Freshman Composition</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Score of 5 (Higher Level):</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ENGL 101 Honors: Freshman Composition</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ENGL 150 Introduction to Literature</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Score of 6 or 7 (Higher Level):</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ENGL 111 Honors: Freshman Composition</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ENGL 250 Honors: Comparative Literature</td>
<td>3</td>
</tr>
<tr>
<td>Language A2</td>
<td>Syllabus review required. Contact Foreign Language Department.</td>
<td></td>
</tr>
<tr>
<td>Language B (French)</td>
<td>Score of 4 (Standard):</td>
<td></td>
</tr>
<tr>
<td></td>
<td>FREN 101 Basic Elements of French I</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Score of 5, 6 or 7 (Standard):</td>
<td></td>
</tr>
<tr>
<td></td>
<td>FREN 101 and 102 Basic Elements of French I and II</td>
<td>6</td>
</tr>
<tr>
<td>Language B (Spanish)</td>
<td>Score of 4 (Standard):</td>
<td></td>
</tr>
<tr>
<td></td>
<td>SPAN 101 Basic Elements of Spanish I</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Score of 5, 6 or 7 (Standard):</td>
<td></td>
</tr>
<tr>
<td></td>
<td>SPAN 101 and 102 Basic Elements of Spanish I and II</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Score of 4 or higher (Higher Level):</td>
<td></td>
</tr>
<tr>
<td></td>
<td>SPAN 101 and 102 Basic Elements of Spanish I and II</td>
<td>6</td>
</tr>
<tr>
<td>Language B (Other languages)</td>
<td>Syllabus review required. Contact Foreign Language Department.</td>
<td></td>
</tr>
<tr>
<td>Language ab initio</td>
<td>Syllabus review required. Contact Foreign Language Department.</td>
<td></td>
</tr>
<tr>
<td>Business &amp; Management</td>
<td>BUAD 100 Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>Economics</td>
<td>Score of 4 or 5:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ECON 200 Basic Economics</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Score of 6 or 7:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ECON 211 Honors: Principles of Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>Geography</td>
<td>Score of 4 or 5:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>GEOG 104 Human Geography</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Score of 6 or 7:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>GEOG 114 Honors: Human Geography</td>
<td>3</td>
</tr>
<tr>
<td>History</td>
<td>Score of 4 or 5:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>HIST 100 Contemp. World in Historical Perspective</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Score of 6 or 7:</td>
<td></td>
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<tr>
<td></td>
<td>HIST 111 Honors: Contemp. World in Hist. Perspective</td>
<td>3</td>
</tr>
<tr>
<td>Special Topics in History</td>
<td>Syllabus review required. Contact History Department.</td>
<td>3</td>
</tr>
<tr>
<td>Info. Tech. in a Global Society</td>
<td>COSC 100 Introduction to Computer Science</td>
<td>3</td>
</tr>
<tr>
<td>Philosophy</td>
<td>Score of 4 or higher (Standard):</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PHIL 101 Introduction to Philosophy</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Score of 4 or 5 (Higher Level):</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PHIL 101 Introduction to Philosophy</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>PHIL 195 Philosophy Elective</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Score of 6 or 7 (Higher Level):</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PHIL 111 Honors: Introduction to Philosophy</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>PHIL 195 Philosophy Elective</td>
<td>3</td>
</tr>
<tr>
<td>Psychology</td>
<td>Score of 4 or 5:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PSYC 150 General Psychology</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Score of 6 or 7:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PSYC 151 Honors: General Psychology</td>
<td>3</td>
</tr>
<tr>
<td>Social &amp; Cultural Anthropology</td>
<td>SOCI 224 Cultural Anthropology</td>
<td></td>
</tr>
<tr>
<td>Biology</td>
<td>BIOL 149 General Biology I</td>
<td>4</td>
</tr>
<tr>
<td>Chemistry</td>
<td>Score of 4 or 5:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CHEM 201 General Chemistry I</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Score of 6 or 7:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CHEM 201 General Chemistry I</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>CHEM 202 General Chemistry II</td>
<td>4</td>
</tr>
<tr>
<td>Design Technology</td>
<td>PHYS 195 Physics Elective</td>
<td>3</td>
</tr>
<tr>
<td>Environmental Systems</td>
<td>IDIS 160 Science, Technology and Society</td>
<td>3</td>
</tr>
<tr>
<td>Physics</td>
<td>Score of 4 or 5 (Higher Level):</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PHYS 215 General Physics I</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Score of 6 or 7 (Higher Level):</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PHYS 215 General Physics I</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>PHYS 216 General Physics II</td>
<td>4</td>
</tr>
<tr>
<td>Further Mathematics</td>
<td>Score of 4 (Standard):</td>
<td></td>
</tr>
<tr>
<td></td>
<td>MATH 236 Calculus I</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Score of 5, 6 or 7:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>MATH 236 Calculus I and at least one additional course from MATH 237 or MATH 380,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(Syllabus review required. Contact Math Dept.)</td>
<td>3-4</td>
</tr>
<tr>
<td>Mathematics Higher Level</td>
<td>Score of 4:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>MATH 120 Pre-Calculus Mathematics</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Score of 5, 6 or 7:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>MATH 120 Pre-Calculus Mathematics and at least one additional course from among MATH 236,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>MATH 237 or MATH 380. (Syllabus review required. Contact Math Department.)</td>
<td>3-4</td>
</tr>
<tr>
<td>Mathematical Methods</td>
<td>Score of 4 (Standard):</td>
<td></td>
</tr>
<tr>
<td></td>
<td>MATH 119 College Algebra</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Score of 5, 6 or 7 (Standard):</td>
<td></td>
</tr>
<tr>
<td></td>
<td>MATH 120 Pre-Calculus Mathematics</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Score of 4 (Higher Level):</td>
<td></td>
</tr>
<tr>
<td></td>
<td>MATH 120 Pre-Calculus Mathematics and at least one additional course from among MATH 236,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>MATH 236 Calculus I</td>
<td>4</td>
</tr>
</tbody>
</table>
Mathematical Studies Score of 4 (Standard):

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>MATH 104 Intro to Math, Problem-Solving</td>
<td>3</td>
</tr>
</tbody>
</table>

Score of 5, 6 or 7: (Standard):

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 104 Intro. to Math, Problem-Solving</td>
<td>3</td>
</tr>
</tbody>
</table>

and possibly one additional course from among MATH 109, MATH 119, or MATH 120.

(Syllabus review required. Contact Math Dept.)

Computer Science Score of 4 or 5:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>COSC 100 Introduction to Computer Science</td>
<td>3</td>
</tr>
</tbody>
</table>

Score of 6 or 7:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>COSC 110 Honors: Introduction to Computer Science</td>
<td>3</td>
</tr>
</tbody>
</table>

Visual Arts Score of 4 or 5:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 100 Art Appreciation</td>
<td>3</td>
</tr>
</tbody>
</table>

Score of 6 or 7:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 111 Honors: Art Appreciation</td>
<td>3</td>
</tr>
</tbody>
</table>

Music

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC 195 Music Elective</td>
<td>3</td>
</tr>
</tbody>
</table>

Theatre Arts

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>THEA 195 Theatre Elective</td>
<td>3</td>
</tr>
</tbody>
</table>
College-Level Examination Program (CLEP)

Following is the list of College Level Examination Program exams currently evaluated. Exams without course equivalency/credit listed may be accepted but are not yet evaluated. Minimum score required is 50, unless otherwise noted.

<table>
<thead>
<tr>
<th>Title of Exam</th>
<th>FSU Course Equivalent(s)</th>
<th>Credit Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>General</strong></td>
<td><strong>Social Sciences and History</strong></td>
<td></td>
</tr>
<tr>
<td>College Composition</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGL 101 Freshman Composition</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><em>Score of 70 or higher:</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGL 111 Honors: Freshman Composition</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Humanities</td>
<td>HUMA 195 Humanities Elective</td>
<td>6</td>
</tr>
<tr>
<td>Mathematics</td>
<td>MATH 195 Mathematics Elective</td>
<td>6</td>
</tr>
<tr>
<td>Natural Sciences</td>
<td>SCIE 195 Natural Science Elective</td>
<td>6</td>
</tr>
<tr>
<td>Social Sciences &amp; History</td>
<td>SOSC 195 Social Science Elective</td>
<td>6</td>
</tr>
<tr>
<td><strong>Composition and Literature</strong></td>
<td><strong>Intro to Educational Psychology</strong></td>
<td></td>
</tr>
<tr>
<td>American Literature</td>
<td>ENGL 261 American Lit.: Colonial to Present</td>
<td>3</td>
</tr>
<tr>
<td>Analyzing &amp; Interpreting</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGL 150 Introduction to Literature</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><em>Literature Score of 70 or higher:</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGL 250 Honors: Comparative Literature</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>English Literature</td>
<td>ENGL 260 British Literature: Beowulf to Present</td>
<td>3</td>
</tr>
<tr>
<td>College Composition Modular</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGL 101 Freshman Composition</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><em>Score of 70 or higher:</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGL 250 Honors: Comparative Literature</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Foreign Languages</strong></td>
<td><strong>Introductory Sociology</strong></td>
<td></td>
</tr>
<tr>
<td>College-level French</td>
<td><strong>Principles of Macroeconomics</strong></td>
<td></td>
</tr>
<tr>
<td>Level I: Score of 50 minimum:</td>
<td>ECON 201 Principles of Economics (Macro)</td>
<td>3</td>
</tr>
<tr>
<td>FREN 101 Basic Elements of French I</td>
<td><em>Score of 70 or higher:</em></td>
<td></td>
</tr>
<tr>
<td>FREN 102 Basic Elements of French II</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Level II: Score of 59 minimum:*</td>
<td>ECON 211 Honors: Principles of Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>FREN 101 Basic Elements of French I</td>
<td><strong>Principles of Microeconomics</strong></td>
<td></td>
</tr>
<tr>
<td>FREN 102 Basic Elements of French II</td>
<td>ECON 202 Principles of Economics (Micro)</td>
<td>3</td>
</tr>
<tr>
<td>FREN 211 French Grammar,</td>
<td><em>Score of 70 or higher:</em></td>
<td></td>
</tr>
<tr>
<td>Composition, and Conversation I</td>
<td>ECON 212 Honors: Principles of Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>FREN 212 French Grammar,</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Composition, and Conversation II</td>
<td></td>
<td></td>
</tr>
<tr>
<td>College-level German</td>
<td><strong>Western Civilization I:</strong></td>
<td></td>
</tr>
<tr>
<td>Evaluated at student request</td>
<td>HIST 195 History Elective Ancient Near East to 1648</td>
<td>3</td>
</tr>
<tr>
<td>College-level Spanish</td>
<td><strong>Western Civilization II:</strong></td>
<td></td>
</tr>
<tr>
<td>Level I: Score of 50 minimum:</td>
<td>HIST 195 History Elective 1648 to the Present</td>
<td>3</td>
</tr>
<tr>
<td>SPAN 101 Basic Elements of Spanish I</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>SPAN 102 Basic Elements of Spanish II</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>LEVEL II: Score of 63 minimum:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SPAN 101 Basic Elements of Spanish I</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>SPAN 102 Basic Elements of Spanish II</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>SPAN 211 Spanish Grammar,</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Composition, and Conversation I</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>SPAN 212 Spanish Grammar,</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Composition, and Conversation II</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>College Algebra</td>
<td><strong>Science and Mathematics</strong></td>
<td></td>
</tr>
<tr>
<td>MATH 119 College Algebra</td>
<td>Calculus w/Elementary Functions/MATH 236 Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>College Algebra-Trigonometry</td>
<td>College Algebra</td>
<td>3</td>
</tr>
<tr>
<td>MATH 120 Pre-Calculus Mathematics</td>
<td></td>
<td></td>
</tr>
<tr>
<td>College Mathematics</td>
<td>College Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>MATH 195 Mathematics Elective</td>
<td></td>
<td></td>
</tr>
<tr>
<td>General Biology</td>
<td><strong>Biological Sciences</strong></td>
<td></td>
</tr>
<tr>
<td>BIOL 149 General Biology I</td>
<td></td>
<td>4</td>
</tr>
</tbody>
</table>
Below are listed special departmental examinations currently offered on campus. Students who believe they qualify for credit by exam must take the examination prior to signing up for the course. See the current Undergraduate Registration Guide for specific test dates or contact the department offering the exam for specific information.

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Earned</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 211 Financial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 212 Managerial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 311 Intermediate Accounting I</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 109 Human Biology &amp; the Environment</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 149 General Biology I</td>
<td>4</td>
</tr>
<tr>
<td>BMIS 320 Advanced Computer Applications in Business</td>
<td>3</td>
</tr>
<tr>
<td>COSC 100 Intro. to Computer Science</td>
<td>3</td>
</tr>
<tr>
<td>COSC 101 The Discipline of Computer Science</td>
<td>3</td>
</tr>
<tr>
<td>COSC 240 Computer Science I</td>
<td>4</td>
</tr>
<tr>
<td>COSC 350 Computer Org./Assem.Language</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 101 Freshman Comp.</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 306 Soc. Science Adv. Comp.</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 310 General Adv. Comp.</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 103 Physical Geography</td>
<td>4</td>
</tr>
<tr>
<td>GEOG 104 Human Geography</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 207 Physical Geology and Geomorphology</td>
<td>4</td>
</tr>
<tr>
<td>GEOG 208 Earth System History</td>
<td>4</td>
</tr>
<tr>
<td>GEOG 275 Fundamentals of Geographic Data Handling</td>
<td>3</td>
</tr>
<tr>
<td>HEED 100 Personal Wellness</td>
<td>2</td>
</tr>
<tr>
<td>MATH 104 Intro. to Math Problem-Solving</td>
<td>3</td>
</tr>
<tr>
<td>MATH 109 Elements of Probability &amp; Statistics</td>
<td>3</td>
</tr>
<tr>
<td>MATH 118 Applied Mathematics for Business</td>
<td>3</td>
</tr>
<tr>
<td>MATH 119 College Algebra</td>
<td>3</td>
</tr>
<tr>
<td>MATH 236 Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>MUSC 100 Introduction to Music Theory</td>
<td>2</td>
</tr>
<tr>
<td>MUSC 102 Tonal Analysis I</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 104 Aural Musicianship I</td>
<td>2</td>
</tr>
<tr>
<td>PHSC 203 Physical Science</td>
<td>4</td>
</tr>
</tbody>
</table>

You may also receive credit by accelerated placement in foreign languages by passing a higher-level course with a grade of C or better. You must pay a fee of $10 per credit. Accelerated placement credit is available in: FREN 101, 102, 211, 212, 250; SPAN 101, 102, 211, 212, 250 (3 credits per course).
Policies
USM Bylaws, Policies and Procedures of the Board of Regents

Policy on Student Classification for Admission and Tuition Purposes

Check the USM website (www.usmd.edu/regents/bylaws/SectionVIII) for the most up-to-date version.

I. Policy
A. Purpose
To extend the benefits of its system of higher education while encouraging the economical use of the State's resources, it is the policy of the Board of Regents of the University System of Maryland (USM) to recognize the categories of in-state and out-of-state residency for the purpose of admission and assessing tuition at USM institutions.

B. Qualification for In-State Status
Generally, in order to qualify for in-state status, a prospective, returning, or current student must demonstrate that he or she is a permanent Maryland resident. Under certain circumstances, as set forth in this Policy, students who are not permanent Maryland residents may qualify temporarily for in-state status. Students who do not qualify for in-state status under this Policy shall be assigned out-of-state status for admission and tuition purposes.

C. Standard of Proof
The student seeking in-state status shall have the burden of proving by clear and convincing evidence that he or she satisfies the requirements and standards set forth in this Policy. Assignment of in-state or out-of-state status will be made by each USM institution upon a review of the totality of facts known or presented to it.

II. Determination of Residency Status
A. Criteria for Determination of Residency Status
An initial determination of residency status will be made at the time of admission and re-admission based upon information provided by the student with the signed application certifying that the information provided is complete and correct. Additional information may be requested by the institution, to clarify facts presented. To qualify for in-state status, the student must demonstrate that for at least 12 consecutive months immediately prior to and including the last date available to register for courses for the semester/term for which the student seeks in-state status, the student had the continuous intent to reside in Maryland indefinitely and for a primary purpose other than that of attending an educational institution in Maryland. The student will demonstrate the requisite intent by satisfying all of the following requirements for the 12-month period (or shorter period indicated):

1. Has continuously maintained his or her primary living quarters in Maryland.
2. Has substantially all personal property, such as household effects, furniture, and pets, in Maryland.
3. Has paid Maryland income tax on all taxable income, including all taxable income earned outside of Maryland, and has filed a Maryland Resident Tax Return.
4. Has registered all owned or leased motor vehicles in Maryland for at least 12 consecutive months, if previously registered in another state. Students who have lived in Maryland for at least 12 consecutive months but who have had their motor vehicle(s) registered in Maryland for less than 12 months will be deemed to have satisfied this requirement if they can show evidence that their owned or leased motor vehicle(s) was (were) registered in Maryland within 60 days after moving to the state.
5. Has possessed a valid Maryland driver's license for at least 12 consecutive months, if previously licensed to drive in another state. Students who have lived in Maryland for at least 12 consecutive months but who have held a Maryland driver's license for less than 12 months will be deemed to have satisfied this requirement if they can show evidence that their driver's license was issued in Maryland within 60 days after moving to the state.
6. Is currently registered to vote in Maryland, if previously registered to vote in another state (no time requirement).
7. Receives no public assistance from a state other than the State of Maryland or from a city, county, or municipal agency other than one in Maryland.
8. Has a legal ability under Federal and Maryland law to live permanently and without interruption in Maryland.

B. Presumption of Out-of-State Status
Either of the following circumstances raises a presumption that the student is residing in the State of Maryland primarily for the purpose of attending an educational institution and, therefore, does not qualify for in-state status under this Policy:

1. A student is attending school or living outside Maryland at the time of application for admission to a USM institution, or
2. A student is Financially Dependent on a person who is not a resident of Maryland. A student will be considered financially independent if the student provides 50% or more of his or her own living and educational expenses and has not been claimed as a dependent on another person's most recent tax returns.

III. Change in Classification for Tuition Purposes
A. Petition for Change in Classification for Tuition Purposes
After the initial determination is made, a student seeking a change to in-state tuition status must submit a Petition for Change in Classification for Tuition Purposes that includes all of the information the student wishes the institution to consider. All information must be submitted by the institution's deadline for
submitting a petition for the semester for which the student seeks reclassification. Only one Petition may be filed per semester.

B. Criteria for Change in Tuition Status

A student seeking reclassification from out-of-state to in-state tuition status must demonstrate, by clear and convincing evidence, that for at least twelve (12) consecutive months immediately prior to and including the last date available to register for courses for the semester/term for which the student seeks in-state tuition status, the student had the continuous intent to 1) make Maryland his or her permanent home; 2) abandon his or her former home state; 3) reside in Maryland indefinitely; and reside in Maryland primarily for a purpose other than that of attending an educational institution in Maryland.

A student will demonstrate the requisite intent by satisfying all of the following requirements for a period of at least twelve (12) consecutive months (or for the shorter period of time indicated) immediately prior to and including the last date available to register for courses in the semester/term for which the student seeks in-state tuition status. Evidence of intent must be clear and convincing and will be evaluated not only by the amount presented but also based upon the reliability, authenticity, credibility and relevance of the evidence and the totality of facts known to the institution. The student must demonstrate (providing appropriate documentation as necessary) that for the relevant period he or she:

1. Continuously maintained his or her primary living quarters in Maryland.
2. Has substantially all of his or her personal property, such as household effects, furniture and pets, in Maryland.
3. Has paid Maryland income tax on all taxable income including all taxable income earned outside the State and has filed a Maryland Resident Tax Return.
4. Has registered all owned or leased motor vehicles in Maryland for at least 12 consecutive months, if previously registered in another state Students who have lived in Maryland for at least 12 consecutive months but who have had their motor vehicle(s) registered in Maryland for less than 12 months will be deemed to have satisfied this requirement if they can show evidence that their owned or leased motor vehicle(s) was (were) registered in Maryland within 60 days after moving to the state.
5. Has possessed a valid Maryland driver’s license for at least 12 consecutive months, if previously licensed to drive in another state. Students who have lived in Maryland for at least 12 consecutive months but who have held a Maryland driver’s license for less than 12 months will be deemed to have satisfied this requirement if they can show evidence that their driver’s license was issued in Maryland within 60 days after moving to the state.
6. Is currently registered to vote in Maryland, if previously registered to vote in another state (no time requirement).
7. Receives no public assistance from a state other than the State of Maryland or from a city, county or municipal agency other than one in Maryland.
8. Has a legal ability under Federal and Maryland law to live permanently without interruption in Maryland.
9. Has either not raised the presumption set forth in Section II.B above; or alternatively, if the student’s circumstances have raised the presumption set forth in Section II.B above, the student has rebutted that presumption.

C. Rebuttal Evidence

If the information received by the institution about the student has raised the presumption set forth in Section II.B, the student bears the burden of rebutting the presumption set forth in Section II.B by presenting additional evidence of objectively verifiable conduct to rebut the presumption and show the requisite intent. Rebuttal evidence of intent must be clear and convincing and will be evaluated not only by the amount presented but also based upon the reliability, authenticity, credibility and relevance of the evidence and the totality of facts known to the institution. Evidence that does not document a period of at least twelve (12) consecutive months immediately prior to and including the last date available to register for courses in the semester/term for which the student seeks in-state tuition status is generally considered an unfavorable factor under this Policy. The absence of objective, relevant evidence is generally considered an unfavorable factor. A student’s statement of intent to remain in Maryland in the future is generally not considered to be objective evidence under this Policy.

For purposes of rebutting the presumption, additional evidence that will be considered includes, but is not limited to:

1. Source of financial support:
   a. Maryland employment and earnings history through sources beyond those incident to enrollment as a student in an educational institution e.g., beyond support provided by work study, scholarships, grants, stipends, aid, student loans, etc., (Tuition costs will be considered as a student expense only to the extent tuition exceeds the amount of any educational scholarship, grant, student loan, etc.), or
   b. Evidence the student is Financially Dependent upon a person who is a resident of Maryland.
2. Substantial participation as a member of a professional, social, community, civic, political, athletic or religious organization in Maryland, including professionally related school activities that demonstrate a commitment to the student’s community or to the State of Maryland.
3. Registration as a Maryland resident with the Selective Service, if applicable.
4. Evidence that the student is married to a Maryland resident.
5. Evidence that the student attended schools in Maryland for grades K-12.
6. Evidence showing the student uses his or her Maryland address as his or her sole address of record for all purposes including on health and auto insurance records, bank accounts, tax records, loan and scholarship records, school records, military records, leases, etc.
7. An affidavit from a person unrelated to the student that provides objective, relevant evidence of a student's conduct demonstrating the student's intent to reside in Maryland primarily for a purpose other than that of attending an educational institution in Maryland.
8. Evidence of life and employment changes that caused the student to relocate to Maryland for reasons other than primarily educational purposes (e.g. divorce, family relocation, taking care of a sick family member, etc.)

D. Appeal

A student may appeal an adverse decision on a Petition for Change in Classification.
E. Change in Circumstances Altering In-State Status
The student shall notify the USM institution in writing within fifteen (15) days of any change in circumstances which may alter in-state status. Failure to do so could result in retroactive charges for each semester/term affected.

F. Incomplete, Untimely, False or Misleading Information
If necessary information is not provided by the institution’s deadline, the USM institution may, at its discretion, deny or revoke in-state status. In the event incomplete, false, or misleading information is presented, the USM institution may, at its discretion, revoke in-state status and take disciplinary action provided for by the institution’s policies. Such action may include suspension or expulsion. In such cases, the institution reserves the right to retroactively assess all out-of-state charges for each semester/term affected.

IV. Criteria for Temporary Qualification of Non-Residents for In-State Status
Non-residents with the following status shall be accorded the benefits of in-state status for the period in which they hold such status, if they provide clear and convincing evidence through documentation, by the institution’s deadline for the semester for which they seek in-state status, showing that they fall within one of the following categories:

A. A full-time or part-time (at least 50 percent time) regular employee of USM or a USM institution.
B. The spouse or Financially Dependent child of a full-time or part-time (at least 50 percent time) regular employee of USM or a USM institution.
C. An active duty member of the Armed Forces of the United States as defined in 38 U.S.C.A. § 101(10) as the United States Army, Navy, Marine Corps, Air Force, and Coast Guard, including the reserve components thereof, who is stationed in Maryland, resides in Maryland, or is domiciled in Maryland, or his/her spouse or a financially dependent child of that active duty member.
D. A veteran of the Armed Forces of the United States who provides documentation that he or she was honorably discharged and currently resides or is domiciled in Maryland.
E. A veteran who lives in Maryland and was discharged from a period of at least 90 days of service in the active military, naval, or air service less than three years before the date of the veteran’s enrollment and is pursuing a course of education with educational assistance under the Montgomery G.I. Bill (38 U.S.C. §3301) or the Post-9/11 G.I. Bill (38 U.S.C. §3301).
F. Anyone who lives in Maryland, and:
   1. Is using transferred Post-9/11 G.I. Bill benefits (38 U.S.C. §3319) and enrolls within three years of the transferor’s discharge or release from a period of at least 90 days of service in the active military, naval or air service; or
   2. Is using transferred Post-9/11 G.I. Bill benefits (38 U.S.C. §3319) and the transferor is a member of the uniformed services who is serving on active duty; or
   3. Is using benefits under the Marine Gunnery Sergeant John David Fry Scholarship (38 U.S.C. §3311(b)(9)).
   4. Is entitled to rehabilitation under 38 U.S.C. §3102(a)

An individual as described in this Section IV.F will continue to retain in-state status if the individual is using educational benefits under chapter 30, 31, or 33, of title 38, United States Code, and remains continuously enrolled (other than during regularly scheduled breaks between courses, semesters, or terms) at the same school.

G. A member of the Maryland National Guard, as defined in the Public Safety Article of the Maryland Annotated Code, who joined or subsequently serves in the Maryland National Guard to: (i) provide a critical military occupational skill; or (ii) be a member of the Air Force Critical Specialty Code as determined by the National Guard.

H. For UMUC, only, a full-time active member of the Armed Forces of the United States on active duty, or his/her spouse.
I. A graduate assistant appointed through a USM institution for the semester/term of the appointment. Except through prior arrangement, this benefit is available only for enrollment at the institution awarding the assistantship.

V. Additional Procedures
Each USM institution shall develop and publish additional procedures to implement this Policy. Procedures shall provide that on request the institution President or designee has the authority to waive any requirement set forth in Section II if it is determined that the application of the requirements creates an unjust result. These procedures shall be filed with the Office of the Chancellor.

VI. Definitions
A. Financially Dependent: For the purposes of this Policy, a financially dependent student is one who has been claimed as a dependent on another person’s prior year tax returns or is a ward of the State of Maryland.
B. Financially Independent: For the purposes of this Policy, a financially independent student is one who provides 50% or more of his or her own living and educational expenses and has not been claimed as a dependent on another person’s most recent tax returns.
C. Parent: A parent may be a natural parent, or, if established by a court order recognized under the law of the State of Maryland, an adoptive parent.
D. Guardian: A guardian is a person so appointed by a court order recognized under the laws of the State of Maryland.
E. Spouse: A spouse is a partner in a legally contracted marriage.
F. Child: A child is a natural child or a child legally adopted pursuant to a court order recognized under the law of Maryland.
G. Regular Employee: A regular employee is a person employed by USM or a USM institution who is assigned to a State budget line or who is otherwise eligible to enroll in a State retirement system. Examples of categories NOT considered regular employees are graduate students, contingent employees, and independent contractors.
H. Continuous Enrollment:
1. Undergraduate Student – An undergraduate student who is enrolled at a USM institution for consecutive fall and spring semesters, until completion of the student’s current degree program or unless on an approved leave of absence or participating in an approved program off-campus.

2. Graduate and Professional – Continuous enrollment for a graduate or professional student is defined by the institution in accordance with program requirements.

I. Armed Forces of the United States: As defined in 38 U.S.C.A. § 101(10) as the United States Army, Navy, Marine Corps, Air Force, and Coast Guard, including the reserve components thereof.

VII. Implementation

This Policy as amended by the Board of Regents on April 19, 2019, shall be applied to all student tuition classification decisions effective Summer semester 2019 and thereafter.

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**FSU Procedure for Residency Status Appeals**

Any student who wishes to appeal the decision of residency status previously determined by the Office of the Registrar or the Admissions Office, may do so in writing to the Appeals Board for Residency Status. This board shall consist of representatives designated by the Provost, the Vice President for Student and Educational Services, and the Vice President for Administration and Finance. The appeal will be reviewed by the board members in the order listed. Only by unanimous agreement of the board members will the decision of the Office of the Registrar or Admissions be overruled. Upon request, the President or designee has the authority to waive any residency requirements if it is determined that the student is indeed a permanent resident and application of the criteria creates an unjust result.

A student desiring to appeal should obtain and submit the University System of Maryland “Petition for Change in Classification for Tuition” through the office that made the original residency status decision, the Office of the Registrar or the Admissions Office.

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**General Education and Transfer**

**.01 Scope and Applicability.**

This chapter applies only to public institutions of higher education.

**.02 Definitions.**

A. In this chapter, the following terms have the meanings indicated.

B. Terms Defined.

1. “A.A. degree” means the Associate of Arts degree.
2. “A.A.S. degree” means the Associate of Applied Sciences degree.
3. “A.A.T. degree” means the Associate of Arts in Teaching degree.
4. “A.F.A. degree” means the Associate of Fine Arts degree.
5. “Arts” means courses that examine aesthetics and the development of the aesthetic form and explore the relationship between theory and practice.
6. “A.S. degree” means the Associate of Sciences degree.
7. “A.S.E. degree” means the Associate of Science in Engineering degree.
8. “Associate’s degree” includes an:
   a. A.A. degree;
   b. A.S. degree;
   c. A.A.S. degree;
   d. A.A.T. degree;
   e. A.F.A. degree; and
   f. A.S.E. degree.
9. “Biological and physical sciences” means courses that examine living systems and the physical universe. They introduce students to the variety of methods used to collect, interpret, and apply scientific data, and to an understanding of the relationship between scientific theory and application.
10. “Cumulative grade point average” means the average of grades received for completed coursework at all institutions attended.
11. “English composition courses” means courses that provide students with communication knowledge and skills appropriate to various writing situations, including intellectual inquiry and academic research.
(12) “General education” means the foundation of the higher education curriculum providing a coherent intellectual experience for all students.

(13) “General education program” means a program that is designed to:

(a) Introduce undergraduates to the fundamental knowledge, skills, and values that are essential to the study of academic disciplines;

(b) Encourage the pursuit of lifelong learning; and

(c) Foster the development of educated members of the community and the world.

(14) “Humanities” means courses that examine the values and cultural heritage that establish the framework for inquiry into the meaning of life.

(15) “Mathematics” means courses that provide students with numerical, analytical, statistical, and problem-solving skills.

(16) “Native student” means a student whose initial college enrollment was at a given institution of higher education and who has not transferred to another institution of higher education since that initial enrollment.

(17) “Parallel program” means the program of study or courses at one institution of higher education that has parallel courses and comparable objectives as those at another higher education institution, for example, a transfer program in psychology in a community college which is definable as a parallel program to a baccalaureate psychology program at a 4-year institution of higher education.

(18) “Receiving institution” means the institution of higher education at which a transfer student currently desires to enroll.

(19) “Recommended transfer program” means a planned program of courses, both general education and courses in the major, taken at a community college, which is applicable to a baccalaureate program at a receiving institution, and ordinarily the first half of the baccalaureate degree.

(20) “Reverse transfer” means a process whereby credits that a student earns at any public senior higher education institution in the State toward a bachelor’s degree are transferrable to any community college in the State for credit toward an associate’s degree.

(21) “Sending institution” means the institution of higher education of most recent previous enrollment by a transfer student at which transferrable academic credit was earned.

(22) “Social and behavioral sciences” means courses that are concerned with the examination of society and the relationships among individuals within a society.

(23) “Transfer student” means a student entering an institution for the first time having successfully completed a minimum of 12 semester hours at another institution that are applicable for credit at the institution the student is entering.

.02-1 Admission of Transfer Students to Public Institutions.

A. Admission to Institutions.

(1) Subject to §B of this regulation, a student attending a public institution who has completed an associate’s degree or who has completed 60 or more semester hours of credit, may not be denied direct transfer to another public institution if the student attained a cumulative grade point average of at least 2.0 on a 4.0 scale or its equivalent at the sending institution, except as provided in §A(4) of this regulation.

(2) Subject to §B of this regulation, a student attending a public institution who has not completed an associate’s degree or who has completed fewer than 60 semester hours of credit, is eligible to transfer to a public institution regardless of the number of credit hours earned if the student:

(a) Satisfied the admission criteria of the receiving public institution as a high school senior; and

(b) Attained at least a cumulative grade point average of 2.0 on a 4.0 scale or its equivalent at the sending institution.

(3) Subject to §B of this regulation, a student attending a public institution who did not satisfy the admission criteria of a receiving public institution as a high school senior, but who has earned sufficient credits at a public institution to be classified by the receiving public institution as a sophomore, shall meet the stated admission criteria developed and published by the receiving public institution for transfer.

(4) If the number of students seeking admission exceeds the number that can be accommodated at a receiving public institution, admission decisions shall be:

(a) Based on criteria developed and published by the receiving public institution on the institution’s website; and

(b) Made to provide fair and equal treatment for native and transfer students.

B. Admission to Programs.

(1) A receiving public institution may require additional program admission requirements to some programs if the standards and criteria for admission to the program:

(a) Are developed and published by the receiving public institution; and

(b) Maintain fair and equal treatment for native and transfer students.

(2) Courses taken at a public institution as part of a recommended transfer program leading toward a baccalaureate degree shall be applicable to related programs at a receiving public institution granting the baccalaureate degree.

C. Receiving Institution Program Responsibility.

(1) The faculty of a receiving public institution is responsible for development and determination of the program requirements in major fields of study for a baccalaureate degree, including courses in the major field of study taken in the lower division.

(2) A receiving public institution may set program requirements in major fields of study which simultaneously fulfill general education requirements.
(3) A receiving public institution, in developing lower division course work, shall exchange information with other public institutions to facilitate the transfer of credits into its programs.

(4) A receiving public institution shall ensure that any changes to program standards and criteria for admission and the transfer of credits maintain the fair and equal treatment of native and transfer students, and are communicated in a timely manner.

.03 General Education Requirements for Public Institutions.

A. While public institutions have the autonomy to design their general education program to meet their unique needs and mission, that program shall conform to the definitions and common standards in this chapter, and incorporate the general education knowledge and skills required by the Middle States Commission on Higher Education Standards for Accreditation. No later than August 1, 2017, a public institution shall satisfy the general education requirement by:

(1) Requiring each program leading to the A.A. or A.S. degree to include not less than 28 and not more than 36 semester hours, and each baccalaureate degree program to include not less than 38 and not more than 46 semester hours of required core courses, with the core requiring, at a minimum, course work in each of the following five areas:

   (a) Arts and humanities,
   (b) Social and behavioral sciences,
   (c) Biological and physical sciences,
   (d) Mathematics, and
   (e) English composition; or

(2) Conforming with COMAR 13B.02.02.16D(2) (b)—(c).

B. Each core course used to satisfy the distribution requirements of §A(1) of this regulation shall carry at least 3 semester hours.

C. General education programs of public institutions shall require at least:

(1) Two courses in arts and humanities;
(2) Two courses in social and behavioral sciences;
(3) Two science courses, at least one of which shall be a laboratory course;
(4) One course in mathematics, having performance expectations demonstrating a level of mathematical maturity beyond the Maryland College and Career Ready Standards in Mathematics (including problem-solving skills, and mathematical concepts and techniques that can be applied in the student’s program of study); and
(5) One course in English composition, completed with a grade of C or better.

D. Institution-Specific Requirements.

(1) In addition to the five required areas in §A of this regulation, a public institution may include up to 8 semester hours in course work outside the five areas. These courses may be integrated into other general education courses or may be presented as separate courses. Examples include, but are not limited to, Health, Diversity, and Computer Literacy.

(2) Public institutions may not include the courses in this section in a general education program unless they provide academic content and rigor equivalent to the areas in §A(1) of this regulation.

E. General education programs leading to the A.A.S. degree shall include at least 18 semester hours from the same course list designated by the sending institution for the A.A. and A.S. degrees. The A.A.S. degree shall include at least one 3-semester-hour course from each of the five areas listed in §A(1) of this regulation.

F. A course in a discipline listed in more than one of the areas of general education may be applied only to one area of general education.

G. A public institution may allow a speech communication or foreign language course to be part of the arts and humanities category.

H. Composition and literature courses may be placed in the arts and humanities area if literature is included as part of the content of the course.

I. Public institutions may not include physical education skills courses as part of the general education requirements.

J. General education courses shall reflect current scholarship in the discipline and provide reference to theoretical frameworks and methods of inquiry appropriate to academic disciplines.

K. Courses that are theoretical may include applications, but all applications courses shall include theoretical components if they are to be included as meeting general education requirements.

L. Notwithstanding §A(1) of this regulation, a public 4-year institution may require 48 semester hours of required core courses if courses upon which the institution’s curriculum is based carry 4 semester hours.

M. Public institutions shall develop systems to ensure that courses approved for inclusion on the list of general education courses are designed and assessed to comply with the requirements of this chapter.

.04 Transfer of Education Program Credit.

A. Transfer of Credit to Another Public Institution

(1) Credit earned at any public institution in the State is transferable to any other public institution if the:

   (a) Credit is from a college or university parallel course or program;
   (b) Grades in the block of courses transferred average 2.0 or higher; and
   (c) Acceptance of the credit is consistent with the policies of the receiving institution governing native students following the same program.

(2) If a native student’s “D” grade in a specific course is acceptable in a program, then a “D” earned by a transfer student in the same course at a sending institution is also acceptable in the program. Conversely, if a native student is required to earn a grade of “C” or better in a required course, the transfer student shall also be required to earn a grade of “C” or better to meet the same requirement.

B. Credit Earned in or Transferred From a Community College.
C. Nontraditional Credit.

(1) Except as provided in §B(5) of this regulation, at least 60 credits but not more than 70 credits of general education, elective, and major courses that a student earns at any community college in the State toward an associate's of art or an associate's of science degree shall be transferrable to any public senior higher education institution in the State for credit toward a bachelor's degree.

(2) To be transferrable, a credit shall have been earned in accordance with the student's degree plan.

(3) Courses taken at a public institution as part of a recommended transfer program leading toward a baccalaureate degree shall be applicable to related programs at the receiving public institution granting the degree if successfully completed in accordance with the receiving institution's policies governing native students in the same program.

(4) Students earning an A.A.S. or A.F.A. degree shall have their credits evaluated in a manner that maximizes the transfer of articulated and elective credit.

(5) A community college and a public senior higher education institution may provide in an articulation agreement for the transfer of credits in addition to credits transferred under §B(1) of this regulation.

C. Nontraditional Credit.

(1) The assignment of credit for AP, CLEP, or other nationally recognized standardized examination scores presented by transfer students is determined according to the same standards that apply to native students in the receiving institution, and the assignment shall be consistent with the State minimum requirements.

(2) Transfer of credit from the following areas shall be consistent with COMAR 13B.02.02. and shall be evaluated by the receiving institution on a course-by-course basis according to the same standards that apply to native students at the receiving institution:
   (a) Technical courses from career programs;
   (b) Course credit awarded through articulation agreements with other segments or agencies, which should be developed in collaboration with all public institutions, including course credit awarded by articulation with Maryland public secondary schools;
   (c) Credit awarded for clinical practice or cooperative education experiences;
   (d) Credit awarded for life and work experiences; and
   (e) Credit awarded for training, coursework, or education through the military.

(3) The basis for the awarding of the credit shall be indicated on the student's transcript by the receiving institution.

(4) The receiving institution shall inform a transfer student of the procedures for validation of course work for which there is no clear equivalency. Examples of validation procedures include ACE recommendations, portfolio assessment, credit through challenge, examinations, and satisfactory completion of the next course in sequence in the academic area.

(5) The receiving baccalaureate degree-granting institution shall use validation procedures when a transferring student successfully completes a course at the lower-division level that the receiving institution offers at the upper-division level.

The validated credits earned for the course shall be substituted for the upper-division course.

D. Program Articulation.

(1) Recommended transfer programs shall be developed through collaboration between the sending and receiving institutions. A recommended transfer program represents an agreement between the two institutions that allows students aspiring to the baccalaureate degree to plan for seamless transfer. These programs constitute first-year/sophomore level course work to be taken at the community college in fulfillment of the receiving institution's lower-division course work requirement.

(2) Recommended transfer programs in effect at the time that this regulation takes effect, which conform to this chapter, may be retained.

E. Reverse Transfer of Credit

(1) Subject to §E(2) of this regulation, a community college shall accept for reverse transfer any credits that an individual earned at a public senior institution up to 45 credits. Credits in excess of 45 credits may be accepted in accordance with the community college's policy.

(2) To be eligible for the transfer of credit under §E(1) of this regulation, a student shall have completed at least 15 credits at the community college to which the credits are transferred.

(3) Community colleges and public senior institutions shall develop a process to identify students eligible for reverse transfer at no cost to the student.

F. Transfer of General Education Credit

(1) A student transferring to one public institution from another public institution shall receive general education credit for work completed at the student's sending institution as provided by this chapter.

(2) A completed general education program shall transfer without further review or approval by the receiving institution and without the need for a course-by-course match.

(3) Courses that are defined as general education by one institution shall transfer as general education even if the receiving institution does not have that specific course or has not designated that course as general education.

(4) A Maryland community college shall accept 28—36 credits of general education as specified in Regulation .03(C) of this chapter as completion of the general education requirements at the community college, without further review or the need for a course-by-course match.

(5) The receiving institution shall give lower-division general education credits to a transferring student who has taken any part of the lower-division general education credits described in Regulation .03 of this chapter at a public institution for any general education courses successfully completed at the sending institution.

(6) Except as provided in Regulation .03M of this chapter, a receiving institution may not require a transfer student who has completed the requisite number of general education credits at any public college or university to take, as a condition of graduation, more than 10—18 additional semester hours of general education and specific courses required of all students at the receiving institution, with the
total number not to exceed 46 semester hours. This provision does not relieve students of the obligation to complete specific academic program requirements or course prerequisites required by a receiving institution.

(7) Each public institution shall designate on or with the student transcript those courses that have met its general education requirements, as well as indicate whether the student has completed the general education program.

(8) Associate Degrees.

(a) While there may be variance in the numbers of hours of general education required for associate’s degrees at a given institution, the courses identified as meeting general education requirements for all degrees shall come from the same general education course list and exclude technical or career courses.

(b) A student possessing an associate’s degree who transfers into a receiving institution with fewer than the total number of general education credits designated by the receiving institution shall complete the difference in credits according to the distribution as designated by the receiving institution. Except as provided in Regulation .03M of this chapter, the total general education credits for baccalaureate degree-granting public receiving institutions may not exceed 46 credits.

(9) Student Responsibilities. A student is held:

(a) Accountable for the loss of credits that:

(i) Result from changes in the student’s selection of the major program of study;

(ii) Were earned for remedial course work; or

(iii) Exceed the total course credits accepted in transfer as allowed by this chapter; and

(b) Responsible for meeting all requirements of the academic program of the receiving institution.

.05 Academic Success and General Well-Being of Transfer Students.

A. Sending Institutions.

1. Community colleges shall encourage their students to complete the associate degree in a recommended transfer program that includes both general education courses and courses applicable toward the program at the receiving institution.

2. Community college students are encouraged to choose as early as possible the institution and program into which they expect to transfer.

3. The sending institution shall:

(a) Provide to community college students information about the specific transfer-ability of courses and programs to 4-year colleges;

(b) Transmit information about transfer students who are capable of honors work or independent study to the receiving institution; and

(c) Promptly supply the receiving institution with all the required documents if the student has met all financial and other obligations of the sending institution for transfer.

B. Receiving Institutions.

1. Admission requirements and curriculum prerequisites shall be stated explicitly in institutional publications.

2. A receiving institution shall admit transfer students from newly established public colleges that are functioning with the approval of the Maryland Higher Education Commission on the same basis as applicants from regionally accredited colleges.

3. A receiving institution shall evaluate the transcript or transcripts of a degree-seeking transfer student as expeditiously as possible, and notify the student of the results within 20 working days of the receipt of all official transcripts. The receiving institution shall inform a student of the courses that are acceptable for transfer credit and the courses that are applicable to the student’s intended program of study.

4. A transfer student shall be provided the same opportunity as a native student to pursue the program and degree requirements that were in effect at the time that the student enrolled at the sending institution provided they have been continuously enrolled and otherwise meet the same requirements of the native student.

.06 Programmatic Currency.

A. Maryland public institutions shall collaborate to develop and provide to students current and accurate information on transferable programs and courses.

B. Upon approval of new baccalaureate programs, recommended transfer programs shall be developed with each community college.

C. When considering curricular changes, institutions shall notify each other of the proposed changes that might affect transfer students. An appropriate mechanism shall be created to ensure that both 2-year and 4-year public colleges provide input or comments to the institution proposing the change. Sufficient lead time shall be provided to effect the change with minimum disruption. Transfer students are not required to repeat equivalent course work successfully completed at a community college.

.07 Transfer Mediation Committee.

A. Sending and receiving institutions that disagree on the transferability of general education courses as defined by this chapter shall submit their disagreements to the Secretary, who shall appoint a Transfer Mediation Committee to adjudicate the disagreement. Members appointed to the Transfer Mediation Committee shall be representative of the public 4-year colleges and universities and the community colleges.

B. The Transfer Mediation Committee shall address general education issues at the course or curricular level, not individual student cases. As appropriate, the Committee shall consult with faculty on curricular issues.

C. The findings of the Transfer Mediation Committee are considered binding on both parties.

.08 Appeal Process.

A. Notice of Denial of Transfer Credit by a Receiving Institution.

1. Except as provided in §A(2) of this regulation, a receiving institution shall inform a transfer student in writing of the denial of transfer credit not later than mid-semester of the
transfer student’s first semester, if all official transcripts have been received at least 15 working days before mid-semester.

(2) If transcripts are submitted after 15 working days before mid-semester of a student’s first semester, the receiving institution shall inform the student of credit denied within 20 working days of receipt of the official transcript.

(3) A receiving institution shall include in the notice of denial of transfer credit:

(a) A statement of the student’s right to appeal; and

(b) A notification that the appeal process is available in the institution’s catalog.

(4) The statement of the student’s right to appeal the denial shall include notice of the time limitations in §B of this regulation.

B. A student believing that the receiving institution has denied the student transfer credits in violation of this chapter may initiate an appeal by contacting the receiving institution’s transfer coordinator or other responsible official of the receiving institution within 20 working days of receiving notice of the denial of credit.

C. Response by Receiving Institution.

(1) A receiving institution shall:

(a) Establish expeditious and simplified procedures governing the appeal of a denial of transfer of credit; and

(b) Respond to a student’s appeal within 10 working days.

(2) An institution may either grant or deny an appeal. The institution’s reasons for denying the appeal shall be consistent with this chapter and conveyed to the student in written form.

(3) Unless a student appeals to the sending institution, the written decision in §C(2) of this regulation constitutes the receiving institution’s final decision and is not subject to appeal.

D. Appeal to Sending Institution.

(1) If a student has been denied transfer credit after an appeal to the receiving institution, the student may request the sending institution to intercede on the student’s behalf by contacting the transfer coordinator of the sending institution.

(2) A student shall make an appeal to the sending institution within 10 working days of having received the decision of the receiving institution.

E. Consultation Between Sending and Receiving Institutions.

(1) Representatives of the two institutions shall have 15 working days to resolve the issues involved in an appeal.

(2) As a result of a consultation in this section, the receiving institution may affirm, modify, or reverse its earlier decision.

(3) The receiving institution shall inform a student in writing of the result of the consultation.

(4) The decision arising out of a consultation constitutes the final decision of the receiving institution and is not subject to appeal.

.E09 Periodic Review.
A. Report by Receiving Institution.

(1) A receiving institution shall report annually the progress of students who transfer from 2-year and 4-year institutions within the State to each community college and to the Secretary of the Maryland Higher Education Commission.

(2) An annual report shall include ongoing reports on the subsequent academic success of enrolled transfer students, including graduation rates, by major subject areas.

(3) A receiving institution shall include in the reports comparable information on the progress of native students.

B. Transfer Coordinator. A public institution of higher education shall designate a transfer coordinator, who serves as a resource person to transfer students at either the sending or receiving campus. The transfer coordinator is responsible for overseeing the application of the policies and procedures outlined in this chapter and interpreting transfer policies to the individual student and to the institution.

C. The Maryland Higher Education Commission shall establish a permanent Student Transfer Advisory Committee that meets regularly to review transfer issues and recommend policy changes as needed. The Student Transfer Advisory Committee shall address issues of interpretation and implementation of this chapter.


Regulation .05A amended effective July 1, 1996 (23:13 Md. R. 946)

Chapter revised effective April 24, 2017 (44:8 Md. R. 405)
University Procedures for Review of Alleged Arbitrary and Capricious Grading

Grounds for Grievance
The following procedures implement the University System of Maryland Policy for Review of Alleged Arbitrary and Capricious Grading (BOR III-1.20) and are designed to provide a means for a student to seek review of final course grades alleged to be arbitrary and capricious. In this policy the term arbitrary and capricious grading means 1) the assignment of a course grade to a student on some basis other than performance in the course; 2) the assignment of a course grade to a student by unreasonable application of standards different from the standards that were applied to other students in that course; or 3) the assignment of a course grade by a substantial and unreasonable departure from the instructor’s initially articulated standards.

Alleging a final grade to have been determined in an arbitrary and capricious manner is the sole ground upon which a student may seek review under these procedures. Since matters within the instructor’s sphere of academic judgment — such as choice of instructional methods, criteria, and standards for evaluation — are not grounds for grievance, the burden of proving arbitrary and capricious grading by clear and convincing evidence will rest with the student.

How to Undertake a Grade Grievance
Students or faculty who desire additional information about the procedures that follow should contact the Associate Provost. Class days are days classes are in session in the subsequent semester after the grade that the student wants to grieve is assigned. The timetable portrays the maximum time allotted. Participants can meet their responsibilities any time before the specified day.

Stage I: Mediation
A student seeking review for a final grade in a course should make a reasonable effort to confer with the instructor (in person or in writing) and attempt to resolve the matter informally. If this effort is unsuccessful, the student approaches the chair of the department offering the course to request mediation of the grade dispute. This action must be taken no later than the 15th class day of the semester subsequent to the term in which the grade was received. The chair will inform the student of the grounds proper to a grade grievance, as stated above. The chair also will review relevant material and consult with the instructor in an effort to resolve the issue of the grade. (If the instructor involved is the chair, the student approaches the senior faculty member in the department to request mediation.) Mediation must be completed no later than the 25th class day.

In cases where a resolution mutually acceptable to the student and the instructor is not forthcoming, and the student wishes to pursue a formal grievance, the student may proceed to Stage II.

Stage II: Formal Grievance
As a precondition to filing a formal grievance, a student must fulfill all of his/her responsibilities and meet the deadline specified in Stage I: Mediation above.

No later than the end of the 30th class day of the semester, a student still wishing to grieve a grade must file a written grievance with the instructor’s College dean. This grievance must describe in detail the bases for the allegation that the grade was arbitrary and capricious, and include all evidence supporting that claim. The student must send copies of this statement to the instructor and the chair.

Within 10 class days of receipt of a student’s written, Stage II grievance, the dean will dismiss the grievance if the student 1) did not participate in Stage I: Mediation and/or meet the deadline specified in Stage I; 2) did not file the Stage II appeal by the stated deadline; 3) does not furnish evidence that the allegations, if true, constitute arbitrary and capricious grading, as defined above; and/or 4) has filed a complaint concerning the same grade with the ADA/EEO Compliance Office alleging discrimination or sexual harassment.

If the grievance is not dismissed, the dean shall ask the instructor to respond to the grievance in writing within ten class days, addressing the response to the dean and copying the student and the chair. The dean will ask the chair to forward all documentary evidence collected during the mediation stage to the dean.

If the grievance is not dismissed, the dean shall appoint a grade grievance committee of three tenured faculty members and shall set the date for an informal, non-adversarial grade grievance hearing to occur within five class days following the due date for a written response from the instructor. The student, the instructor, and the chair will be invited to attend the hearing, and may present relevant evidence. The dean also will attend and may choose to participate in the discussion. In keeping with the informal nature of the hearing, neither the student nor the instructor may be accompanied by a representative or advisor. If the academic records of other students in the grievant’s class are relevant to the discussion, the grievant must be excused for that portion of the hearing to protect the privacy of other students. The grade grievance committee shall forward its written recommendation to the dean within five class days after the conclusion of the hearing. The dean may accept, reject or alter the recommendation. The dean shall render a decision to the student in writing, either in support of the original grade or of a grade change, with copies to the instructor, the chair and the members of the grade grievance committee. If the dean recommends a grade change and the instructor refuses to change the grade, the dean will vacate and replace the grade in question.

In deciding whether the circumstances justify changing the grade, the dean shall determine whether the grievant has provided clear and convincing evidence of arbitrary and capricious grading. The dean’s decision is final.
Under the Family Educational Rights and Privacy Act (FERPA), students have certain rights regarding the inspection and disclosure of education records directly related to the student and maintained by the University. These rights include:

1. The right to inspect and review the student’s educational records within forty-five (45) days of the day the University receives a request of access. Requests for inspection should be made in writing and directed to the Office of the Registrar.

2. The right to request an amendment of the student’s education records if the student believes that they are inaccurate, misleading or otherwise in violation of the student’s privacy rights under FERPA. A request to amend education records must be made in writing and submitted to the Registrar. The request must clearly identify the part of the record the student wants changed and why it should be changed. If the University decides not to amend the record as requested, the University will notify the student of its decision, and if the decision is negative, the procedures for a hearing regarding the request.

3. The right to consent to disclosures by the University of personally identifiable information contained in the student’s education records, except to the extent FERPA authorizes disclosure without consent. The University discloses education records without a student’s prior written consent under several exceptions to FERPA, including the exception for disclosure to school officials with legitimate education interests. A school official has a legitimate educational interest if the official needs to review an education record in order to fulfill professional responsibilities for the University. A “school official” is any person employed by the University in any administrative, supervisory, academic, research or support staff position; any person or company with whom the University has contracted (such as an auditor or collection agent); or any student serving on an official committee such as a disciplinary or grievance committee, or assisting another school official in performing his or her tasks.

4. Upon request, the University also discloses education records without consent to officials of another school in which a student seeks or intends to enroll.

5. The following categories of information are considered by the University to be directory information and may be disclosed without the student’s prior consent unless the student submits a Directory Restrictions Form using PAWS: name; local, home and email address; local and home telephone number; major field of study; classification; dates of attendance, degrees, honors and awards received; officially recognized activities and sports; weight and height for athletes; and most recent school or educational institution attended.

6. The Directory Restrictions Form in PAWS can be found using the following path: Student Center> “other academics” drop down box> FERPA-Restrict Directory Info.

7. Note that directory information may be released to commercial organizations and may be used for solicitation purposes. However, restricting release of directory information will prevent the University from providing such information to prospective employers and other organizations, media, friends and family.

8. A student may permit inspection of education records by parents, guardians or others by completing a Release of Information Form in PAWS on an annual basis. The form can be found using the following path: Student Center> “other academics” drop down box> FERPA-Release of Info. Release of Information Forms are purged at the completion of each academic year. If a student wishes to permit inspection of education records for the upcoming academic year, a new form must be completed.

9. The right to file with the U.S. Department of Education a complaint if the student believes that the University has failed to comply with the requirements of FERPA. Complaints may be filed with the Family Policy and Regulations Office, U.S. Department of Education, 400 Maryland Avenue, SW, Washington, DC 20202-5901.