For Visits and Further Information

Visitors are always welcome at Frostburg State University. Applicants can contact the Office of Admissions, 301.687.4201, to arrange a date and time. Administrative offices are generally open from 8:30 a.m. to 4:30 p.m., Monday through Friday. The mailing address for the Frostburg State University main campus is 101 Braddock Road, Frostburg, Maryland 21532-2303.

Information 301.687.4000
Academic Programs and Policies Hitchins 213 301.687.4211 jpfifer@frostburg.edu
Admissions Pullen 114 301.687.4201 FSUAdmissions@frostburg.edu
Center for Advising & Career Services Sand Spring Hall 301.687.4403 CAAR@frostburg.edu
Financial Aid Pullen 114 301.687.4301 FinAid@frostburg.edu
On-Campus Housing - Residence Life Office Basement, Annapolis Hall 301.687.4121 (moving to Pullen Hall in 2018) ResLife@frostburg.edu
Registration and Transcripts Pullen 144 301.687.4346 RegInfo@frostburg.edu
Student Affairs Hitchins 116 301.687.4311 StudentAffairs@frostburg.edu
University & Student Billing Pullen 148 301.687.4321 BillingOff@frostburg.edu
USM-Hagerstown 32 W. Washington St. 240.527.2060 InfoNow@frostburg.edu
Veterans Center 150 Park Ave. 301.687.0131 dldabrowski@frostburg.edu

FSU AT A GLANCE
Majors
Accounting
Adolescent Sports Management
Art & Design
Athletic Training
Biology
Business Administration
Chemistry
Communication Studies
Computer Information Systems
Computer Science
Early Childhood/Elementary Education
Earth Science
Economics
Elementary Education
Elementary/Middle School Dual Certification
Engineering
English
Environmental Analysis & Planning
Ethnobotany
Exercise & Sport Science
Foreign Languages & Literature
Geography
Health & Physical Education
Health Science
History
Information Technology
International Studies
Interpretive Biology and Natural History
Law and Society
Liberal Studies
Mass Communication
Mathematics
Mechanical Engineering
Music
Nursing (BS to BSN)
Philosophy
Physics
Political Science
Psychology
Recreation & Parks Management
Secondary Teacher Education
Sesame Computing & Information Assurance
Social Science
Social Work
Sociology
Theatre
Wildlife & Fisheries

Pre-Professional Programs
Dental Hygiene
Dentistry
Law
Medical Technology
Medicine
Nursing
Occupational Therapy
Optometry
Pharmacy
Physical Therapy
Veterinary Medicine

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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: Commission on Collegiate Nursing Education (CCNE)
- Teacher Education Programs: National Council for the Accreditation of Teacher Education (NCATE)

Other Accreditors:
- BA/BS in Athletic Training: Commission on Accreditation of Athletic Training Education (CAATE)
- College of Business programs: AACSB International (Association to Advance Collegiate Schools of Business)
- MS in Counseling Psychology: Master’s in Psychology Accreditation Council (MPAC)
- BA/BS program in Mechanical Engineering, in collaboration with the University of Maryland College Park: Engineering Accreditation Commission of ABET, Inc.
- BS Engineering Program Concentration in Materials Engineering and Electrical Engineering were accredited by ABET through September 2020.
- BS Engineering Program Concentration in Electrical Engineering was accredited through September 2020.
  These programs join our already ABET accredited Collaborative Mechanical Engineering Program.
- BA/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) as consistent with the Maryland Redesign of Teacher Education
- Brady Health Center: Accreditation Association for Ambulatory Health Care (AAAHC)
- Counseling and Psychological Services: International Association of Counseling Services

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 Web site, 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.

FSU 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’s 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 printing, 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 18 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 all incoming freshmen join a group of students with similar interests, then take some of their general education 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.

Ronald Nowaczyk
President
### Undergraduate

**Academic Calendar 2017-2018**

For all deadlines: action must be completed by 4:30 p.m. on the date specified.

#### Fall Semester 2017

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>March 27</td>
<td>Registration Guidelines Booklet Available</td>
</tr>
<tr>
<td>April 3 – 21</td>
<td>Fall 2017 Undergraduate Registration Period</td>
</tr>
<tr>
<td>April 21</td>
<td>Last Day to Register without Late Fees — Undergraduate Continuing Students</td>
</tr>
<tr>
<td>August 8</td>
<td>Fall Tuition Payment must be received in Billing</td>
</tr>
<tr>
<td>August 9</td>
<td>De-Registration May Occur, Late Payment Fee Assessed - All Continuing Students</td>
</tr>
<tr>
<td>August 24</td>
<td>Residence Halls open for Non-Registered New Students</td>
</tr>
<tr>
<td>August 24</td>
<td>Non-Registered Transfers Testing, Advising, and Registration and Freshmen Testing</td>
</tr>
<tr>
<td>August 25</td>
<td>Non-Registered Freshmen Advising and Registration</td>
</tr>
<tr>
<td>August 26</td>
<td>Residence Halls open for registered new students at 12 noon</td>
</tr>
<tr>
<td>August 27</td>
<td>Residence Hall open for registered returning students at 9 a.m.</td>
</tr>
<tr>
<td>August 27</td>
<td>First ORIE Class and Freshman Welcome Events</td>
</tr>
<tr>
<td>August 28</td>
<td>Classes Begin</td>
</tr>
<tr>
<td>August 28 – Sept 1</td>
<td>Drop/Add Period and Late Registration (PAWS and Academic Departments) All unpaid accounts are charged $50 in late fees</td>
</tr>
<tr>
<td>September 4</td>
<td>Labor Day – Offices Closed, No Classes</td>
</tr>
<tr>
<td>September 12</td>
<td>Last Day to File Pass/Fail Option for Undergraduate Courses</td>
</tr>
<tr>
<td>September 15</td>
<td>Unpaid Account assessed $50 Payment Plan Fee</td>
</tr>
<tr>
<td>October 6</td>
<td>Last Day for Undergraduate Grade Changes for Spring 2017 and Summer 2017 (Including Removal of “I” Grades)</td>
</tr>
<tr>
<td>October 9</td>
<td>Mid-Semester Warnings Available in PAWS</td>
</tr>
<tr>
<td>October 23</td>
<td>Last Day to Register for Six-Week 2 Undergraduate Intensive Online Courses</td>
</tr>
<tr>
<td>October 23</td>
<td>Spring 2018 and Intersession 2018 Registration Guidelines Booklet Available</td>
</tr>
<tr>
<td>October 30</td>
<td>First Day of Six-Week 2 Undergraduate Intensive Online Courses</td>
</tr>
<tr>
<td>October 30 – Nov 17</td>
<td>Spring 2018 Undergraduate Registration (Without Payment)</td>
</tr>
<tr>
<td>October 30 – Dec 4</td>
<td>Intersession 2018 Registration (Without Late Fee)</td>
</tr>
<tr>
<td>November 3</td>
<td>Last Day to Withdraw from Undergraduate Courses with a “W”</td>
</tr>
<tr>
<td>November 21</td>
<td>Residence Halls Close at 7:00 p.m.</td>
</tr>
<tr>
<td>November 22 – 26</td>
<td>Thanksgiving Recess</td>
</tr>
<tr>
<td>November 26</td>
<td>Residence Halls Open at 12 noon</td>
</tr>
<tr>
<td>November 27</td>
<td>Classes Resume</td>
</tr>
<tr>
<td>December 4</td>
<td>Payment Due Date for Intersession 2018</td>
</tr>
<tr>
<td>December 11</td>
<td>Last Day to Withdraw from Courses with a “WF”</td>
</tr>
<tr>
<td>December 11</td>
<td>Last Day of Classes</td>
</tr>
<tr>
<td>December 12 – 15</td>
<td>Final Exams</td>
</tr>
<tr>
<td>December 16</td>
<td>Common Exams</td>
</tr>
<tr>
<td>December 18</td>
<td>Final Exams</td>
</tr>
<tr>
<td>December 18</td>
<td>Residence Halls Close at 7:00 p.m.</td>
</tr>
<tr>
<td>December 19</td>
<td>Commencement</td>
</tr>
</tbody>
</table>

#### Intersession 2018

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>October 30, 2017</td>
<td>Registration Begins</td>
</tr>
<tr>
<td>December 4</td>
<td>Intersession Payment must be received in Billing Office (Payment is due by the due date or enrollment in an approved payment plan)</td>
</tr>
<tr>
<td>December 5</td>
<td>Late Payment Fee Begins ($30)</td>
</tr>
<tr>
<td>December 11</td>
<td>Deregistration for Non-Payment Begins</td>
</tr>
<tr>
<td>December 19</td>
<td>Cancellation Date for Courses with insufficient enrollment</td>
</tr>
<tr>
<td>January 2, 2018</td>
<td>Classes Begin</td>
</tr>
<tr>
<td>January 3</td>
<td>Last Day to Withdraw with a Refund (Spring financial aid may not be used for Intersession)</td>
</tr>
<tr>
<td>January 3</td>
<td>Last Day to Add a Course</td>
</tr>
<tr>
<td>January 3</td>
<td>Last Day to Drop Course without “W”</td>
</tr>
<tr>
<td>January 11</td>
<td>Last Day to Drop a Course with a “W”</td>
</tr>
<tr>
<td>January 15</td>
<td>M.L. King Holiday – No Classes, Offices Closed</td>
</tr>
<tr>
<td>January 26</td>
<td>Last Day of Classes</td>
</tr>
</tbody>
</table>

#### Spring Semester 2018

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>October 23, 2017</td>
<td>Spring 2018 Registration Guidelines Booklet Available</td>
</tr>
<tr>
<td>October 30 – Nov 17</td>
<td>Spring 2018 Undergraduate Registration Period</td>
</tr>
<tr>
<td>November 17, 2017</td>
<td>Last Day to Register without Late Fees — Undergraduate Continuing Students</td>
</tr>
<tr>
<td>December 18, 2017</td>
<td>Spring Tuition Payment Due – Undergraduate Students (Payments must be received in the Billing Office)</td>
</tr>
<tr>
<td>December 19, 2017</td>
<td>De-Registration May Occur, Late Payment Fee is Assessed – Undergraduate Continuing Students</td>
</tr>
<tr>
<td>January 2</td>
<td>Spring Tuition Payment Due – Graduate/Doctoral</td>
</tr>
<tr>
<td>January 15</td>
<td>M.L. King Holiday – Offices Closed, No Classes</td>
</tr>
<tr>
<td>January 25</td>
<td>Residence Halls Open for Non-Registered New Students</td>
</tr>
<tr>
<td>January 25</td>
<td>Testing (New Non-Registered Students Only)</td>
</tr>
<tr>
<td>January 26</td>
<td>Advising and Registration (New Undergraduate Non-Registered Students Only)</td>
</tr>
<tr>
<td>January 28</td>
<td>Residence Halls Open at 9:00 a.m.</td>
</tr>
<tr>
<td>January 29</td>
<td>Classes Begin</td>
</tr>
<tr>
<td>January 29 – Feb 2</td>
<td>Drop/Add Period and Late Registration (PAWS and Academic Departments) All unpaid accounts are charged $50 in late fees</td>
</tr>
<tr>
<td>February 16</td>
<td>Last Day to File Pass/Fail Option for Undergraduate Courses</td>
</tr>
<tr>
<td>February 19</td>
<td>Unpaid Accounts assessed $50 Payment Plan Fee</td>
</tr>
<tr>
<td>March 9</td>
<td>Last Day for Undergraduate grade changes for Fall 2017 and Intersession 2018 (including removal of incomplete grades)</td>
</tr>
<tr>
<td>March 12</td>
<td>Mid-Semester Warnings Available in PAWS</td>
</tr>
<tr>
<td>March 16</td>
<td>Residence Halls Close at 7:00 p.m.</td>
</tr>
<tr>
<td>March 17 – 25</td>
<td>Spring Break — No classes</td>
</tr>
<tr>
<td>March 25</td>
<td>Residence Halls Open at 12 noon</td>
</tr>
<tr>
<td>March 26</td>
<td>Classes Resume</td>
</tr>
<tr>
<td>March 26</td>
<td>Fall 2018 and Summer 2018 Registration Guidelines Booklets Available</td>
</tr>
<tr>
<td>March 26</td>
<td>Last Day to Register for Six-Week 2 Undergraduate Intensive Online Courses</td>
</tr>
<tr>
<td>April 2-20</td>
<td>Fall 2018 Undergraduate Registration Period</td>
</tr>
<tr>
<td>April 2</td>
<td>Fall 2018 Graduate Registration Begins</td>
</tr>
<tr>
<td>April 2</td>
<td>Summer 2018 Registration Begins</td>
</tr>
<tr>
<td>April 2</td>
<td>First Day of Six-Week 2 Undergraduate Intensive Web Courses</td>
</tr>
<tr>
<td>April 6</td>
<td>Last Day to Withdraw from Undergraduate Courses with a “W”</td>
</tr>
<tr>
<td>May 15</td>
<td>Last Day to Withdraw from Courses with a “WF”</td>
</tr>
<tr>
<td>May 15</td>
<td>Last Day of Classes</td>
</tr>
<tr>
<td>May 16</td>
<td>Reading Day</td>
</tr>
<tr>
<td>May 17 – 18</td>
<td>Final Exams</td>
</tr>
<tr>
<td>May 19</td>
<td>Common Finals</td>
</tr>
<tr>
<td>May 21 – 23</td>
<td>Final Exams</td>
</tr>
<tr>
<td>May 23</td>
<td>Residence Halls Close at 7:00 p.m.</td>
</tr>
<tr>
<td>May 24</td>
<td>Commencement</td>
</tr>
</tbody>
</table>

#### Summer Sessions 2018

See the Summer Session Schedule Booklet for complete calendar.

Calendar subject to change without notice.
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, gender, 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 and Immigration Compliance Office (301.687.4102) and Office of Gender Equity (301.687.4733).

- 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 301.687.4102 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 in the process. The University offers many special areas of study within your major and outside your major which can enhance your learning and future job possibilities.

Majors

Frostburg State University offers 47 different 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.

College of Business

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

Economics
- business economics
- public policy economics
- quantitative economics

College of Education

Athletic Training
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
Health & Physical Education
Recreation & Parks Management
- adventure sports
- community program delivery
- hospitality management & tourism
- therapeutic recreation

Social Science+
Secondary Teacher Education*

College of Liberal Arts & Sciences

Art and Design+
- seven studio focuses

Biology+
- molecular biology
- environmental science

Chemistry+
- biochemistry
- professional chemistry
- traditional chemistry

Communication Studies
- conflict communication
- leadership communication
- public communication & rhetorical studies

Computer Information Systems

Computer Science
- networks

Earth Science+
- environmental science

Engineering
- electrical engineering
- industrial chemistry
- materials engineering
- engineering management

English
- creative writing
- literature
- professional writing

Environmental Analysis & Planning

Ethnobotany

Foreign Languages & Literature+
- French
- Spanish

Geography
- climate system science
- global systems analysis
- mapping 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

Mass Communication
- nine professional focuses

Mathematics+

Mechanical Engineering
(in collaboration w/UMCP)

Music+
- instrumental performance
- music management
- vocal performance

Nursing: RN to BSN (collaborative)

Philosophy

Physics+
- engineering physics
- traditional physics

Political Science

Psychology

Secure Computing & Information Assurance

Social Work

Sociology

Theatre
- acting
- design and technology
- theatrical studies

Wildlife & Fisheries

*only available as a second major
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 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

First time college students and transfer students may declare their major at the time of admission. Transfer students will be assigned a departmental advisor at registration, while freshman students will be initially advised by their ORIE 101 – Introduction to Higher Education instructor. Freshmen may transition to departmental advising during their second semester after confirming their major choice with their ORIE advisor and meeting with the chair of the department that offers the program. You are expected to declare a major by the time you have completed 45 credit hours. You can change your major at any time. Talk to your advisor and the chair of the department that offers the new major if you want to make a change.

The University System of Maryland - Hagerstown

The University System of Maryland - Hagerstown (USMH) is a regional higher-education center located in downtown Hagerstown that offers upper-division undergraduate and 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 managing institution for USMH, seven institutions offer degrees at USMH: Coppin State University; Frostburg State University; Towson University; University of Maryland, College Park; University of Maryland Eastern Shore; University of Maryland University College and Salisbury University. USMH undergraduate and 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 13 undergraduate and 8 graduate degrees onsite. Baccalaureate programs offered by FSU include: business administration, early childhood education, psychology, sociology and liberal studies. Graduate programs include master's programs in business administration, and elementary and secondary education, 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 and Online Programs

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. The BS in adventure sports management is offered at Garrett 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, performance on the SAT, completion of a college preparatory program, 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 required for admission. You should take the SAT or ACT in your junior or senior year of high school. All first-year applicants or transfer students with fewer than 24 transferable hours must have the results of the SAT/ACT sent to the Admissions Office. Frostburg State University’s SAT identification code is 1714. Frostburg’s ACT identification code is 5402.

Application Dates

Beginning on September 15, 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.

If you have not taken the required courses, you may be admitted to the University with the understanding that courses in the deficient area(s) must be completed during the first year if you want to continue your studies.

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

If you graduated from high school a minimum of three years prior to applying to FSU, you are excused from the SAT/ACT requirement. You still need to submit a transcript of your academic work, including the receipt of a high school diploma or 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 Associate Provost for Enrollment Management 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. In addition, please forward your official SAT or ACT 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
ADMISSION PROCEDURES

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 to the Office of Admissions. This forms 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. 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.

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.

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 56 semester hours of credit at a Maryland community college with a cumulative grade point average of 2.0 or higher on a scale of 4.0, and if the credit is from a college or university parallel course, you will be given direct transfer to FSU.

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/regents/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.

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.sreb/academic-common-market. Currently enrolled students continue to study at resident rates if a program is deleted during their academic careers.

For further information, 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).

Senior Citizen Golden Identification Card
Senior citizens may qualify for a Golden Identification Card which allows 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 2017-2018 only. Please see appropriate Academic Schedule Booklets for 2018-2017 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 charges at any time such changes are deemed necessary by the University and the University System of Maryland Board of Regents.

Tuition

Tuition for legal residents of Maryland is $3,234 per semester plus all other applicable fees at the University. Tuition for out-of-state students is $9,908 per semester plus all other applicable fees at the University. Tuition for regional residents* is $7,406 per semester plus all other applicable fees at the University.

Evening and part-time tuition is $267 per credit hour for resident undergraduate students, $422 for regional resident* undergraduates, $413 per credit hour for resident graduate students, and $531 per credit hour for non-resident graduate students. Doctoral tuition per credit hour is $569 for resident students and $712 for non-resident students.

Summer tuition is $267 per credit hour for resident undergraduate students, $422 for regional resident* undergraduates, $413 per credit hour for resident graduate students, and $531 per credit hour for non-resident graduate students. Doctoral tuition per credit hour is $569 for resident students and $712 for non-resident students.

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 freshman 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 from $8,192 to $11,396 per year. Room contracts are binding for one academic year (fall and spring semesters). All students living in the residence halls are required to purchase a meal ticket for the University dining hall. See the chart below for detailed room and board options and prices.

Undergraduate Tuition & Fees 2017-2018

<table>
<thead>
<tr>
<th>TUITION - FULL TIME (12 cr. or more)</th>
<th>1st Semester</th>
<th>2nd Semester</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maryland Residents</td>
<td>$3,234</td>
<td>$3,234</td>
<td>$6,468</td>
</tr>
<tr>
<td>Out-of-State Residents</td>
<td>9,908</td>
<td>9,908</td>
<td>19,816</td>
</tr>
<tr>
<td>Regional Residents*</td>
<td>7,406</td>
<td>7,406</td>
<td>14,812</td>
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</table>

Mandatory Fees

- Technology Fee: $92/semester
- Activities Fee: $165/semester
- Athletic Fee: $484/semester
- Auxiliary Facilities Fee: $270/semester
- Student Union Operating Fee: $179/semester
- Transportation Fee: $18/semester
- Sustainability Fee: $15/semester
- Total Fees: $1,223/semester

Total Tuition and Fees

- Maryland Residents: $4,457/semester
- Out-of-State Residents: $11,131/semester
- Regional Residents*: $8,629/semester

Room Charges

- Frederick, Westminster: double: $2,321, single: $2,998, large single: $3,252
- All other halls: double: $2,266, single: $2,998, large single: $3,252

Board Charges

- Gold Plan with $200 bonus: $2,349
- Silver Plan: 19 meals/week w/$100 bonus: $2,185
- 14-meal with $100 bonus: $2,095
- 12-meal with $250 bonus: $2,177
- 10-meal with $75 bonus: $1,830
- Super 15 Plan with $300 bonus*: $2,446

*Default residential meal plan

Total Tuition, Fees, Room and Board**

<table>
<thead>
<tr>
<th></th>
<th>1st Semester</th>
<th>2nd Semester</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maryland Residents</td>
<td>$9,224</td>
<td>$9,224</td>
<td>$18,448</td>
</tr>
<tr>
<td>Out-of-State Residents</td>
<td>15,898</td>
<td>15,898</td>
<td>31,796</td>
</tr>
<tr>
<td>Regional Residents*</td>
<td>13,396</td>
<td>13,396</td>
<td>26,792</td>
</tr>
</tbody>
</table>

**Based on $4,642 room rate and $4,892 board rate subject to change
**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 of $165 per semester for full-time students or $26 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 of $484 per semester for full-time students and a $50 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 of $270 per semester for full-time students and $24 per credit hour for part-time students is assessed for construction expenses of the auxiliary facilities.

**Student Union Operating Fee:** A Student Union operating fee of $179 per semester for full-time students and $21 per credit hour for part-time students is charged for operating expenses of the Lane Center.

**Sustainability Fee:** A fee of $15 per semester for full-time students and $2 per credit 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 of $18 per semester for full-time students and $2 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 of $92 per semester for full-time students and $16 per credit hour for part-time students is assessed to fund technology initiatives for student enhancement.

**Other Fees and Expenses**

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

**Late Registration Fee:** A late registration fee of $30 is charged for not registering as prescribed or if payment is received after the due date.

**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 motor vehicle registration fee is charged for students registering a vehicle. Vehicle registration for summer school and evening classes is $10.

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 free drop-add period:

Private Music Fee: Music students desiring private study of organ, piano, other instruments, or voice are charged $150 per credit hour.

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

Special Instruction Fee: Fees of $10-$120 for students enrolled in GEP science laboratory courses and courses utilizing the Academic Computing facility are collected to cover laboratory supplies, equipment, 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 $30 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.

Refund Schedules

<table>
<thead>
<tr>
<th>Fall and Spring Semester</th>
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</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>

<table>
<thead>
<tr>
<th>Summer Sessions</th>
<th></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</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</th>
<th></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>
</tbody>
</table>

Residential meal plans are prorated weekly through 10 weeks.
DECLARATION OF EMERGENCY

The Governor of the State of Maryland, in accordance with the provisions of State Law, hereby declares that an emergency exists requiring the cooperation of the State and local authorities, to be carried out in cooperation with and under the direction of the Maryland State Department of Health and Mental Hygiene.

To this end, the Governor has directed that all necessary measures be taken to protect the health and safety of the people of the State of Maryland.

This declaration shall remain in effect until revoked by the Governor or by the Secretary of State, upon request of the Governor.

[Signature]
Governor of Maryland

[Date]
Financial Aid

The University program of financial aid 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 only application necessary for Federal and general State aid. The Free Application for Federal Student Aid includes detailed instructions and is available on-line at www.fafsa.gov. 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.

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 Educational Opportunity Grant 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 to determine eligibility.

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 to apply.

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 Stafford 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 a degree).

Federal Subsidized Stafford Loan

The Federal Subsidized Stafford 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 Stafford 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 Stafford Loan, you must complete a Free Application

Educational Expenses

<table>
<thead>
<tr>
<th></th>
<th>In-State Resident</th>
<th>Regional Resident**</th>
<th>Out-Of-State Resident</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tuition</td>
<td>$6,468</td>
<td>$14,812</td>
<td>$19,816</td>
</tr>
<tr>
<td>Fees</td>
<td>2,446</td>
<td>2,446</td>
<td>2,446</td>
</tr>
<tr>
<td>Room and Board* - plans starting at</td>
<td>9,340</td>
<td>9,340</td>
<td>9,340</td>
</tr>
<tr>
<td>Books</td>
<td>1,400</td>
<td>1,400</td>
<td>1,400</td>
</tr>
<tr>
<td>Transportation</td>
<td>750</td>
<td>750</td>
<td>950</td>
</tr>
<tr>
<td>Personal</td>
<td>1,000</td>
<td>1,000</td>
<td>1,000</td>
</tr>
</tbody>
</table>

The above figures are based on a 9-month academic year.

*Room and board cost is based on double room in a traditional hall and Gold meal plan. Books, transportation, and personal expenses are estimates only and students should calculate these items based on their own circumstances. Commuter bills will only reflect charges for tuition and fees.

**Regional Rate: Discount for residents of Pennsylvania, Virginia, West Virginia and Ohio living within 120 miles of Frostburg State University in Frostburg, MD.
for Federal Student Aid and other forms as required.

All first-time Federal Subsidized Stafford Loan borrowers must complete an entrance interview and a Master Promissory Note which can be completed at www.studentloans.gov. In addition, all Federal Subsidized Stafford 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 default is that FSU has the right to, and will, withhold the processing of all academic transcripts.

Federal Unsubsidized Stafford Loans
The terms and conditions for the Federal Unsubsidized Stafford Loan program are the same as the Federal Subsidized Stafford 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 Stafford Loans or may qualify for only partial Subsidized Stafford Loans. To apply for a Federal Unsubsidized Stafford 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 Web site is http://ombudsman.ed.gov

Federal 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.

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 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 freshman 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, Stafford 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 be responsible for charges that were once covered by Title IV aid. In some cases, a 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 Stafford Loans, Subsidized Stafford 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</th>
<th>Grade Point Average</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 add all the completed credit hours by the attempted credit hours.

6 completed credit hours / 12 attempted credit hours = 50% completion rate

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 A, B, C, D, F, P, N, FX, W, WF, NC, NR, CS, I, AP, CE, CL, IB, PT and all transfer credits.

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 as-signed 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.
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 intersession. 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 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. 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 COSC 100/110 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
      • GEOG 275 Fundamentals of Geographic Data Handling
      • HPED 310 Technology in Health and Physical Education
      • MUSC 103 Tonal Analysis
      • NURS 404 Nursing Informatics
   You must meet all prerequisites for the course(s) selected
10. 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.
11. Completion of all required professional education courses and requirements for students in teacher education programs.
12. Completion of all approved student outcomes assessment activities required by the University and the academic programs.
13. Completion of an application for diploma and graduation when student completes 70 credit hours (forms available in PAWS online).
14. Fulfillment of all financial obligations to the University.

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.

In the fall semester, most ORIE 101 sections are part of FSU Connections in which students in your ORIE section also will enroll in at least one other class together. 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. Stand-alone ORIE 101 sections are offered primarily in the spring.

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 coursework 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 chair 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 the USM-Hagerstown

Upper division course work required for the majors in business administration, early childhood/elementary education (early childhood specialization), liberal studies, psychology and sociology 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, Environmental Analysis and Planning, Ethnobotany, 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:
  A-F grades will be assigned, with a CS possible for students who have met the CS criteria stipulated in the course syllabus. 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. 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 105 (Critical Reading), 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)  3 hours  3. Mathematics: One of the following (3-4 hours each):
ENGL 101/111*  Freshman Composition
    MATH 104  Intro to Mathematical Problem Solving

2. Advanced Writing: One of the following (3 hours each):
ENGL 308/309/310/312* Advanced Composition
ENGL 300  Critical Writing about Literature
ENGL 330  Business Writing
ENGL 338  Technical Writing
ENGL 339  Scientific Writing
    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  DANC 110 Dance Appreciation
- Music  MUSC 106 Music in Contemporary Culture 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 hours each)

- History  HIST 100/111*/The Contemporary World in Historical Perspective
- Languages  FREN 250 Overview of French Language & Culture or SPAN 250 Overview of Spanish Language & Culture
- 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 General Biology I
- Chemistry  CHEM 100/113*/Chemistry & Society or CHEM 150 General, Organic & Biochemistry or CHEM 201 General Chemistry I
- Geography  GEOG 103/113*/Physical Geography
- Physical Science  PHYS 100 100 Cosmic Concepts (3cr) and PHYS 101 Measurement (1cr) or PHYS 203 Physical Science or PHYS 215 General Physics I or PHYS 261 Principles of Physics I: Mechanics
- Interdisciplinary  IDIS 160  Science, Technology, and Society (3cr)

D. The Social Sciences: At least two of the following (3 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 110/112* 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)

IDIS 150/151*/First-Year FSU Colloquium or IDIS/SUST 155 Intro to Sustainability Studies (required)†
and select one course from:
IDIS 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)

You must meet all prerequisites listed for the course you select.

- AAFST  200  Intro. to African American Studies
- AAFST  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 and Religions
- HIST  100/111*/The Contemporary World in Historical Perspective
- HIST  418  Native Peoples of the Americas
- HIST  436  Women’s Issues in World History
- HLTH  125  Health and Culture
- INST  150  Introduction to World Religions
- INST  200  Intro. to International Studies
- IDIS  226  Intercultural Understanding
- MDFL  301  Latin American Women’s Issues
- MUSC  117  Music of Africa, Asia & the Americas
- MUSC  250  Gender and Sexuality in Music
- MUSC  311  Jazz History
- MUSC  412/412 History of Musical Theatre
- PHIL  308  Political Philosophy
- PHIL  311  Asian and African Philosophy
- PHIL  409  Philosophy and Women
- PSYC  220  Psychology of Women
- PSYC  325  African American Psychology
- PSYC  326  Psychological Science
- PSYC  335  Psychology of Women
- PSYC  336  Psychology of Women
- REC  100  Leisure & Diverse American Culture
- SOCI  224  Cultural Anthropology
- SOCI  305/SOWK 305 Racial & Cultural Minorities
- WMST  201  Introduction to Women’s Studies

Total hours: minimum of 31

*Honors course equivalent
†Complete prior to earning 45 credit hours or soon after transfer, if applicable.
‡Complete after earning 45 credit hours.
The Academic Program

Majors Offered at FSU Career Cluster**

| Accounting* | 2 |
| Adventure Sports Management | 2, 4, 5, 8 |
| Art and Design | 6 |
| Athletic Training | 5 |
| Biology* | 3, 4, 5 |
| Business Administration* | 1, 2 |
| Chemistry* | 3, 4, 5 |
| Communication Studies* | 6 |
| Computer Information Systems* | 2, 10 |
| Computer Science* | 10 |
| Earth Science | 4 |
| Economics* | 2 |
| Elementary/Early Childhood | 8 |
| Elementary/Middle School Dual Cert. | 8 |
| Elementary Education | 8 |
| Engineering | 3, 4 |
| Engineering, Mechanical (w/UMCP) | 3 |
| English* | 3, 6 |
| Environmental Analysis & Planning | 4, 9 |
| Ethnobotany* | 1, 3, 4, 5 |
| Exercise and Sport Science | 1, 5, 8 |
| Foreign Languages & Literature* | 1, 6 |
| Geography* | 1, 4, 7, 9 |
| Health & Physical Education | 5, 8 |
| Health Science | 5, 8 |
| History* | 6 |
| Information Technology* | 10 |
| International Studies* | 1, 2, 8 |
| Interpretive Biology & Natural History | 1, 4 |
| Law and Society | 8 |
| Liberal Studies | all |
| Mass Communication* | 6 |
| Mathematics* | 3 |
| Music* | 6 |
| Nursing | 5 |
| Philosophy* | 6 |
| Physics* | 3, 4, 5 |
| Political Science* | 8 |
| Psychology* | 5, 8 |
| Recreation & Parks Mgmt.* | 1, 4, 5, 8 |
| Secondary Teacher Education | 8 |
| Secure Computing & Info. Assurance | 10 |
| Social Science | 8 |
| Social Work | 5, 8 |
| Sociology* | 8 |
| Theatre* | 6 |
| Wildlife & Fisheries | 4 |

**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 key 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 insure that you learn matches current industry standards. In addition, teacher education students will learn how to blend career awareness into instruction at all levels.

The ten 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. If, after having been admitted to this university and that you meet all the requirements of the later catalog chosen.
3. If you reenter 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.

Minors

*Minorso 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.
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 freshmen.

For further information, contact the Office of the Provost.

The University 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/International Housing in Frost Hall, Diehl Hall, and Cambridge 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 and a combined SAT score of 1250 (or an ACT score of 26). Students who do not meet both of these requirements may apply for admission to the Honors Program based on either an excellent GPA or high 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:

a) ENGL 111 or 312
b) 15-17 credit hours of Honors variants from an approved list
c) 6 credit hours from the following:
   - IDIS 351 Honors Advanced Colloquium
   - IDIS 491 Honors Seminar
   - IDIS 493 Honors Thesis

Experiential Learning Option (ELO): 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 freshman 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.

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 offers a wide variety of online classes and more specialized courses during Summer Session and Intersession that are not available to nontraditional or part-time FSU students during the regular academic year. In addition, the University offers you opportunities...
to pursue unique educational experiences that are difficult to schedule while enrolled in other classes.

**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, refer to the Intersession bulletin distributed each fall, visit the Intersession Web site 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, refer to the Summer Session bulletin distributed each spring, visit the Summer Session Web site 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 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 web page 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 web site at www.frostburg.edu/studyabroad.

**Enrollment of Undergraduates in Graduate Courses**

Frostburg State University 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.

Registration for graduate courses will be completed under the direction of the Registrar’s Office as a separate registration and will not be included in your undergraduate registration. 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 requirements.

Exceptions to these policies are made only for students who are admitted to a combined baccalaureate-master’s program at Frostburg State University or for programs that have received an exemption to these requirements. See the degree program listings for descriptions of current programs, selection criteria, and exceptions allowed.

Graduate Studies

You may pursue such degree programs as M.B.A., M.Ed., M.A.T., M.S. or the Ed.D. in Educational Leadership. Most students study part-time in the evening. The Master of Arts in Teaching is offered as an intensive, year-long, full time program. You may enroll in courses and complete programs at the main campus in Frostburg or at the USM - Hagerstown.

See the Graduate Catalog or website for further information.

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.

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 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. 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.

Additional Major Program:

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. Complete the Master of Arts in Teaching, 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.
7. 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 freshmen to take popular introductory courses before the start of the fall semester. You register for SOFI courses during your scheduled Preview FSU session in June 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 & 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

At Frostburg, you always will have an academic advisor to assist you in realizing your academic and career goals. You are encouraged to see your advisor regularly to discuss your current academic work and future plans, to ask for advice about any problem you encounter, and to find out about other services on campus that are available to support your academic success. You will need to see your 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 (the Student Administration computer system) so you can register and drop/add on the web. Most advisors post appointment sheets outside their office doors prior to registration, or you can call or e-mail your 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 come to Preview FSU, our freshman orientation program. At Preview FSU, you will work with an experienced faculty advisor who is specially trained to work with first year students. During your first semester, your advisor will be the instructor of your ORIE 101, Introduction to Higher Education class. ORIE instructor/advisors include faculty and administrators who will assist you with your transition to college. Advising and planning is a major component of the ORIE 101 curriculum. You will meet your ORIE advisor twice a week, so take advantage of this contact to ask any question you have. Freshmen may transition to academic departmental advising during their second semester after meeting with their ORIE advisor to discuss first semester outcomes and to confirm their choice of major. If you aren’t ready to move to a departmental advisor or to declare your major, your ORIE instructor will continue to advise 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/initial registration. You then will 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:

- Freshman 0-29 semester hours earned
- Sophomore 30-59 semester hours earned
- Junior 60-89 semester hours earned
- Senior 90+ semester hours earned

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 (The Web-based student information system) 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 drop a class, you must complete the change-of-course form and file it with the Registrar’s Office. If you drop a course during the first 60 percent of a term (beginning with the first day of classes), you will receive a W. 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.)

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/her instructor of conflicts between religious observances and scheduled course activities.

Absences for Activities

The faculty recognize the value 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. If you participate in such activities and incur class absences because of them, you are responsible for notifying your instructors in advance of such absences. An instructor who has any question regarding your absence for such activities may call the faculty member or other person responsible for the activity.

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

Attendance at Another Institution

Once you enroll as a degree-seeking student 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 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.

If you have 0-89 total credits earned (including previous transfer credit, credits in which you are currently 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 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:

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.

If you have 70 credits transferred from two-year colleges, you cannot transfer additional credit from a two-year college. This is a State regulation and no exceptions are allowed.

Exceptions to the rules specified above require a 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.

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, fill out the proper form in the Registrar’s Office or 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 Business Office that you will not be attending the current semester. You must contact the Business 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 depend-
ACADEMIC REGULATIONS & PROCEDURES

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 a 2.0 cumulative grade point average at the end of your last term of enrollment, and 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 Intersessions, 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.

Exceptions to these rules require a written request to the Registrar’s Office at least three weeks prior to the commencement ceremony, accompanied by evidence that you have enrolled in, and paid tuition for, course work that will meet the remaining requirements during the summer session immediately following May commencement or the January Intersession immediately following December commencement. Permission will be granted only if you have no more than two courses totaling no more than nine credits remaining to complete your degree and 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 the request, as determined by the official degree audit performed by the Registrar.

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 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 Withdraw
- WF Withdraw after the withdrawal deadline (counts as an F, failure)
- FX Withdraw unofficially (counts as an F, failure)
- 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

Incompletes
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-Withdrew; WF-Withdrew After Deadline (Failing); FX-Withdrew Unofficially (Failing). The FX will be given only if you have failed to withdraw or drop officially or have stopped going to class prior to the end of the semester. Failure to pass the course because you did not take the final exam or complete other course requirements will be recorded as an F grade rather than an FX.

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, at final registration or up to eleven class days following registration, 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.

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 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.
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>B</th>
<th>C</th>
<th>D</th>
<th>F, WF, FX</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
</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.

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; 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 School 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.
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 to meet the basic skill standard in reading, writing and/or mathematics (as defined in the section of the catalog on testing policies).
3. You fail at least half of the semester hours of credit in any single semester while on academic probation.
4. You fail to meet the minimum academic progress standard for your number of earned hours while on academic probation. (See table on this page.)
5. 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 completed on-line. The on-line prompts will ask you to:

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.

**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>

1Total hours earned = all earned hours, graded and ungraded, including transfer credits.
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 can not improve the GPA because credits, not grades, transfer from these institutions.

**Academic Warning**

If your semester GPA falls below 1.5 and your cumulative GPA is below 2.5 you will be placed on academic warning, and must meet the warning conditions specified below.

**Additional Probation and Warning Conditions**

If you are on academic probation or warning, the following rules apply:

1. You may not enroll for more than 15 credit hours per semester.
2. You must have your course schedule and load reviewed and approved by your academic advisor. You must meet regularly with your advisor throughout the semester. (The Academic Standards Subcommittee seriously considers the written report of your advisor should you be subject to academic dismissal.)
Academic Eligibility for Athletes

As a student-athlete, you must be eligible according to the regulations of the National Collegiate Athletic Association 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 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 Director of Special Academic Services.
   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 Director of Special Academic Services.
3. Complete the 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.
4. If you are a transfer student who has ever participated in intercollegiate athletics:
   a. Be certified by the transfer institution as academically and athletically eligible had you remained at that institution. If you transferred from a four-year institution to a two-year college and then to Frostburg State University, you must have been both academically and athletically eligible had you remained at the previous four-year institution, or you must have completed 24 semester hours (or 36 quarter hours) of transferable degree credit and at least two full-time semesters (or three full-time quarters) of attendance at the two-year institution, in order to be immediately eligible at FSU, or
   b. Complete two full time semesters in residence at Frostburg State University before being eligible to compete.
5. If you are a continuing or readmitted student:
   a. Pass a minimum of 24 credits since the beginning of the last season of competition in a particular sport, with the following exceptions:
      1) You may request that credits earned in excess of the minimum 24 credits per year in previous years be counted to meet the 24-credit requirement. Each “banked” credit may be counted only once. Credits earned in repeated courses that are not repeatable for credit may be counted only once. Banking must be approved by the Director of Special Academic Services.
      2) You may receive an exception to the 24-credit rule if you can document circumstances outside your control which interfered with your ability to complete the required credits in a particular year, but you are still making satisfactory progress towards graduation. Rules established by the NCAA for Divisions I and II serve as guidelines for acceptable circumstances. To request an exception, you must submit a written appeal to the Athletics Program Advisory Group.
   b. By the beginning of the fifth full-time semester, declare an academic major as proof of normal progress towards the degree.
   c. Meet the minimum academic progress standards defined for your academic level (see table on this page), with the following exceptions:
      1) If you are ineligible at the beginning of a semester, you may become eligible mid-semester only due to:
         a) Successful completion of a course in which you earned an incomplete (I) grade.
         b) An official grade change.
         c) 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.
      2) You may request a waiver of the minimum GPA requirement (for an FSU GPA between 1.75 - 1.99 only) if compelling circumstances are present. Each request shall be considered on its own merits, independent of any other previous request. To insure consistency, waiver requests must be submitted to the Athletics Program Advisory Group. A record is kept of all waiver applications and the decisions rendered. Decisions are sent to the conference office as well.
   d. 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 unless you have earned a total of 24 credits since the beginning of the last season of competition in a particular sport.
6. 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 Director of Athletics for approval and transmission to the appropriate authorities.

Minimum Academic Progress Standards for Athletes

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

1Semester at Frostburg State = number of semesters enrolled at FSU, including 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 can not improve the GPA because credits, not grades, transfer from these institutions.
Vision Statement:
The College of Business will be recognized for its high-quality academic and experiential learning programs.

Mission Statement:
The College of Business prepares students to successfully meet professional opportunities through a dynamic, student-centered educational environment that emphasizes leadership, notable and timely research, application of knowledge, and global experiential learning.

Mission Statement Components:
The College of Business:

- emphasizes excellence in teaching through innovative approaches, small-class environment, caring faculty, and interactive focus.
- provides intellectual and professional development to students through coursework, research, and global experiential learning with a focus on leadership, ethical values, and community engagement.
- measures students’ learning outcomes to ensure continuous improvement and positive impact of its programs.
- engages business practitioners, alumni, students, and community and considers their input to enhance its programs.
- provides professional development opportunities for enhancement of faculty’s teaching skills, research capabilities, practical application, and global experiential learning.

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 Speaking
- 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)

Select one of the following (3 hours)

- MATH 109/110 Elements of Applied Probability and Statistics (Core Skill 3)
- MATH 380 Introduction to Probability and Statistics

**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 361 Principles of Marketing
## Summary of Requirements for Major/Minor in Accounting

### Major

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Hours Required</th>
<th>Major</th>
<th>Minor</th>
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<tbody>
<tr>
<td><strong>College of Business Core:</strong></td>
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<tr>
<td>ACCT 211* Financial Accounting</td>
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<td>ACCT 212* Managerial Accounting</td>
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<td>BLAW 291* Legal Environment of Business</td>
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<tr>
<td>FINA 370* Corporate Finance</td>
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<tr>
<td>MGMT 110* Career and Professional Development I</td>
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<tr>
<td>MGMT 251* Management of Organizations</td>
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<td>MGMT 310* Career and Professional Development II</td>
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<td>MGMT 355* Operations Management</td>
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<td>MGMT 356* Leadership &amp; Human Behavior</td>
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<td>MGMT 405* Business Ethics and Social Responsibility</td>
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<td>MGMT 485* Business Policy and Strategy (Capstone)</td>
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<td>MKTG 361* Principles of Marketing</td>
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<td><strong>Courses Outside College of Business:</strong></td>
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<td>Communication Studies</td>
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<td>CMST 122* Introduction to Public Speaking</td>
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<tr>
<td>Computer Science</td>
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<tr>
<td>COSC 220* Software Applications for Business (Tech. Fluency)</td>
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<td>Economics</td>
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<td>ECON 201/211* Principles of Economics (Macro) (GEP Group D)</td>
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<td>ECON 202/212* Principles of Economics (Micro)</td>
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<td>MATH 118* Applied Mathematics for Business</td>
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<td>or MATH 220* Calculus for Applications I</td>
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<td>or MATH 236* Calculus I (Core Skill 3)</td>
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<tr>
<td>MATH 109/110* Elements of Applied Probability and Statistics (Core Skill 3)</td>
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<td>or MATH 380* Introduction to Probability &amp; Statistics</td>
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<td><strong>Distribution Within Department:</strong></td>
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<td>ACCT 305* Accounting Systems</td>
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<td>ACCT 311* Intermediate Accounting I</td>
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<td>ACCT 312* Intermediate Accounting II</td>
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<td>ACCT 313* Intermediate Accounting III</td>
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<td>ACCT 315* Cost Accounting</td>
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<td>ACCT 325* Auditing</td>
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<td>ACCT 401* Advanced Financial Accounting</td>
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<td>ACCT 420* Tax</td>
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<td><strong>Elective Hours in Department:</strong></td>
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<td>6</td>
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</tbody>
</table>

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

### Minor

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Hours Required</th>
<th>Minor</th>
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<tbody>
<tr>
<td><strong>College of Business Core:</strong></td>
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<tr>
<td>ACCT 211* Financial Accounting</td>
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<tr>
<td>ACCT 212* Managerial Accounting</td>
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<tr>
<td><strong>Courses Outside College of Business:</strong></td>
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<tr>
<td><strong>Distribution Within Department:</strong></td>
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<td>6</td>
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<tr>
<td>ACCT 311* Intermediate Accounting I</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACCT 312* Intermediate Accounting II</td>
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<td></td>
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<tr>
<td><strong>Elective Hours in Department:</strong></td>
<td></td>
<td>6</td>
</tr>
</tbody>
</table>

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

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### Combined BS/MBA Option

- 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.

---

### Professors:

- Bandura, Shaffer (Chair)
- Bao, Groer, Venezia

### Associate Professors:

- Shrader, Tilley

### Lecturer:

- Butler, Gilmore

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*You must receive a grade of “C” or better for this course to count toward major or minor.*
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. All CPA exam candidates in many states, including Maryland, are required to complete 150 hours of academic credit. 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.

Eligibility requirements for the combined BS in ACCT/MBA:

a) Declared accounting major at FSU, or FSU accounting graduate.
b) A minimum score of 450 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.

Summary of 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)
   - MGMT 510 Leadership and Ethics
   - ECON 511 Economics for Managers
   - MGMT 512 Management Decision Analysis
   - MGMT 542 Organizational Behavior
   - BMIS 607 Information Management
   - FINA 610 Financial Management
   - MGMT 620 Strategic Human Resource Management
   - MKTG 640 Marketing Management
   - MGMT 680 Strategic Integration*
   - MGMT 690 Special Topics in Management**

*MGMT 680 must be taken in the last 6-9 credits of study.
**While there are no prerequisites, MGMT 690 should be taken in the last semester/s.
Business Administration

Major

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:
Gaumer (Chair, Department of Marketing and Finance), Offstein, Rahman, Shah, Shin, Singh, Tootoonchi

Associate Professors:
Chory, Dean, Mattare, McClellan, Monahan (Chair, Department of Management), Shore, Sigerstad, Ye

Assistant Professors:
Ashraf, Huh, Kang, Levitt, Turner-Henderson, Venezia, Youssef

Lecturer:
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.

Minor

Hours Required in College of Business Core:

Major 33  
Minor 18

Hours Required in Concentration:

Major 27  
Minor 0

Hours Required Outside College of Business:

Major 18-19  
Minor 3

Total Hours Required for Major/Minor:

Major 78-79  
Minor 21

Summary of Requirements for Major/Minor in Business Administration

Major

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)

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

   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 235* 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.

Minor

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 361 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 International Trade
ECON 352 Intermediate Micro-Economics
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 (18 hours)
ECON 400 International Trade
FINA 477 International Financial Management
INTR 330 Global Business Seminar (Capstone)
MGMT 450 International Management
MKTG 460 Global Marketing

3. Electives (9 hours)
Select three from the following 3-credit courses:
CMST 350 Intercultural Communication
ECON 309 Comparative Economic Systems
ECON 401 International Finance
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 (21 hours)
HMGT 101 Analysis of the Hospitality Industry (3 credits at UMES)
HMGT 396 Special Topics in Hospitality Management (12 credits)
Approved courses will be 6 weeks of study abroad at Yanung University in Taiwan.
HMGT 401 Law and the Hospitality Industry (3 credits at UMES)

3. Elective Courses (6 hours)
Select from among the following:
BMIS 455 Management Information Systems
ECON 305 Managerial Economics
FINA 476 Financial Management
HMGT 425 Entrepreneurial Business Plan
HMGT 450 International Management
HMGT 452 Staffing and Development
HMGT 456 Compensation Management
HMGT 457 Labor Relations
HMGT 490 Special Topics in Business Administration – Management
HMGT 494 Internship in Management (3 or 6 credits)
HMGT 499 Independent Study in Management
MKTG 366 Consumer Behavior

NOTE: No more than 6 hours of internship credit may be used for this option.

*Internship must be performed at Rocky Gap or any hotels and resorts.
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 Interpersonal Communication
   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 Interpersonal Communication
   or CMST 322 Presentational Communication
   or CMST 335 Organizational Communication
   ECON 305 Managerial Economics
   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
# 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)

## 2. Courses Outside College of Business: (21-22 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 Speaking

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

### Mathematics (9-10 hours)
- ECON 450* Quantitative Economics
  - and 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)
- 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 307 Government, Business, and Public Policy
- 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.

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**College of Business Core:**
- 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)

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

**Communication Studies:**
- CMST 122* Introduction to Public Speaking

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

**Mathematics:**
- ECON 450* Quantitative Economics
  - and 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

**Area of Concentration:**
- 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 307 Government, Business, and Public Policy
- 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

Concentrations in

• PUBLIC POLICY ECONOMICS
• QUANTITATIVE ECONOMICS

Professors:
W. Anderson, Neral, Stair

Associate Professors:
Kiriazis (Chair), McCoskey

Assistant Professor:
Kucher, Rossi

• 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.

Minor

Concentrations in

• PUBLIC POLICY ECONOMICS
• QUANTITATIVE ECONOMICS

Summary of Requirements for Major/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
   ECON 460* Introduction to Econometrics
   ECON 491* Seminar in Economics (Capstone)

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

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 must be at the 400 level.

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

   Minors must also complete at least 6 additional credit hours in economics (excluding ECON 495) at the 300 or 400 level.

* Note: You must receive a grade of C or better for this course to count toward the major/minor.
* Note: If this option as selected, ECON 450 may not be used to satisfy an Economics elective.
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
   or ECON 303 American Economic History
   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: (7 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: (21 hours)
   ECON 300 History of Economic Thought
   or ECON 303 American Economic History
   ECON 307 Government, Business, and Public Policy
   ECON 309 Comparative Economic Systems
   or ECON 405 Economics of Developing Countries
   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

Summary of Requirements for Double Major in Secondary Teacher Education

If you wish to complete a Maryland State-approved program in teaching secondary social studies, you must:

- Complete the BA/BS in economics without concentration or with a concentration in public policy economics or quantitative economics.
- Declare a second major in Secondary Teacher Education. See the Secondary Teacher Education Program Coordinator for details.
- In addition to the regular Economics major requirements, you must take coursework in geography, history, political science, and social science in order to qualify for Maryland State certification in social studies and to meet NCATE accreditation standards. See the Secondary Teacher Education Program Coordinator for details.
Finance

Minor

Total Hours Required: 18

Coordinator:
Dr. Carol Gaumer
Chair, Department 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.

You should consider the minor in finance if you are completing a major not subject to the requirements of the FSU Business common body of knowledge – CBK (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.

Summary of Requirements for Minor in Finance

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Department</th>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 211</td>
<td>Financial Accounting</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ECON 200</td>
<td>Basic Economics or ECON 201/211 Principles of Economics (Macro)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FINA 303</td>
<td>Principles of Finance</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Select three courses from among the following:
- FINA 301 Introduction to Personal Financial Planning
- FINA 370 Corporate Finance
- 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
- FINA 475 Securities Investment
- FINA 477 International Financial Management

Financial Services

Minor

Total Hours Required: 18

Coordinator:
Dr. Carol Gaumer
Chair, Department 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.

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 FSU Business common body of knowledge (CBK). You need to be prepared to take advanced finance courses.

Summary of Requirements for Minor in Financial Services

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Department</th>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>FINA 370</td>
<td>Corporate Finance or FINA 476 Financial Management</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Select five courses from among the following:
- FINA 301 Introduction to Personal Financial Planning
- FINA 370 Corporate Finance
- 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
- FINA 476 Financial Management

or FINA 476 Financial Management (if not selected to meet the requirement listed above)
- FINA 475 Securities Investment
- FINA 477 International Financial Management
### Management Minor

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

- Only courses in which a grade of C or better is earned may count towards satisfaction of minor requirements.
- 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.

#### Summary of Requirements for Minor in Management

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Hours Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Required Courses: (6 hours)</td>
<td>6</td>
</tr>
<tr>
<td>MGMT 251 Management of Organizations</td>
<td></td>
</tr>
<tr>
<td>MGMT 405 Business Ethics and Social Responsibility</td>
<td></td>
</tr>
<tr>
<td>2. Elective Courses: (12 hours)</td>
<td>12</td>
</tr>
<tr>
<td>Select from:</td>
<td></td>
</tr>
<tr>
<td>MGMT 315 New Business Ventures</td>
<td></td>
</tr>
<tr>
<td>MGMT 355 Operations Management</td>
<td></td>
</tr>
<tr>
<td>MGMT 356 Leadership and Human Behavior</td>
<td></td>
</tr>
<tr>
<td>MGMT 357 Human Resources Management</td>
<td></td>
</tr>
<tr>
<td>MGMT 359 Quality Management</td>
<td></td>
</tr>
<tr>
<td>MGMT 425 Entrepreneurial Business Plan</td>
<td></td>
</tr>
<tr>
<td>MGMT 450 International Management</td>
<td></td>
</tr>
<tr>
<td>MGMT 452 Staffing and Development</td>
<td></td>
</tr>
<tr>
<td>MGMT 456 Compensation Management</td>
<td></td>
</tr>
<tr>
<td>MGMT 457 Labor Relations</td>
<td></td>
</tr>
<tr>
<td>MGMT 490 Special Topics in Business Administration – Management</td>
<td></td>
</tr>
<tr>
<td>MGMT 494 Internship in Management (6 credits maximum)</td>
<td></td>
</tr>
</tbody>
</table>

**Coordinator:**
Dr. Carol Gaumer  
Chair, Department 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.

### Marketing Minor

**Coordinator:**
Dr. Carol Gaumer  
Chair, Department 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.

#### Summary of Requirements for Minor in Marketing

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Hours Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Required Courses: (6 hours)</td>
<td>6</td>
</tr>
<tr>
<td>MKTG 361 Principles of Marketing</td>
<td></td>
</tr>
<tr>
<td>MKTG 366 Consumer Behavior</td>
<td></td>
</tr>
<tr>
<td>2. Elective Courses: (12 hours)</td>
<td>12</td>
</tr>
<tr>
<td>Select four of the following:</td>
<td></td>
</tr>
<tr>
<td>MKTG 363 Advertising</td>
<td></td>
</tr>
<tr>
<td>MKTG 364 Branding Strategy</td>
<td></td>
</tr>
<tr>
<td>MKTG 365 Professional Selling and Relationship Management</td>
<td></td>
</tr>
<tr>
<td>MKTG 460 Global Marketing</td>
<td></td>
</tr>
<tr>
<td>MKTG 465 Marketing Strategies</td>
<td></td>
</tr>
<tr>
<td>MKTG 466 Services Marketing</td>
<td></td>
</tr>
<tr>
<td>MKTG 467 Digital and Social Media Marketing</td>
<td></td>
</tr>
</tbody>
</table>
Small Business/Entrepreneurship

Minor

Coordinator:
Dr. Michael Monahan
Chair, Department of Management

- Only courses in which a grade of C or better is earned may count towards satisfaction of minor requirements.
- 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.

Summary of 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 361 Principles of Marketing

<table>
<thead>
<tr>
<th>MINOR</th>
</tr>
</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>
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 curriculums in its varied programs. The college mission is implemented through a diverse, recognized and credentialed faculty committed to excellence in teaching, learning and scholarship. The College of Education fulfills its mission by preparing future leaders to enter a complex and global society with confidence and competence.

Vision
The College of Education 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.

Core Values
We value:
• a high standard or excellent teaching, service, research and other professional activities
• stimulating, collaborative and supportive settings for students, faculty, staff and administrators characterized by creativity, innovation and excellence.
• lifelong learning and professional development for students, faculty, staff and administrators.
• an atmosphere of mutual respect and support, which promotes open sharing of ideas and viewpoints and debate and issues and concerns.
• high standards of ethics, integrity, responsibility, and accountability.
• the active participation of stakeholders in the planning and development of programs.
• diversity and an atmosphere of mutual respect and acceptance.
• interdisciplinary collaboration.
• assessment as a mechanism for continuous improvement.
• creative responses to change.

Dr. Clarence Golden, Jr.
Dean, College of Education
203-5 Framptom
301.687.3184
FSU’s Teacher Education Report Card

Contextual Information

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number of students admitted into teacher preparation, all specializations, AY 2015-2016</td>
<td>300</td>
</tr>
<tr>
<td>Number of students in supervised student teaching</td>
<td>150</td>
</tr>
<tr>
<td>Number of faculty members who supervised student teachers:</td>
<td></td>
</tr>
<tr>
<td>Full-time faculty</td>
<td>13</td>
</tr>
<tr>
<td>Adjunct faculty</td>
<td>15</td>
</tr>
<tr>
<td>Total faculty student teaching supervisors</td>
<td>28</td>
</tr>
<tr>
<td>Student teacher/faculty ratio</td>
<td>9.7</td>
</tr>
<tr>
<td>The average number of student teaching hours per week required*</td>
<td>40</td>
</tr>
<tr>
<td>The total number of weeks of supervised student teaching required</td>
<td>20</td>
</tr>
<tr>
<td>Average total number of hours required</td>
<td>700</td>
</tr>
</tbody>
</table>

*Student teaching varies by program with most interns spending 20 weeks in the school.

Individual Assessments completed by 10 or more students 2015-2016

<table>
<thead>
<tr>
<th>TYPE OF ASSESSMENT</th>
<th>FROSTBURG STATE UNIVERSITY</th>
<th>STATEWIDE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number Taking Assessment</td>
<td>Number Passing Assessment</td>
</tr>
<tr>
<td>Professional Knowledge</td>
<td>68</td>
<td>67</td>
</tr>
<tr>
<td>ELEM ED CONTENT AREA EXERCISES</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Academic Content Areas</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>EARLY CHILDHOOD: CONTENT KNOWLEDGE</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Summary Institutional-level Pass-rate Data: Regular Teacher Preparation Program
Academic Year: 2015-2016

<table>
<thead>
<tr>
<th>Type of Assessment</th>
<th>Number Taking Assessment</th>
<th>Number Passing Assessment</th>
<th>Institutional Pass Rate</th>
<th>Statewide Pass Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Summary Totals and Pass Rates</td>
<td>113</td>
<td>108</td>
<td>96%</td>
<td>98%</td>
</tr>
</tbody>
</table>

See College of Education website for detailed report.

1 The number of program completers found, matched and used in the passing rate calculation will not equal the sum of the column labeled “Number Taking Assessment” since a completer can take more than one assessment.
2 Institutions and/or States did not require the assessments within an aggregate where data cells are blank.
3 Number of completers who took one or more tests in a category and within their area of specialization.
4 Number who passed all tests they took in a category and within their area of specialization.
5 Summary Totals and Pass Rate: Number of completers who successfully completed one or more tests across all categories used by the state for licensure and the total pass rate.
Educational Professions

Teacher Education Programs

The Educational Professions Department offers an Early Childhood/Elementary major leading to eligibility for certification in PreK through grade 6, an Elementary Education major for certification in grades 1-6, and Elementary Education/Middle School certification in grades 1-9.

The Educational Professions Department also offers approved teacher education programs leading to eligibility for certification in Secondary Education (English, world languages, mathematics, social studies), for grades 7-12 as well as middle school depending on subject area, 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. The university, the public schools, parents and other community members link together using their hands, heads and hearts to prepare the finest pre-service teacher candidates.

Eligibility for Teacher Certification in Maryland

For eligibility for certification in the Early Childhood/Elementary program, Elementary program or Elementary/Middle, candidates must complete the approved program requirements as listed, university graduation requirements and Praxis testing requirements. Passing Praxis II, demonstrating the knowledge and skills of a specialized content area at the Maryland State Department of Education prescribed score, is required to gain teacher certification. Therefore, candidates must take Praxis II to become program completers and to graduate in an approved teacher education program. Completion of P-12 teacher education programs and the secondary professional sequence also requires taking Praxis II.

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 standard for Praxis in that state. Having a Maryland certificate of eligibility may prove helpful in the out-of-state certification effort.

Approved Program

Since NCATE (National Council for Accreditation of Teacher Education) and the Maryland State Department of Education have approved FSU’s teacher education programs, the Department of Educational Professions authorizes the Registrar’s Office to affix an approved program stamp on your official transcript 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 the following phase admission requirements in order to be accepted into and complete an education program. Application deadlines for Phase I, Phase II and Phase III for all candidates, including transfers, are established in October for spring semester and in May for fall semester by the Office of Unit Assessment.

Accreditation

Teacher Education Programs are accredited by the State of Maryland under the Redesign for Teacher Education and by the National Council for Accreditation of Teacher Education. Further, the education programs are recognized by 14 professional content area associations which offer national recognition for being compliant with national standards. The University will continue to update education programs and discipline requirements in the major or specialization to meet national and state standards and directives, making substitutions when required. Check with the Department of Educational Professions for current information.
Phase I Admission Requirements (Program Entrance)
1. Completion of at least 45 credit hours.
2. Cumulative GPA of at least 2.5 (including all grades from transfer institutions).
3. Passing scores on PRAXIS CORE as established by the state of Maryland or SAT composite score of 1100 on math and critical reading or math and verbal; or ACT composite score of 24.
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 better (or P) in all required Professional Education Sequence courses, including transfer equivalents, designated by program.
7. Twenty (20) documented hours of working with diverse populations.*
8. Declaration of a major.
9. Grade of C or above in MATH 206.
10. Declaration of specialization or concentration.

Additional Phase I Requirements for Early Childhood/Elementary, Elementary and Elementary/Middle (P-9) Education Majors
1. Grade of C or above in MATH 206.
2. Declaration of specialization or concentration.

Phase II Admission Requirements
1. Completion of at least 60 credit hours (Junior standing).
2. Cumulative FSU GPA of at least 2.5.
3. Cumulative GPA of at least 2.5 in the Professional Education Sequence, designated by program.
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 ENGL 308 or equivalent.
7. Seventy-five percent or 18 credits of specialization or concentration completed (P-9 majors only).
8. Grade of C or better in MATH 207 or transfer equivalent (P-9 majors only).
9. Acceptable rating on professional dispositions evaluation.

Admission Requirements for Professional Development Schools/Internship
1. Successful completion of field work courses.
2. Cumulative FSU GPA of at least 2.5.
3. GPA of at least 2.5 in Block I 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. Successful completion of an entrance interview/conference.
6. Acceptable rating on professional dispositions evaluation.

Phase III Admission Requirements
1. Completion of at least 90 credit hours (senior standing).
2. Cumulative FSU GPA of at least 2.60.
3. Cumulative GPA of at least 2.75 in the Professional Education Sequence, designated by program.
4. GPA of at least 2.75 in content major or area of specialization/concentration.
5. Grade of C or better (or P) in all required Professional Education Sequence courses, including transfer equivalents, designated by program.
6. Successful completion of Phase II field work.
7. Negative result on current TB test.
8. Recommendation of advisor and approval of program coordinator.
9. Verification of completion or registration for PRAXIS II content knowledge and pedagogy tests required by the Maryland State Department of Education.
10. Acceptable rating on professional dispositions evaluation.

Additional Phase III Admission Requirements
1. Grade of C or better in MUSC 350 and PHEC 309 (P-9 majors only).
2. Passing score on Early Childhood Comprehensive Exam (EC/Elem only).

*S According to departmental format.
**Confirming that candidate is free of convictions that would disqualify him or her from obtaining certification in Maryland.
Program Exit Requirements
1. Successful presentation of a portfolio that meets institutional standards.
2. Successful completion of Phase III field work and seminar.

Early Childhood/Elementary Education

<table>
<thead>
<tr>
<th>Major</th>
<th>MAJOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours Required in Education:</td>
<td>71</td>
</tr>
<tr>
<td>Hours Required in Other Departments:</td>
<td>57-61</td>
</tr>
<tr>
<td>Total Hours Required:</td>
<td>128-132</td>
</tr>
</tbody>
</table>

Summary of Requirements for Major in Early Childhood/Elementary Education
A dual certification program

1. Completion of GEP: (41 hours)
   - List of recommended courses available in the Department of Educational Professions
     a. Core Skills (9) including MATH 109/110 (3) or MATH 119 (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)
   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-Phase or concurrent with Phase I)
   c. ECED 293 Early Childhood Learning Environment, Materials and Methods (3 hours taken Pre-Phase or concurrent with Phase I)
   d. ECED 431 Early Childhood Education Curriculum Development, Implementation and Assessment (3 hours taken during Phase II, Block II)
   e. ECED 443 Adults in the Child's World (3 hours taken during Phase II, Block I)
   f. EDUC 390 Field Experience in Early Childhood Education (3 hours taken Phase 1)
   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-PHASE
   - EDUC 100 Career Analysis in Education (1)
   - EDUC 201 Students, Teachers and Learning Environments (3 hours taken Pre-Phase or concurrent with Phase I)
   - EDUC 202 Foundations of Learning and Instruction (3 hours taken Pre-Phase or concurrent with Phase I)
   - EDUC 325 Educational Technology (3 hours taken Pre-Phase or concurrent with Phase I)

PHASE I (7 hours and 3 hours for Early Childhood Specialization Course)
   - 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)

Course required concurrent with Phase I for Early Childhood/Elementary Candidates enrolled at University System of Maryland – Hagerstown:
   - EDUC 335 Teaching Frameworks (2) (which replaces EDUC 100 and EDUC 200)
PHASE II, Block 1  (14 hours and 3 hours for Early Childhood Specialization Course)

- ELED 307  Teaching Assistantship (1)
- ELED 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)

PHASE II, Block 2  (13 hours and 3 hours for Early Childhood Specialization Course)

- 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)

PHASE III  (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. Successful presentation of a portfolio that meets institutional standards.
   b. Completion of the PRAXIS II content knowledge and pedagogy tests required by the Maryland State Department of Education.
   c. 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:
Ornstein, Rotruck (Chair), Stephenson

Associate Professors:
Nichols, Milleson, Scarloss, Welsch

Assistant Professors:
Boayue, Mattern, McGee, Rankin

Lecturer:
O'Neal

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 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.

Summary of 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)
   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)
   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)

Summary of Requirements for Integrated Arts Concentration (24 hours)

a. Required courses (17 hours)
   i. ART 110 Visual Imagery (GEP Group A)
   ii. ART 104 Two-Dimensional Design
   or ART 105 Three-Dimensional Design
   iii. MUSC 100 Introduction to Music Theory
   or MUSC 101 Music Fundamentals (GEP Group A)
   iv. DANC 101 Dance Appreciation (GEP Group A)
   or THEA 110 Introduction to Acting
   v. MUSC 350 Music and Creative Interaction for the Elementary Classroom Teacher
   vi. EDUC 333 Integrated Arts in the Elementary Classroom

b. Electives (7 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 104 Two Dimensional Design
ART 105 Three Dimensional Design
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 Radio Workshop
MCOM 101 Television Workshop
MCOM 213 Audio Production
MCOM 250 Announcing and Performing
Summary of 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)
   iv. HIST 100/111 Contemporary World History (GEP Group B)
   v. 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)
   vi. PSYC 150/151 General Psychology (GEP Group D)
       or SOCI 100/111 Introduction to Sociology
   vii. HIST 113 World History, Earliest Times to 1500
        or HIST 114 World History 1500 to 1900

c. Advanced Electives (3 hours)

GROUP I History
   HIST 306 Medieval Europe
   HIST 310 Ancient Greece and Rome
   HIST 418 Native Peoples of the Americas
   HIST 445 History of Maryland
   HIST 461 History of Colonial America
   HIST 462 Revolutionary America, 1763-1789
   HIST 464 History of Civil War and Reconstruction

GROUP II Geography
   GEOG 301 Geography of North America
   GEOG 302 Geography of Maryland

GROUP III Sociology
   SOCI 305 Racial and Cultural Minorities (GEP Group F)
   SOCI 364 Sociology of Marriage and Family

GROUP IV Political Science
   POSC 321 American State and Local Politics

Summary of Requirements for Language and Literacy Concentration (24 hours)

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

b. Required Advanced Courses (9 hours)
   i. REED 440 Children's Literature
      or ENGL 276 Adolescent Literature
   ii. EDUC 372 Teaching Writing in the Classroom
   iii. ELED 472 Language Arts Methods

c. Supporting Courses (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)

d. Electives (6 hours) Select from 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 280 Mythology and Literature
   ENGL 290 Topics in Language and Literature
   ENGL 450 Women and Literature
   EDUC 490 Special Topics in Education - Festival of Children's Literature (must be taken 3 times)
   ENGL 276 Adolescent Literature
   REED 440 Children's Literature

GROUP II Writing
   ENGL 215 Grammar for Writing
   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 Human Communication
   CMST 122 Introduction to Public Speaking
   CMST 215 Small Group Communication
   CMST 345 Conflict Management
   CMST 350 Intercultural Communication
   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
   MDLF 111 Intercultural Understanding (GEP Group F)
   MDLF 190 Selected Topics in Foreign Language and Literature
   MDLF 290 Selected Topics in Foreign Language and Literature
Summary of Requirements for STEM Concentration  
(24 hours)

**a. Required courses (7 hours)**  
i. BIOL 149 Biology I (GEP Group C)  
ii. MATH 119 College Algebra (GEP Core Skills)

**b. Additional required courses in Science**  
(4 hours required; choice of 1 course)  
i. CHEM 150 General, Organic and Biochemistry (GEP Group C)  
ii. CHEM 201 Chemistry I (GEP Group C)  
iii. PHYS 215 General Physics I (GEP Group C)

**c. Additional required courses in Mathematics**  
(6 hours required; choice of 2 courses)  
i. MATH 109 Elements of Applied Probability and Statistics  
ii. MATH 200 An Introduction to Discrete Mathematics  
iii. MATH 340 Fundamental Concepts of Geometry

**d. Required courses in STEM Education**  
(4 hours)  
i. EDUC 340 STEM Education Through A Trans-disciplinary Approach (Phase I admission)  
ii. EDUC 440 STEM Laboratory (Phase III admission)

**e. Electives in Problem Solving (3 hours)**

**GROUP I Technical**  
ENES 100 Introduction to Engineering Design  
CHEM 100/113 Chemistry and Society  
GEOG 205 Descriptive Meteorology  
GEOG 208 Earth Systems History  
GEOG 325 Urban Geography: Metropolitan Systems  
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)  
SOCI 200 Social Problems

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

**PRE PHASE**
EDUC 100 Career Analysis in Education (1)
EDUC 201 Students, Teachers, and Learning Environments (3; Pre-Phase or concurrent with Phase I)
EDUC 202 Foundations of Learning and Instruction (3; Pre-Phase or concurrent with Phase I)
EDUC 325 Educational Technology (3 hours taken Pre-Phase or concurrent with Phase I)

**PHASE I (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)

**PHASE II, Block I**  
(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)

**PHASE II, Block II**  
(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)

**PHASE III (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. Successful presentation of a portfolio that meets institutional standards.
b. Completion of the Praxis II content knowledge and pedagogy tests required by the Maryland State Department of Education.
c. Successful completion of required field experiences in primary (1-3) and intermediate (4-5) grades.
## Elementary/Middle School Dual Certification

### Major

<table>
<thead>
<tr>
<th></th>
<th>MAJOR</th>
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<tbody>
<tr>
<td>Hours Required in Education:</td>
<td>62</td>
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<tr>
<td>Hours Required in Other Departments:</td>
<td>62-69</td>
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<tr>
<td>Total Hours Required:</td>
<td>124-131</td>
</tr>
</tbody>
</table>

#### Summary of Requirements for Major in Elementary/Middle School Dual Certification

#### Major

1. **Completion of GEP:** (41 hours)
   - List of recommended courses available in Department of Educational Professions
   - Core Skills (9) including MATH 109/110 (3) or MATH 119 (3)
   - Modes of Inquiry (29-32) including two 4-credit natural science courses

2. **Additional Required Courses for Elementary/Middle Majors:**
   - MATH 206 Problem Solving for Elementary Teachers I (3)
   - MATH 207 Problem Solving for Elementary Teachers II (3)
   - 4 credit laboratory science elective (4)
   - MUSC 350 Music and Creative Interaction for the Elementary Classroom Teacher (3)
   - 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)

- **Required GEP courses** (6 hours)
  - ENGL 308/309/310/312/300/330/338/339 Advanced Composition (3; GEP Core Skills)
  - ENGL 150/250 Introduction to Literature (3; GEP Group B)

- **Required Content Courses** (12 hours required; choice of 4 courses)
  - ENGL 430: The Composing Process (3)
  - EDUC 372: Teaching Writing in the Classroom (3)
  - CMST 102 Introduction to Human Communication (3)
  - ENGL 276 Adolescent Literature (3)
  - REED 440 Children's Literature (3)

- **Middle School Program Requirements** (6 hours)
  - EDUC 316 Early Adolescent Learning and Literacy (3)
  - EDUC 445 Strategic Reading and Writing in the Middle Grades (3; Phase II, Block II)

#### Summary of Requirements for Mathematics Specialization (25 hours)

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

- **Required Elementary Program courses** (6 hours)
  - MATH 206 Problem Solving for Elementary Teachers I (3 credits)
  - MATH 207 Problem Solving for Elementary Teachers II (3 credits)

- **Required Content Courses** (10 hours)
  - MATH 200 Discrete Mathematics (3)
  - MATH 236 Calculus I (4)
  - MATH 340 Fundamental Concepts of Geometry (3)

- **Middle School Program Requirements** (6 hours)
  - EDUC 316 Early Adolescent Learning and Literacy (3)
  - EDUC 445 Strategic Reading and Writing in the Middle Grades (3; Phase II, Block II)

#### Summary of Requirements for Science Specialization (25 hours)

- **Required GEP courses** (12 hours)
  - BIOL 149 General Biology (4; GEP Group C)
  - PHSC 203 Physical Science (4; GEP Group C)
iii. GEOL 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 Learning and Literacy (3)
ii. EDUC 445 Strategic Reading and Writing in the Middle Grades (3; Phase II, Block II)

Summary of Requirements for Social Studies Specialization (24 hours)
a. Required GEP course (6 hours)
i. GEOG 104/114 Human Geography (3; GEP Group D) or GEOG 110 World Regional Geography (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 Learning and Literacy (3)
ii. EDUC 445 Strategic Reading and Writing in the Middle Grades (3; Phase II, Block II)

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

PRE-PHASE
EDUC 100 Career Analysis in Education (1)
EDUC 201 Students, Teachers and Learning Environments (3; Pre-Phase or concurrent with Phase I)
EDUC 202 Foundations of Learning and Instruction (3; Pre-Phase or concurrent with Phase I)
EDUC 325 Educational Technology (3 hours taken Pre-Phase or concurrent with Phase I)

PHASE I (7 hours and 3 hours for Middle Grades Specialization Course)
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)

PHASE II, Block 1 (14 hours; completed over 1 semester)
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)

PHASE II, Block 2 (13 hours and 3 hours for Middle Grades Specialization Course)
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)

PHASE III (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. Successful presentation of a portfolio that meets institutional standards.
b. Completion of the Praxis II content knowledge and pedagogy tests required by the Maryland State Department of Education.
c. Successful completion of required field experiences in primary (1-3), intermediate (4-5) and middle grades (6-8).
Professional Education Sequence for P-12 Programs

**ART**

**Pre-Phase I**
- EDUC 202 Foundations of Learning & Instruction (7 hours)
- EDUC 310 Diversity and Social Justice in Education
- EDUC 325 Technology Education

**Phase I**
- EDUC 200 Phase I Teaching and Professional Assessment Laboratory (7 hours)
- REED 317 Content Area Reading
- SPED 451 Adapting Instruction in Diverse Classrooms

**Phase II**
- EDUC 300 Phase II Teaching and Professional Assessment Laboratory (11 hours)
- EDUC 392 K-12 Field Experience
- EDUC 450 Art Education Methods for the Secondary Teacher
- EDUC 451 Art Education Methods for the Elementary Teacher
- REED 418 Reading and Writing Connections

**Phase III**
- EDUC 406 Leadership Seminar (14 hours)
- EDUC 497 Teaching Internship, K-12 Program

**Other Graduation/Program Exit Requirements**
- a. Successful presentation of a portfolio that meets institutional, Maryland state, and national standards.
- b. Verification of taking PRAXIS II content knowledge and pedagogy tests required by the Maryland State Department of Education (before Phase III).

**MUSIC**

**Pre-Phase I**
- MUSC 125 Introduction to Music Education (3 hours)

**Phase I**
- MUSC 252 Early Music Experience (4 hours)
- REED 317 Content Area Reading

**Phase II**
- EDUC 300 Phase II Teaching and Professional Assessment Laboratory (18.5 hours)
- EDUC 354 General Music Methods in Elementary School
- EDUC 355 General Music Methods in Secondary School
- EDUC 392 K-12 Field Experience
- MUSC 352 Choral Music Methods or MUSC 353 Instrumental Music Methods
- REED 418 Reading and Writing Connections
- SPED 451 Adapting Instruction in Diverse Classrooms

**Phase III**
- EDUC 406 Leadership Seminar (14 hours)
- EDUC 497 Teaching Internship, K-12 Program

**Other Graduation/Program Exit Requirements**
- a. Successful presentation of a portfolio that meets institutional, Maryland state, and national standards.
- b. Verification of taking PRAXIS II content knowledge and pedagogy tests required by the Maryland State Department of Education (before Phase III).

**HEALTH & PHYSICAL EDUCATION**

**Phase I**
- HPED 310 Technology in Health and Physical Education (9 hours)
- HPED 416 Curriculum Design in Health and Physical Education
- REED 317 Content Area Reading

**Phase II**
- EDUC 392 K-12 Field Experience (17 hours)
- HPED 402 Adapted Physical Education
- HPED 404 Health Instruction
- HPED 408 Elementary Methods of Physical Education

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**Contact:**
- Dr. Jodi Nichols, Associate Professor, Department of Educational Professions

**Associate Professor:**
- Nichols, Scarloss

**Assistant Professors:**
- Bosley, Hurst, Mattern, Rankin

- 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.
- The courses of study to be followed in academic content areas are established by the individual departments (art, health and physical education, music).
- You cannot major or minor in P-12 education.
Secondary Teacher Education

Coordinator:
Dr. Jodi Nichols, Associate Professor

Associate Professors:
Milleson, Nichols, Scarloss

Assistant Professors:
Allen, Bishoff, Bosley, Hurst, Rankin, Mattern

- 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 double major in one of the following disciplines: English, foreign languages and literature, mathematics or social science. Contact Dr. Jodi Nichols, program coordinator, for details.

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 (certification in concentration in Spanish)
- English
- mathematics
- social science

Professional Teacher Education Sequence

Pre-Phase (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)

Phase I (7 hours)
EDUC 200 Phase I Teaching & Professional Assessment Laboratory (1)
SPED 451 Adapting Instruction in Diverse Classrooms (3)
REED 317 Content Area Reading (3)

Phase II (12 hours)
EDUC 300 Phase II Teaching & Professional Assessment Laboratory (1)
EDUC 391 Teaching Internship I: Secondary Education (2)
REED 418 Reading and Writing Connections (3)
SCED 410 Secondary Methods and Curriculu (3)
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 Phase III

Phase III (8-14 hours)
SCED 496 Teaching Internship II: Secondary Education (6-12)
EDUC 406 Leadership Seminar (2)

Other Graduation/Program Exit Requirements
a. Successful presentation of a portfolio that meets institutional, Maryland state and national standards.
b. Verification of taking PRAXIS II Health Education and Physical Education: Content and Design required by the Maryland State Department of Education before Phase III.
Social Science

Major

Summary of Requirements for Major in Social Science

<table>
<thead>
<tr>
<th>Economics (9 hours)</th>
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<tbody>
<tr>
<td>Hours required in Social Sciences:</td>
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<td>Hours required in other fields:</td>
<td>6</td>
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<td>Total Hours Required:</td>
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</table>

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 114 Honors Human Geography (GEP Group D or F)
- or GEOG 110 World Regional Geography: Cultural Diversity (GEP Group D or F)
- 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 1 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.

Coordinator:
Beth Scarloss, Associate Professor, Department of Educational Professions

Department Contacts:
- David Kiriadis, Chair, Department of Economics
- James Saku, Chair, Department of Geography
- Sally Boniece, Chair, Department of History
- Stephen Twing, Chair, Department of Political Science
- J. Flinn, Chair, Department of Psychology
- Robert Moore, Chair, Department of Sociology

A major in Social Science requires a minimum of 66 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.
Psychology (9-10 hours)
Select one course each from three 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
SOCI 332 Collective Behavior
SOCI 334 Gender and Social Life

3. Research Methods (3-4 hours)
Choose one of the following from a department selected as a track above:
ECON 450 Quantitative Economics
GEOG 380 Geographic Research Methods and Field Techniques
HIST 299 Writing and Research in History
POSC 250 Research Methods
PSYC 201 Research Methods and Analysis I
SOCI 311 Basic Research Methods

4. Social Science Seminar (3 hours)
SOSC 490 Topics in Social Science (Capstone)

5. Other required courses (6 hours)
CMST 102 Introduction to Human Communication*
COSC 100 Introduction to Computer Science* (Tech. Fluency)

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

Summary of Requirements for Double Major in Secondary Teacher Education

If you wish to complete a Maryland State-approved program in teaching secondary social studies, you must:

- Complete the BA/BS in social science.
- Declare a second major in Secondary Teacher Education. See the Secondary Teacher Education Program Coordinator for details
Athletic Training

Major

**Director:**
Tony Zaloga, Director of Athletic Training Program

**Clinical Education Coordinator:**
Jacqueline Durst

- The Athletic Training Program is accredited by the Commission on Accreditation of Athletic Training Education (CAATE).
- Special entrance requirements are designed to ensure that students are capable of completing the rigorous curriculum and will have the ability to pass the Board of Certification (BOC) exam for athletic training.
- You must pass the BOC exam to become a Certified Athletic Trainer.

<table>
<thead>
<tr>
<th>MAJOR</th>
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<tr>
<td>Hours Required in Kinesiology: 75</td>
</tr>
<tr>
<td>Hours Required in Other Departments: 18</td>
</tr>
<tr>
<td>Total Hours Required: 93</td>
</tr>
</tbody>
</table>

**Admission Requirements**

To be considered for full admission into the Athletic Training Program (ATP), the student must meet each of the following criteria:

1. Completion of a minimum of 28 semester hours. Transfer students are required to have prerequisite course work approved by the ATP Program Director.
2. A minimum 3.0 overall GPA.
3. A minimum of a "B" grade in each of the following courses:
   a. BIOL 149 General Biology
   b. EXSS 103 Foundations of Exercise & Sport Science
   c. ATTR 206 Introduction to Athletic Training
4. Satisfactory completion of 50 observational hours in the FSU athletic training clinic. The student must make arrangements with the Program Director prior to starting observation.
5. A completed formal application for admission into the ATP, including an essay.
6. Two completed recommendation forms from non-Athletic Training faculty members.
7. Completion of a formal interview with the ATP selection committee.
8. Signed copy of the Technical Standards for admission into the Athletic Training Program.

In addition to the previous criteria, the student must have a physical examination and medical history form completed by the appropriate health care provider. The student must also submit a copy of the immunization records required of all incoming FSU students. All students must also receive Hepatitis B vaccination before they are accepted.

**Application Review Process**

1. Students who have met the above minimum requirements will be evaluated on the following scale:
   - Overall GPA 40 percent
   - Prerequisite GPA 30 percent
   - Faculty Recommendations 20 percent
   - Interview 5 percent
   - Application/Essay 5 percent

2. The following scale will be used to evaluate the quality of the applicant.

<table>
<thead>
<tr>
<th>GPA</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.0-3.0</td>
<td>Student considered for full admission</td>
</tr>
<tr>
<td>Below 3.0</td>
<td>Student may be considered for full admission</td>
</tr>
</tbody>
</table>

The total number of students that can be accepted into the program depends on the availability of clinical placements. Meeting the criteria listed in the section on the Application Review Process does not guarantee acceptance into the Athletic Training Program.

**Maintaining Advanced Good Standing in Athletic Training Education Program**

Once admitted, the Athletic Training student must maintain the following to remain fully admitted:

1. A minimum overall GPA of 3.0
2. A minimum grade of "B" in each of the required courses in the major
3. Current certifications in First Aid and CPR
4. Attendance at the annual OSHA bloodborne pathogens presentation

Students who fail to meet 1 and/or 2 have one academic year to correct the deficiency before being dismissed from the ATP. Violations of 3 and/or 4 will result in an immediate suspension of clinical experiences until the student is in compliance.
Summary of Requirements for Major in Athletic Training

Major

1. KINE Courses: (75 hours)
   - ATTR 206 Introduction to Athletic Training
   - ATTR 210 Athletic Taping and Bracing Techniques
   - ATTR 222 Emergency Medical Techniques in Athletic Training
   - ATTR 223 Clinical Experiences in Athletic Training I
   - ATTR 318 Orthopedic Assessment I Upper Extremity
   - ATTR 319 Orthopedic Assessment II Lower Extremity
   - ATTR 320 Pharmacology and General Medical Conditions
   - ATTR 322 Clinical Experiences in Athletic Training II
   - ATTR 323 Clinical Experiences in Athletic Training III
   - ATTR 340 Organization and Administration of Athletic Training
   - ATTR 408 Therapeutic Modalities in Sports Medicine
   - ATTR 413 Rehabilitation Techniques in Sports Medicine
   - ATTR 414 Advanced Rehabilitation Techniques in Athletic Training
   - ATTR 422 Clinical Experiences in Athletic Training IV (Capstone)
   - ATTR 423 Clinical Experiences in Athletic Training V (Capstone)
   - ATTR 450 Evidence-Based Practice in Athletic Training
   - ATTR 480 Capstone I in Athletic Training
   - ATTR 485 Capstone II in Athletic Training
   - EXSS 103 Foundations of Exercise & Sport Science
   - EXSS 200 Nutrition
   - EXSS 175 Foundations of Resistance Training
   - EXSS 303 Biomechanics for Exercise and Sport Science
   - 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

2. Courses in Other Departments: (18 hours)
   - BIOL 149 General Biology (GEP Group C)
   - BIOL 321 Anatomy & Physiology I
   - BIOL 322 Anatomy & Physiology II
   - MATH 109 Elements of Applied Probability and Statistics (Core Skill 3)
   - PSYC 150 General Psychology (GEP Group D)

Coaching

Minor

Coordinator:
Troy Strieby, Assistant Professor, Department of Kinesiology

Professor:
R. Lewis

Assistant Professors:
Strieby, Wright

Field experience required in school program. Recommended during senior year.

You cannot major in coaching.

Summary of Requirements for Minor in Coaching

Minor

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

Coaching

MINOR

Hours Required in KINE: 22
Hours Required in Other Departments: 0
Total Hours Required: 22
Exercise & Sport Science

Major

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
- 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: (24 hours)
- BIOL 149 General Biology I (GEP Group C)
- BIOL 321 Anatomy and Physiology I
- BIOL 322 Anatomy and Physiology II
- BUAD 100 Introduction to Business
- MGMT 315 New Business Ventures
- PSYC 150 General Psychology (GEP Group D)

Assistant Professors:
M. Kentrus, Wright, Zaloga

Lecturer:
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.

Health & Physical Education

Major with Teaching Certification

1. Discipline Core: (41 hours)
- HPED 103 Foundations of Physical Education
- HPED 104 Foundations of Health Education
- 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 230 Assessment in Health & Physical Education
- HPED 232 Teaching Health Content I: ATOD and Safety Education

Summary of Requirements for Major in Health & Physical Education

Major

| Hours Required in Kinesiology: | 72 |
| Hours Required in Other Departments: | 18 |
| Total Hours Required: | 90 |

Assistant Professors:
L. Simpson (Chair), R. Gallagher

Lecturer:
Bosley

- Upon successful completion of the program, you will be eligible to apply for PreK health certification and PreK physical education certification.
- The Department of Kinesiology also offers majors in athletic training and exercise and sport science.
- A minor is offered in coaching (see separate section of this catalog). You cannot minor in Health and Physical Education.
Health Promotion

Minor

Summary of Requirements for Minor in Health Promotion

| MINOR | Total Hours Required: | 21 |

Coordinator:
Susan Gray,
Professor, Department of Kinesiology and Recreation

- The curriculum is based on the professional responsibilities and competencies for health education and health promotion specialists developed by the American Association of Health Education.
- You cannot major in health promotion.

(21 hours)
HLTH 101 Community Health Promotion
HLTH 125 Health and Culture (GEP Group F)
HLTH 330 Epidemiology of Health
HLTH 405 Sexuality
HLTH 430 Methods and Materials for Health Promotion
HLTH 435 Health Promotion Programming
or RECR 382 Program Planning
HLTH 483 Field Experience in Health Promotion (3 cr.)
Adventure Sports Management

BS in Adventure Sports Management
Located at Garrett College

**Professor:**
- Kauffman (coordinator)
**Assistant Professors:**
- Buta, Dougherty, Strieby
**Affiliated Faculty:**
- Hershey, Logsdon, Peterson, Richardson: Garrett College

- The four-year program is offered on the Garrett College campus.
- Initially, students will be full-time degree-seeking students at Garrett College.
- Students can apply to Frostburg's B.S. in Adventure Sports Management program as transfer students at any time during their academic career at Garrett College.
- Students completing the four-year degree will also complete the A.A.S. degree in Adventuresports from Garrett College.

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### Program

The mission of the B.S. degree in Adventure Sports Management is to provide students with a rigorous program to develop leadership and management skills in the adventure sports and expanding tourism industries. The program utilizes Frostburg State University's and Garrett College's proximity to the unique natural resource base in Western Maryland.

The B.S. degree in Adventure Sports Management is designed as an integrated “two plus two” program. The program maintains the integrity of Garrett College's A.A.S. degree in Adventuresports while adding Frostburg's focus on Recreation and Parks Management. All students completing the B.S. degree in Adventure Sports Management can transfer their credits back to Garrett College and receive the A.A.S. degree in Adventuresports.

### Summary of Requirements for Major in Adventure Sports Management

#### MAJOR

| Hours Required at Frostburg State University: | 36 |
| Hours Required at Garrett College: | 34 |
| Total Hours Required: | 70 |

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#### 1. Adventure Sports Courses: (30 credits)
- ADSP 330 Outdoor Education
- ADSP 340 Expedition Planning in Adventure Sports
- ADSP 350 Risk Management in Adventure Sports
- ADSP 360 Entrepreneurship in Adventure Sports
- ADSP 381 Facilitation Skills and Techniques in Adventure Sports
- ADSP 382 Agency Assessment in Adventure Sports
- ADSP 391 Journaling in Adventure Sports
- ADSP 392 Mentorship I in Adventure Sports
- ADSP 491 Professional Preparation in Adventure Sports (ASI 206)
- ADSP 492 Mentorship (Internship) (ASI 207)

#### 2. Recreation and Parks Management Courses: (6 credits)
- RECR 393 History and Philosophy of Outdoor Recreation
- RECR 488 Principles of Ecotourism

#### 3. Content Courses Outside Department: (19 credits)
- ASI 101 Intro ASI Park, Recreation*
- ASI 164 Advanced Level First Aid and CPR*
- ASI 170 Guiding and Instructing Adventuresports*
- ASI 200 ASI Program Management*
- ASI 201 Leadership/Group Dynamics*
- ASI 104/105/204/205 Colloquium (1 Credit)*
- BIO 110 Natural History (Group C: Science)*

#### 4. Skill Courses Outside Department: (15 credits)
- ASI 110 Backcountry Living Skills*
- ASI Basic Skills Courses (4 Credits)*
- ASI Intermediate Skills Courses (4 Credits)*
- ASI Instructors Level Course (2 Credits)*
- ASI Rescue Skills Course (2 Credits)*

* These are Garrett College courses
Recreation and Parks Management

### Concentrations in
- **ADVENTURE SPORTS**
- **COMMUNITY PROGRAM DELIVERY**
- **HOSPITALITY MANAGEMENT & TOURISM**
- **THERAPEUTIC RECREATION**

#### Professors:
Blankenship, Kauffman

#### Assistant Professor:
Buta

#### Affiliated Faculty:
Debra Frank, Allegany College of Maryland; Mike Logsdon, Garrett College

- Program 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 certification 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). Students may retain their eligibility ONLY if they select the additional requirement options of a minor, an associate degree or a concentration. If students already have a bachelor's degree from another institution or pursue a second major at FSU, they are not eligible to participate in ACM.

### Summary of Requirements for Major/Minor in Recreation and Parks Management

#### Major

1. **Discipline Core:** (36 hours)
   - RECR 201 Introduction to Recreation and Parks
   - RECR 342 Park and Facility Design
   - RECR 380 Recreation Leadership
   - 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 494 Field Experience in Recreation and Parks (3 credits)
   - 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. a second major
   b. a minor
   c. an associate degree
   d. a bachelor's degree from another institution
   e. a concentration within the major as follows:

   - **Community Program Delivery Concentration** (27 hours)
     - **A. Recreation:** (12 hours)
       - Select four of the following:
         - ASI 110 Backcountry and Outdoor Living Skills* (GEP Group F)
         - RECR 100 Leisure and the Diverse American Culture (GEP Group F)
         - RECR 221 Introduction to Therapeutic Recreation
         - RECR 321 Therapeutic Recreation Practices and Procedures
         - 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 Speaking
       - CMST 215 Small Group Communication

   - **Therapeutic Recreation Recr. MINOR**

#### Minor

1. **Required Courses:** (6 hours)
   - RECR 380 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).

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* courses offered only at Garrett College
**II. Adventure Sports Concentration (27-28 hours)**

**A. Two ASI skills courses: (2 hours)**
*Any two courses from Section B, C, D or E*

**B. Two Introductory Level Courses: (2 hours)**
*Examples include but are not limited to:
ASI 111 Beginning Orienteering
ASI 115 Wilderness Survival Skills
ASI 120 Introduction to Traditional Rock Climbing
ASI 121 Rock Craft 1
ASI 130 Introduction to Whitewater Kayaking
ASI 131 Introduction to Paddlesports
ASI 133 Introduction to Whitewater Canoeing
ASI 136 Introduction to Rafting and River Guiding
ASI 138 Introduction to Sea Kayaking
ASI 140 Introduction to Cross Country Mountain Biking
ASI 145 Mountain Bike Mechanics I
ASI 150 Beginning Alpine Skiing
ASI 154 Beginning Snowboarding
ASI 158 Cross Country Skiing
ASI 159 Introduction to Telemark Skiing
ASI 180 Introduction to New Games-Initiatives/Low Ropes Challenge Course
ASI 190 Beginning Open Water SCUBA
ASI 192 Basic Sailing

**C. Three Intermediate Level Courses: (3 hours)**
*Examples include but are not limited to:
ASI 117 Cold Weather Outdoor Living Skills
ASI 210 Winter Adventure Skill
ASI 212 Eastern Mountaineering
ASI 220 Rock Craft 2
ASI 221 Rock Craft 4
ASI 222 Rock Craft 5
ASI 226 Ice Climbing
ASI 230 Whitewater Kayaking Techniques I
ASI 231 Whitewater Kayaking Techniques II
ASI 232 Whitewater Freestyle Kayaking
ASI 233 Whitewater Canoeing Techniques I
ASI 236 Whitewater Rafting Technique Development
ASI 238 Sea Kayaking Techniques I
ASI 240 Intermediate Cross Country Mountain Biking
ASI 244 Downhill and Dual-Slalom
ASI 247 Mountain Bike Mechanics Certification
ASI 258 Cross Country Skiing Techniques I
ASI 280 Intermediate Ropes Course

**D. One Instructor/Guide Level Course: (1 hour)**
*Examples include but are not limited to:
ASI 270 Rock Craft 6: Rock Climbing Instructor Development
ASI 271 Wilderness Guide Instructor Training (LNT Master Educator)
ASI 273 Mountain Bike Guide Development and Certification
ASI 274 Ski School Instructor Training
ASI 276 Whitewater Kayak Instructor Training
ASI 277 Whitewater Rafting Instructor Training
ASI 279 Challenge Course Facilitation

**E. One Rescue Level Course: (1 hour)**
*Examples include but are not limited to:
ASI 160 Swift Water Rescue
ASI 162 Fundamentals of Search and Rescue
ASI 260 Rock Craft 3: Vertical Rock Rescue

**F. Take all of the following: (9 hours)**
ASI 110 Backcountry Living Skills *
ASI 164 Wilderness First Responder *
RECR 393 History and Philosophy of Outdoor Recreation or HUM 210 Society & the Environment *

**G. Communications Studies: (3 hours)**
Select one of the following:
CMST 102/112 Intro to Human Communications
CMST 122 Introduction to Public Speaking
CMST 132 Introduction to Interpersonal and Small Group Communication
CMST 215 Small Group Communication

**H. Select two of the following: (6-7 hours)**
ACCT 211 Financial Accounting
BIO 110 Natural History (4 credit hours) *
MGMT 251 Management of Organizations
MGMT 315 New Business Ventures
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
RECR 448 Principles of Ecotourism

**III. Hospitality Management & Tourism Concentration (28 hours)**

**A. Recreation courses: (3 hours)**
RECR 384 Special Events Management
RECR 448 Principles of Ecotourism

**B. Tourism courses: (3 hours)**
GEOG 454 Geography of Tourism
or GEOG 455 Tourism Planning
or **30-120 Principles of Travel/Tourism

**C. Hotel and Resort courses: (19 hours)**
**30-110 Food Service Sanitation

**D. Business courses: (3 hours)**
ACCT 211 Financial Accounting
or **61-109 Practical Accounting/Bookkeeping

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*Garrett College courses
**Allegany College of Maryland courses

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*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.

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*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.
IV. Therapeutic Recreation Concentration (41–44 credits)

A. Complete a 560-hour 14 consecutive week internship
under both NCTRC-certified site and internship supervisors.

B. Recreation Courses: (15 hours)
RECR 221 Introduction to Therapeutic Recreation
RECR 321 Therapeutic Recreation Practices and Procedures
RECR 421 Client Assessment and Evaluation in Therapeutic Recreation
RECR 422 Administration and Supervision of Therapeutic Recreation
RECR 423 Advanced Facilitation Methods for Clinical and Community Setting in Therapeutic Recreation

C. Anatomy and Physiology: (4 hours)
BIOL 211 Essentials of Anatomy and Physiology

D. Abnormal Psychology: (3 hours)
PSYC 317 Abnormal Psychology

E. Human Growth and Development through the Life Span: (3–6 hours)
PSYC 208 Introduction to Lifespan Development
or PSYC 210 Child Psychology and PSYC 212 Adolescence and Adulthood

F. Human Services and Related Biological and Physical Sciences: (16 hours)
BIOL 149 General Biology I (GEP) (4)
PSYC 150/151 General Psychology (GEP)

Select 3 courses from:
PSYC 213 Psychology of Adjustment
PSYC 250 Death and Dying
PSYC 404 Psychology of Exceptional Children
PSYC 409 Human Learning and Cognition
PSYC 410 Introduction to Counseling
PSYC 418 Social Psychology
PSYC 489 Child and Adolescent Disorders
SOCI 100 Introduction to Sociology (GEP)
SOCI 200 Social Problems
SOCI 203 Sociology of Deviant Behavior
SOCI 340 Criminology
SOCI 442 Juvenile Delinquency
SOCI 468 Sociology of Later Life

The therapeutic recreation concentration prepares students to sit for the National Council for Therapeutic Recreation Certification Exam.
College of Liberal Arts & Sciences

Programs in the College of Liberal Arts & Sciences

- Addictions Counseling
- African American Studies
- Animal Behavior
- Art & Design
- Art History
- Biology
- Chemistry
- Communication Studies
- Computer Print Graphics
- Computer Information Systems
- Computer Science
- Cultural Anthropology
- Dance
- Earth Science
- Engineering
- English
- Environmental Analysis & Planning
- Ethnobotany
- Film Studies
- Fine Arts
- Foreign Languages & Literature
- Forestry
- Geography
- Graphic Design
- Health Science
- Health Sciences Preparatory Programs
  - Dental Hygiene
  - Dentistry
  - Medical Technology
  - Medicine
  - Occupational Therapy
  - Optometry
  - Pharmacy
  - Physical Therapy
  - Veterinary Medicine
- History
- 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
- Mass Communication
- Mathematical Sciences
- Mathematics
- Mechanical Engineering
- Music
- Nursing
- Nursing Preparation
- Philosophy
- 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

College of Liberal Arts & Sciences

Dr. Joseph M. Hoffman
Dean
College of Liberal Arts & Sciences
241 Compton Science Center
301.687.4120

Dr. Cindy Herzog
Associate Dean
College of Liberal Arts & Sciences
241 Compton Science Center
301.687.4142

Dr. Scott Fritz
Associate Dean
College of Liberal Arts & Sciences
247 Compton Science Center
301.687.7020

College of Liberal Arts & Sciences Strategic Plan

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 a stimulating, collaborative, and supportive setting for students, faculty, staff, and administrators.
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

Frostburg State University offers an Emphasis in Addictions Counseling to help prepare you to be a licensed addiction counselor. The University also offers additional courses you can take to prepare for state certification. Below is information on FSU’s Emphasis followed by information on Maryland state certification.

Emphasis in Addictions Counseling at Frostburg State University

Complete a minimum of 16 credit hours distributed as follows:

a. Required Courses: (15 hours)
   ALL of the following:
   - PSYC 150/151 General Psychology (GEP Group D)
   - PSYC 386 Drugs and Human Behavior
   - PSYC 387 Addictions Treatment Delivery
   - PSYC 388 Treatment Issues and Theory in Addictions
   - PSYC 389 Ethics for the Addiction Counselor

b. Elective: (3 hours)
   Select ONE of the following:
   - PSYC 385 Group Processes
   - PSYC 410 Introduction to Counseling
   - SOWK 379 Foundations for Generalist Practice
   - SOWK 473 Generalist Practice with Groups

Additional Maryland State Certification Information

The Board of Professional Counselors and Therapists oversees the following regulations for Addictions Counselors in Maryland. There are two levels of Maryland state certification relevant to the undergraduate student, which are briefly described below. These levels pertain to those who want to apply for and take the state exam above and beyond any requirements for the undergraduate major. For complete requirements, contact:

Board of Professional Counselors and Therapists
4201 Patterson Ave.
Baltimore, MD 21215-2299
410.764.4732

Certified Supervised Counselor – Alcohol and Drug (CSC-AD):
- Associate degree in a health or a human service counseling field
- 15 credit hours of alcohol and drug counselor training with at least 1 credit hour in ethics of alcohol and drug counseling and the remaining credits from the list of topics areas (see below).

Certified Associate Counselor – Alcohol and Drug (CAC-AD):
- Bachelor’s degree in a health or human services counseling field.*
  - At FSU, students majoring in psychology or social work are automatically eligible, while majors in law and society, sociology or other areas will be considered on a case-by-case basis.
- 20 credit hours of alcohol and drug counselor training with at least 1 credit hour in ethics of alcohol and drug counseling and the remaining credits from the list of topics areas (see below).

*Completing one of these degree programs AND taking the required alcohol and drug counselor training courses are the first steps in meeting certification requirements. At the bachelor’s degree level you must also have at least three years or 3,000 hours of supervised experience, and two years of the experience must have been completed after the award of the degree. You will also have to pass an examination selected by the Board.

List of Topic Areas

The credit hour requirement must be satisfied from the following content areas. Each area is followed by the appropriate FSU course(s); all are 3-credit courses except Ethics. Be aware that although bachelor’s degree counselors need only 20 credit hours from the following list to satisfy the course requirement, your examination will cover ALL CONTENT AREAS.

1. Pharmacology of Psychoactive Drugs
   - PSYC 386
2. Individual Counseling Techniques
   - PSYC 410, SOWK 379
3. Group Therapy Techniques
   - PSYC 385, SOWK 473
4. Abnormal Psychology
   - PSYC 317

Coordinator:
Dr. Lisa Morshead, Assistant Professor, Department of Psychology

- You cannot major or minor in addictions counseling.
- The Addictions Emphasis Program does not fulfill the full scope of the educational coursework the Maryland Board now requires for persons seeking certification as a CAC-AD, at the Bachelor’s level. The Emphasis Program consists of 24 out of 33 required hours for licensure. For a complete list of the educational requirements, visit the Psychology Department’s webpage.
African American Studies

**Minor**

<table>
<thead>
<tr>
<th>Required Core Course</th>
<th>MINOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>AAST 200 Introduction to African American Studies (GEP Group F)</td>
<td>3-18</td>
</tr>
</tbody>
</table>

**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
- GEOG 324 Urban Geography
- GEOG 403 Geography of Sub-Saharan Africa
- HIST 353 Contemporary Africa
- PHIEC 415 The Black Athlete in American Society
- PHIL 311 Asian and African Philosophy (GEP Group F)
- POLS 330 Politics of Africa
- PSYC 325 African American Psychology
- PSYC 450 Multicultural Counseling
- SOCI 305 Racial and Cultural Minorities (GEP Group F)
- SOCI 306 Sociology of African Americans
- SOCI 307 African Americans of Appalachia

Special Topics courses numbered 290, 403, 490 or 491 in the participating departments when approved by Coordinator. Independent Studies courses numbered 499 when approved by the Coordinator, limited to one 3-hour total enrollment.
Animal Behavior

Summary of Requirements for Minor in Animal Behavior

1. Required Courses in Biology: (7 hours)
   - BIOL 149 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

<table>
<thead>
<tr>
<th>Minor</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>

- 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.
Art & Design

Major

Teaching Certification Option

Professors:
Brown (Chair), Davis, Dieruf

Associate Professors:
Hein, Herzfeld, Hodges, Odone

Assistant Professor:
English

• 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 the Studio Focus Review (ART 291) and Senior Review (ART 491).
• 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.

Summary of Requirements for BFA in Art & Design

<table>
<thead>
<tr>
<th>Major</th>
<th>For Teaching Cert. Option</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours Required in Art:</td>
<td>71</td>
</tr>
<tr>
<td>Hours Required in Other Departments:</td>
<td>0</td>
</tr>
<tr>
<td>Total Hours Required:</td>
<td>71</td>
</tr>
</tbody>
</table>

Major

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)
   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

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 ____ * 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)
Art History

Minor

Summary of Requirements for Minor in Art History

**Summary of 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.

**Art History Minor**

<table>
<thead>
<tr>
<th>MINOR رد</th>
<th>MINOR رد</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours Required in Art:</td>
<td>15-18</td>
</tr>
<tr>
<td>Hours Required in Other Departments:</td>
<td>3-0</td>
</tr>
<tr>
<td>Total Hours Required:</td>
<td>18</td>
</tr>
</tbody>
</table>

**Professors:**
- Brown (Chair), Davis, Dieruf

**Associate Professors:**
- Hein, Herzfeld, Hodges, Odone

**Assistant Professor:**
- English

- 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.

**1. Basic Courses: (3 hours)**

Choose from:

<table>
<thead>
<tr>
<th>Code</th>
<th>Course Name</th>
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<tbody>
<tr>
<td>ART 100</td>
<td>Art Appreciation (GEP Group A)</td>
</tr>
<tr>
<td>HIST 100</td>
<td>The Twentieth Century World (GEP Group B or Group F)</td>
</tr>
</tbody>
</table>

**2. Core Courses: (12 hours)**

Choose from:

<table>
<thead>
<tr>
<th>Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 301</td>
<td>Artistic Traditions: Asia (GEP Group F)</td>
</tr>
<tr>
<td>or ART 302</td>
<td>Artistic Traditions: Africa and the Americas (GEP Group F)</td>
</tr>
<tr>
<td>ART 360</td>
<td>Western Art History</td>
</tr>
<tr>
<td>ART 408</td>
<td>20th Century Art History</td>
</tr>
<tr>
<td>ART 415</td>
<td>Art Criticism</td>
</tr>
</tbody>
</table>

**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

### Summary of Requirements for Major/Minor in Biology

#### Major

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
   - BIOL 496 Seminar in Biology (Capstone)

3. **Biology Electives:** (9-12 hours)
   - Select any 3 classes between the 300 and 456 level, except 401.

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)

#### Minor

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.

### Contact:
- David Puthoff, Associate Professor, Department of Biology
- Professors:
  - Ammer, Fritz, Li, Raesly, Seddon, Serfass
- Associate Professors:
  - Brosi, Keller, Puthoff (Chair)
- Assistant Professors:
  - Hocking, Lambert, Studinski, Taylor

### Requirements Table

<table>
<thead>
<tr>
<th></th>
<th>For Major</th>
<th>For Minor</th>
<th>Pre-Health Prof. Option</th>
<th>Mol. Bio Conc.</th>
<th>Env. Science Conc.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours Required in Biology</td>
<td>41-44</td>
<td>21-24</td>
<td>43-45</td>
<td>46-48</td>
<td>46</td>
</tr>
<tr>
<td>Hours Required in Other Depts.:</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 Required</td>
<td>71-74</td>
<td>21-24</td>
<td>73-75</td>
<td>85-87</td>
<td>86</td>
</tr>
</tbody>
</table>
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
     - CHEM 455 Biochemistry I

5. Required Courses in Other Departments: (30 hours)
   - See Section 4 above (Biology major).

Summary of Requirements for Major in Biology – Molecular Biology Concentration

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: (17 hours)
   - BIOL 401 Genetics Lab
   - BIOL 435 Molecular Biology
   - BIOL 437 Molecular Biology Seminar (Capstone)
   - BIOL 438 Biotechnology Laboratory (3 hours)
   - BIOL 440 Developmental Biology
   - BIOL 445 Immunology

4. Electives: (6-8 hours)
   - Choose two of the following:
     - BIOL 302 Animal Physiology
     - BIOL 403 Plant Physiology
     - BIOL 340 General Ecology
     - BIOL 402 Evolution
     - BIOL 404 Histology
     - BIOL 456 Advanced Microscopy
     - BIOL 499 Special Problems in Biology
     - or IDIS 493 Honors Thesis

5. Required Courses in Other Departments: (39-40 hours)

   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: (8 hours)
   - 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)
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.

**Summary of Requirements for Major in Biology – Environmental Science Concentration**

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)
   - GEOL 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
   - GEOL 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 level (middle and high school) must first obtain a degree in biology (any track) 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.
Interpretive Biology and Natural History

Major

See related programs:

- BIOLOGY
  - PRE-HEALTH OPTION
  - MOLECULAR BIOLOGY
  - ENVIRONMENTAL SCIENCE
- ENVIRONMENTAL ANALYSIS & PLANNING
- ETHNOBOTANY
- FORESTRY
- WILDLIFE & FISHERIES

Summary of Requirements for Major in Interpretive Biology and Natural History

Major

1. Introductory Level Courses: (29 hours)
   - BIOL 149 General Biology I (GEP Group C)
   - BIOL 160 General Zoology
   - BIOL 161 General Botany
   - CHEM 201 General Chemistry (GEP Group C)
   - or CHEM 150 General, Organic and Biochemistry (GEP Group C)
   - CMST 102/112 Introduction to Communication
   - GEOG 103/113 Physical Geography
   - MATH 119 College Algebra
   - or MATH 120 Pre-Calculus Mathematics (Core Skill 3)
   - or any math course above 219
   - MATH 109/110 Elements of Applied Probability and Statistics (Core Skill 3)

2. Advanced Level Courses (17 hours)
   - ENGL 339 Scientific Writing
   - or ENGL 338 Technical Writing (Core Skill 2)
   - BIOL 334 General Animal Behavior
   - BIOL 340 General Ecology
   - BIOL 426 Vertebrate Zoology
   - BIOL 494 Field Experiences in the Biological Sciences (Capstone, minimum 3 credits)

3. Electives: (19-21 hours)
   - Take one of the following:
     - BIOL 406 Ornithology
     - BIOL 417 Ichthyology
     - BIOL 422 Herpetology
     - BIOL 423 Mammalogy
   - Take one of the following:
     - BIOL 309 General Entomology
     - BIOL 411 Invertebrate Zoology
   - Take one of the following:
     - BIOL 405 Dendrology
     - BIOL 409 Plant Taxonomy
   - Take one additional course from above electives or one of the following:
     - BIOL 200 Scientific Investigation and Communication
     - BIOL 230 Wildlife Techniques
     - BIOL 313 Plant Evolution and Diversity
     - BIOL 402 Evolution
     - BIOL 420 Fish Management and Culture
     - BIOL 425 Forest Ecology and Conservation
     - BIOL 450 Ecology and Management of Wildlife Populations

   Take two of the following:
   - ART 235 Photography
   - CMST 322 Presentational Communication
   - GEOG 275 Fundamentals of Geographic Data Handling (Tech. Fluency)
   - GEOG 317 Principles of Geographic Information Science
   - GEOG 406 Management and Conservation of Natural Resources
   - GEOG 430 Surface Water Hydrology
   - GEOG 433 Surveying and Field Techniques
   - GEOG 441 Soil Analysis
   - GEOG 445 Biogeography
   - GEOG 472 Environmental Planning
   - GEOG 473 Environmental Law
   - RECR 342 Park and Facility Design
   - RECR 380 Recreation Leadership

Contact:
- Thomas Lambert, Assistant Professor, Department of Biology

Professors:
- Ammer, Fritz, Li, Raesly, Seddon, Serfass

Associate Professors:
- Brosi, Keller, Puthoff

Assistant Professors:
- Hocking, Lambert, Studinski, Taylor

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, forestry, ethnobotany, geography, and sustainability studies.

Contact:
- Thomas Lambert, Assistant Professor, Department of Biology

Professors:
- Ammer, Fritz, Li, Raesly, Seddon, Serfass

Associate Professors:
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Assistant Professors:
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Students interested in professional and graduate degrees may need to take additional courses.

Minors are available in biology, forestry, ethnobotany, geography, and sustainability studies.


**Chemistry**

**Major**

**Minor**

**Track in:**
- TRADITIONAL CHEMISTRY

**Concentrations in:**
- PROFESSIONAL CHEMISTRY
- BIOCHEMISTRY

**Professors:**
- Larivee (Chair), Senese

**Associate Professors:**
- Biser, Crawford, Norris, Simon

**Assistant Professor:**
- Currie

All chemistry majors must take the core courses and select either the Traditional Track, Professional Concentration, Biochemistry Concentration or Teaching Certification Option 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 is a suitable choice. (See the section on Health Professions Preparation of this catalog.)

The Professional Concentration is a strong program for graduate school preparation.

### Summary of Requirements for Major/Minor in Chemistry

<table>
<thead>
<tr>
<th>Major</th>
<th>Minor</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Core Introductory Level Courses:</strong> (8 hours)</td>
<td><strong>1. Core Introductory Level Courses:</strong> (8 hours)</td>
</tr>
<tr>
<td>CHEM 201 General Chemistry I (GEP Group C)</td>
<td>CHEM 201 General Chemistry I (GEP Group C)</td>
</tr>
<tr>
<td>CHEM 202 General Chemistry II</td>
<td>CHEM 202 General Chemistry II</td>
</tr>
<tr>
<td><strong>2. Core Advanced Courses:</strong> (23 hours)</td>
<td><strong>2. Core Advanced Courses:</strong> (13 hours)</td>
</tr>
<tr>
<td>CHEM 311 Organic Chemistry I</td>
<td>CHEM 311 Organic Chemistry I</td>
</tr>
<tr>
<td>CHEM 312 Organic Chemistry Laboratory I</td>
<td>CHEM 312 Organic Chemistry Laboratory I</td>
</tr>
<tr>
<td>CHEM 321 Organic Chemistry II</td>
<td>CHEM 321 Organic Chemistry II</td>
</tr>
<tr>
<td>CHEM 322 Organic Chemistry Laboratory II</td>
<td>CHEM 322 Organic Chemistry Laboratory II</td>
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<tr>
<td>CHEM 304 Computational Tech. in Chem. (Tech. Fluency)</td>
<td>CHEM 304 Computational Tech. in Chem. (Tech. Fluency)</td>
</tr>
<tr>
<td>CHEM 305 Research Methods in Chemistry</td>
<td>CHEM 305 Research Methods in Chemistry</td>
</tr>
<tr>
<td>CHEM 441 Physical Chemistry Lecture I</td>
<td>CHEM 441 Physical Chemistry Lecture I</td>
</tr>
<tr>
<td>CHEM 445 Physical Chemistry Lab I</td>
<td>CHEM 445 Physical Chemistry Lab I</td>
</tr>
<tr>
<td>CHEM 491 Seminar in Chemistry</td>
<td>CHEM 491 Seminar in Chemistry</td>
</tr>
<tr>
<td>CHEM 492 Capstone Experience</td>
<td>CHEM 492 Capstone Experience</td>
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<tr>
<td><strong>3. Required Courses in Other Departments:</strong></td>
<td><strong>3. Required Courses in Other Departments:</strong></td>
</tr>
<tr>
<td><strong>Mathematics:</strong> (8 hours)</td>
<td><strong>Mathematics:</strong> (8 hours)</td>
</tr>
<tr>
<td>MATH 236 Calculus I (Core Skill 3)</td>
<td>MATH 236 Calculus I (Core Skill 3)</td>
</tr>
<tr>
<td>MATH 237 Calculus II</td>
<td>MATH 237 Calculus II</td>
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<tr>
<td><strong>Physics:</strong> (8 hours)</td>
<td><strong>Physics:</strong> (8 hours)</td>
</tr>
<tr>
<td>PHYS 215, 216 General Physics I, II (215: GEP Group C)</td>
<td>PHYS 215, 216 General Physics I, II (215: GEP Group C)</td>
</tr>
<tr>
<td>or PHYS 261, 262 Principles of Physics I, II (261: GEP Group C)</td>
<td>or PHYS 261, 262 Principles of Physics I, II (261: GEP Group C)</td>
</tr>
<tr>
<td><strong>4. Choice of Specialization:</strong> (12-61.5 hours)</td>
<td><strong>4. Choice of Specialization:</strong> (12-61.5 hours)</td>
</tr>
<tr>
<td>Majors must choose the Traditional Track, Professional Concentration, Biochemistry Concentration or Teaching Certification Option. Requirements listed below.</td>
<td>Majors must choose the Traditional Track, Professional Concentration, Biochemistry Concentration or Teaching Certification Option. Requirements listed below.</td>
</tr>
<tr>
<td><strong>5. All majors must earn a C or better in CHEM 201, 202, 311, 320, 321.</strong></td>
<td><strong>5. All majors must earn a C or better in CHEM 201, 202, 311, 320, 321.</strong></td>
</tr>
</tbody>
</table>

### Requirements for the Traditional Track for Chemistry Majors

1. **Core Courses:** (47 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: (47 hours)
Required of all Chemistry majors, listed above.

2. Advanced Courses: (16 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
CHEM 493 Advanced Chemistry Research (1 hour)

3. Required Elective Courses (5-6 hours)
A minimum of 5 hours in at least two courses:
CHEM 420 Environmental Chemical Analysis
CHEM 438 Advanced Organic Chemistry
CHEM 455 Biochemistry I
CHEM 457 Biochemistry II
CHEM 460 Environmental Chemistry
CHEM 490 Selected Topics in Chemistry
CHEM 493 Advanced Chemistry Research (2 additional hours)

4. Required Course in Other Departments: (8 hours)
BIOL 149 General 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: (47 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: (15 hours)
BIOL 149 General Biology I (GEP Group C)
BIOL 304 Microbiology
BIOL 350 Genetics
BIOL 435 Molecular Biology

4. Required Electives: (1-4 hours)
Select from among:
CHEM 411 Advanced Inorganic Chemistry
CHEM 420 Environmental Chemical Analysis
CHEM 421 Instrumental Analysis
CHEM 442 Physical Chemistry II
CHEM 493 Advanced Chemistry Research (1-3 hours)
MATH 238 Calculus III

5. 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 level (middle and high school) must first obtain a degree in chemistry (any track) 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.
Communication Studies

Major

Tracks In:
- CONFLICT COMMUNICATION STUDIES
- LEADERSHIP COMMUNICATION STUDIES
- PUBLIC COMMUNICATION AND RHETORICAL STUDIES

Associate Professors:
Ruminski, Whalen (Chair)

Instructor:
Stern

Lecturer:
Willingham

- 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.

1. Communication Studies Core Courses: (18 hours)
All of the following:
CMST 102/112 Introduction to Human Communication
CMST 300 Interpersonal Communication
CMST 335 Organizational Communication
CMST 451 Seminar in Communication Theory
CMST 485 Issues and Responsibilities of Communication
CMST 494 Communication Studies Practicum (3 credits)
or CMST 492 Internship Project (3 credits) (Capstone)

2. Communication Studies Tracks: (18 hours)
Select one 12-hour track; also, select one additional course from each of the other two tracks (6 hours):

Conflict Communication Studies
CMST 302 Argumentation and Advocacy
CMST 312 Language Behavior and Communication
CMST 345 Conflict Management
CMST 350 Intercultural Communication (GEP Group F)

Leadership Communication Studies
CMST 215 Small Group Communication
CMST 225 Interviewing
CMST 322 Presentational Communication
LEAD 101 Introduction to Leadership Studies

Public Communication and Rhetorical Studies
CMST 302 Argumentation and Advocacy
CMST 322 Presentational Communication
CMST 355 Political Communication
CMST 422 Seminar in Rhetorical Criticism

3. Required Courses in Other Departments:
(6 hours)
COSC 100/110 Introduction to Computer Science
or ART 207 Graphic Design (Tech. Fluency)
MCOM 105 Introduction to Mass Communication

Summary of Requirements for Major/Minor In Communication Studies

Major

| Hours Required in Communication Studies: | 36 | 18 |
| Hours Required in Other Departments: | 6 | 0 |
| Total Hours Required: | 42 | 18 |

Minor

1. Communication Studies Core Courses: (6 hours)
CMST 102/112 Introduction to Human Communication
CMST 451 Seminar in Communication Theory

2. Communication Studies Electives: (12 hours)
Choose four courses from:
CMST 215 Small Group Communication
CMST 225 Interviewing
CMST 300 Interpersonal Communication
CMST 302 Argumentation and Advocacy
CMST 312 Language Behavior and Communication
CMST 322 Presentational Communication
CMST 335 Organizational Communication
CMST 345 Conflict Management
CMST 350 Intercultural Communication
CMST 355 Political Communication
CMST 365 Environmental Communication
CMST 422 Seminar in Rhetorical Criticism
CMST 485 Issues and Responsibilities of Communication
Computer Print Graphics

Emphasis

<table>
<thead>
<tr>
<th>Emphasis</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

Summary of 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)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>ART 104</td>
<td>Two-Dimensional Design</td>
</tr>
<tr>
<td>ART 207</td>
<td>Graphic Design</td>
</tr>
<tr>
<td>ART 212</td>
<td>Drawing</td>
</tr>
<tr>
<td>ART 307</td>
<td>Computer Graphics</td>
</tr>
<tr>
<td>ART 336</td>
<td>Digital Imaging for the Fine Arts</td>
</tr>
<tr>
<td>ART 407</td>
<td>Advanced Graphic Design: Print (Level 1)</td>
</tr>
<tr>
<td>ART 407</td>
<td>Advanced Graphic Design: Print (Level II)</td>
</tr>
<tr>
<td>ART 414</td>
<td>Advanced Graphic Design: Interactive Multimedia Design</td>
</tr>
</tbody>
</table>

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.

Professors:
Brown (chair), Davis, Dieruf

Associate Professors:
Hein, Herzfeld, Hodges, Odone

Assistant Professor:
English

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.

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.
Computer Information Systems

Major

Minor

See related programs
- COMPUTER SCIENCE
- INFORMATION TECHNOLOGY

Professors:
Chitsaz, Rinard (Chair)

Associate Professors:
M. Flinn, Zheng

Assistant Professors:
Pan, Xiao, Xu

Lecturers:
Gbenro, S. Kennedy

- Computer science courses must have a grade of C or better to be applied towards major or minor requirements.
- You may receive credit by examination for the following courses: COSC 100, 101, 240, 350.

Summary of Requirements for Major/Minor in Computer Information Systems

<table>
<thead>
<tr>
<th>Major</th>
<th>Minor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours Required in Computer Science:</td>
<td>47</td>
</tr>
<tr>
<td>Hours Required in Other Departments:</td>
<td>27-28</td>
</tr>
<tr>
<td>Total Hours Required:</td>
<td>74-75</td>
</tr>
</tbody>
</table>

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 Computer Science Capstone

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. Other Required Courses:
   - Mathematics (6-7 hours)
     - MATH 220 Calculus for Applications
     - MATH 236 Calculus I (Core Skill 3)
     - MATH 109/110 Elements of Applied Probability and Statistics (Core Skill 3)
     - MATH 380 Introduction to Probability and Statistics
   - Other: (12 hours)
     - ACCT 211 Financial Accounting
     - CMST 102 Introduction to Human Communication
     - ENGL 338 Technical Writing (Core Skill 2)
     - MGMT 251 Management of Organizations

4. Electives: (6 hours)
   At least two courses selected from:
   - COSC 305 Computer Ethics
   - COSC 320 Business Programming
   - COSC 335 Advanced Topics in Computer Networks
   - COSC 345 The Internet and Multimedia Communications
   - COSC 350 Low-Level Programming Concepts
   - COSC 390 Topics in Modern Programming Languages
   - COSC 431 Secure Computing
   - 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

5. Electives in Business: (9 hours)
   Any three of the following courses
   - BLAW 291 Legal Environment of Business
   - MGMT 355 Operations Management
   - MGMT 356 Leadership and Human Behavior
   - MGMT 357 Human Resource Management
   - MKTG 361 Principles of Marketing

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
   - BLAW 291 Legal Environment of Business
   - MGMT 355 Operations Management
   - MGMT 356 Leadership and Human Behavior
   - MKTG 361 Principles of Marketing
Computer Science

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 life long 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.

Summary of Requirements for Major/Minor in Computer Science

<table>
<thead>
<tr>
<th>Major</th>
<th>Minor</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Core Courses:</strong> (26 hours)</td>
<td><strong>1. Core Courses:</strong> (11 hours)</td>
</tr>
<tr>
<td>COSC 101 The Discipline of Computer Science (Tech. Fluency)</td>
<td>COSC 101 The Discipline of Computer Science (Tech. Fluency)</td>
</tr>
<tr>
<td>COSC 102 Foundations of Computer Science</td>
<td>COSC 240 Computer Science I</td>
</tr>
<tr>
<td>COSC 240 Computer Science I</td>
<td>COSC 241 Computer Science II</td>
</tr>
<tr>
<td>COSC 241 Computer Science II</td>
<td>COSC 325 Software Engineering</td>
</tr>
<tr>
<td>COSC 325 Software Engineering</td>
<td>COSC 365 Digital Logic</td>
</tr>
<tr>
<td>COSC 365 Digital Logic</td>
<td>COSC 460 Operating Systems Concepts</td>
</tr>
<tr>
<td>COSC 460 Operating Systems Concepts</td>
<td>COSC 489 Computer Science Capstone</td>
</tr>
<tr>
<td>COSC 489 Computer Science Capstone</td>
<td></td>
</tr>
<tr>
<td><strong>2. Required Advanced Courses:</strong> (18 hours)</td>
<td><strong>2. Electives:</strong> (9 hours)</td>
</tr>
<tr>
<td>COSC 310 Data Structures &amp; Algorithm Analysis</td>
<td>Three additional computer science courses. Two must be at the 300-level or above.</td>
</tr>
<tr>
<td>COSC 331 Fundamentals of Computer Networks</td>
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<tr>
<td>COSC 350 Low-Level Programming Concepts</td>
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<tr>
<td>COSC 444 Introduction to Parallel Computing</td>
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<tr>
<td>COSC 450 Programming Language Principles &amp; Paradigms</td>
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<tr>
<td>COSC 485 Introduction to the Theory of Computation</td>
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</tr>
</tbody>
</table>
### Major (continued)

<table>
<thead>
<tr>
<th>1. Core Courses: (26 hours)</th>
<th>Minor</th>
</tr>
</thead>
<tbody>
<tr>
<td>COSC 101 The Discipline of Computer Science (Tech. Fluency)</td>
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</tr>
<tr>
<td>COSC 102 Foundations of Computer Science</td>
<td></td>
</tr>
<tr>
<td>COSC 240 Computer Science I</td>
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<tr>
<td>COSC 241 Computer Science II</td>
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<tr>
<td>COSC 325 Software Engineering</td>
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<tr>
<td>COSC 365 Digital Logic</td>
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<tr>
<td>COSC 400 Operating Systems Concepts</td>
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<tr>
<td>COSC 489 Computer Science Capstone</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>2. Required Advanced Courses: (15 hours)</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>COSC 331 Fundamentals of Computer Networks</td>
<td></td>
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<tr>
<td>COSC 335 Advanced Topics in Computer Networks</td>
<td></td>
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<tr>
<td>COSC 345 The Internet and Multimedia Communications</td>
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<tr>
<td>COSC 431 Secure Computing</td>
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<tr>
<td>COSC 435 Network Implementation and Testing</td>
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</table>

<table>
<thead>
<tr>
<th>3. Other Required Courses:</th>
<th></th>
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<tbody>
<tr>
<td>Mathematics (14 hours)</td>
<td></td>
</tr>
<tr>
<td>MATH 236 Calculus I (Core Skill 3)</td>
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<tr>
<td>MATH 237 Calculus II</td>
<td></td>
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<tr>
<td>MATH 350 Linear Algebra I</td>
<td></td>
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<tr>
<td>or MATH 432 Differential Equations</td>
<td></td>
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<tr>
<td>or MATH 435 Numerical Analysis</td>
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<tr>
<td>or MATH 437 Combinatorics and Graph Theory</td>
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<tr>
<td>or MATH 470 Mathematical Models and Applications</td>
<td></td>
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<tr>
<td>MATH 380 Introduction to Probability &amp; Statistics</td>
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</tbody>
</table>

### Minor

<table>
<thead>
<tr>
<th>Science (12 hours):</th>
<th></th>
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<tbody>
<tr>
<td>Select two courses from the following:</td>
<td></td>
</tr>
<tr>
<td>BIOL 149 General Biology I</td>
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<tr>
<td>CHEM 201 General Chemistry I</td>
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<tr>
<td>GEOL 103 Physical Geography</td>
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<tr>
<td>PHYS 261 Principles of Physics I: Mechanics</td>
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<tr>
<td>AND select one course from the following:</td>
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<tr>
<td>BIOL 160 General Zoology</td>
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<tr>
<td>BIOL 161 General Botany</td>
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</tr>
<tr>
<td>CHEM 202 General Chemistry II</td>
<td></td>
</tr>
<tr>
<td>PHYS 262 Principles of Physics II: Electricity and Magnetism</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Other (6 hours)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>CMST 102 Introduction to Human Communication</td>
<td></td>
</tr>
<tr>
<td>ENGL 338 Technical Writing (Core Skill 2)</td>
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</tr>
</tbody>
</table>

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<thead>
<tr>
<th>4. Electives: (6 hours)</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>A minimum of 6 hours in at least two courses</td>
<td></td>
</tr>
<tr>
<td>COSC 305 Computer Ethics</td>
<td></td>
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<tr>
<td>COSC 335 Advanced Topics in Computer Networks</td>
<td></td>
</tr>
<tr>
<td>COSC 345 The Internet and Multimedia Communications</td>
<td></td>
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<tr>
<td>COSC 390 Topics in Modern Programming Languages</td>
<td></td>
</tr>
<tr>
<td>COSC 415 Computer Interfacing</td>
<td></td>
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<tr>
<td>COSC 420 Robotics and Industrial Computer Applications</td>
<td></td>
</tr>
<tr>
<td>COSC 431 Secure Computing</td>
<td></td>
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<tr>
<td>COSC 435 Network Implementation and Testing</td>
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<tr>
<td>COSC 440 Database Management Systems</td>
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<tr>
<td>COSC 445 Network Programming</td>
<td></td>
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<tr>
<td>COSC 455 Artificial Intelligence</td>
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<tr>
<td>COSC 465 Computer Systems Architecture</td>
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<tr>
<td>COSC 470 Compiler Design and Implementation</td>
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<tr>
<td>COSC 475 Interactive Computer Graphics</td>
<td></td>
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<tr>
<td>COSC 491 Seminar in Computer Science</td>
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<tr>
<td>COSC 494 Field Exp. in Computer/Information Science</td>
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<tr>
<td>COSC 499 Individual Problems in Computer Science</td>
<td></td>
</tr>
<tr>
<td>ITEC 442 Electronic Commerce</td>
<td></td>
</tr>
</tbody>
</table>
COMPUTER SCIENCE

Science: (12 hours):
Select two courses from the following:
- BIOL 149 General Biology I
- CHEM 201 General Chemistry I
- GEOG 103 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 310 Data Structures and Algorithm Analysis
- COSC 350 Low-Level Programming Concepts
- COSC 390 Topics in Modern Programming Languages
- COSC 444 Introduction to Parallel Computing
- COSC 445 Network Programming
- COSC 450 Programming Language Principles & 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
Cultural Anthropology

Minor

Coordinator:
Kara Rogers-Thomas, Associate Professor, Department of Sociology

• You cannot major in Cultural Anthropology.

Summary of Requirements for Minor in Cultural Anthropology

Minor

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

Dance

Minor

Coordinator:
Jamie McGreevy, Coordinator of Dance minor
Nicole Mattis, Chair, Department of Theatre and Dance

• You cannot major in Dance.

Summary of Requirements for Minor in Dance

Minor

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

3. Required Courses in Other Disciplines:
   Select a minimum of 2-3 hours from among:
   HEED 200 Nutrition
   MUSC 100 Introduction to Music Theory
   THEA 110 Introduction to Acting
   THEA 210 Voice and Movement
   THEA 306 Stage Lighting
Earth Science

Major

Concentration in

• ENVIRONMENTAL SCIENCE

<table>
<thead>
<tr>
<th>Contact:</th>
<th>James Saku (Chair), Department of Geography</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participating Faculty:</td>
<td>Precht (Geography)</td>
</tr>
<tr>
<td>Associate Professors:</td>
<td>Allen (Geography), Crawford (Chemistry), Moore (Physics), Norris (Chemistry), Pegg (Biology), Ramsport (Geography)</td>
</tr>
<tr>
<td>Assistant Professors:</td>
<td>Bogart (Geography), Flood (Geography)</td>
</tr>
</tbody>
</table>

This is a multidisciplinary program administered by the Department of Geography.

An optional internship is available in Earth Science.

There is no minor in Earth Science.

Summary of Requirements for Major in Earth Science

1. Required Core Courses: (21 hours)
   - GEOG 103/113 Physical Geography (GEP Group C)
   - GEOG 207 Physical Geology and Geomorphology
   - GEOG 208 Earth Systems History
   - GEOG 275 Fund. of Geographic Data Handling (Tech. Fluency)
   - MATH 109 Elements of Applied Probability and Statistics (Core Skill 3)
   - GEOG 380 Research Methods in Geography

2. Required Supporting Science Sequence (8 hours)
   - Complete one of the following science sequences:
     - CHEM 201/202 General Chemistry I & II (GEP Group C)
     - PHY 215/216 General Physics I & II (GEP Group C)
     - PHY 261/262 Principles of Physics I & II (GEP Group C)
     - ENES 102 Statics/220 Mechanics of Materials

3. Advanced Electives (9-10 hours)
   - Complete three of the following courses:
     - GEOG 406 Management and Conservation of Natural Resources
     - GEOG 430 Surface Water Hydrology or GEOG 435 Oceanography
     - GEOG 431 Quaternary Environments or GEOG 441 Soil Analysis
     - GEOG 445 Biogeography
     - GEOG 460 Natural Hazards in the Physical Environment
     - GEOG 476 Fluvial/Coastal Geomorphology or GEOG 475 Glacial/Periglacial Geomorphology
     - CHEM 420 Environmental Chemical Analysis or CHEM 320 Quantitative Analytical Chemistry or CHEM 460 Environmental Chemistry

4. Technique Courses (3 hours)
   - Complete one of the following courses:
     - GEOG 310 Fundamentals of Cartography
     - GEOG 317 Principles of Geographic Information Science
     - GEOG 413 Remote Sensing – Image Interpretation
     - GEOG 433 Surveying and Field Techniques

5. Additional Mathematics Course (3-4 hours)
   - Complete one of the following courses:
     - MATH 119 College Algebra (Core Skill 3)
     - MATH 220 Calculus for Applications I
     - MATH 236 Calculus I (Core Skill 3)
     - MATH 237 Calculus II

6. 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.

7. Capstone Experience (1 hour)
   - GEOG 486 Earth Science Capstone

If you are interested in teaching earth science ... 

- Students wishing to teach earth science at the secondary level (middle and high school) must first obtain a degree in earth science 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.
Summary of Requirements for Environmental Science
Concentration in Earth Science

1. Introductory Level Courses: (16 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 109 Elements of Probability and Statistics (Core Skill 3)
   - MATH 119 College Algebra (Core Skill 3) – or any other MATH 220 or above

2. Required Advanced Courses: (15 hours)
   - GEOG 380 Research Methods in Geography
   - GEOG 406 Management and Conservation of Natural Resources
   - GEOG 445 Biogeography
   - GEOG 472 Environmental Planning or GEOG 473 Environmental Law
   - GEOG 486 Earth Science Capstone
   - GEOG 488 Environmental Practicum or GEOG 492 Internship: Research in Geography*
   *requires co-registration in GEOG 495

3. Required Supporting Science Sequence: (16 hours)
   - BIOL 149 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 314 Plant Taxonomy or BIOL 305 Dendrology
   - BIOL 340 General Ecology
   - BIOL 406 Ornithology
   - 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 Global Climate System
   - GEOG 430 Surface Water Hydrology
   - GEOG 431 Quaternary Environments
   - GEOG 432 Groundwater Hydrology
   - GEOG 460 Natural Hazards in the Physical Environment

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 407 Political Geography
     - GEOG 410 Locational Analysis
     - HIST 409 World Environmental History
     - HIST 418 Native Peoples of the Americas
     - HIST 420 Green: Environment and Economy in US 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 & 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, J. Hoffman, G. Latta, Plitnik, O. Soysal, Wang

**Associate Professors:**
- Eltayeb, E. Moore (Chair)

**Assistant Professors:**
- Liu, Norouzi, Speights, Wondmagegn

## Mission Statement

The mission of the FSU Engineering Program is to provide excellent undergraduate education in 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

Within the first few years following graduation, alumni of the Engineering BS program will demonstrate:

- **Broad knowledge** of mathematics, physical science and engineering science with emphasis in selected concentration areas of engineering to be successful in government, industry, private companies and interdisciplinary graduate programs
- **Professional skills** to function in multidisciplinary teams, use modern instruments, computers and engineering software to solve engineering problems, perform research and participate in design projects
- **An understanding of professional responsibility** to evaluate their ethical obligations to society, employers, employees and peers
- **Motivation for lifelong learning** to update their technical knowledge and understanding of societal and contemporary issues

## Program Outcomes

Students will acquire the knowledge and skills needed to demonstrate the learning outcomes assessed throughout the curriculum. When students graduate, they will be able to:

a. Apply knowledge of mathematics, science and engineering
b. Design and conduct experiments, as well as analyze and interpret data
c. Design a system, component or process to meet desired needs
d. Function on multidisciplinary teams
e. Identify, formulate and solve engineering problems
f. Demonstrate an understanding of professional and ethical responsibility
g. Communicate effectively
h. Demonstrate the broad education necessary to understand the impact of engineering solutions in a global and societal context
i. Recognize the need for, and engage in, life-long learning
j. Demonstrate a knowledge of contemporary issues in engineering
k. Use the techniques, skills and modern engineering tools necessary for engineering practice

## Summary of Requirements for Major in Engineering

### Major

<table>
<thead>
<tr>
<th>CONCENTRATIONS</th>
<th>ELECTRICAL</th>
<th>MATERIALS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours Required in Engineering:</td>
<td>55-58</td>
<td>57-58</td>
</tr>
<tr>
<td>Hours Required in Other Disciplines:</td>
<td>34</td>
<td>34</td>
</tr>
<tr>
<td>Total Hours Required:</td>
<td>89-92</td>
<td>91-92</td>
</tr>
</tbody>
</table>

## 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 pages 110-111.

*All majors must earn a C or better in MATH 236, MATH 237, MATH 238, MATH 432, PHYS 261, PHYS 262, PHYS 263 and PHYS 264.*
2. Area of Concentration (34-37 hours)

Majors must choose to concentrate in one of the following areas:

**Electrical Engineering (34-37 hours)**

- **ENEE 204** Basic Circuit Theory
- **ENEE 206** Fund. Digital and Electric Circuits Lab
- **ENEE 244** Digital Logic Design
- **ENEE 303** Analog and Digital Electronics
- **ENEE 307** Electronic Circuits Lab
- **ENEE 350** Computer Organization
- **ENEE 380** Electromagnetic Theory
- **ENES 310** Mechatronic and Robotic Design
- **ENEE 408** Capstone Design Project for Electrical Engineers
- **ENEE 439** Topics in Signal Processing
- **ENEE 475** Power Electronics

Two electives from any 300- or 400-level ENEE, ENES or ENME course or CHEM 304

**Materials Engineering (36-37 hours)**

- **ENES 102** Statics
- **ENES 220** Mechanics of Materials
- **ENES 221** Dynamics
- **ENME 232** Thermodynamics
- **ENME 331** Fluid Mechanics
- **ENME 332** Transfer Processes
- **ENME 362** Engineering Materials and Manufacturing
- **ENME 405** Fundamentals of Materials Engineering
- **ENME 410** Capstone Design Project for Materials Engineering
- **ENME 425** Microfabrication

Two electives from any 300- or 400-level ENEE, ENES, or ENME course or CHEM 304
Engineering

Engineering BS at AACC
Located at AACC at Arundel Mills, a Regional Higher Education Center

Total Hours Required at FSU: 50

Program Educational Objectives
Within the first few years following graduation, alumni of the Engineering BS program will:

1. Meet regional workforce needs in engineering
2. Integrate effective workforce skills, best practices and ethical principles
3. Work effectively in multidisciplinary teams and communicate ideas orally and in writing
4. Demonstrate motivation for lifelong learning for personal enrichment and to achieve professional success

Program Outcomes
Students will acquire the knowledge and skills needed to demonstrate the learning outcomes assessed throughout the curriculum.

When students graduate, they will be able to:

a. Apply knowledge of mathematics, science and engineering
b. Design and conduct experiments, as well as analyze and interpret data
c. Design a system, component or process to meet desired needs
d. Function on multidisciplinary teams
e. Identify, formulate and solve engineering problems
f. Demonstrate an understanding of professional and ethical responsibility
g. Communicate effectively
h. Demonstrate the broad education necessary to understand the impact of engineering solutions in a global and societal context
i. Recognize the need for, and engage in, lifelong learning
j. Demonstrate knowledge of contemporary issues in engineering
k. Use the techniques, skills and modern engineering tools necessary for engineering practice

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

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, PHYS 263 and PHYS 264.

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.

Courses at FSU (50 hours)

<table>
<thead>
<tr>
<th>IDIS</th>
<th>150</th>
<th>First-Year FSU Colloquium</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENEE</td>
<td>303</td>
<td>Analog and Digital Electronics</td>
</tr>
<tr>
<td>ENEE</td>
<td>307</td>
<td>Electronic Circuits Lab</td>
</tr>
<tr>
<td>ENEE</td>
<td>350</td>
<td>Computer Organization</td>
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<tr>
<td>ENEE</td>
<td>380</td>
<td>Electromagnetic Theory</td>
</tr>
<tr>
<td>ENEE</td>
<td>408</td>
<td>Capstone Design Project for Electrical Engineers</td>
</tr>
<tr>
<td>ENEE</td>
<td>439</td>
<td>Topics in Signal Processing</td>
</tr>
<tr>
<td>ENEE</td>
<td>475</td>
<td>Power Electronics</td>
</tr>
<tr>
<td>ENES</td>
<td>310</td>
<td>Mechatronic and Robotic Design</td>
</tr>
<tr>
<td>ENES</td>
<td>401</td>
<td>Fundamentals of Energy Engineering</td>
</tr>
<tr>
<td>ENES</td>
<td>491</td>
<td>Engineering Seminar</td>
</tr>
<tr>
<td>ENGL</td>
<td>338</td>
<td>Technical Writing</td>
</tr>
<tr>
<td>ENME</td>
<td>350</td>
<td>Electronics and Instrumentation I</td>
</tr>
<tr>
<td>ENME</td>
<td>351</td>
<td>Electronics and Instrumentation II</td>
</tr>
</tbody>
</table>

Two electives from any 300- or 400-level ENEE, ENES or ENME course. Any courses offered at FSU to meet credit requirements.
Engineering BS at Cecil College

Total Hours Required at FSU: 55

Program Educational Objectives
Within the first few years following graduation, alumni of the Engineering BS program will:
1. Meet regional workforce needs in engineering
2. Integrate effective workforce skills, best practices and ethical principles
3. Work effectively in multidisciplinary teams and communicate ideas orally and in writing
4. Demonstrate motivation for lifelong learning for personal enrichment and to achieve professional success

Program Outcomes
Students will acquire the knowledge and skills needed to demonstrate the learning outcomes assessed throughout the curriculum. When students graduate, they will be able to:

a. Apply knowledge of mathematics, science and engineering
b. Design and conduct experiments, as well as analyze and interpret data
c. Design a system, component or process to meet desired needs
d. Function on multidisciplinary teams
e. Identify, formulate and solve engineering problems
f. Demonstrate an understanding of professional and ethical responsibility
g. Communicate effectively
h. Demonstrate the broad education necessary to understand the impact of engineering solutions in a global and societal context
i. Recognize the need for, and engage in, lifelong learning
j. Demonstrate knowledge of contemporary issues in engineering
k. Use the techniques, skills and modern engineering tools necessary for engineering practice

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 239, PHYS 261, PHYS 262, PHYS 263 and PHYS 264.

Once admitted into the program at Cecil College, students will complete an additional 50 credits of engineering and upper-division general education coursework. The majority of the upper-division courses will be taught on site at Cecil College. Several will be delivered via interactive video or through online learning.

FSU Courses (55 hours)

Arts and Humanities GEP course*  
ENGL 338  Technical Writing  
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
ENME 405  Fundamentals of Materials Engineering
ENME 425  Microfabrication
ENES 401  Fundamentals of Energy Engineering
ENES 491  Engineering Seminar
ENEE 408  Capstone Design Project for Electrical Engineers

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.
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 the Accreditation Board for Engineering and Technology (ABET).
- The degree awarded to students completing the program is a B.S. from UMCP. Therefore, students enrolled in the collaborative program must complete UMCP’s general education program requirements.
- During the freshman 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. Meet expectations in mechanical engineering careers or graduate education.
2. Demonstrate appropriate utilization of professional skills of team-work, problem solving, design, research and communication with all participants.
3. Engage in the community through the application of knowledge of ethical obligations to society, employers, employees and peers.
4. Engage in life-long learning to update their technical knowledge and understanding of societal and contemporary issues.

Program Outcomes

The students of the Mechanical Engineering Collaborative Program will demonstrate throughout the curriculum:

a. An ability to apply knowledge of mathematics, science and engineering
b. An ability to design and conduct experiments, as well as to analyze and interpret data
c. An ability to design a system, component or process to meet desired needs
d. An ability to function on multidisciplinary teams
e. An ability to identify, formulate and solve engineering problems
f. An understanding of professional and ethical responsibility
g. An ability to communicate effectively
h. The broad education necessary to understand the impact of mechanical engineering solutions in a global and societal context
i. A recognition of the need for and an ability to engage in lifelong learning
j. A knowledge of contemporary issues in mechanical engineering
k. An ability to use the techniques, skills and modern engineering tools necessary for mechanical engineering practice

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 (43 hours)
   - CHEM 133 General Chemistry for Engineers (preferred)
     or CHEM 202 General Chemistry II
   - CHEM 201 General Chemistry I (Meets GEP requirement)
   - ENGL 101 Freshman Composition (Meets GEP requirement)
   - ENGL 339 Scientific Writing
     or 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 (Meets GEP requirement)

*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.

Total Hours Required: 111*
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

Concentrations in:
• LITERATURE
• CREATIVE WRITING
• PROFESSIONAL WRITING

Professors:
Barkley, Idris, Kehrwald, Lutz, R. Smith, Snelson

Associate Professors:
Armiento, R. Brewer, A. Duncan, S. Duncan (Chair), LaFemina, Morris, Raucci

Assistant Professors:
Hartzog, Knott, Shimmin

Lecturer:
Browne

The department also coordinates minors in 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.

Minor

Concentrations in:
• LITERATURE
• CREATIVE WRITING
• PROFESSIONAL WRITING

Summary of Requirements for Major/Minor in English

<table>
<thead>
<tr>
<th></th>
<th>MAJOR</th>
<th>MINOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours Required in English:</td>
<td>40</td>
<td>24</td>
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<td>Hours Required in Other Departments:</td>
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<td>0</td>
</tr>
<tr>
<td>Total Hours Required:</td>
<td>40</td>
<td>24</td>
</tr>
</tbody>
</table>

Requirements for Literature Concentration

1. Major Core Curriculum: (15 hours – listed above)

2. Concentration Core Requirements: (7 hours)

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 421 Jane Austen in Literature and Film
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 6 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: (22 hours)
   - ENGL 334 Creative Writing: Fiction
   - ENGL 335 Creative Writing: Poetry
   - ENGL 377 Modernism
   - or ENGL 378 Post Modernism
   - 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: (25 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 Certification in Teaching Secondary English

1. Major Core Curriculum (15 hours — listed above)

2. Certification Requirements: (34 hours)
   Students must complete the requirements for the Literature Concentration (25 credits). In addition, they must complete the following requirements (9 credits):
   - ENGL 276 Adolescent Literature
   - ENGL 416 History of the English Language
   - ENGL 430 The Composing Processes
   Highly recommended: Either ENGL 336 Journalism or ENGL 491 Practicum in the Teaching of Writing.

Summary of Requirements for Certification in Teaching Secondary English

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 admissions 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 Introduction to English Linguistics
   - ENGL 416 History of the English Language
   - 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.
Professional Writing

Emphasis

Coordinator:
Sydney Duncan, Associate 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 freshman English course, passed with a grade of C or better.

Summary of Requirements for Emphasis in Professional Writing

Select 12 hours from the following courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 330</td>
<td>Business Writing</td>
</tr>
<tr>
<td>ENGL 336</td>
<td>Journalistic Writing</td>
</tr>
<tr>
<td>ENGL 338</td>
<td>Technical Writing</td>
</tr>
<tr>
<td>ENGL 339</td>
<td>Scientific Writing</td>
</tr>
<tr>
<td>ENGL 355</td>
<td>Socially Networked Journalism</td>
</tr>
<tr>
<td>ENGL 402</td>
<td>Editing and Production</td>
</tr>
<tr>
<td>ENGL 436</td>
<td>Advanced News and Feature Writing</td>
</tr>
<tr>
<td>ENGL 430</td>
<td>The Composing Processes</td>
</tr>
<tr>
<td>ENGL 438</td>
<td>Applied Digital Writing</td>
</tr>
</tbody>
</table>

Coordinator:
Sydney Duncan, Associate 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.

Total Hours Required: 12

Teaching of Writing

Emphasis

Coordinator:
Rochelle Smith, 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.

Summary of Requirements for Emphasis in the Teaching of Writing

1. Select 3 hours from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 300</td>
<td>Critical Writing About Literature</td>
</tr>
<tr>
<td>ENGL 308</td>
<td>Social Sciences Advanced Composition</td>
</tr>
<tr>
<td>ENGL 309</td>
<td>Advanced Composition: Humanities</td>
</tr>
<tr>
<td>ENGL 310</td>
<td>General Advanced Composition</td>
</tr>
<tr>
<td>ENGL 312</td>
<td>Honors: Advanced Composition</td>
</tr>
<tr>
<td>ENGL 330</td>
<td>Business Writing</td>
</tr>
<tr>
<td>ENGL 338</td>
<td>Technical Writing</td>
</tr>
<tr>
<td>ENGL 339</td>
<td>Scientific Writing</td>
</tr>
<tr>
<td>ENGL 306</td>
<td>Linguistics</td>
</tr>
<tr>
<td>ENGL 416</td>
<td>History of the English Language</td>
</tr>
<tr>
<td>ENGL 430</td>
<td>Composing Processes</td>
</tr>
</tbody>
</table>

2. 6 hours of ENGL 491 Practicum in the Teaching of Writing

3. Select 3 hours from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>ENGL 300</td>
<td>Criminology</td>
</tr>
<tr>
<td>ENGL 308</td>
<td>Social Sciences Basic</td>
</tr>
<tr>
<td>ENGL 309</td>
<td>Advanced Composition</td>
</tr>
<tr>
<td>ENGL 310</td>
<td>General Advanced Composition</td>
</tr>
<tr>
<td>ENGL 312</td>
<td>Honors: Advanced Composition</td>
</tr>
<tr>
<td>ENGL 330</td>
<td>Business Writing</td>
</tr>
<tr>
<td>ENGL 338</td>
<td>Technical Writing</td>
</tr>
<tr>
<td>ENGL 339</td>
<td>Scientific Writing</td>
</tr>
<tr>
<td>ENGL 306</td>
<td>Linguistics</td>
</tr>
<tr>
<td>ENGL 416</td>
<td>History of the English Language</td>
</tr>
<tr>
<td>ENGL 430</td>
<td>Composing Processes</td>
</tr>
</tbody>
</table>

Total Hours Required: 12
Environmental Analysis & Planning

Major

- This multidisciplinary program is jointly administered by the Departments of Biology and Geography.
- You may not minor in Environmental Analysis and Planning.
- The program is supported by the Maryland Department of the Environment.
- Internship is optional.
- You are advised to complete the 100- and 200-level courses within your first 60 hours of course work, and before enrolling in 400-level courses in Geography and Biology.

Summary of Requirements for Major in Environmental Analysis and Planning

Major

1. Courses in Biology: (21-23 hours)
   - BIOL 149 General Biology I (GEP Group C)
   - BIOL 160 General Zoology
   - or BIOL 161 General Botany
   - BIOL 314 Plant Taxonomy
   - BIOL 340 General Ecology
   - Take 2 of 4 courses:
     - BIOL 303 Plant Physiology
     - BIOL 304 Microbiology
     - BIOL 421 Sample Design and Analysis of Plant Communities
     - BIOL 430 Limnology
   * GEOG 445, Biogeography, may be substituted for one of the BIOL electives.

2. Courses in Geography: (46-47 hours)
   - GEOG 103/113 Physical Geography (GEP Group C)
   - GEOG 207 Physical Geology and Geomorphology
   - GEOG 275 Fundamentals of Geographic Data Handling (Tech. Fluency)
   - GEOG 310 Fundamentals of Cartography
   - GEOG 340 Soil: Genesis, Nature and Characterization
   - GEOG 413 Remote Sensing - Image Interpretation
   - GEOG 430 Surface Water Hydrology
   - GEOG 470 Soil & Water Engineering
   - GEOG 472 Environmental Planning (Capstone)
   - GEOG 473 Environmental Law
   - Take four of 10 courses:
     - GEOG 208 Earth System History
     - GEOG 317 Principles of Geographic Information Science
     - GEOG 420 Topics in the Mapping and Geospatial Sciences
     - GEOG 431 Quaternary Environments
     - GEOG 432 Groundwater Hydrology
     - GEOG 433 Surveying and Field Techniques
     - GEOG 441 Soil Analysis
     - GEOG 471 Engineering for Land Development
     - GEOG 475 Glacial/Periglacial Geomorphology
     - GEOG 476 Fluvial/Coastal Geomorphology

3. Required Courses in Other Departments: (17-18 hours)
   - CHEM 201 General Chemistry I (GEP Group C)
   - CHEM 202 General Chemistry II
   - ENGL 338 Technical Writing (Core Skill 2)
   - MATH 109 Elements of Applied Probability and Statistics (Core Skill 3)
   - MATH 220 Calculus for Applications
     - or MATH 236 Calculus I (Core Skill 3)
# Ethnobotany

## Major

### Summary of Requirements for Major in Ethnobotany

<table>
<thead>
<tr>
<th>Major</th>
<th>Minor</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Scientific Foundations</strong> (22 hours)</td>
<td><strong>1. Scientific Foundations</strong> (4 hours)</td>
</tr>
<tr>
<td>BIOL 149 General Biology I (GEP Group C)</td>
<td>BIOL 149 General Biology I (GEP Group C)</td>
</tr>
<tr>
<td>BIOL 161 General Botany</td>
<td>BIOL 161 General Botany</td>
</tr>
<tr>
<td>CHEM 201 General Chemistry I (GEP Group C)</td>
<td>CHEM 201 General Chemistry I (GEP Group C)</td>
</tr>
<tr>
<td>or CHEM 150 General, Organic and Biochemistry (GEP Group C)</td>
<td>or CHEM 150 General, Organic and Biochemistry (GEP Group C)</td>
</tr>
<tr>
<td>GEOG 103 Physical Geography (GEP Group C)</td>
<td>GEOG 103 Physical Geography (GEP Group C)</td>
</tr>
<tr>
<td>MATH 109/110 Elements of Applied Probability and Statistics (Core Skill 3)</td>
<td>MATH 109/110 Elements of Applied Probability and Statistics (Core Skill 3)</td>
</tr>
<tr>
<td>MATH 119 College Algebra (Core Skill 3)</td>
<td>MATH 119 College Algebra (Core Skill 3)</td>
</tr>
<tr>
<td>or MATH 120 Pre-Calculus (Core Skill 3)</td>
<td>or MATH 120 Pre-Calculus (Core Skill 3)</td>
</tr>
<tr>
<td>or any math course level III or higher</td>
<td>or any math course level III or higher</td>
</tr>
<tr>
<td><strong>2. Ethnobotany Core</strong> (13 hours)</td>
<td><strong>2. Ethnobotany Core</strong> (7 hours)</td>
</tr>
<tr>
<td>BIOL 128 Introduction to Ethnobotany</td>
<td>BIOL 128 Introduction to Ethnobotany</td>
</tr>
<tr>
<td>Select one additional course from:</td>
<td>Select one additional course from:</td>
</tr>
<tr>
<td>BIOL 328 Economic Botany</td>
<td>BIOL 328 Economic Botany</td>
</tr>
<tr>
<td>BIOL 428 Ethnographic Field Techniques (capstone)</td>
<td>BIOL 428 Ethnographic Field Techniques</td>
</tr>
<tr>
<td>BIOL 460 Field Experiences in Forestry</td>
<td>BIOL 460 Field Experiences in Forestry</td>
</tr>
<tr>
<td><strong>3. Botany and Plant Ecology</strong> (24 hours)</td>
<td><strong>3. Botany and Plant Ecology</strong> (3 hours)</td>
</tr>
<tr>
<td>BIOL 313 Plant Evolution and Diversity</td>
<td>GEOG 445 Biogeography</td>
</tr>
<tr>
<td>BIOL 340 General Ecology</td>
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<tr>
<td>BIOL 403 Plant Physiology</td>
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<tr>
<td>BIOL 405 Dendrology</td>
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<tr>
<td>BIOL 409 Plant Taxonomy</td>
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</tr>
<tr>
<td>BIOL 425 Forest Ecology and Conservation</td>
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<tr>
<td>GEOG 445 Biogeography</td>
<td></td>
</tr>
<tr>
<td><strong>4. Cultural Perspectives</strong> (9 hours)</td>
<td><strong>4. Cultural Perspectives</strong> (3 hours)</td>
</tr>
<tr>
<td>GEOG 104 Human Geography (GEP Group D or F)</td>
<td>SOCI 224 Cultural Anthropology (GEP Group F)</td>
</tr>
<tr>
<td>or GEOG 110 World Regional Geography (GEP Group D or F)</td>
<td>or GEOG 110 World Regional Geography (GEP Group F)</td>
</tr>
<tr>
<td>SOCI 224 Cultural Anthropology (GEP Group F)</td>
<td>SOCI 224 Cultural Anthropology (GEP Group F)</td>
</tr>
<tr>
<td>SOC 350 Folklore in Appalachia</td>
<td>SOC 350 Folklore in Appalachia</td>
</tr>
<tr>
<td><strong>5. Electives</strong> (3-4 hours)</td>
<td></td>
</tr>
<tr>
<td>Select one additional course from:</td>
<td></td>
</tr>
<tr>
<td>BIOL 313 Plant Evolution and Diversity</td>
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</tr>
<tr>
<td>BIOL 340 General Ecology</td>
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<tr>
<td>BIOL 403 Plant Physiology</td>
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<tr>
<td>BIOL 405 Dendrology</td>
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<tr>
<td>BIOL 409 Plant Taxonomy</td>
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</tr>
<tr>
<td>BIOL 425 Forest Ecology and Conservation</td>
<td></td>
</tr>
<tr>
<td>GEOG 104 Human Geography (GEP Group D or F)</td>
<td></td>
</tr>
<tr>
<td>or GEOG 110 World Regional Geography (GEP Group F)</td>
<td></td>
</tr>
<tr>
<td>SOCI 224 Cultural Anthropology (GEP Group F)</td>
<td></td>
</tr>
<tr>
<td>SOC 350 Folklore in Appalachia</td>
<td></td>
</tr>
</tbody>
</table>

### Minor

**See related programs:**

- Biology
- Cultural Anthropology
- Environmental Analysis & Planning
- Forestry
- Geography
- Interpretive Biology & Natural History
- Sustainability Studies
- Wildlife & Fisheries

**Coordinator:**

Sunshine L. Brosi, Associate Professor, Department of Biology

**Participating Faculty:**

**Professors:**

Fritz, Li (Biology), Precht

**Associate Professors:**

Biser, (Chemistry), Brosi (Biology), Putthoff (Biology), Rogers Thomas (Sociology)

- Ethnobotany is an interdisciplinary major.
- You are encouraged to minor in related fields, including cultural anthropology, chemistry, geography, sociology, foreign language, biology and sustainability studies.
- A degree 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.
- You have the option to participate in research on medicinal plants of the Appalachian region through the Appalachian Center for Ethnobotanical Studies (ACES) a cooperative program with Frostburg State University, West Virginia University and the University of Maryland Biotechnology Institute.
Film Studies

Minor

Coordinator:
Dr. Kevin Kehrwald,
Professor, Department of English

Participating Faculty:
Professors:
Kehrwald (English), R. Smith (English)

Associate Professor:
Raucci (English)

Assistant Professors:
Danzl (Communication), Knott (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

Summary of Requirements for Minor in Film Studies

Minor

1. Required Core Courses: (9 hours)
   - ENGL 207* Introduction to Film Studies (Fall)
   - ENGL 208* Film and American Culture (Spring, even-numbered years)
   - ENGL 344* Film Theory (Spring, odd-numbered years)
   *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 287 Intro to Video Production (every semester)
   - MCOM 387 Multi-Camera Studio Production (Fall)

Relevant Special Topics courses will be welcomed as electives as approved by the Coordinator.

Fine Arts

Minor

Professors:
Brown (Chair), Davis, Dieruf

Associate Professors:
Hein, Herzfeld, Hodges, Odone

Assistant Professor:
English

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.

Summary of Requirements for Minor in Fine Arts

Minor

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)
   - 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

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
   - ART 440 Advanced Sculpture
Foreign Languages & Literature

**Major**

Concentrations in
- **SPANISH**

**Minor**

Summary of Requirements for Major/Minor in Foreign Languages & Literature with a Concentration in Spanish

<table>
<thead>
<tr>
<th>Major</th>
<th>Minor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours Required in Foreign Languages &amp; Literature:</td>
<td>48</td>
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<tr>
<td>Hours Required in Other Departments:</td>
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<tr>
<td>Total Hours Required:</td>
<td>48</td>
</tr>
</tbody>
</table>

Students are strongly encouraged to keep work from all their courses in anticipation of the senior seminar.

**Summary of Requirements for Minor in Foreign Languages & Literature with a Concentration in French**

<table>
<thead>
<tr>
<th>Major</th>
<th>Minor</th>
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<tbody>
<tr>
<td>1. Core Curriculum (9 hours)</td>
<td>1. Core Curriculum (9 hours)</td>
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<tr>
<td>SPAN 211 Spanish Grammar, Composition &amp; Conversation I*</td>
<td>SPAN 211 Spanish Grammar, Composition &amp; Conversation I*</td>
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<tr>
<td>SPAN 212 Spanish Grammar, Composition &amp; Conversation II</td>
<td>SPAN 212 Spanish Grammar, Composition &amp; Conversation II</td>
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<tr>
<td>SPAN 250 Overview of Spanish Language &amp; Culture (GEP Group B)</td>
<td>SPAN 250 Overview of Spanish Language &amp; Culture (GEP Group B)</td>
</tr>
<tr>
<td>2. Advanced Courses (36 hours)</td>
<td>2. Advanced Courses (9 hours)</td>
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<tr>
<td>Eleven upper-level Spanish courses, four of which must be at the 400 level</td>
<td>Any three 300 or 400–level courses in Spanish</td>
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<tr>
<td>SPAN 489 Capstone in Spanish</td>
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</tr>
<tr>
<td>3. Linguistics (3 hours)</td>
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</tr>
<tr>
<td>LING 301 Introduction to Language</td>
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</tr>
</tbody>
</table>

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.
Summary of Requirements for Minor in Forestry

Minor

1. Required Courses: (17 hours)
   - BIOL 149  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 & 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

<table>
<thead>
<tr>
<th>Concentrations in:</th>
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</tr>
</thead>
<tbody>
<tr>
<td>• CLIMATE SCIENCE</td>
<td></td>
</tr>
<tr>
<td>• GLOBAL SYSTEMS ANALYSIS</td>
<td></td>
</tr>
<tr>
<td>• MAPPING &amp; GEOSPATIAL SCIENCES</td>
<td></td>
</tr>
</tbody>
</table>

### Professors:
- Precht, Saku (Chair)
- Associate Professors: Allen, Ramsopp, Russo
- Assistant Professors: Bogart, Flood, Wetherholt
- Lecturers: T. Edwards, A. Lewis

You may elect to complete the major without specialized concentration or choose a concentration in climate science, global systems analysis or mapping science.

An internship is optional.

### Summary of Requirements for Major/Minor in Geography (without specialized concentration)

#### Major

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
   - GEOG 405 Global Climate System
   - GEOG 430 Surface Water Hydrology
   - GEOG 431 Quaternary Environments
   - GEOG 445 Biogeography

3. **Advanced Human Geography:** (3 hours)
   - GEOG 300 Economic Geography
   - GEOG 324 Urban Geography: Internal City Patterns
   - GEOG 325 Urban Geography: Metropolitan Systems
   - GEOG 407 Political Geography
   - GEOG 410 Locational Analysis
   - GEOG 423 Geography of the Suburbs
   - GEOG 425 Geography of Transportation
   - GEOG 427 Geography of Languages & Religions (GEP Group F)
   - 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 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. & Conservation of Natural Resources
   - GEOG 450 Urban Planning

#### Minor

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

### Hours Required in Geography:

<table>
<thead>
<tr>
<th>Major</th>
<th>Minor</th>
</tr>
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<tbody>
<tr>
<td>41-44</td>
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<td>42-43</td>
<td>38-39</td>
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<td>44-45</td>
<td>50-51</td>
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</table>

<table>
<thead>
<tr>
<th>Hours Required in Other Departments:</th>
<th>Major</th>
<th>Minor</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>12-13</td>
<td>9</td>
</tr>
<tr>
<td>0</td>
<td>6</td>
<td></td>
</tr>
</tbody>
</table>
Requirements for Climate Science 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 Mapping Sciences
   GEOG 380 Research Methods in Geography
   GEOG 480 The Geographic Perspective
   GEOG 481 Geography Capstone

2. Required Climate Science Courses: (15-16 hours)
   GEOG 205 or PHSC 205 Descriptive Meteorology
   GEOG 335 Oceanography
   or GEOG 430 Surface Water Hydrology
   GEOG 405 Physical Climatology
   GEOG 429 Synoptic Climatology
   GEOG 469 Principles of Atmospheric Dynamics

3. Advanced Physical Geography: (3-4 hours)
   Select one from:
   GEOG 335 Oceanography*
   GEOG 340 Soil: Genesis, Nature & Characterization
   GEOG 430 Surface Water Hydrology*
   GEOG 431 Quaternary Environments
   GEOG 432 Groundwater Hydrology
   GEOG 445 Biogeography
   GEOG 460 Natural Hazards in the Physical Environment

4. Advanced Human Geography: (3 hours)
   Select one from:
   GEOG 324 Urban Geography: Internal City Patterns
   GEOG 325 Urban Geography: Metropolitan Systems
   GEOG 360 Food Systems
   GEOG 406 Conservation & Management of Natural Resources
   GEOG 410 Locational Analysis
   GEOG 423 Geography of the Suburbs
   GEOG 425 Geography of Transportation

5. Geographic Techniques: (3 hours)
   Select one from:
   GEOG 317 Principles of Geographic Information Science
   GEOG 413 Remote Sensing – Image Interpretation
   GEOG 420 Topics in the Mapping and Geospatial Sciences

6. Required Courses in Other Departments (6 hours)
   MATH 109/110 Elements of Applied Probability and Statistics (Core Skill 3)
   or MATH 220 Calculus for Applications
   or MATH 236 Calculus 1 (Core Skill 3)

7. Recommendations:
   Students are encouraged to select additional course work:
   COSC 130 Introduction to Programming
   MATH 221 Calculus for Applications 2
   PHSC 215 General Physics 1
   Additional Geographic Techniques courses
   Additional Advanced Physical Geography courses

* if not used to fulfill Climate Science Requirement
Requirements for Global Systems Analysis Concentration

1. Required Core Courses: (20 hours)
   GEG 103 Physical Geography (GEP Group C)
   GEG 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 325 Urban Geography: Metropolitan Systems
   GEOG 410 Locational Analysis
   GEOG 423 Geography of the Suburbs
   GEOG 425 Geography of Transportation
   GEOG 427 Geography of Languages and Religions (GEP Group F)
   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 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 Global Climate System
   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 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. 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 Mapping and Geospatial Sciences
   GEOG 433 Surveying and Field Techniques

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 Global Climate System
   GEOG 430 Surface Water Hydrology
   GEOG 431 Quaternary Environments
   GEOG 445 Biogeography

   Group II Human Geography: (0-3 hours)
   GEOG 300 Economic Geography
   GEOG 324 Urban Geography: Internal City Patterns
   GEOG 325 Urban Geography: Metropolitan Systems
   GEOG 407 Political Geography
   GEOG 410 Locational Analysis
   GEOG 423 Geography of the Suburbs
   GEOG 425 Geography of Transportation
   GEOG 427 Geography of Languages and Religions (GEP Group F)
   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 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 & Statistics (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)
   COSC 330 Web Design and Development (3 hours)
   ITEC 315 Programming (3 hours)
   ITEC 345 Database Systems I (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 (Chair), Davis, Dieruf

Associate Professors:
Hein, Herzfeld, Hodges, Odone

Assistant Professor:
English

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.

<table>
<thead>
<tr>
<th>Minor</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours Required in Art:</td>
<td>21</td>
</tr>
<tr>
<td>Hours Required in Other Departments:</td>
<td>0</td>
</tr>
<tr>
<td>Total Hours Required:</td>
<td>21</td>
</tr>
</tbody>
</table>

1. Basic Courses: (9 hours)

<table>
<thead>
<tr>
<th>Art</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 104 Two-Dimensional Design</td>
<td></td>
</tr>
<tr>
<td>ART 207 Graphic Design (Tech. Fluency)</td>
<td></td>
</tr>
<tr>
<td>ART 212 Drawing</td>
<td></td>
</tr>
</tbody>
</table>

2. Introductory Studio: (3 hours)

Choose from:

<table>
<thead>
<tr>
<th>Art</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 216 Illustration</td>
<td></td>
</tr>
<tr>
<td>ART 221 Painting</td>
<td></td>
</tr>
<tr>
<td>ART 232 Printmaking</td>
<td></td>
</tr>
<tr>
<td>ART 235 Photography</td>
<td></td>
</tr>
</tbody>
</table>

3. Advanced Studio Focus: (9 hours)

<table>
<thead>
<tr>
<th>Art</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 307 Computer Graphics</td>
<td></td>
</tr>
<tr>
<td>ART 407 Advanced Graphic Design: Print</td>
<td></td>
</tr>
<tr>
<td>ART 414 Advanced Graphic Design: Interactive Multimedia Design</td>
<td></td>
</tr>
</tbody>
</table>

Coordinator:
R. Scott Fritz, Professor/Associate Dean

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:

<table>
<thead>
<tr>
<th>Biology</th>
<th>Philosophy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemistry</td>
<td>Psychology</td>
</tr>
<tr>
<td>Kinesiology</td>
<td>Physics and Engineering</td>
</tr>
<tr>
<td>Mathematics</td>
<td>Sociology</td>
</tr>
</tbody>
</table>

Health Science

Major

Coordinator:
R. Scott Fritz, Professor/Associate Dean

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.

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Participating Departments:

<table>
<thead>
<tr>
<th>Biology</th>
<th>Philosophy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemistry</td>
<td>Psychology</td>
</tr>
<tr>
<td>Kinesiology</td>
<td>Physics and Engineering</td>
</tr>
<tr>
<td>Mathematics</td>
<td>Sociology</td>
</tr>
</tbody>
</table>

Summary of Requirements for Major in Health Science

<table>
<thead>
<tr>
<th>Major</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Hours Required in HSCI:</td>
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<tr>
<td>Hours Required in Other Departments:</td>
<td>63-71</td>
</tr>
<tr>
<td>Total Hours Required:</td>
<td>67-75</td>
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</table>

1. Required GEP Courses

<table>
<thead>
<tr>
<th>Biology</th>
<th>149 General Biology I (GEP Group C)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemistry</td>
<td>201 General Chemistry I (GEP Group C)</td>
</tr>
<tr>
<td>English</td>
<td>101 Freshman Composition (Core Skill)</td>
</tr>
<tr>
<td>English</td>
<td>338/339 Technical/Scientific Writing (Core Skill)</td>
</tr>
<tr>
<td>Math</td>
<td>119 College Algebra (or higher) (Core Skill)</td>
</tr>
<tr>
<td>Philosophy</td>
<td>102 Contemporary Ethical Problems (GEP Group B)</td>
</tr>
<tr>
<td>Psychology</td>
<td>150 General Psychology (GEP Group D)</td>
</tr>
<tr>
<td>Sociology</td>
<td>100 Introduction to Sociology (GEP Group D)</td>
</tr>
</tbody>
</table>

2. Health Science Required Courses

(37 credits)

<table>
<thead>
<tr>
<th>Biology</th>
<th>160 General Zoology</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biology</td>
<td>321/322 Anatomy and Physiology I/II</td>
</tr>
<tr>
<td>or Biology 302 Animal Physiology and Biology 427 Comparative Anatomy</td>
<td></td>
</tr>
<tr>
<td>Chemistry</td>
<td>202 General Chemistry II</td>
</tr>
<tr>
<td>Health Science</td>
<td>101 Community Health Promotion</td>
</tr>
<tr>
<td>Health Science</td>
<td>101 Medical Terminology</td>
</tr>
<tr>
<td>Math</td>
<td>109 Statistics</td>
</tr>
<tr>
<td>Philosophy</td>
<td>313 Biomedical Ethics</td>
</tr>
<tr>
<td>Physics</td>
<td>215 General Physics I</td>
</tr>
<tr>
<td>Physics</td>
<td>216 General Physics II</td>
</tr>
<tr>
<td>Health Science</td>
<td>491 Health Science Capstone</td>
</tr>
</tbody>
</table>

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.
### Health Sciences Preparatory Programs

#### Dental Hygiene Preparation

**Pre-professional program**

| Summary of Requirements for Pre-professional Program in Dental Hygiene Preparation |
|---|---|
| **1. Science Courses** (28 hours) | **4. Psychology** (6 hours) |
| BIOL 149* General Biology I | PSYC 150 General Psychology |
| BIOL 304 Microbiology | PSYC 208 Introduction to Lifespan Development |
| BIOL 310 Cell Biology | PSYC 210 Child Development |
| BIOL 310 Cell Biology | PSYC 212 Adolescent and Adult Development |
| BIOL 321* Anatomy and Physiology I | PSYC 214 Introduction to Geropsychology |
| BIOL 322* Anatomy and Physiology II | PSYC 220 Psychology of Women |
| CHEM 311/312 Organic Chemistry I | PSYC 250 Death and Dying |
| CHEM 321/322 Organic Chemistry II | PSYC 317 Abnormal Psychology |
| CHEM 455 Biochemistry I | PSYC 345 Animal Learning and Cognition |
| CHEM 456 Biochemistry Laboratory | PSYC 386 Drugs and Human Behavior |
| CHEM 457 Biochemistry II | PSYC 409 Human Learning and Cognition |
| EXSS 200 Nutrition | PSYC 420 Physiological Psychology |
| EXSS 303 Biomechanics for Exercise and Sport Science | PSYC 430 Health and Psychology |
| EXSS 341 Psychology of Physical Activity | PSYC 489 Abnormal Child Psychology |
| EXSS 401 Physiology of Exercise | SOCI 367 Sociology of Medicine |
| HLTH 125 Health and Culture | SOCI 466 Women, Health and Healing |
| HLTH 230 Epidemiology of Health | SOCI 468 Sociology of Later Life |
| HLTH 405 Sexuality | **5. Sociology** (3 hours) |
| **2. Non-Science Courses** (12 hours) | **SOCI** 100 Introduction to Sociology |
| ENGL 101 Freshman Composition | **6. Nutrition** (3 hours) |
| ENGL 310 or 312 Advanced Composition | HEED 200 Nutrition |
| ENGL 338 Technical Writing | **7. Public Speaking** (3 hours) |
| MATH 109 Elements of Applied Probability and Statistics | CMST 122 Introduction to Public Speaking |
| **3. Humanities** (3 hours) | **8. Social Sciences** (6 hours) |
| This course can be taken in the categories of literature, philosophy, foreign languages, music and art appreciation, fine arts, math, particular education courses and history. Courses must be academic, non-studio courses. Physical Education courses are not transferable. | Social science electives can be taken in the categories of psychology and sociology — in addition to the required introductory courses, anthropology, political science, economics, cultural studies, women's studies, geography, business management, religion, information systems (not keyboarding courses) and education. Introduction to Computers (academic course — COSC 100) would be an acceptable 3-hour social science elective. |

**Coordinator:**
Karen Keller, Associate Professor, Department of Biology

- The listed pre-professional courses are required for students interested in attending the University of Maryland, Baltimore's Dental Hygiene Program. These courses could also be taken, together with additional requirements, by students interested in attending other programs in Dental Hygiene.

- It is expected that each student enrolled in the Pre-Dental Hygiene Program will earn at least a C grade in all prerequisite courses and a minimum 3.0 cumulative grade point average and a 3.0 cumulative grade point average in biology, chemistry, and nutrition to be considered competitive for the program.

- You cannot major or minor in Dental Hygiene Preparation.
Summary of Requirements for Medical, Dental, Optometry & Veterinary Medicine Pre-Health Professions Program

1. Students intending to enter health professions schools should plan their academic programs carefully to meet pre-professional, university and major requirements.

2. Pre-health professions students should continually examine the catalog of the institution they plan to attend in order to complete courses required by the professional school and to fulfill additional entrance expectations. Students should bear in mind that requirements change and they should maintain contact with any professional schools they want to attend.

3. A science major is not a prerequisite for medical school; therefore, a major should be selected in which the student has a high aptitude and interest and which provides career alternatives. A proper course selection is most important; consequently, we highly recommend early consultation with the chair of the department of your selected major, who will assign you to a pre-health professions advisor.

4. Though students may choose any major, most pre-health professions students at FSU select biology or chemistry as majors. The Pre-Health Professions Option outlined in the Biology section of this catalog should be selected by students majoring in Biology. Chemistry students planning medical school and other pre-health professional programs complete either the Biochemistry concentration or Traditional Track outlined for the Chemistry major. Students opting to minor in either department are advised to use sections 5 and 6 below as a guide to course selection.

5. Professional schools generally require a demonstrated proficiency in the basic sciences. The following courses are among the minimum requirements for students planning to prepare for medical, dental, optometry or veterinary school.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 149 and 160</td>
<td>General Biology I and Intro to Zoology</td>
<td>8 cr.</td>
</tr>
<tr>
<td>CHEM 201 and 202</td>
<td>General Chemistry I and II</td>
<td>8 cr.</td>
</tr>
<tr>
<td>CHEM 311/312 and 321/322</td>
<td>Organic Chemistry I and II</td>
<td>8 cr.</td>
</tr>
<tr>
<td>PHYS 215, 216 or 261, 262</td>
<td>General Physics I, II or Principles of Physics I, II</td>
<td>8 cr.</td>
</tr>
</tbody>
</table>

6. Some professional schools require and many recommend additional courses as minimal requirements. The following list should be used as a guide for course selection by students in any major.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 302</td>
<td>Animal Physiology</td>
<td>4 cr.</td>
</tr>
<tr>
<td>BIOL 304</td>
<td>Microbiology</td>
<td>4 cr.</td>
</tr>
<tr>
<td>BIOL 310</td>
<td>Cell Biology</td>
<td>4 cr.</td>
</tr>
<tr>
<td>BIOL 321</td>
<td>Anatomy &amp; Physiology I</td>
<td>4 cr.</td>
</tr>
<tr>
<td>BIOL 322</td>
<td>Anatomy &amp; Physiology II</td>
<td>4 cr.</td>
</tr>
<tr>
<td>BIOL 350</td>
<td>Genetics</td>
<td>3 cr.</td>
</tr>
<tr>
<td>BIOL 401</td>
<td>Genetics Laboratory</td>
<td>1 cr.</td>
</tr>
<tr>
<td>BIOL 404</td>
<td>Histology</td>
<td>4 cr.</td>
</tr>
<tr>
<td>BIOL 427</td>
<td>Comparative Anatomy</td>
<td>4 cr.</td>
</tr>
<tr>
<td>BIOL 435</td>
<td>Molecular Biology</td>
<td>4 cr.</td>
</tr>
<tr>
<td>CHEM 320</td>
<td>Quantitative Analytical Chemistry</td>
<td>4 cr.</td>
</tr>
<tr>
<td>CHEM 455, 456, 457</td>
<td>Biochemistry Lec. I &amp; II and Lab</td>
<td>6 cr.</td>
</tr>
<tr>
<td>ENGL 338</td>
<td>Technical Writing</td>
<td>3 cr.</td>
</tr>
<tr>
<td>MATH 120</td>
<td>Pre-Calculus</td>
<td>3 cr.</td>
</tr>
<tr>
<td>MATH 109 or 380</td>
<td>Calculus I, II, III</td>
<td>12 cr.</td>
</tr>
<tr>
<td>MATH 236, 237, 238</td>
<td>Probability &amp; Statistics</td>
<td>3 cr.</td>
</tr>
<tr>
<td>PHIL 313</td>
<td>Biomedical Ethics</td>
<td>3 cr.</td>
</tr>
<tr>
<td>SOC 367</td>
<td>Sociology of Medicine</td>
<td>3 cr.</td>
</tr>
</tbody>
</table>

7. Biochemistry I (CHEM 455) is an entrance requirement at the Virginia-Maryland Regional College of Veterinary Medicine.

8. Almost all professional schools require applicants to take certain standardized examinations.

Medical Schools — Medical College Admission Test (MCAT).
Dental Schools — Dental Admissions Test (DAT).
Optometry Schools — Optometry Admission Test (OAT).
Veterinary Schools — Graduate Record Exam (GRE).

You may obtain information about the tests from Career Services.
Medical Technology Preparation

Summary of Requirements for Pre-professional Program in Medical Technology

1. Biology: (15-16 hours)
   BIOL 149 General Biology I
   BIOL 304 Microbiology
   BIOL 321 Anatomy and Physiology I

2. Chemistry (12 hours)
   CHEM 201 General Chemistry I
   CHEM 202 General Chemistry II
   CHEM 311 & 312 Organic Chemistry I (and lab)

3. English (6 hours)
   ENGL 101/111 Freshman Composition
   or ENGL 310/312 Advanced Composition
   ENGL 150/250 Intro. to Literature
   or an advanced English/American Literature course

4. Humanities (3 hours)
   Select a non-performing course from art, music, foreign language (2nd year or above), humanities, communication studies, theatre, philosophy.

5. Mathematics (6 hours)
   MATH 119 College Algebra
   or MATH 120 Pre-Calculus
   or MATH 236 Calculus I
   MATH 109/110 Elements of Applied Probability and Statistics
   or MATH 380 Intro. to Probability and Statistics

6. Guided Electives (3 hours)
   Select a Communications Studies (CMST) course focusing on communication and/or speech course such as CMST 102/112 Intro. to Human Communication or CMST 122 Intro. to Public Speaking.

7. Social Sciences (6 hours)
   Select courses from economics, geography, history, political science, psychology, sociology, African American studies.

8. Electives (minimum 8 hours)
   Select courses from biology, chemistry, and physics.
   Strongly recommended:
   CHEM 321 & CHEM 322 Organic Chemistry II (and lab)
   PHYS 215 General Physics I or PHYS 261 Principles of Physics I
   PHYS 216 General Physics II or PHYS 262 Principles of Physics II

Nursing Preparation

A liberal arts program is recommended as preparation for professional study in the field of nursing, particularly if you are interested in the additional career opportunities available to those earning a B.S. degree in Nursing. The courses below are a sample of prerequisite courses required for nursing programs. Please work closely with advisor from the Department of Nursing to determine courses required.

1. Biology: (16 hours)
   BIOL 149 General Biology I
   BIOL 304 Microbiology
   BIOL 321 Anatomy & Physiology I
   BIOL 322 Anatomy & Physiology II

2. Chemistry: (4 or 8 hours)
   CHEM 201 General Chemistry I
   CHEM 202 General Chemistry II

3. English: (6 hours)
   ENGL 101 Freshman Composition
   ENGL 308 Social Sciences Advanced Composition
   or ENGL 338 Technical Writing
   or ENGL 339 Scientific Writing

4. Humanities: (9 hours)
   Must include courses from at least three of the following disciplines:
   English (literature courses), history, philosophy, foreign languages, music/art (history and/or appreciation), speech

5. Social Sciences (9 hours)
   PSYC 150 General Psychology
   PSYC 208 Intro to Lifespan Development
   SOCI 100 Introduction to Sociology

6. Other Required Courses: (9 hours)
   EXSS 200 Nutrition
   MATH 119 College Algebra
   MATH 109 Elements of Probability and Statistics
Occupational Therapy Preparation

Pre-professional program

The following information is relevant for students interested in the Combined BS/MS Occupational Therapy Program at Towson University. The prerequisite courses may also be taken, together with additional requirements, by students interested in completing a professional occupational therapy program at other institutions. Applicants must consult the occupational therapy pages on Towson’s website for additional information about the program, including any changes made subsequent to this catalog. Applicants are also highly encouraged to contact the Admissions and Placement Coordinator for the College of Health Professions at Towson University for additional information at 410.704.2653.

- Candidates must apply to Towson University and complete the Supplemental Application for the Combined BS/MS Program that can be found online at the website listed below. The supplemental application must be received by March 1.
- Applicants must apply to Towson University by Jan. 15 for fall admission.
- Applicants must have completed a minimum of 13 units in college courses, excluding developmental courses, by the end of the fall term preceding screening.

Summary of Requirements for Pre-professional Program in Occupational Therapy

**Prerequisite Courses:** (13 hours)

<table>
<thead>
<tr>
<th>Course</th>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 149</td>
<td>149</td>
<td>General Biology I</td>
</tr>
<tr>
<td>or BIOL 321</td>
<td>321</td>
<td>Anatomy and Physiology I</td>
</tr>
<tr>
<td>ENGL 101/111</td>
<td>101/111</td>
<td>Freshman Composition</td>
</tr>
<tr>
<td>PSYC 150/151</td>
<td>150/151</td>
<td>General Psychology</td>
</tr>
<tr>
<td>SOCI 100/111</td>
<td>100/111</td>
<td>Intro. to Sociology</td>
</tr>
</tbody>
</table>

For further information, consult the website for Towson University, Combined Bachelors & Master’s OT Program: www.towson.edu/ot
Pharmacy Preparation

Pre-professional program

Summary of Requirements for Pre-professional Program in Pharmacy

<table>
<thead>
<tr>
<th>Category</th>
<th>Hours</th>
<th>Courses</th>
</tr>
</thead>
</table>
| 1. Biology       | 16    | BIOL 149 General Biology I  
|                  |       | BIOL 304 Microbiology  
|                  |       | BIOL 321 Anatomy & Physiology I  
|                  |       | BIOL 322 Anatomy & Physiology II  |
| 2. Chemistry     | 16    | CHEM 201 General Chemistry I  
|                  |       | CHEM 202 General Chemistry II  
|                  |       | CHEM 311 Organic Chemistry I  
|                  |       | CHEM 312 Organic Chemistry I Lab  
|                  |       | CHEM 321 Organic Chemistry II  
|                  |       | CHEM 322 Organic Chemistry II Lab  
|                  |       | CHEM 455 Biochemistry I (recommended) |
| 3. English       | 6     | ENGL 101/111 Freshman Composition  
|                  |       | ENGL 310/312 Advanced Composition  
|                  |       | or ENGL 338 Technical Writing  
|                  |       | or ENGL 339 Scientific Writing  |
|                  |       | or MATH 380 Introduction to Probability and Statistics  
|                  |       | and MATH 236 Calculus I  |
| 5. Physics       | 8     | PHYS 215 General Physics I  
|                  |       | or PHYS 216 General Physics II  
|                  |       | or PHYS 261 Principles of Physics I  
|                  |       | and PHYS 262 Principles of Physics II  |
| 6. Humanities    | 6     |         |
| 7. Social Sciences| 6   | ECON 202 Principles of Economics (Micro)  
|                  |       | And one other Social Science elective  |
| 8. Humanities/Social Science Electives | 6 | CMST 122 Introduction to Public Speaking  
|                  |       | and one other Humanities/Social Science elective  |

Total Hours: 65

Physical Therapy Preparation

Pre-professional program

Summary of Requirements for Pre-professional Program in Physical Therapy

<table>
<thead>
<tr>
<th>Category</th>
<th>Hours</th>
<th>Courses</th>
</tr>
</thead>
</table>
| 1. Biology       | 16    | BIOL 149 General Biology I (GEP Group C)  
|                  |       | BIOL 321 Anatomy and Physiology I  
|                  |       | BIOL 322 Anatomy and Physiology II  
|                  |       | Any 300- or 400-level biology course with lab (excluding botany courses) in addition to the courses listed above |
| 2. Chemistry     | 8     | CHEM 201 General Chemistry I (GEP Group C)  
|                  |       | CHEM 321 General Chemistry II  |
| 3. Mathematics   | 6     | MATH 119 College Algebra (co-requisite for CHEM 201)  
|                  |       | MATH 109 Elements of Applied Probability & Statistics (Core Skill 3)  
|                  |       | or SOCI 310 Statistics for Social Science  |
| 4. Physics       | 8     | PHYS 215 General Physics I (GEP Group C)  
|                  |       | PHYS 216 General Physics II  |
| 5. Physical Therapy Experience | Required | 100-200 hours of volunteer or aide experience as a current CPR certificate  |

Coordinator:

Melody Kentrus, Assistant Professor, Department of Kinesiology and Recreation
5. Psychology (6 hours)
PSYC 150 General Psychology (GEP Group D)
PSYC 317 Abnormal Psychology

6. Electives (6 hours)
Choose two of the following:
ATTR 320 Pharmacology and General Medical Conditions
EXSS 303 Biomechanics for Exercise and Sport Science
EXSS 341 Psychology of Physical Activity
HEED 200 Nutrition
PSYC 210 Child Development
PSYC 212 Adolescence and Adulthood
PSYC 320 Health Psychology
PSYC 420 Physiological Psychology
(Consult with Physical Therapy Preparation Coordinator concerning other appropriate electives.)

History

Major

Minor

Concentrations in:
- INTERNATIONAL HISTORY
- HISTORY OF THE AMERICAS

Professor:
Abbay, Boniece (Chair)

Associate Professors:
Charney, Wood

Assistant Professors:
Ma, McConnell

Lecturers:
Schuster, Wehrman

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.

Summary of Requirements for Major/Minor in History

Major

Minor

1. Core Introductory Level Courses: (6 hours)
Select from:
HIST 103 History of the United States
HIST 104 History of the United States
HIST 113 World History
HIST 114 World History

(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 four 300/400-level HIST courses except HIST 495.

1. Core Introductory Level Courses: (12 hours)
HIST 103 History of the United States
HIST 104 History of the United States
HIST 113 World History
HIST 114 World History

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
   - HIST 304 History of Latin America
   - 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 445 History of Maryland
   - 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 History
   - HIST 489 Special Topics in History of the Americas

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
   - ECON 309 Comparative Economic Systems
   - ECON 405 Economic Growth and Development
   - ENGL 270 European and Non-European Literature
   - ENGL 271 Asian and African Literature
   - ENGL 332 The Age of Johnson
   - ENGL 340 Shakespeare
   - ENGL 371 The Middle Ages in Literature
   - 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
   - GEOG 320 Geography of Latin America
   - GEOG 401 Geography of Europe
   - GEOG 402 Geography of Northern Eurasia
   - GEOG 403 Geography of Sub-Sahara Africa
   - POSC 330 Politics of Africa
   - POSC 331 Politics of Latin America
   - POSC 332 Politics of the Middle East
   - POSC 333 Politics of Europe
   - POSC 431 Russian Politics
   - FREN 250 or above (250 – GEP Group B)
   - SPAN 250 or above (250 – GEP Group B)

Requirements for History of the Americas Concentration

1. Select five courses from the following:
   - HIST 303 History of Latin America
   - HIST 304 History of Latin America
   - 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 436 Women’s Issues in World History (GEP Group F)
   - HIST 437 History of Korea
   - HIST 445 History of Maryland
   - 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 History
   - HIST 489 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 American Literature: Colonial to Present
   - ENGL 270 European and Non-European Literature
   - ENGL 271 Asian and African Literature
   - ENGL 272 Early Modern Literature
   - ENGL 273 Literature of the Enlightenment
   - ENGL 274 Age of Revolution
   - ENGL 275 Romanticism
   - ENGL 376 Realism and Naturalism
   - ENGL 377 Modernism
   - ENGL 378 Postmodernism
   - ENGL 379 Postcolonial Literature
   - 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 330 Politics of Africa
   - POSC 331 Politics of Latin America
   - POSC 332 Politics of the Middle East
   - POSC 333 Politics of Europe
   - POSC 421 American Legislative Politics
   - POSC 427 The American Presidency
   - POSC 471 American Political Thought
   - SOCI 307 African Americans in Appalachia
   - FREN 250 or above (250 – GEP Group B)
   - SPAN 250 or above (250 – GEP Group B)
Industrial and Organizational Psychology

Minor

Coordinator:
Paul C. Bernhardt, Associate Professor, Department of Psychology

Participating Faculty:

Professors:
Monahan (Management)
Petersen (Psychology)

Associate Professors:
Bernhardt (Psychology), McClellan (Management), Shore (Management)

Assistant Professors:
Chory (Management)

• 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.

Summary of Requirements for Minor in Industrial and Organizational Psychology

Major

| Hours Required in Psychology: | 9-12 |
| Hours Required in Management: | 6-9 |
| Total Hours Required: | 18 |

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:
PSYC 318 Social Psychology
PSYC 385 Group Processes
MGMT 356 Leadership and Human Behavior
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.
Information Technology

Major

Minor

Tracks in
- Accounting
- Business Information Technology
- Computer Security
- Graphic Arts
- Mass Communication

See related programs:
- Computer Information Systems Major & Minor
- Computer Science Major & Minor
  - Concentration in Networks

Professors:
Chitsaz, Rinard (Chair)

Associate Professors:
M. Flinn, Zheng

Assistant Professors:
Pan, Xiao, Xu

Lecturers:
Gbenro, S. Kennedy

- Computer science and information technology courses must have a grade of C or better to be applied towards major or minor requirements.
- You may receive credit by examination for the following courses: COSC 100, 101.

Summary of Requirements for Major/Minor 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 363 PC Module Installation and Maintenance
   - ITEC 364 PC Software Installation and Maintenance
   - 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 Introduction to Mass Communication
     - MCOM 246 Intro to Mass Communication Research Methods
     - MCOM 287 Intro to Video Production
     - MCOM 346 Mass Communication Theory

Requirements for Minor in Information Technology

- COSC 100 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
### Concentration in International Studies

- **INTERNATIONAL BUSINESS**
- **INTERNATIONAL POLITICS**
- **INTERNATIONAL ECONOMICS**
- **INTERNATIONAL DEVELOPMENT**

**Coordinator:**
Richard Russo, Associate Professor, Department of Geography

**Departmental Contacts:**
Professors:
- Abbay (History), Boniece (History),
- Twing (Political Science)

**Associate Professors:**
- McCoskey (Economics), Russo (Geography), Sanchez (English and Foreign Languages)

- The International Studies major is interdisciplinary in nature and allows you to choose from 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 secondary 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.

### Summary of Requirements for Major/Minor in International Studies

#### Major

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Hours Required</th>
<th>Notes</th>
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</thead>
<tbody>
<tr>
<td><strong>Required Core Courses</strong></td>
<td>24 hours</td>
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<tr>
<td>INST 150 Intro to World Religions (GEP Group F)</td>
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<tr>
<td>INST 200 Intro to International Studies (GEP Group F)</td>
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<td>INST 491 Seminar in International Studies (Capstone)</td>
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<tr>
<td>ECON 201/211 Principles of Economics (Macro) (GEP Group D)</td>
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<tr>
<td>or GEOG 110 World Regional Geography: Cultural Diversity (GEP Group D or F)</td>
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<td>HIST 100/111 The Contemporary World in Historical Perspective (GEP Group B or F)</td>
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<td>or HIST 114 World History</td>
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<tr>
<td>MATH 109/110 Elements of Applied Probability and Statistics (Core Skill)</td>
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<tr>
<td>POSC 111/114 Introduction to World Politics (GEP Group D) or POSC 131 Intro to Comparative Politics (GEP Group D or F)</td>
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<tr>
<td><strong>Foreign Language: (12 hours)</strong></td>
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<tr>
<td>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.</td>
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<tr>
<td><strong>Elective Courses: (21 hours)</strong></td>
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<td>Choose seven courses from at least three disciplines in consultation with your advisor. (For those completing a concentration, go to the concentration requirements.)</td>
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<td>AAST 300 Traditional Africa</td>
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<td>AAST 400 Africans of the Diaspora</td>
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<td>ART 301 Artistic Traditions: Asia</td>
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<td>ART 302 Artistic Traditions: Africa and the Americas</td>
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<td>ART 360 Western Art History</td>
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<td>ECON 309 Comparative Economic Systems</td>
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<td>ECON 400 International Trade</td>
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<td>ECON 401 International Finance</td>
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<td>ECON 405 Economics of Developing Countries</td>
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<td>ECON 410 Resource and Energy Economics</td>
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<td>ENGL 270 European &amp; Neo-European Literature</td>
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<td>ENGL 271 Asian &amp; African Literature</td>
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<td>ENGL 379 Postcolonial Literature</td>
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<td>ENGL 418 Second Language Acquisition: Theory &amp; App</td>
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<td>GEOG 300 Economic Geography</td>
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<td>GEOG 320 Geography of Latin America</td>
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<td>GEOG 360 Food Systems</td>
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<td>GEOG 400 Geography of Asia</td>
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<td>GEOG 401 Geography of Europe</td>
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<td>GEOG 402 Geography Northern Eurasia</td>
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<td>GEOG 403 The Geography of Sub-Saharan Africa</td>
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<td>GEOG 404 Geography of the Middle East</td>
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<td>GEOG 406 Mgmt. and Consrv. of Natural Res.</td>
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<td>GEOG 407 Political Geography</td>
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<tr>
<td>GEOG 427 Geog. of Languages and Religions (GEP Group F)</td>
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#### Minor

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<thead>
<tr>
<th>Requirement</th>
<th>Hours Required</th>
<th>Notes</th>
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<tbody>
<tr>
<td><strong>Required Core Courses:</strong> (3 hours)</td>
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<tr>
<td>INST 200 Intro to International Studies (GEP Group F)</td>
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<tr>
<td><strong>Foreign Language:</strong> (0 hours)</td>
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<tr>
<td><strong>Elective Courses:</strong> (18 hours)</td>
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<tr>
<td>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.</td>
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<tr>
<td><strong>Group I (9 hours)</strong></td>
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<tr>
<td>ECON 201/211 Principles of Economics – Macro (GEP Group D)</td>
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<td>ECON 202/212 Principles of Economics – Micro (GEP Group D)</td>
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<td>GEOG 104/114 Human Geography (GEP Group D or F) or GEOG 110 World Regional Geography: Cultural Diversity (GEP Group D or F)</td>
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<td><strong>Group II (9 hours)</strong></td>
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<td>ECON 309 Comparative Economic Systems</td>
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<td>FINA 470 International Financial Management</td>
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<td>GEOG 300 Economic Geography</td>
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<td>LING 301 Introduction to Language</td>
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<td>MGMT 450 International Management</td>
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<td>MKTG 460 International Marketing</td>
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<td>PHIL 308 Political Philosophy (GEP Group F)</td>
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<td>POSC 336 Politics of Food</td>
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<td>POSC 341 International Organization</td>
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<td>POSC 342 Foreign Policy of the United States</td>
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<td>POSC 370 Introduction to Political Thought</td>
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<td>POSC 441 International Relations: Theory and Practice</td>
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<td>POSC 443 Transnational Terrorism and Counter-Terrorism</td>
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<tr>
<td>POSC 488 Comparative Legal Systems</td>
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</tbody>
</table>
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 |
   | B LAW 291 | Legal Environment of Business |
   | INTR 330 | International Business |

   and one of the following pairs of courses:

   | FINA 370 | Corporate Finance* |
   | FINA 470 | International Financial Management |
   | MGMT 251 | Management of Organizations |
   | MGMT 450 | International Management |
   | MKTG 361 | Principles of Marketing |
   | MKTG 460 | International 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 360 | Food Systems |
   | GEOG 407 | Political Geography |
   | GEOG 427 | Geography of Languages and Religions (GEP Group F) |
   | HIST 409 | World Environmental History |
   | INST 490 | Special Topics in International Studies |
   | INST 492 | Internship Seminar (if internship is relevant to International Business) |
   | PHIL 308 | Political Philosophy (GEP Group F) |
   | POSC 336 | Politics of Food |
   | POSC 341 | International Organization |
   | POSC 441 | International Relations: Theory and Practice |
   | POSC 488 | Comparative Legal Systems |

*Students should be aware that there are additional MATH and ACCT prerequisites for FINA 370; also, students are advised to complete FINA 303 before enrolling in FINA 370.
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: (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: (9 hours)
   - Three from among the following:
     - ECON 400 International Trade
     - HIST 419 A History of Terrorism
     - INST 490 Special Topics 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 the Middle East
     - POSC 336 Politics of Food

Requirements for International Development 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 309 Comparative Economic Systems
   - ECON 405 Economics of Developing Countries
   - GEOG 300 Economic Geography
   - MATH 118 Algebra With Calculus for Business
   - MATH 220 Calculus for Applications I
   - MATH 236 Calculus I (Core Skill 3)
   B. Elective Courses: (6 hours)
   - Two from among the following:
     - ECON 309 Comparative Economic Systems
     - ECON 410 Resource and Energy Economics
     - GEOG 300 Economic Geography
     - INST 490 Special Topics in International Studies
     - INST 492 Internship Seminar (if internship is relevant to International Development)
     - POSC 330 Politics of Africa
     - POSC 331 Politics of Latin America
     - POSC 332 Politics of the Middle East
     - POSC 336 Politics of Food

Requirements for International Economics 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
     - ECON 401 International Finance
     - GEOG 320 Geography of Latin America
     - GEOG 360 Food Systems
     - GEOG 400 Geography of Asia
     - GEOG 403 The Geography of Sub-Saharan Africa
     - GEOG 404 Geography of the Middle East
     - GEOG 407 Political Geography
     - HIST 301 Traditional Africa
     - HIST 304 History of Latin America
     - HIST 341 Modern and Contemporary Middle East
     - HIST 353 Contemporary Africa
     - HIST 360 Modern and Contemporary Asia
     - HIST 455 Latin American Revolutions
     - HIST 457 India
     - INST 490 Special Topics in International Studies
     - INST 492 Internship Seminar (if internship is relevant to International Economics)
     - PHIL 311 Asian and African Philosophy (GEP Group F)
     - POSC 330 Politics of Africa
     - POSC 331 Politics of Latin America
     - POSC 332 Politics of the Middle East
     - POSC 336 Politics of Food

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
   - GEOG 400 Geography of Asia
   - GEOG 403 The Geography of Sub-Saharan Africa
   - GEOG 404 Geography of the Middle East
   - GEOG 407 Political Geography
   - HIST 301 Traditional Africa
   - HIST 304 History of Latin America
   - HIST 341 Modern and Contemporary Middle East
   - HIST 353 Contemporary Africa
   - HIST 360 Modern and Contemporary Asia
   - HIST 455 Latin American Revolutions
   - HIST 457 India
   - INST 490 Special Topics 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 the Middle East
   - POSC 442 National Security Policy
   - POSC 443 Transnational Terrorism and Counter-Terrorism
   - POSC 488 Comparative Legal Systems

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 Special Topics 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 the 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
     - POSC 488 Comparative Legal Systems
Jazz Studies

Minor

Program Coordinator:
Brent Weber, Assistant 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.

Jazz Studies Minor Core Requirements:

<table>
<thead>
<tr>
<th>Minor</th>
<th>MINOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours Required in Music:</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>

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 215 Beginning Improvisation
   - MUSC 216 Advanced Improvisation
   - 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 116-123 Private Instruction and/or MUSA 356-363 Private Instruction
Journalism

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.

Summary of Requirements for Minor in Journalism

**Minors**

<table>
<thead>
<tr>
<th>Total Hours Required:</th>
<th>24</th>
</tr>
</thead>
</table>

1. **English:** (12 hours)
   - ENGL 336 Journalistic Writing
   - ENGL 402 Editing and Production
   - ENGL 436 Advanced News and Feature Writing
   - ENGL 494 Field Experience

2. **History:** (3 hours)
   - Choose one from the following:
     - HIST 304 History of Latin America
     - HIST 341 Modern and Contemporary Middle East
     - HIST 353 Contemporary Africa
     - HIST 360 Modern and Contemporary Asia
     - HIST 376 Modern Europe
     - HIST 404 Revolutionary and Soviet Russia
     - HIST 467 U.S. in the 20th Century, 1945-Present
     - HIST 475 Genocide and Mass Violence

3. **Mass Communication:** (6 hours)
   - MCOM 326 Writing for the Electronic Media
   - MCOM 447 Telecommunications Law

4. **Political Science:** (3 hours)**
   - POSC 363 Media and Politics***

**Students minoring in journalism are encouraged to take HIST 100, The Contemporary World in Historical Perspective, towards fulfilling the six-hour requirement in the Humanities (Group B) for the General Education Program.**

**Students minoring in journalism are encouraged to take POSC 110, Introduction to American Politics, or POSC 113, Introduction to World Politics, towards fulfilling the six-hour requirement in the Social Sciences (Group D) for the General Education Program.**

***The Political Science Department has agreed to waive the pre-requisite for POSC 363 for journalism minors.**
Summary of Requirements at FSU for the Bachelors/Juris Doctor Program

1. Complete 91 credit hours with Frostburg State University.
2. Complete all of Frostburg State University's general education requirements.
3. Maintain cumulative grade point averages as required at FSU for the academic major and overall course work.
4. Complete all requirements for an academic major at Frostburg State University.
5. Be accepted by the University of Baltimore School of Law into its early admission program. Students can apply for early admission by simply checking the appropriate box on the regular application form.
6. Attain the Bachelor's degree from Frostburg State University upon transferring 29 credits from the University of Baltimore School of Law.

In addition it is recommended that students meet the following criteria:
1. Maintain a grade point average of 3.3 or above at Frostburg State University to enhance the chances for acceptance by the University of Baltimore School of Law.
2. Complete one of the following majors at Frostburg State University: economics, French, geography, history, law and society, philosophy, political science, psychology, sociology, or Spanish. Other majors are possible, but may require the completion of more than 91 credit hours.

Law and Society

Major

Concentrations in:

- CRIMINAL JUSTICE
- LEGAL STUDIES

Coordinator:
Scott Johnson, Professor,
Department of Political Science

Coordinating Committee:
Professors:
S. Johnson (Political Science),
D. Lewis (Political Science)

Associate Professor:
McMullen (Sociology)

Assistant Professor:
Mathias (Philosophy)

Law and Society is an interdisciplinary major that offers concentrations in criminal justice and legal studies.

An internship is optional but strongly encouraged.

You cannot minor in Law and Society.

Summary of Requirements for Major in Law and Society

Major

1. Required Core Courses: (19 hours)
PHIL 102 Contemporary Ethical Problems (GEP Group B)
or PHIL 112 Honors Contemporary Ethical Problems
(PHIL Group B)
POSC 110 Intro. to American Politics (GEP Group D)
or POSC 112 Honors Intro. to American Politics (GEP Group D)
POSC 250 Research Methods
or SOCI 311 Basic Research Methods

2. Concentrations: (27-30 hours) Complete one of the following concentrations:

Concentration in Legal Studies (27 hours)

A. Required Course (3 hours)
PHIL 410 Philosophy of 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 Telecommunications Law
MGMT 457 Labor Relations
PHIL 420 Sport Law and Ethics
POSC 324 Criminal Justice Systems
SCIA 210 Introduction to Cyber Law

Group 2
PHIL 100 Critical Thinking
PHIL 301 Ethics
PHIL 304 Social Philosophy
PHIL 305 Criminal Justice Ethics
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
**Law School Preparation**

**Pre-professional program**

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 analogical. 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:

- **A. Required Courses (30 hours)**
  - CMST 102 Introduction to Human Communication
  - CMST 122 Introduction to Public Speaking
  - PHIL 320 Criminal Justice Ethics
  - PHIL 410 Philosophy of Law
  - POSC 324 Criminal Justice Systems
  - SOCI 200 Social Problems
  - SOCI 203 Deviant Behavior
  - SOCI 340 Criminology
  - SOCI 443 The American Correctional System

- **B. Elective Courses (12 hours)**
  - Select any four of the following courses:
    - PHIL 301 Ethics
    - PHIL 304 Social Philosophy
    - POSC 321 American State & Local Politics

- **3. Internship: (optional; 9 or 15 hours)**
  - POSC 492 Internship Seminar
  - POSC 495 Internship in Political Science

### Concentration in Criminal Justice (30 hours)

- **A. Required Courses (30 hours)**
  - CMST 102 Introduction to Human Communication
  - CMST 122 Introduction to Public Speaking
  - PHIL 301 Ethics
  - PHIL 304 Social Philosophy
  - POSC 321 American State & Local Politics

- **B. Elective Courses (12 hours)**
  - Select any four of the following courses:
    - PHIL 301 Ethics
    - PHIL 304 Social Philosophy
    - POSC 321 American State & Local Politics

**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.
Summary of Requirements for Minor in Leadership Studies

| Minor | Total Hours Required: | 19 |

1. Required Core Courses: (13 credits)
- CMST 102 Introduction to Human Communication
- LEAD 101 Introduction to Leadership Studies
- LEAD 201 Leadership Theories and Practices
- LEAD 401 Citizen Leader

2. Leadership Values and Skills: (3 credits)
Select one of the following courses:
- CMST 215 Small Group Communication
- CMST 300 Interpersonal Communication
- CMST 322 Presentational Communication
- CMST 335 Organizational Communication
- CMST 345 Conflict Management
- MGMT 356 Leadership and Human Behavior
- MGMT 405 Business Ethics and Social Responsibility
- PHIL 301 Ethics
- PHIL 304 Social Philosophy
- PHIL 314 Business Ethics
- POSC 462 Personality and Politics
- PSYC 385 Group Processes
- PSYC 414 Theories of Personality
- PSYC 418 Social Psychology
- SOWK 375 Human Behavior and the Social Environment I
- SOWK 473 Generalist Practice with Groups

3. Leadership Environments: (3 credits)
Select one of the following courses:
- LEAD 499 Independent Study (3 cr.)
- MGMT 251 Management of Organizations
- MGMT 357 Human Resources Management
- 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 380 Recreation Leadership
- RECR 382 Program Planning
- SOCI 325 Community Analysis
- SOWK 370 Introduction to Social Welfare and Social Work
# Liberal Studies

## Major

<table>
<thead>
<tr>
<th>MAJOR</th>
<th>Total Hours Required:</th>
<th>52</th>
</tr>
</thead>
</table>

The Liberal Studies major is an integrative program providing breadth in the arts, humanities, natural and social sciences, and depth in an area of specialization.

The major is adaptable to student interest in technical and/or professional studies and constitutes a desirable preparation for graduate training or for entry and advancement opportunities in a wide array of employment fields requiring a baccalaureate degree.

## Summary of Requirements for Major in Liberal Studies

### Major

#### I. Liberal Core: (21 hours)

A minimum of 21 hours of course work in the arts and sciences in addition to courses satisfying General Education Program requirements, and distributed as follows:

- A. 3 hours in communication arts course that focuses on writing or speaking.
- B. 18 hours in arts and sciences courses, 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) 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, practicum, field work or internship).

#### III. Capstone Seminar (1 hour)

LBST 450: Senior Self-Assessment (capstone)
Mass Communication

Major

Summary of Requirements for Major In Mass Communication

<table>
<thead>
<tr>
<th>Major</th>
<th>Minor</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Introductory/Prerequisite Course:</strong> (3 hours)</td>
<td><strong>1. Required Courses</strong> (18 hours)</td>
</tr>
<tr>
<td>MCOM 105  Introduction to Mass Communication</td>
<td>MCOM 105  Introduction to Mass Communication</td>
</tr>
<tr>
<td><strong>2. Mass Communication Practice Courses:</strong> (9 hours)</td>
<td>MCOM 246* Intro. to Mass Communication Research Methods</td>
</tr>
<tr>
<td>ART 207  Graphic Design (Tech. Fluency)</td>
<td>MCOM 246* Mass Communication Theory</td>
</tr>
<tr>
<td>MCOM 287  Introduction to Video Production</td>
<td>MCOM 447* Telecommunications Law</td>
</tr>
<tr>
<td>MCOM 246* Introduction to Mass Communication Research Methods</td>
<td>MCOM 485* Electronic Media Aesthetics and Criticism</td>
</tr>
<tr>
<td><strong>3. Advanced Mass Communication Courses:</strong> (18 hours)</td>
<td>MCOM 486* Current Issues &amp; New Technologies in Mass Communication</td>
</tr>
<tr>
<td>MCOM 326* Writing for Electronic Media</td>
<td><strong>2. Electives</strong> (6 hours)</td>
</tr>
<tr>
<td>MCOM 346* Mass Communication Theory</td>
<td>Select six additional credits of MCOM courses (excluding MCOM 100 and MCOM 101)</td>
</tr>
<tr>
<td>MCOM 447* Telecommunications Law</td>
<td><strong>5. Professional Focus for majors continued:</strong></td>
</tr>
<tr>
<td>MCOM 485* Electronic Media Aesthetics &amp; Criticism</td>
<td>MCOM 313* Advanced Audio Production</td>
</tr>
<tr>
<td>MCOM 486* Current Issues and New Technology in Mass Communication</td>
<td>MCOM 465* Music Promotion and Production</td>
</tr>
<tr>
<td>MCOM 498* Senior Seminar in Mass Communication (Capstone)</td>
<td>MCOM 499* Directed Study</td>
</tr>
<tr>
<td><strong>4. Internship:</strong> (Minimum of 3 hours)</td>
<td>MUSC 358* The Business of Music and Arts Management</td>
</tr>
<tr>
<td>MCOM 492 and 495 Internship Project/Extended Internship</td>
<td><strong>Group 2</strong></td>
</tr>
<tr>
<td>or MCOM 494 Internship</td>
<td>MCOM 387* Multi-Camera Studio Production</td>
</tr>
<tr>
<td>or One 3-credit Mass Communication Elective</td>
<td>MCOM 487* Advanced Video Production</td>
</tr>
<tr>
<td><strong>5. Professional Focus:</strong> (12 hours)</td>
<td>MCOM 488* Multi-Camera Field Production</td>
</tr>
<tr>
<td>All MCOM majors must complete one of the focus groupings listed below OR one of the following minors: Communication Studies, Graphic Design, Journalism, Leadership Studies, Marketing or Public Relations. 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.</td>
<td>MCOM 499* Directed Study</td>
</tr>
<tr>
<td><strong>Audio Production</strong></td>
<td><strong>Radio Industry</strong></td>
</tr>
<tr>
<td>Choose four from:</td>
<td>Choose four from:</td>
</tr>
<tr>
<td>MCOM 213  Audio Production</td>
<td>CMST 225  Interviewing</td>
</tr>
<tr>
<td>MCOM 250  Announcing and Performance</td>
<td>CMST 335  Organizational Communication</td>
</tr>
<tr>
<td>MCOM 313* Advanced Audio Production</td>
<td>CMST 345  Conflict Communication</td>
</tr>
<tr>
<td>MCOM 465* Music Promotion and Production</td>
<td>MCOM 316* Electronic Media Management</td>
</tr>
<tr>
<td>MCOM 499* Directed Study</td>
<td>MCOM 336* Broadcast-Cable Programming</td>
</tr>
<tr>
<td>MUSC 358  The Business of Music and Arts Management</td>
<td>MGMT 251* Management of Organizations</td>
</tr>
<tr>
<td><strong>Video Production</strong></td>
<td>MGMT 356* Leadership and Human Behavior</td>
</tr>
<tr>
<td>MCOM 387* Multi-Camera Studio Production</td>
<td>MGMT 357* Human Resource Management</td>
</tr>
<tr>
<td>MCOM 487* Advanced Video Production</td>
<td>MUSC 358* The Business of Music and Arts Management</td>
</tr>
<tr>
<td>MCOM 488* Multi-Camera Field Production</td>
<td><strong>Multimedia Design</strong></td>
</tr>
<tr>
<td>MCOM 499* Directed Study</td>
<td><strong>ART</strong> 307* Computer Graphics</td>
</tr>
<tr>
<td><strong>Audio/Video Production</strong></td>
<td>and choose 9 hours (3 hours in one course and 6 hours in the other) from:</td>
</tr>
<tr>
<td>Choose two from each group:</td>
<td><strong>ART</strong> 407* Advanced Graphic Design: Print</td>
</tr>
<tr>
<td><strong>Group 1</strong></td>
<td><strong>ART</strong> 414* Advanced Graphic Design: Interactive Multimedia</td>
</tr>
<tr>
<td>MCOM 213  Audio Production</td>
<td>Design</td>
</tr>
<tr>
<td>MCOM 250  Announcing and Performance</td>
<td><strong>Course has prerequisites; consult the course description section of this catalog</strong></td>
</tr>
<tr>
<td><strong>† 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.</strong></td>
<td><strong>† 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.</strong></td>
</tr>
</tbody>
</table>
## Mathematics

### Major

**Professors:**
Hegde, Hughes, Lemmert, Revennaugh

**Associate Professors:**
Barnet, Michael (Chair), Wojnar

**Assistant Professors:**
Dumnich, Dunmyre, Forsythe, N. Tootoonchi

**Lecturer:**
Devlin

- 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.

### Minor

**Events Planning**
Choose four from:
- CMST 102 Introduction to Human Communication
- CMST 122 Introduction to Public Speaking
- LEAD 101 Introduction to Leadership Studies
- MCOM 465 Music Promotion and Production
- MCOM 499 Directed Study
- MUSC 358 The Business of Music and Arts Management
- RECR 382 Program Planning
- RECR 384 Special Events Management

**Web Management**
- COSC 101 The Discipline of Computer Science (Tech. Fluency)
- COSC 120 Introduction to Cyberspace
- COSC 330 Web Design and Development
- COSC 345 The Internet & Multimedia Communication

**Media Promotions**
Choose four from:
- CMST 322 Presentational Communication
- MCOM 456 Creative Strategies in Adver. & Media Buying
- MCOM 465 Music Promotion and Production
- MCOM 499 Directed Study
- MKTG 361 Principles of Marketing
- MKTG 366 Consumer Behavior
- MUSC 358 The Business of Music and Arts Management

### Summary of Requirements for Major/Minor in Mathematics

<table>
<thead>
<tr>
<th></th>
<th>MAJOR</th>
<th>MINOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours Required in Mathematics:</td>
<td>42</td>
<td>21</td>
</tr>
<tr>
<td>Hours Required in Other Departments:</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total Hours Required:</td>
<td>42</td>
<td>21</td>
</tr>
</tbody>
</table>

#### 1. Basic Courses (21 hours)
- MATH 236 Calculus I (Core Skill 3)
- MATH 237 Calculus II
- MATH 238 Calculus III
- MATH 315 Foundations of Mathematics
- MATH 350 Linear Algebra I
- MATH 491 Seminar in Mathematics (Capstone)

#### 2. Electives (21 hours)
Select from courses at the 300 or 400 level, except MATH 340. Fundamental Concepts of Geometry or MATH 495 Internship in Mathematics. You must select at least one course from each of the following groups.

**A. Geometry and Topology**
- MATH 440 Modern College Geometry
- MATH 460 Introductory Topology

**B. Analysis**
- MATH 425 Introduction to Real Analysis
- MATH 426 Introduction to Complex Analysis

**C. Algebra**
- MATH 451 Modern Higher Algebra
- MATH 452 Linear Algebra II

**D. Applied Mathematics**
- MATH 380 Introduction to Probability and Statistics
- MATH 432 Differential Equations
- MATH 436 Mathematical Physics
- MATH 470 Mathematical Models and Applications
- MATH 480 Probability and Statistics
Summary of Requirements for Focus in Mathematical Sciences

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.

1. Core Mathematics Courses: (3 hours)
   - MATH 315 Foundations of Mathematics
   - MATH 425 Introduction to Real Analysis
   - MATH 440 Modern College Geometry
   - MATH 451 Modern Higher Algebra
   - MATH 460 Introductory Topology
   - MATH 465 Theory of Numbers

2. Applied Mathematics: (9 hours)
   - 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)
   - 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

Coordinator:
Marc Michael Chair, Department of Mathematics

Focus

Summary of Requirements for Double Major in Mathematics and Secondary Teacher Education

If you wish to complete a Maryland State-approved program in teaching secondary Mathematics, you must:

- Complete the BA/BS in Mathematics.
- Declare a second major in Secondary Teacher Education. 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 (21 hours)
   - MATH 236 Calculus I (Core Skill 3)
   - MATH 237 Calculus II
   - MATH 238 Calculus III
   - MATH 315 Foundations of Mathematics
   - MATH 350 Linear Algebra I
   - MATH 491 Seminar in Mathematics (Capstone)

2. Mathematics Teaching Certification Option Requirements (21 hours)
   - MATH 380 Introduction to Probability and Statistics
   - MATH 425 Real Analysis
     Or MATH 426 Complex Analysis
   - MATH 437 Combinatorics and Graph Theory
   - MATH 440 Modern College Geometry
   - MATH 461 History of Mathematics
   - MATH 465 Theory of Numbers
   - MATH 451 Modern Higher Algebra
Music

Major and minor

Concentrations in:
- VOCAL PERFORMANCE
- MUSIC MANAGEMENT

Track in:
- INSTRUMENTAL PERFORMANCE
- MUSIC STUDIES

Teaching Certification Option

Associate Professor:
M. Gallagher

Assistant Professors:
Reddan, Weber

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 or the teaching certification option.

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.

Summary of Requirements for Major/Minor in Music

<table>
<thead>
<tr>
<th>Major</th>
<th>Minor</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Core Requirements:</strong> (47.5-49 hours)</td>
<td><strong>Core Requirements:</strong> (23 hours)</td>
</tr>
<tr>
<td><strong>1. Music Theory:</strong> (16 hours)</td>
<td><strong>1. Music Theory:</strong> (8 hours)</td>
</tr>
<tr>
<td>MUSC 102 Tonal Analysis I</td>
<td>MUSC 102 Tonal Analysis I</td>
</tr>
<tr>
<td>MUSC 103 Tonal Analysis II (Tech. Fluency)</td>
<td>MUSC 103 Tonal Analysis II (Tech. Fluency)</td>
</tr>
<tr>
<td>MUSC 104 Aural Musicanship I</td>
<td>MUSC 104 Aural Musicanship I</td>
</tr>
<tr>
<td>MUSC 105 Aural Musicanship II</td>
<td>MUSC 105 Aural Musicanship II</td>
</tr>
<tr>
<td>MUSC 204 Tonal Analysis III</td>
<td></td>
</tr>
<tr>
<td>MUSC 205 Tonal Analysis IV</td>
<td></td>
</tr>
<tr>
<td>MUSC 206 Aural Musicanship III</td>
<td></td>
</tr>
<tr>
<td>MUSC 207 Aural Musicanship IV</td>
<td></td>
</tr>
</tbody>
</table>

| **2. Music History & Literature:** (9 hours) | **2. Music History & Literature:** (6 hours) |
| MUSC 310 Music Appreciation (GEP Group A) | MUSC 308 Music History I |
| or MUSC 117 Music of Africa, Asia & the Americas (GEP Group A or F) | MUSC 309 Music History II |
| MUSC 311 Music History III | MUSC 313 Music History III |

| **3. Ensemble:** (8 hours for performance specializations, 7 hours for music mgmt. and teaching cert.) | **3. Ensemble:** (3 hours) |
| Select from: | Select from: |
| MUSC 319 University Chorale | MUSC 319 University Chorale |
| MUSC 330 Wind Ensemble | MUSC 330 Wind Ensemble |
| MUSC 335 String Ensemble | MUSC 335 String Ensemble |
| MUSC 336 Chamber Guitar Ensemble | MUSC 336 Chamber Guitar Ensemble |

| **4. Piano Proficiency:** (0 hours) | **4. Private Instruction:** (4 hours) |
| MUSA 415 Piano Proficiency Exam | MUSA 116-123 Private Instruction and/or MUSA 356-363 Private Instruction |

| **5. Private Instruction:** (12 hours) | **5. Recital Attendance:** (2 hours) |
| MUSA 116-123 Private Instruction and/or MUSA 356-363 Private Instruction | MUSA 101 Student Recital Attendance |

| **6. Recital Attendance:** (4 hours for performance specializations, 3.5 hours for music mgmt and teaching cert.) |  |
| MUSA 101 Student Recital Attendance |  |
Summary of Requirements for the Teaching Certification Option in Music

1. Core Courses: (47.5 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 104, 105 Class Piano
     MUSA 208 Class Instruments II: 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 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: (8 hours)
   MUSA 104, 105 Class Piano
   MUSA 116-123 Private Instruction
   MUSA 356-363 Private Instruction
   MUSC 315, 327, 331, 337, 339, 340 Ensembles

4. Other Requirements: (7 hours)
   MUSC 310 Basic Principles of Conducting I - Choral
   And select four hours from:
   MUSA 213 Piano Pedagogy
   MUSC 305 Orchestration
   MUSC 358 Business of Music and Arts Management
   MUSC 360 Special Topics in Music (up to 4 credits)
   MUSC 401 Post-Tonal Analysis
   MUSC 407 Counterpoint
   MUSC 499 Individual Research in Music (up to 4 credits)

Summary of Requirements for the Music Industry Concentration

1. Core Courses: (47.5 hours)
   Required for all music majors; listed above.

2. Advanced Courses: (19-22 hours)
   MCOM 465 Music Promotion and Production
   MUSC 310 Basic Conducting I
   MUSC 390 Junior Recital
   MUSC 358 The Business of Music and Arts Management
   MUSC 492 Senior Project Paper (Capstone)
   MUSC 495 Internship in Music Industry (9 or 12 hours) (Capstone)

3. Required Courses in Other Departments: (21-24 hours)
   - Select one of the following options:
     a. Business Administration Minor (21 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 and Human Behavior
        or BMUS 320 Advanced Computer Appl. in Business
        MKTG 361 Principles of Marketing
        ECON 200 Basic Economics (GE Group D)
        or ECON 211 Principles of Economics-Macro (GE Group D)
     b. Mass Communication Minor (24 hours)
        MCOM 105 Introduction to Mass Communication
        MCOM 246 Intro. to Mass Comm. Research Methods
        MCOM 346 Mass Communication Theory
        MCOM 447 Telecommunications Law
        MCOM 485 Electronic Media Aesthetics and Criticism
        MCOM 486 Current Issues & New Technologies in Mass Communication
        Electives: Select 6 additional credits of MCOM courses (excluding MCOM 100 and MCOM 101)

3. Supplementary Lesson Requirements: (up to 4 credits)
   MUSC 410 Conducting II – Instrumental
   MUSC 412 History of Musical Theatre

Summary of 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)
   MUSC 315, 321, 331, 335, 337, 339, 340 Ensembles

4. Other Requirements for Vocal Performance Majors: (12 hours)
   MUSC 310 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

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.

Summary of Requirements for the Music Studies Track

1. Core Courses: (49 hours)
   Required for all music majors; as listed on p. 129 of current catalog.

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 214 Jazz Theory and Analysis
   MUSC 305 Orchestration
   MUSC 311 Jazz History
   MUSC 360 Special Topics in Music (up to 2 cr.)
   MUSC 410 Conducting II – Instrumental
   MUSC 412 History of Musical Theatre
Musical Theatre

Minor

Summary of Requirements for Minor in Musical Theatre

<table>
<thead>
<tr>
<th></th>
<th>MINOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours Required in Music:</td>
<td>9-11</td>
</tr>
<tr>
<td>Hours Required in Theatre:</td>
<td>12-14</td>
</tr>
<tr>
<td>Hours Required in Dance:</td>
<td>5</td>
</tr>
<tr>
<td>Total Hours Required:</td>
<td>28</td>
</tr>
</tbody>
</table>

1. Music Courses: (9 hours)

- MUSC 102 Theory I 3 cr.
- MUSC 104 Aural Skills I 1 cr.
- MUSC 412/THEA 412 History of Musical Theatre 3 cr.
- MUSA 116 or 356 Private Instruction in 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 I 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)

Students choose from:

- MUSC 321 Opera Workshop 1 cr.
- THEA 105 Performance Practicum (only musical productions will be counted) 1 cr.

Both courses are repeatable for credit.

Students may not fulfill their MUSC 321 and THEA 105 (musical) requirements during the same semester.

Professor:
- Yost-Rushton

Associate Professors:
- Mattis, Rushton

Assistant Professor:
- Reddan

- 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.
Nursing

RN to BSN Completion Program

Collaborative Transfer Program

Major

Coordinator:
Heather A. Gable (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 pre-professional program in Nursing Preparation described in the 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 a part-time, online format 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.

Summary of Requirements for Major in Nursing

General Education Program

All candidates for the Bachelor of Science in Nursing degree must complete a minimum of 41 credits in general education. Courses may be completed at FSU or another institution (except as noted). The FSU course number is specified below. Where a specific course is listed, this is a required course for nursing that meets both major and GEP requirements. Please note that most of the required GEP courses must be completed before enrolling in upper-division nursing courses.

**CORE SKILLS**

1. ENGL 101  Freshman Composition (1)  3 hours
2. ENGL 308  Social Sciences Advanced Composition (2)  3 hours
   or ENGL 338 Technical Writing (2)
   or ENGL 339 Scientific Writing (2)
3. MATH 109/110 Elements of Applied Probability & Statistics  3 hours

<table>
<thead>
<tr>
<th>MAJOR</th>
<th>Hours transferred from community college: 30-55</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Hours earned with unencumbered RN license: 30</td>
</tr>
<tr>
<td></td>
<td>Hours required at Frostburg State: 35-60</td>
</tr>
<tr>
<td></td>
<td>Total Hours Required: 120</td>
</tr>
</tbody>
</table>
**MODES OF INQUIRY**

See the description of the FSU General Education Program in the catalog for a list of courses that meet each requirement.

**A. The Fine and Performing Arts**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 hours</td>
<td></td>
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</tbody>
</table>

**B. The Humanities**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 hours</td>
<td></td>
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</tbody>
</table>

**C. The Natural Sciences**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 100 Chemistry and Society or CHEM 201 General Chemistry I or CHEM 150 General Organic Biochemistry or other approved 4 cr. chemistry* (1, 3)</td>
<td>4 hours</td>
</tr>
<tr>
<td>BIOL 321 Anatomy and Physiology I (articulated) (1)</td>
<td>4 hours</td>
</tr>
</tbody>
</table>

**D. The Social Sciences**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 hours</td>
<td></td>
</tr>
</tbody>
</table>

**E. The FSU Colloquia**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>IDIS 150 Freshman Colloquium (or a 3-credit interdisciplinary community college course approved for GEP credit in the “Interdisciplinary and Emerging Issues” category)</td>
<td>3 hours</td>
</tr>
<tr>
<td>IDIS 350 Advanced Colloquium (2) or one additional course from Groups A - D</td>
<td>3 hours</td>
</tr>
</tbody>
</table>

**F. Identity and Difference**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 hours</td>
<td></td>
</tr>
</tbody>
</table>

**Total General Education Hours**

41 hours

(1) Course completed as part of Associate Degree in Nursing. These courses are prerequisites for all upper-division nursing courses.

(2) Course must be completed at FSU or another four-year college at the upper-division level with a grade of C or better.

(3) Course must be completed with a grade of C or better.

* Corequisite for FSU’s CHEM 201 is MATH 119 (College Algebra).

Advanced composition should be completed prior to or soon after beginning nursing courses.

### Additional Prerequisite Courses

Courses may be completed at ACM, FSU or another institution. FSU course number specified below.

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 322 Anatomy and Physiology II (1)</td>
<td>4 hours</td>
</tr>
<tr>
<td>BIOL 304 Microbiology (1)</td>
<td>4 hours</td>
</tr>
<tr>
<td>HEED 200 Nutrition</td>
<td>3 hours</td>
</tr>
<tr>
<td>PSYC 208 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>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS 401 Health Assessment</td>
<td>3 hours</td>
</tr>
<tr>
<td>NURS 402 Nursing Research and Evidence-Based Practice</td>
<td>3 hours</td>
</tr>
<tr>
<td>NURS 403 Elements of the Professional Nursing Role</td>
<td>3 hours</td>
</tr>
<tr>
<td>NURS 404 Nursing Informatics (Tech. Fluency)</td>
<td>3 hours</td>
</tr>
<tr>
<td>NURS 405 Ethics in Contemporary Nursing Practice</td>
<td>3 hours</td>
</tr>
<tr>
<td>NURS 406 Leadership for Quality and Safety</td>
<td>3 hours</td>
</tr>
<tr>
<td>NURS 491 Population-Focused Nursing Practice</td>
<td>3 hours</td>
</tr>
<tr>
<td>NURS 495 Population-Focused Nursing Practice Practicum</td>
<td>3 hours</td>
</tr>
<tr>
<td>NURS 496 Capstone Project</td>
<td>2 hours</td>
</tr>
</tbody>
</table>

2. Courses outside the discipline:

a. **Required:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MGMT 356 Leadership and Human Behavior</td>
<td>3 hours</td>
</tr>
</tbody>
</table>
b. Electives:
(choose one of the following): 3 hours
- CMST 300 Interpersonal Communication
- HEED 418 Current Issues in Health
- HLLTH 330 Epidemiology of Health
- HLLTH 430 Methods and Materials for Health Promotion
- HLLTH 435 Health Promotion Programming
- MGMT 359 Quality Management
- MGMT 405 Business Ethics and Social Responsibility
- NURS 407 Healthcare Finance
- NURS 410 Contemporary Psychiatric Nursing Practice
- NURS 412 Women's Health in Global Perspectives
- PSYC 386 Drugs and Human Behavior
- PSYC 387 Addictions and Treatment Delivery
- PSYC 388 Treatment Issues and Theory in Addictions
- PSYC 409 Human Learning and Cognition
- PSYC 430 Health Psychology
- PSYC 485 Behavioral Approaches to Human Problems
- SOCI 305 Racial and Cultural Minorities (GEP Group F)
- SOCI 367 Sociology of Medicine
- SOWK 468/SOCI 468 Sociology of Later Life

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:
Kara Platt, 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.
- A cohort of 10 students will be accepted every spring semester into ACM's Nursing Program.
- 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 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 from ACM and then the following semester graduate with their Bachelor of Science in Nursing from FSU.

Pre-Requisites for ACM Nursing Program (33 Credits)
- Biology 321 Anatomy and Physiology I
- Biology 322 Anatomy and Physiology II
- Biology 304 Microbiology
- Math 109 Elements of Applied Probability and Statistics
- English 101 Freshman Composition
- Psychology 150 General Psychology
- Sociology 100 Introduction to Sociology
- Psychology 208 Introduction to Lifespan Development
- 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 page 139-140 of the Undergraduate catalog.
## Philosophy

### Major

<table>
<thead>
<tr>
<th>Hours Required in Philosophy:</th>
<th>30</th>
<th>18</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours Required in Other Departments:</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total Hours Required:</td>
<td>30</td>
<td>18</td>
</tr>
</tbody>
</table>

### Minor

#### Summary of Requirements for Major/Minor in Philosophy

**Major**

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)

2. **Elective Courses:** (18 hours)
   
   **A. Introductory Level** (3 hours)
   - Select one from:
     - 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** (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.

**Minor**

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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**Professor:** Makang

**Associate Professors:** Brassfield, Brill, Mathias (Chair)
Physics

Tracks in:
• TRADITIONAL PHYSICS
• ENGINEERING PHYSICS

Professors:
Deng-Luzader, J. Hoffman, Latta, Plitnik, O. Soysal, Wang

Associate Professors:
Doyle, E. Moore (Chair), Tidrow

Assistant Professors:
Norouzi, Speights, Wondmagegn

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.

Summary of Requirements for Major/Minor in Physics

Major

1. Introductory Level Courses: (15 hours)
   PHYS 261 Principles of Physics I: Mechanics (GEP Group C)
   PHYS 262 Principles of Physics II: Thermodynamics, Electricity and Magnetism
   PHYS 263 Principles of Physics III: Sound & Light
   PHYS 264 Principles of Physics IV: 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)

Minor

1. Introductory Level Courses: (15 hours)
   PHYS 261 Principles of Physics I: Mechanics (GEP Group C)
   PHYS 262 Principles of Physics II: Thermodynamics, Electricity and Magnetism

2. Advanced Courses: (5 hours)
   PHYS 263 Principles of Phys. III: Sound/Light
   PHYS 264 Principles of Physics IV: Modern Physics
   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

Summary of Requirements for Traditional Physics Track

1. Courses required for all majors: (50 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

Summary of Requirements for Engineering Physics Track

1. Courses required for all majors: (50 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.
If you are interested in teaching physics ...

- Students wishing to teach physics at the secondary level (middle and high school) must first obtain a degree in physics 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.

### Political Science

#### Major

- **Professors:** Andorfer, Bowman, Hartlaub, S. Johnson, D. Lewis, O’Rorke, Simpson, Twing (Chair)
- **Lecturer:** Magrath
- Only courses in which you earn a grade of C or better will count towards satisfaction of major or minor requirements.
- The Department strongly encourages majors to consider the internship option.
- POSC 492 counts as elective credit toward POSC major; POSC 495 counts as general elective credit.
- Upon the completion of 75 credit hours, all majors must enroll in POSC 490 Capstone Seminar.

#### Minor

- **Professors:** Andorfer, Bowman, Hartlaub, S. Johnson, D. Lewis, O’Rorke, Simpson, Twing (Chair)
- **Lecturer:** Magrath

### Summary of Requirements for Major/Minor in Political Science

#### Major

<table>
<thead>
<tr>
<th>Hours Required in Political Science:</th>
<th>MAJOR</th>
<th>MINOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours Required in Other Departments:</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total Hours Required:</td>
<td>37</td>
<td>21</td>
</tr>
</tbody>
</table>

- **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. Research Methods:** (3 hours)
  - POSC 250 Research Methods
- **3. Capstone Seminar** (1 hour)
  - POSC 490 Capstone Seminar in Political Science
- **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 322 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

#### Minor

<table>
<thead>
<tr>
<th>Hours Required in Political Science:</th>
<th>MAJOR</th>
<th>MINOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours Required in Other Departments:</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total Hours Required:</td>
<td>37</td>
<td>21</td>
</tr>
</tbody>
</table>

- **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

*Seminar courses may be applicable to the distribution requirements with the prior approval of the department chair.
**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

---

**Summary of Requirements for Double Major in Secondary Teacher Education**

If you wish to complete a Maryland State-approved program in teaching secondary social studies, you must:

- Complete the BA/BS in political science.
- Declare a second major in Secondary Teacher Education. See the Secondary Teacher Education Program Coordinator for details.
- In addition to the regular major requirements, you must take coursework in economics, geography, history, and social science in order to qualify for Maryland State certification in social studies and to meet NCATE accreditation standards. See the Secondary Teacher Education Program Coordinator for details.
Psychology

Major

Minor

Internship Option

Child and Family Psychology Emphasis

Leadership in Psychology Emphasis

Professors:
Bensley, Edwards, Herzog, Murtagh, Peterson, Southerly

Associate Professors:
Bernhardt, J. Flinn (Chair), E. Kennedy, Redmond-Matz

Assistant Professors:
Masciocchi, Morshead

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.

Summary of Requirements for Major/Minor in Psychology

<table>
<thead>
<tr>
<th></th>
<th>MAJOR</th>
<th>MINOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours Required in Psychology:</td>
<td>39</td>
<td>18</td>
</tr>
<tr>
<td>Hours Required in Other Departments:</td>
<td>7</td>
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</tr>
<tr>
<td>Total Hours Required:</td>
<td>46</td>
<td>18</td>
</tr>
</tbody>
</table>

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
- PSYC 212 Adolescent and Adult Development

GROUP D Sociocultural
- PSYC 314 Theories of Personality
- PSYC 317 Abnormal Psychology
- PSYC 318 Social Psychology

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

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.
Major (continued)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 445</td>
<td>Research Applications in Animal Behavior and Cognition</td>
</tr>
<tr>
<td>PSYC 450</td>
<td>Multicultural Counseling Issues</td>
</tr>
<tr>
<td>PSYC 488</td>
<td>Environmental Psychology</td>
</tr>
</tbody>
</table>

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 General Biology (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.
   - You must have a minimum 3.0 grade point average in the major; or if your psychology GPA is between 2.75 and 3.0, you must pass a comprehensive examination covering all areas of psychology.

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 resumé 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

PSYCHOLOGICAL
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 Leadership in Psychology Emphasis**
- The Leadership in Psychology Emphasis provides you the opportunity to gain valuable knowledge and experience that employers and graduate programs seek in applicants. It includes coursework on the best teaching/learning practices and leadership theories in psychology. In the field experience course, you will apply these skills by serving as a learning mentor for students enrolled in General Psychology.
- You must apply for acceptance into the field experience course (PSYC 394) prior to enrolling in the emphasis.

1. Complete a minimum of 15 credit hours distributed as follows:
   a. **Prerequisite Course (3 hours)**
      PSYC 150/151 General Psychology (GEP Group D)

   b. **Psychology Courses Related to Group Leadership (3 hours)**
      Select one of the following:
      - PSYC 385  Group Processes
      - PSYC 314  Theories of Personality
      - PSYC 318  Social Psychology
      - LEAD 201  Leadership Theories and Practices

   c. **PSYC 394 Learning Mentor in Psychology Field Experience (3 hours)**
      You must apply for approval and receive permission from the department to enroll; thus, only those students who are approved to enroll in PSYC 394 can complete this emphasis. Applications and a list of requirements for enrollment are available in the Department of Psychology. A grade of C or better is required.

   d. **Electives (6 hours)**
      Select any course(s) listed under b. above that were not used to meet the Group Leadership requirement and/or enroll in PSYC 394 for an additional 3 to 6 credits (reapplication and departmental approval are required).

**Summary of Requirements for Double Major in Secondary Teacher Education**
If you wish to complete a Maryland State-approved program in teaching secondary social studies, you must:
- Complete the BA/BS in psychology.
- Declare a second major in Secondary Teacher Education. See the Secondary Teacher Education Program Coordinator for details.
- In addition to the regular major requirements, you must take coursework in economics, geography, history, political science and social science in order to qualify for Maryland State certification in social studies and to meet NCATE accreditation standards. See the Secondary Teacher Education Program Coordinator for details.
Public Administration

Emphasis

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.

Summary of Requirements for Emphasis in Public Administration

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>POSC 110/112</td>
<td>Introduction to American Politics</td>
</tr>
<tr>
<td>POSC 323</td>
<td>Public Administration</td>
</tr>
<tr>
<td>POSC 353</td>
<td>Public Program Evaluation</td>
</tr>
<tr>
<td>POSC 355</td>
<td>Public Budgeting</td>
</tr>
</tbody>
</table>

Coordinator:
John O’Rorke, Professor, Department of Political Science

Public Relations

Minor

Coordinator:
Andy Duncan, Associate Professor, Department of English

Participating Faculty:
Professor:
J. Lombardi (Communication)

Associate Professors:
A. Duncan (English), Herzfeld (Visual Arts), Ruminski (Communication), Ye (Marketing & Finance)

Assistant Professors:
Dean (Marketing & Finance), Hein (Visual Arts)

You cannot major in Public Relations.

Summary of Requirements for Minor in Public Relations

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Courses in Communication Studies:</td>
<td></td>
</tr>
<tr>
<td>(6 hours)</td>
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</tr>
<tr>
<td>CMST 300  Interpersonal Communication</td>
<td></td>
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<tr>
<td>or CMST 322  Presentational Communication</td>
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<tr>
<td>CMST 335  Organizational Communication</td>
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<tr>
<td>2. Courses in English: (6 hours)</td>
<td></td>
</tr>
<tr>
<td>ENGL 336  Journalistic Writing</td>
<td></td>
</tr>
<tr>
<td>ENGL 436  Advanced News and Feature Writing</td>
<td></td>
</tr>
<tr>
<td>3. Courses in Other Departments: (12 hours)</td>
<td></td>
</tr>
<tr>
<td>ART 207  Graphic Design (Tech. Fluency)</td>
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</tr>
<tr>
<td>ART 235  Photography</td>
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<tr>
<td>MCOM 287  Introduction to Video Production</td>
<td></td>
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<tr>
<td>MCOM 325  Seminar in Public Relations</td>
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<tr>
<td>or MKTG 361  Principles of Marketing</td>
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</tbody>
</table>

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:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 104</td>
<td>Two-dimensional Design</td>
</tr>
<tr>
<td>BUAD 100</td>
<td>Introduction to Business</td>
</tr>
<tr>
<td>CMST 122</td>
<td>Introduction to Public Speaking</td>
</tr>
<tr>
<td>ECON 200</td>
<td>Basic Economics (GEP Group D)</td>
</tr>
</tbody>
</table>
SECURE COMPUTING AND INFORMATION ASSURANCE

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:
Chitsaz, Rinard (Chair)

Associate Professors:
M. Flinn, Zheng

Assistant Professors:
Pan, Xiao, Xu

Lecturers:
Gbenro, S. Kennedy

- 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.
- 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

Summary of Requirements for Major/Minor in Secure Computing & Information Assurance

<table>
<thead>
<tr>
<th>Major</th>
<th>Minor</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Core Courses: (25 hours)</strong></td>
<td><strong>1. Core Courses: (25 hours)</strong></td>
</tr>
<tr>
<td>COSC 101 The Discipline of Computer Science (Tech. Fluency)</td>
<td>COSC 101 The Discipline of Computer Science</td>
</tr>
<tr>
<td>COSC 102 Foundations of Computer Science</td>
<td>COSC 102 Foundations of Computer Science</td>
</tr>
<tr>
<td>SCIA 120 Introduction to Secure Computing and Information Assurance</td>
<td>SCIA 120 Introduction to Secure Computing and Information Assurance</td>
</tr>
<tr>
<td>SCIA 210 Introduction to Cyber Law</td>
<td>COSC 240 Computer Science I</td>
</tr>
<tr>
<td>COSC 240 Computer Science I</td>
<td>COSC 241 Computer Science II</td>
</tr>
<tr>
<td>COSC 241 Computer Science II</td>
<td>SCIA 340 Secure Databases</td>
</tr>
<tr>
<td>SCIA 489 Capstone Course</td>
<td>SCIA 489 Capstone Course</td>
</tr>
</tbody>
</table>

- 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.
- You may receive credit by examination for the following courses: COSC 100, 101, 240.
<table>
<thead>
<tr>
<th>Major</th>
<th>Minor</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>2. Required Advanced Courses:</strong> (27 hours)</td>
<td></td>
</tr>
<tr>
<td>COSC 331 Fundamentals of Computer Networks</td>
<td></td>
</tr>
<tr>
<td>SCIA 325 Software Security Engineering</td>
<td></td>
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<tr>
<td>SCIA 335 Network Security</td>
<td></td>
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<tr>
<td>SCIA 360 Operating System Security</td>
<td></td>
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<tr>
<td>SCIA 370 Security Policy and Assessment</td>
<td></td>
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<tr>
<td>SCIA 460 Cloud Computing and Security</td>
<td></td>
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<tr>
<td>SCIA 470 Computer and Network Forensics I</td>
<td></td>
</tr>
<tr>
<td>SCIA 471 Computer and Network Forensics II</td>
<td></td>
</tr>
<tr>
<td>SCIA 472 Hacking Exposed and Incident Response</td>
<td></td>
</tr>
<tr>
<td><strong>3. Other Required Courses:</strong> (12-13 hours)</td>
<td></td>
</tr>
<tr>
<td>CMST 102/112 Introduction to Human Communication</td>
<td></td>
</tr>
<tr>
<td>ENGL 338 Technical Writing (Core Skill 2)</td>
<td></td>
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<tr>
<td>MATH 109/110 Elements of Applied Probability &amp; Statistics (Core Skill 3)</td>
<td></td>
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<tr>
<td>or MATH 380 Intro. To Probability &amp; Statistics</td>
<td></td>
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<tr>
<td>MATH 220 Calculus for Applications I</td>
<td></td>
</tr>
<tr>
<td>or MATH 236 Calculus I (Core Skill 3)</td>
<td></td>
</tr>
<tr>
<td><strong>4. Electives:</strong> (9 hours)</td>
<td></td>
</tr>
<tr>
<td>A minimum of 9 hours in at least three courses:</td>
<td></td>
</tr>
<tr>
<td>COSC 305 Computer Ethics</td>
<td></td>
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<tr>
<td>ITEC 442 Electronic Commerce</td>
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<tr>
<td>SCIA 425 Software Testing and Assurance</td>
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<td>SCIA 435 Access Control</td>
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<tr>
<td>SCIA 480 Applied Cryptography</td>
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<tr>
<td>SCIA 485 Emerging Issues and Cyber Warfare</td>
<td></td>
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<tr>
<td>SCIA 491 Seminar in Secure Computing and Information Assurance</td>
<td></td>
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<tr>
<td>SCIA 494 Field Experience in Secure Computing and Information Assurance</td>
<td></td>
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<tr>
<td>SCIA 499 Individual Problems in Secure Computing and Information Assurance</td>
<td></td>
</tr>
</tbody>
</table>
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.
Summary of Requirements for Major in Social Work

Major

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

**Professors:**
- Moore (Chair), Russell
- Associate Professors:
  - W. Li, Hartman-Linck, McMullen, Moorehead, Rogers Thomas

- 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 or at the University System of Maryland - Hagerstown.
- The department also offers a minor in cultural anthropology.
- Internship opportunities are available.

**Summary of Requirements for Major/Minor in Sociology**

<table>
<thead>
<tr>
<th>Requirement</th>
<th>MAJOR</th>
<th>MINOR</th>
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</thead>
<tbody>
<tr>
<td><strong>1. Basic Courses: (6 hours)</strong></td>
<td></td>
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<tr>
<td>SOCI 100/111 Intro. to Sociology (GEP Group D)</td>
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<tr>
<td>SOCI 200 Social Problems</td>
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<tr>
<td><strong>2. Methods and Theory (15 hours)</strong></td>
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<tr>
<td>SOCI 310 Statistics for Social Science</td>
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<tr>
<td>SOCI 311 Basic Research Methods</td>
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<td></td>
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<tr>
<td>SOCI 450 Classical Sociological Theory</td>
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<tr>
<td>SOCI 451 Contemporary Sociological Theory</td>
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<tr>
<td>SOCI 491 Seminar in Sociology (Capstone)</td>
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<tr>
<td><strong>3. Distribution within Department: (15 hours)</strong></td>
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<tr>
<td>At least nine hours must be at the 300 or 400 level</td>
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<tr>
<td><strong>4. Internship Requirement:</strong></td>
<td>optional</td>
<td>(0 hours)</td>
</tr>
<tr>
<td><strong>5. Required Course in Other Departments: (3 hours)</strong></td>
<td>COSC 100 Intro. to Computer Science (Tech. Fluency)</td>
<td></td>
</tr>
<tr>
<td><strong>1. Basic Courses: (6 hours)</strong></td>
<td>SOCI 100/111 Intro. to Sociology (GEP Group D)</td>
<td></td>
</tr>
<tr>
<td>SOCI 200 Social Problems</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>2. Methods and Theory (0 hours)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>3. Distribution within Department: (12 hours)</strong></td>
<td>At least six hours must be at the 300 or 400 level</td>
<td></td>
</tr>
<tr>
<td><strong>4. Internship Requirement:</strong></td>
<td>(0 hours)</td>
<td></td>
</tr>
<tr>
<td><strong>5. Required Courses in Other Departments: (0 hours)</strong></td>
<td></td>
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</tbody>
</table>

**Summary of Requirements for Double Major in Secondary Teacher Education**

If you wish to complete a Maryland State-approved program in teaching secondary social studies, you must:
- Complete the BA/BS in sociology.
- Declare a second major in Secondary Teacher Education. See the Secondary Teacher Education Program Coordinator for details.
- In addition to the regular major requirements, you must take coursework in economics, geography, history, political science and social science in order to qualify for Maryland State certification in social studies and to meet NCATE accreditation standards. See the Secondary Teacher Education Program Coordinator for details.
Sustainability Studies

Minor

Summary of Requirements for Minor in Sustainability Studies

Minor

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
   IDIS 160 Science, Technology and Society
   LEAD 101 Introduction to Leadership Studies
   MDFL 111 Intercultural Understanding
   PHIL 102 Contemporary Ethical Problems
   POSC 113 Introduction to World Politics
   SOCI 224 Cultural Anthropology
   SUST 246 Sustainability in Action

3. Elective Courses*: (9 hours)
   Select three courses from at least two departments:
   BIOL 109 Human Biology and the Environment
   CHEM 420 Environmental Chemical Analysis
   CMST 365 Environmental Communication
   CMST 402 Editing and Production
   ENGL 440 Literature of the Environment
   GEOG 360 Food Systems
   GEOG 405 Global Climate Systems
   GEOG 421 Regional Planning
   GEOG 423 Geography of the Suburbs
   GEOG 450 Urban Planning
   GEOG 472 Environmental Planning

   *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.

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),
Shuster (History),
J. Browne (English)

Ex Officio:
J. Hoffman (Dean, College of Liberal Arts and Sciences)
Theatre

Major

Minor

Tracks in:

• Acting
• Design and Technology
• Theatrical Studies

Professor:
Yost-Rushton

Associate Professors:
Mattis (Chair, Department of Theatre and Dance), Rushton

Assistant Professor:
Schroeder

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 (acting track) 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.

Summary of Requirements for Major/Minor In Theatre

<table>
<thead>
<tr>
<th>Major</th>
<th>Acting</th>
<th>Design &amp; Theatrical Studies</th>
<th>Theatre Studies</th>
<th>Minor</th>
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<tbody>
<tr>
<td>Hours Required in Theatre:</td>
<td>60</td>
<td>30</td>
<td>30</td>
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<tr>
<td>Hours Required in Core</td>
<td>30</td>
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<td>Hours Required in Track</td>
<td>30</td>
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</tr>
<tr>
<td>Hours Required in Other Departments:</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total Hours Required:</td>
<td>60</td>
<td>60</td>
<td>60</td>
<td>60</td>
</tr>
</tbody>
</table>

1. Core Courses in Theatre: (30 hours)

THEA 102 Shop Practicum
THEA 103 Front of House Practicum
THEA 104 Production Crew Practicum
THEA 106 Introduction to Theatre (GEP Group A)
THEA 107 Introduction to Theatrical Vision (GEP Group A)
THEA 110 Introduction to Acting
THEA 208 Acting: Basic Principles and Application
THEA 210 Voice and Movement
THEA 211 Voice and Movement II
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 154 Jazz I
DANC 165 Tap I
DANC 361 Dance for Musical Theatre
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
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)

1. Core Courses in Theatre: (15 hours)

THEA 106 Introduction to Theatre (GEP Group A)
THEA 107 Introduction to Theatrical Vision (GEP Group A)
THEA 110 Introduction to Acting
THEA 206 Modern American Drama
THEA 308 Directing

2. Additional Theatre Electives: (9 hours)

You must select additional courses, for a total of 9 hours, from any Theatre courses not already used to fulfill a Theatre minor requirement.
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:
THEA 400 Theatre Production (Theatrical Studies Capstone)
and 15 additional hours from any theatre courses not already used to fulfill core courses in theatre requirements

Or
THEA 499 Directed Study (Theatrical Studies Capstone)
and 15 additional hours from any theatre courses not already used to fulfill core courses in theatre requirements

Or
THEA 466 Projects in Directing (Theatrical Studies Capstone)
and 15 additional hours from any theatre courses not already used to fulfill core courses in theatre requirements
### Wildlife & Fisheries

#### Major

See related programs:
- **BIOLOGY**
  - Pre-Health Option
  - Molecular Biology
  - Environmental Science
- **Environmental Analysis & Planning**
- **Ethnobotany**
- **Forestry**
- **Interpretive Biology & Natural History**

**Contact:**
Thomas Lambert, Assistant Professor, Department of Biology

**Professors:**
Ammer, Fritz, Li, Raesly, Seddon, Serfass

**Associate Professors:**
Brosi, Keller, Puthoff

**Assistant Professors:**
Hocking, Lambert, Studinski, Taylor

<table>
<thead>
<tr>
<th></th>
<th>WILDLIFE PROFESSIONAL</th>
<th>GENERAL</th>
<th>PROFESSIONAL FISHERIES</th>
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<tbody>
<tr>
<td>Hours Required in Biology:</td>
<td>49-52</td>
<td>49-52</td>
<td>36-37</td>
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<tr>
<td>Hours Required in Other Departments:</td>
<td>30-32</td>
<td>20-23</td>
<td>29</td>
</tr>
<tr>
<td>Total Hours Required:</td>
<td>79-81</td>
<td>72-74</td>
<td>61-62</td>
</tr>
</tbody>
</table>

**Summary of Requirements for Major in Wildlife & Fisheries**

1. **Core Curriculum:** (40 hours)
   - **Biol 149 General Biology I (GEP Group C)**
   - **Biol 180 General Zoology**
   - **Biol 161 General Botany**
   - **Biol 200 Scientific Investigation and Communication**
   - **Biol 340 General Ecology**
   - **Biol 350 Genetics**
   - **Biol 492 Wildlife-Fisheries Seminar (Capstone)**
   - **Chem 201 General Chemistry I (GEP Group C)**
   - **CMST 102/112 Introduction to Human Communication**
   - **Engl 339 Scientific Writing (Core Skill 3)**
   - **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)
   - **Biol 450 Ecology and Management of Wildlife Populations**
   - **Biol 230 Wildlife Techniques**
   - **Biol 406 Ornithology**
   - **Biol 422 Herpetology**
   - **Biol 423 Mammalogy**
   - **Anatomy and Physiology, one of the following:**
     - **Biol 302 Animal Physiology**
     - **Biol 427 Comparative Anatomy**
   - **Botany, one of the following:**
     - **Biol 405 Dendrology**
     - **Biol 409 Plant Taxonomy**
   - **Policy, Administration, and Law, 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:** (40 hours — listed above)
   2. **Wildlife Core Requirements:** (23-24 hours — listed above)
   3. **Professional Certification Core Requirements:** (16-17 hours)

   **Quantitative Sciences:**
   - **Biol 414 Quantitative Analysis of Vertebrate Populations**
   - **Math 220 Calculus for Applications I**
   - **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:** (40 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)**
   - **Math 120 Pre-Calculus (Core Skill 3)**
   - or any math course above 219

Plus two additional courses:
- **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:** (40 hours — listed above)
   2. **Professional Fisheries Track Requirements:** (22 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

Summary of Requirements for Minor in Women’s Studies

Coordinator:
Julie Hartman-Linck, Associate Professor, Department of Sociology

Participating Faculty:

Professors:
Boniece (History), Lutz (English)

Associate Professors:
Armiento (English), Brassfield (Philosophy), J. Flinn (Psychology), Hartman-Linck (Sociology), Morris (English)

Assistant Professors:
English (Fine Arts), McConnell (History)

Lecturers:
Schuster (History), Willingham (Communication)

Women’s Studies is a multicultural and multidisciplinary minor.
You cannot major 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)
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 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

Total Hours Required: 18
Course Descriptions

**Accounting**

**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.
Partnerships, business combinations, consolidated financial statements, international accounting issues, foreign currency transactions, foreign currency financial statement translation and other current topics. Spring. Prerequisite: C grade or better in ACCT 302 or 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, 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 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.

**Adventure Sports Management**

**ADSP 330 Outdoor Education** 3 cr.
Development of outdoor education in the nonprofit service industry, including National Outdoor Leadership School and Outward Bound. Course taken as part of LIFE program during the immersion semester. Spring. Prerequisite: ADSP 340 or permission of instructor.

**ADSP 340 Expedition Planning in Adventure Sports** 3 cr.
Students learn the principles of planning adventure sports expeditions and experiences, including professional outfitting and the LIFE immersion experience. Course taken the semester prior to LIFE program immersion experience. Fall.

**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.

**ADSP 360 Entrepreneurship in Adventure Sports** 3 cr.

**ADSP 381 Facilitation Skills and Techniques in Adventure Sports** 3 cr.
Development of facilitation skills, including interpersonal skills and techniques, to become an effective leader and manager in adventure sports. Course taken as part of LIFE program during the immersion semester. Spring. Prerequisite: ADSP 340 or permission of instructor.

**ADSP 382 Agency Assessment** 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. Fall.

**ADSP 391 Journaling in Adventure Sports** 3 cr.
Principles of journaling in an adventure sports setting. Course taken as part of LIFE program during the immersion semester. Spring. Prerequisite: ADSP 340 or permission of instructor.
African American Studies

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.

AAST 495 AAST Mentorship 9-12 cr.
Optional credits for the 400 hours required for the mentorship. Fall/spring/summer.

AAST 497 AAST Internship 3 cr.
Variable topics related to African American Studies from disciplines across the University. Variable. Repeatable for a maximum of 6 credits if topics are substantially different. Prerequisite: AAST 200 or permission of the instructor.

AAST 499 AAST Internship 1-3 cr.
Variable topics related to African American Studies from disciplines across the University. Variable. Repeatable for a maximum of 6 credits if topics are substantially different. Prerequisite: AAST 200 or permission of the instructor.

ADSP 392 Mentorship I in Adventure Sports 3 cr.
Intensive study under an individual, owner or leader in the adventure sports industry with an emphasis on an instructional setting. Course taken as part of LIFE program during the immersion semester. Spring. Prerequisite: ADSP 340 or permission of instructor.

ADSP 491 Professional Development in Adventure Sports 3 cr.
Emphasizing the positioning approach, the course introduces effective job search strategies to prepare students for their mentorship experience and eventual employment. Topics include the positioning approach: developing interview skills; creating a resume, cover letter and online portfolio; and utilizing a variety of sources to locate potential mentorship/internship/job opportunities in the adventure sports industry. Fall.

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. May be taken in conjunction with ADSP 495. Fall/spring/summer.

ADSP 495 Mentorship in Adventure Sports 9-12 cr.
Completion of an approved project and 400 hours minimum required. May be taken in conjunction with ADSP 495. Fall/spring/summer.

ADSP 497 Mentorship II in Adventure Sports 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.

ADSP 499 Mentorship III in Adventure Sports 3 cr.
Variable. Repeatable for maximum of 6 credits if topics are substantially different. Prerequisite: acceptance into the Honors Program or permission of instructor. GEP Group A.

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 111 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 111. Prerequisite: acceptance into the Honors Program or permission of instructor. GEP Group A.

ART 202 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 207 Graphic Design 3 cr.
Basic level graphic processes and techniques: Photoshop and Quark softwares, Macintosh platform. Information and technology fluency. Visual art and graphic design orientation. Two hr. lecture, 2 hr. lab. Every semester. Tech. Fluency.

ART 209 Crafts Workshop 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 photography: basic camera use, exposure control and darkroom procedure. Final portfolio of work required. Two hr. lecture, 2 hr. discussion and one 3-hr. darkroom period per week. 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, departmental 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. Prerequisites: ART 202; concurrent enrollment in ART 291 and second advanced course.

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; concurrent enrollment in ART 291 and second advanced course.

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; concurrent enrollment in ART 291 and second advanced course.

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. Prerequisites: ART 221; concurrent enrollment in ART 291 and second advanced course.

ART 430 Greek and Roman Art  3 cr.
A social and art historical analysis of Greco-Roman visual representation. Sculpture and painting. Spring, odd-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. Prerequisites: ART 232; concurrent enrollment in ART 291 and second advanced course.

ART 435 Advanced Photography  3 cr.
In-depth photographic exploration of selected subject matter. Unified photographic thesis required; 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. Prerequisites: ART 235; concurrent enrollment in ART 291 and second advanced course.

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. Prerequisites: ART 240; concurrent enrollment in ART 291 and second advanced course.

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, mannerism in the cinquecento and caravaggism and classicism in the seicento. Fall, odd-numbered years.
COURSE DESCRIPTIONS

ATHLETIC TRAINING

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 223 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 head, abdomen, throat and thorax 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 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 3 cr.
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 323 and ATTR 322. 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

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 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.
Problem solving and communication in the natural sciences. Emphasis on analytical reasoning, application of concepts and principles, and values of language, order and measurement to scientific thought. Three hrs. lecture/discussion. Every semester. Prerequisites: BIOL 149, MATH 109/209 and sophomore standing or permission of instructor.

**BIOL 211 Essentials of Anatomy and Physiology** 4 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.

**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 150 or BIOL 160.

**BIOL 310 Cell Biology** 4 cr.
Dynamics of cells and their life processes. Ultrastructure, organization, thermodynamic and metabolic processes. Recommended for biology majors immediately following BIOL 150. 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 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 150 or 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. Spring. 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 150, 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. Spring. Prerequisites: BIOL 150, 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 401 Genetics Laboratory** 1 cr.
Techniques of collection 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 150 or BIOL 160, CHEM 201.

**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. Spring, odd-numbered years. Prerequisite: BIOL 150 or 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 150 or 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 150 or 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 150 or 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 150, BIOL 160 or permission of instructor.

BIOL 425 Forest Ecology and Conservation 3 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 426 Vertebrate Zoology 4 cr.
The biology of vertebrates: origin, evolution, classification, structure, ecology, reproduction. Identification of regional examples. Three hrs. lecture, one 2-hr. lab. Spring, even-numbered years. Prerequisite: BIOL 150 or BIOL 160.

BIOL 427 Comparative Anatomy 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 150 or BIOL 160.

BIOL 428 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 ofhydrobiology. 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. Prerequisite: 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. Spring, even-numbered years. 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. Fall, even-numbered years. Prerequisite: BIOL 150 or 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 GEDG 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 Seminar 1 cr.
Current topics in Wildlife and Fisheries presented by students, faculty and invited speakers, coupled with analysis and discussion. For majors in wildlife & fisheries. Variable. Repeatable for maximum of 4 credits if topics are substantially different. Prerequisite: junior, senior or graduate standing in biology or wildlife/fisheries. Wildlife & Fisheries Capstone.
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 MANAGEMENT INFO SYSTEMS  •  CHEMISTRY

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 101 Chemistry and Society 4 cr.
Examination of the modes 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. recitation and one 2-hr. lab. Math Level 1 required. Every semester. Prerequisite: Admission to Honors Program or permission of instructor. GEP Group C.

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. recitation and one 2-hr. lab. Math Level 1 required. Every semester. Prerequisite: Admission to Honors Program or permission of instructor. GEP Group C.

CHEM 133 General Chemistry for Engineers 4 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, electrochemistry 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. Two hrs. lecture, 1 hr. recitation and one 2-hr. lab. 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 thermochemistry. Two hrs. lecture, 2 hrs. discussion and one 2-hr. lab. Every semester. You cannot earn credit for both CHEM 101 and 201. Prerequisites: C or better in CHEM 103 or placement at Chemistry Level 2 or higher and Math Level II or higher. Corequisite: MATH 102/119 or permission of instructor. GEP Group C. Note: for information on Chemistry Level placement, see Department Chair.

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 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 202 or COSC 240 or ENEE 114 equivalent, or permission of the instructor.

CHEM 305 Research Methods in Chemistry 3 cr.

BIOL 494 Field Experiences in Biological Sciences 2 to 6 cr.
Work experience with a federal, state or private agency or industry related to the student’s major. Faculty sponsor, project approval and final report by the student required. Variable. Repeatable for maximum of 12 credits if placement sites are different. Prerequisites: biology, wildlife & fisheries, or interpretive biology and natural history majors only; junior or senior standing. Interpretive Biology & Natural History and 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 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 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 ADMINISTRATION  •  BUSINESS LAW  •  BUSINESS MANAGEMENT INFO SYSTEMS  •  CHEMISTRY
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 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. Prerequisite: CHEM 202 or equivalent. Corequisite: CHEM 311.

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. Corequisite: CHEM 322.

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: CHEM 321.

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, spectrophuorometry 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, spectrophotometric, 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.
Theory and applications of the principles of physical chemistry. Equilibria, gas laws, thermodynamics, electrochemistry, structures and properties. 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.
Quantum theory, statistical thermodynamics, chemical dynamics, spectroscopy and structures. 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 321, BIOL 149 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-credit 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 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 6 credits. Prerequisite: CHEM 441, junior standing in chemistry, 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: C or better in Organic Chemistry I (CHEM 311 and CHEM 312); in good academic standing; submission of Agreement Form to Department Chair prior to registering, departmental approval. May not be used to satisfy the requirements for a minor in chemistry.

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 Human Communication 3 cr.
Fundamental theory and practice of human communication in dyadic, small-group and public situations. Every semester.

CMST 112 Honors: Introduction to Human Communication 3 cr.
Fundamental theory and practice of human communication in dyadic, small-group and public situations. Student-led discussions, activities. Variable. Prerequisite: admission to Honors Program or written permission of instructor.

CMST 122 Introduction to Public Speaking 3 cr.
Introduction to, and guided application of, basic principles which underlie effective public speaking and listening in informative, persuasive, and ceremonial speeches. Spring.

CMST 215 Small Group 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.

CMST 225 Interviewing 3 cr.
Communication in informational, appraisal, employment, persuasive and research interviews. Focuses on selecting and structuring questions to achieve specific objectives and on strategies of collecting, analyzing and reporting qualitative data for research. Fall. Prerequisite: CMST 102/112.

CMST 300 Interpersonal Communication 3 cr.
Study of the face-to-face dyad as the fundamental human communication relationship. Implications for other communication modes and settings. Fall. Prerequisite: CMST 102/112 or CMST 132 or permission of instructor.

CMST 302 Argumentation and Advocacy 3 cr.
Analysis, construction and communication of logical arguments in a variety of decision-making contexts. Spring. Prerequisite: CMST 102/112 or CMST 122 or permission of instructor.

CMST 312 Language Behavior and Communication 3 cr.
Processes of human language that enhance or limit thought and expression; development of language and symbolizing; relationship of thought to language; effects of language behavior. Spring. Prerequisite: CMST 102/112 or permission of instructor.

CMST 322 Presentational Communication 3 cr.
Theory and practice of orally presenting ideas to reach audience-centered goals. Use of technology in activities common to communication-related careers. Spring. Prerequisites: CMST 102/112 or CMST 122, or permission of instructor.

CMST 335 Organizational Communication 3 cr.
Theory, practices and analysis of organizational communication, with emphasis on applying practical knowledge in current and future organizational contexts. Includes creation of an organizational portfolio and preparation for the capstone experience for majors. Fall. Prerequisite: CMST 102/112 or permission of instructor.

CMST 345 Conflict Management 3 cr.
Examines 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 permission of instructor.

CMST 350 Intercultural Communication 3 cr.
Explores 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 permission of instructor.

CMST 355 Political Communication 3 cr.
Overview of the role of communication in contemporary political life. Political communication theories, political campaign communication, media and political communication, propaganda and the role of political communication in promoting a deliberative democracy. Fall. Prerequisite: CMST 102/112 or permission of instructor.

CMST 365 Environmental Communication 3 cr.
Development, adaptation and critical analysis of environmentally themed messages for particular audiences. Variable.

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. Fall, even-numbered years. Prerequisite: CMST 102/112 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 explained. Application to realistic settings. Fall. Prerequisite: CMST 102/112 or permission of instructor.

CMST 485 Issues and Responsibilities of 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. Fall. Prerequisite: CMST 102/112 or permission of instructor.

CMST 490 Special Topics in Communication Studies 3 cr.
Study, research or applied experience related to an announced selected topic. Repeatable for maximum of 9 credits if topics are substantially different. Variable. Prerequisite: permission of instructor.

CMST 492 Internship Project 3 cr.
Academic component of internship experience, in conjunction with CMST 495. Graded A through F. Summer. Corequisite: CMST 495. Prerequisites: CMST 102/112, CMST 335, CMST 451 and one additional 3-credit CMST course, plus permission of instructor. Capstone.

CMST 494 Communication Studies Practicum 1 to 3 cr.
Supervised field experience for Communication Studies majors. Participation in the communication operations of a commercial, governmental or educational organization. Repeatable for maximum of 3 credits. Every semester. Prerequisites: CMST 102, CMST 335, CMST 451 and one additional 3-credit CMST course, plus permission of instructor. Capstone.

CMST 495 Internship in Communication 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, 3 credits in 492 and may not enroll in any other courses. Part-time interns must register for 6 credits in 495 and 3 credits in 492. Graded P/F. Summer. Prerequisites: Junior/Senior status, not on probation; declared major in communication studies, minimum 12 cr. in communication studies and 2.5 GPA in major; Internship Agreement Form approved by department internship director before registering.

CMST 499 Directed Study 1 to 6 cr.
Intensive study through faculty-directed projects or papers. Hours arranged. Variable. Prerequisite: permission of Department Chair.

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 O-notation and efficiency of algorithms. Three hrs. lecture, 2 hrs. lab. Every semester. Prerequisite: Level III or above on the mathematics placement test, or a Level II mathematics course.

COSC 110 Honors: 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 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 120 Introduction to Cyberspace 3 cr.
Survey of Cyberspace including all Internet services, communications and networking, Internet protocols, file types, multimedia and a summary of Web programming techniques. The practical component covers e-mail, chat, teleconferencing, file transfer, newsgroups, mailing lists and the World Wide Web. For a semester project, you will search for and develop a basic Web site presenting Internet resources in your major discipline; this site should be a valuable personal reference that can be updated throughout your education and career. Every semester.

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 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. Spring. Prerequisite: Grade of C or better in COSC 240 or grade of C or better in ITEE 315.

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 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; multilists; 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 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. Every semester. 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 330 Web Design and Development 3 cr.
A practical study of the design and development of Web sites, covering design principles, authoring applications, authoring languages, hypermedia, techniques for user interactivity, and Web programming. The practical component gives hands-on experience with each of these topics and introduces scripting with JavaScript; these labs exercises provide the expertise to complete, as a course project, a Web site presenting an advanced aspect of Web technology that the student researches. Every semester. Prerequisite: Grade of C or better in COSC 120 or permission of the instructor.

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, and end to end multicast and multimedia application. Variable. 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 390 Topics in Modern Programming Languages 1 to 3 cr.
A modern programming language will be covered. Topics include the syntax and semantics of the language as well as the language programming environment. Example programs will deal with applications particularly suited to the chosen language. Students
will be required to design and implement a major programming project. Variable. Prerequisite: Grade of C or better in COSC 241.

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. Every semester. Prerequisites: junior or senior standing and completion of COSC 240 with a grade of C or better. DEPARTMENT APPROVAL REQUIRED PRIOR TO REGISTERING.

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 PHYC 315 or PHYS 332, grade of C or better in COSC 240, or permission of the instructor. Also offered as PHYC 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 core classes and permission of the instructor.

COSC 431 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, undirected and directed synchronization, data parallelism, divide-and-conquer parallelism, and map-reduce. Spring. Corequisite: Grade of C or better 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. Spring. 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.

COSC 485 Introduction to the Theory of Computation 3 cr.
Basic theoretical principles embodied in formal languages, automata, computability and computational complexity. Emphasis is placed on developing formal descriptions of computers and computational processes, and practical implications of theoretical results. Spring. Prerequisites: Grade of C or better in COSC 310.

COSC 489 Capstone Course 1 cr.
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 entity. Every semester. Prerequisites: Senior standing and completion of all core courses and grade of C or better in at least two required advanced courses.

COSC 491 Seminar in Computer Science 1 to 6 cr.
Group study of advanced topics under faculty supervision; up to 3 credits may apply to major or minor in Computer Science. Repeatable for maximum of 6 credits if topics are substantially different; up to 3 credits count toward major or minor. Variable. Prerequisites: Grade of C or better in core courses and written permission of faculty supervisor. DEPARTMENTAL APPROVAL REQUIRED PRIOR TO REGISTERING.

COSC 494 Field Experience in Computer/Information Science 3 cr.
Work experience in industry, government, or small business providing an opportunity for practical application of academic training in computer/information science. The course requirements are: (1) a 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 and (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; up to 3 credits count in major. Every semester. Prerequisite: junior or senior standing and completion of the core courses in Computer Science with grade of C or better. DEPARTMENTAL APPROVAL REQUIRED PRIOR TO REGISTERING.

COSC 499 Individual Problems in Computer Science 1 to 6 cr.
Individual advanced projects under faculty supervision; up to 3 credits may apply to major or minor in Computer Science. Students must submit a written, clear proposal to faculty supervisor and department. This proposal must be detailed enough to describe topics, time allocation and limitation, objectives, assignments and projects. Repeatable for maximum of 6 credits: up to 3 credits count toward major or minor. Every semester. Prerequisites: Grade of C or better in core courses and written permission of faculty and supervisor. DEPARTMENTAL APPROVAL REQUIRED PRIOR TO REGISTERING.
Secure Computing and Information Assurance

SCIA 120 Introduction to Secure Computing and Information Assurance 3 cr.
Overview of computing security. Importance of securing digital information, operating systems security, computer programming, and secure digital communications. Physical security, software 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 been implemented in relationship to the digital age and living in an online society. Computer crimes, identity theft, sexual harassment, intellectual property, plagiarism, computer forensics, medical issues, and financial concerns. Tort liability, securities, antitrust laws, bankruptcy, and hiring termination. Every semester.

SCIA 325 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 241 and SCIA 120.

SCIA 335 Network Security 3 cr.
Cryptography basics for network security, network-related authentication, and certification. 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 337 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. Variable. 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. Variable. 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 basics, 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.

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.

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. Prerequisite: Grade of C or better in SCIA 471.

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. Variable. 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. Variable. 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, comprehensive report. 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. Prerequisites: 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 that describes 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 may be applied 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. Fall, even-numbered years.

DANC 231 Ballet II 3 cr.
Intermediate ballet techniques, terminology and history. 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 3 cr.
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 3 cr.
Application of procedures in auditioning, learning choreography, creating and teaching choreography, rehearsals, and production of both individual and company dance pieces as a member of FSU Dance Company concluding 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 3 cr.
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 3 cr.
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 3 cr.
Procedures for choreographing, producing and directing dance productions. Variable. Prerequisite: 2 credits in dance technique or permission of instructor.

DANC 429 Special Topics in Dance 1 to 3 cr.
Advanced analysis and practice in movement; varying topics. Repeatable for maximum of 6 credits. Prerequisite: 2 credits in dance technique or permission of instructor.

DANC 471 Principles of Teaching Dance 3 cr.
Theory and practice of dance instruction, including methods and materials. Two lectures and one lab/week. Variable. Prerequisite: DANC 471.

Economics

ECON 200 Basic Economics 3 cr.
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) 3 cr.
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) 3 cr.
An introduction to Principles of Economics focusing primarily on 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 3 cr.
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 3 cr.
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 3 cr.
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 3 cr.
The theory of labor supply and demand, labor force participation, income and wages, labor markets, labor unions, and labor legislation. Spring. Prerequisites: ECON 201/211 and ECON 202/212.

ECON 303 American Economic History 3 cr.
Development from colonial times to the present. The industrial revolution and the impact of technological change upon 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.
Prerequisites: ECON 201/211 and ECON 202/212.

ECON 307 Government, Business, and Public Policy
3 cr.
The 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 309 Comparative Economic Systems
3 cr.
Analysis of ideology and problems in different economic systems: capitalism, Marxism, and socialism. Comparisons of centrally planned and unplanned economies; 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
3 cr.
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
3 cr.

ECON 400 International Trade
3 cr.
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 118 or MATH 220 or MATH 236.

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. Prerequisites: 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 crs.
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 status, 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 Career Analysis in 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. Portfolio development. Observations with reflections. Every semester. Required: taken prior to admission to Phase I. Recommended: taken within first 2 semesters at Frostburg State University.

**EDUC 200 Phase I Teaching & Professional Assessment Laboratory**
1 cr.
Through a series of short video-taped teaching sessions, students acquire skill in assessing their own strengths and weaknesses as teachers. Students will write instructional objectives, prepare lesson plans and teach a series of 10-minute lessons to their peers. Includes screening for selected teaching proficiencies. This course is required in all teacher education programs. Graded P/F. Every semester. Prerequisite: admission to Phase I. Corequisite: enrollment in EDUC 202.

**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. Controlled observations in educational settings. Every semester. Prerequisite: EDUC 100.
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-Phase or concurrently with Phase I. 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: admission to Phase II and concurrent enrollment in Phase II methods and appropriate field work experiences.

EDUC 300 Phase II Teaching and Professional Assessment Laboratory .5 cr.
Video-taped teaching segments with students in school settings. Skills practice and analysis using various teaching models, classroom management techniques and assessment practices. Participation in seminars on current topics in education. Screening for selected academic and instructional proficiencies. Graded P/F. Every semester. Prerequisite: admission to Phase II and concurrent enrollment in Phase II methods and appropriate field work experiences.

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. Variable.

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-Phase or concurrent with Phase I.

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. 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. Variable. Prerequisite: EDUC 100 or permission of instructor.

EDUC 335 Teaching Framework 2 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 and reflection. Fall semester. Prerequisite: admission to Phase I 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. Variable. Prerequisite: admission to Phase I or permission of instructor.

EDUC 345 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 Phase II of 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 Phase II of the Teacher Education Program.

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. Variable. Prerequisite: EDUC 100 or permission of instructor.

EDUC 376 Special and Multicultural Education 3 cr.
Characteristics of exceptional children. Understanding how exceptionalities, American culture, race, ethnicity, gender, socio-economic class, religion, age, language and intellectual ability influence learning. Historical and legal influences on American schools and community agencies. Applicable teaching methods. Controlled observations included. Every semester. Prerequisite: Phase I admission.

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 Phase I of the ECE/ELEM major’s professional sequence. ECE specialization. Graded P/F. Every semester. Prerequisite: Phase I admission or permission of department.

EDUC 391 Teaching Internship I: Secondary Education 2 cr.
Initial internship practicum at secondary school level. Graded P/F. Fall.

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 Phase II courses. Graded P/F. Prerequisite: Phase II admission.

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: Phase II admission and concurrent enrollment in Block I.

EDUC 402 Internship I Seminar 1 cr.
Analysis of planning, instruction and assessment components of effective teaching at the Internship I level. Management strategies for student behavior, curriculum, materials selection and resources. Reflective self and peer evaluation of teaching performance in the classroom. Every semester. Prerequisites: Phase II admission and concurrent enrollment in Block II.

EDUC 403 Assessment and Management of Learning 3 cr.
EDUC 406 Leadership Seminar
Reflective self and peer evaluation of teaching performance in the classroom as a foundation for exploration of the leadership roles professional teachers are expected to play in the classroom, school, community and profession. Prerequisite: Phase III admission, concurrent enrollment in internship.

EDUC 422 Leadership Seminar: P-9
Educational leadership in schools, communities and professional organizations. Elements of developmentally appropriate classroom management. Management strategies for student behavior, curriculum, material and resources. Professionalism and advocacy emphasized. Every semester. Prerequisite: Phase III admission. Capstone.

EDUC 429 The School and Community
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 430 Desktop Publishing for Educators
Use a computer for publishing materials. Learn fundamental principles of publishing design. Learn how to produce published materials that can be used in the classroom. Design desktop publishing projects that will involve K-12 students. Plan for integration of desktop publishing into the curriculum. Variable.

EDUC 432 Hypermedia & Multimedia: Educational Applications
Learn about hypermedia and multimedia. Become familiar with using a computer for hypermedia applications. Work with text, graphics, video and sound to create presentations and information exploration materials which incorporate various approaches to teaching and learning. Design hypermedia projects that will involve K-12 students. Plan for integration of hypermedia into the curriculum. Variable.

EDUC 434 LOGO: Ed. Programming and Instructional Techniques
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
Planning, constructing and implementing a STEM project during the final internship semester. A miniproject will highlight the candidate's ability to deliver inquiry-based instruction. Every semester. Prerequisite: admission to Phase III.

EDUC 445 Strategic Reading and Writing in the Middle Grades
The middle school movement, the middle school student and curriculum, teaching in the middle school, middle school organization. Every semester. Prerequisite: Phase II admission or permission of the Department Chair.

EDUC 446 Using Databases for Critical Thinking
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
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. Every semester. Prerequisite: Phase II admission or permission of the Department Chair; EDUC 392 and EDUC 451 recommended concurrently.

EDUC 454 Microcomputer Application in Education
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: Phase II admission or permission of instructor.

EDUC 490 Special Topics in Education
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
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: Phase III admission.

EDUC 499 Individual Problems in Education
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
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 prephase, 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
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 prephase of ECE/ELEM major's professional sequence. Every semester. It is recommended that ECED 150 be taken prior to ECED 293.

ECED 431 Early Childhood Education Curriculum Development, Implementation and Assessment
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 Phase II Block II of ECE/ELEM major's professional sequence. Prerequisite: successful completion of ECED 443 or permission of the department.

ECED 438 Early Childhood Classroom Management
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
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
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 Phase II Block I of ECE/ELEM major's professional sequence. Every semester. Prerequisite: Phase II admission 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 Phase II.

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 Phase II.

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. Variable. 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 Phase II.

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 Phase II.

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: successful completion of admission requirements for Professional Development Schools.

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: Successful completion of Internship I and admission requirements for Phase III. Capstone.

Guidance

GUO 406 Introduction to Guidance 3 cr.
History and philosophy of guidance programs; the role, organization, and methods of guidance. Variable.

Reading

REED 317 Content Area Reading 3 cr.
Identification of the special reading demands in content areas and development of appropriate instructional activities. The reading process as it relates to content area learning. Research, best practices and instructional strategies. Required for all secondary and K-12 approved programs. Fall. Prerequisite: appropriate Phase admission.

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: Phase I admission.

REED 416 Reading and Language 3 cr.
Practical applications of research in language development, acquisition and use. Relevant to all education majors. Every semester. Prerequisite: Phase II admission.

REED 418 Reading and Writing Connections 3 cr.
Reading and writing activities in daily instruction. The role and use of authentic assessments in determining student reading performance and selection of materials appropriate to student ability levels. Not open to students with credit for former REED 318. Fall. Prerequisite: Phase II admission.

REED 420 Assessment for Reading Instruction 3 cr.
Understanding of the use of national, state, local and classroom reading assessment data to make ongoing instructional modifications as a strategy for prevention and intervention. Understanding of a variety of reading assessments and curriculum adjustments. Communicating assessment data about individual student reading performance to appropriate sources. Every semester. Prerequisite: successful completion of Block I.

REED 425 Materials and Motivations for Reading 3 cr.
Support for long-term motivation of developing readers within a framework of inquiry. Experience a variety of texts, including fiction and nonfiction, to be used in the classroom. Apply strategies for selecting materials, retrieving and evaluating materials. Understanding of accessibility, variety of media, multicultural materials, text features and oral and written responses to literature. Knowledge of the role of parents in supporting reading programs. Every semester. Prerequisite: Block II admission or permission of the department.

REED 440 Children’s Literature 3 cr.
Content and form of children’s literature in books other than school textbooks. How to evaluate literature and use literary materials in teaching. Variable.

REED 473 Reading Instruction 3 cr.

Secondary Education

SCED 410 Secondary Methods and Curriculum 3 cr.

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. Not open to students with credit for former SCED 311. Fall. Prerequisite: Phase II admission or permission of Department Chair; EDUC 391 recommended concurrently.

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. Not open to students with credit for former SCED 314. Fall. Prerequisite: Phase II admission or permission of Department Chair; EDUC 391 recommended concurrently.

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.) Not open to students with credit for former SCED 315. Fall. Prerequisites: Phase II admission or permission of Department Chair; EDUC 391 recommended concurrently.

SCED 416 Business Education in the Secondary School 3 cr.
Methods of teaching business content and skill competencies, organization and evaluation of work experiences, and the leadership role of the teacher in the development of student organizations. Included are philosophy, aims, purposes and objectives of Business Education; planning, organizing and evaluating the educational process, facilities and equipment; survey techniques used in business; teacher role in developing attitudes.
and preparing students for lifelong learning. Proficiency in the skill areas required. Credit cannot be earned for both SCED 416 and SCED 316. Fall. Prerequisites: Phase II admission or permission of Department Chair; EDUC 391 recommended concurrently.

SCED 419 Science in the Secondary School 3 cr.
Subject methods course required for secondary certification in teaching science. Modern trends in curriculum and instruction. Not open to students with credit for former SCED 319. Fall. Prerequisites: Phase II admission or permission of Department Chair; EDUC 391 recommended concurrently.

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. Not open to students with credit for former SCED 320. Fall. Prerequisites: Phase II admission or permission of Department Chair; EDUC 391 recommended concurrently.

SCED 430 Pedagogical Content Knowledge in the Secondary Disciplines 3 cr.
Secondary content, discipline-specific learning modules in lesson design and teaching methods focused on English Language Arts, Mathematics, Spanish Language & Literature, Science and Social Studies. Comparison of pedagogically appropriate application of content curriculum at the middle and high school levels in all secondary disciplines. Design of model unit plan and other key program assessments. Embedded clinical practice in local 7-12 schools. Required for secondary education majors. Fall. Prerequisite: Phase II admission.

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. Spring. Prerequisite: Phase III admission or permission of Department Chair.

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 phase 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 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. One hr. 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, MATH 237, PHYS 261.

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, 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 or permission of department chair.

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. Spring. Prerequisite: PHYS 264 or permission of department chair.

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. Prerequisites: Physics 263, or permission of the department chair.

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. Preparation
**Electrical Engineering**

**Courses marked UMCP Course are offered only for students completing the previous UMCP/FSU collaborative electrical engineering program. A limited selection of UMCP ENEE courses is offered as needed.**

**ENEE 114 Programming Concepts for Engineers**

3 cr. 

Introduction to software design, program development, and programming languages. Data and instruction formats, addressing modes, assembly language programming.

**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. Phasors, node and mesh analysis, superposition, theorems of Thévenin and Norton. Transient analysis for first- and second-order circuits. Three hr. lecture and one hr. discussion/recitation per week. Spring. Prerequisite: ENEE 114. 

**ENEE 206 Fundamental Electric & Digital Circuit Laboratory**

2 cr. 

A laboratory course to study the 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 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 303 Analog and Digital Electronics**

3 cr. 

Introduction to the conceptual physical operation of PN-junction diodes, MOSFETs and bipolar transistors (BJTs). 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. BJF forward active operation by study of CE design, bias and small-signal operation. MOS common source operation, study of inverters, NAND and NOR gates. Stabilization 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 307 course. 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. Prerequisites: “C” or better in ENEE 204, 206, 244. 

**ENEE 322 Signal and System Theory**

3 cr. 

Concept of linear systems, state space equations for continuous 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, electric 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: PHYS263 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. Prerequisite: PHYS 312. 

**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. Prerequisite: 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
ENME 371 Product Engineering and Manufacturing 3 cr.
FSU Course. Business aspects of engineering product development. Relationship of
design and manufacturing. Product specification. Statistical process control. Design team
development. The development process. Fall. Prerequisites: ENES 220 and ENME 391.

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 378 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 221.

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 & 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. Fall. Prerequisites: 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: Completion of ENES 491 and permission of department chair. May not be taken at the same time as ENEE 408 and PHYS 492.

ENME 423 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 425 Microfabrication 3 cr.
Spring. Prerequisites: Senior standing in physics or engineering or permission of department chair.

ENME 462 Vibration, Controls and Optimization II 3 cr.

ENME 472 Integrated Product and Process Development 3 cr.

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 Freshman 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: Freshman 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. Every semester. 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 ENGL 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 111. Prior literature course at the 200-level required. Core Skill 2.

ENGL 330 Business Writing 3 cr.
Basic writing for business and para-professional occupations. Writing resumes, 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. Every semester. 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 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 current social-networking platforms such as Blogger, Facebook, Flickr and Twitter. Introduction to online beat coverage. Logistical and ethical challenges of the 24-hour news cycle. Fall. Prerequisite: C or better in ENGL 101 or 111.

ENGL 360 Creative Nonfiction 3 cr.
Merging of the skills of storytelling and reporting to write personal essays and literary journalism. Fall. Prerequisite: ENGL 334, 335, or 336.

ENGL 402 Editing and Production 3 cr.
Design, layout, and editing techniques for professional publications. Reinforcement of copy editing and proofreading skills. Spring. Prerequisite: ENGL 300, 308, 309, 310, 330, 338 or 339.

ENGL 430 The Composing Processes 3 cr.
A survey of theory and research on the composing processes. Spring. 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. Spring. Prerequisite: ENGL 300, 308, 309, 310, 312, 330, 338, 339 or permission of instructor.

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 intern 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 those third-world 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 F.

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. Every semester. Prerequisite: C or better in ENGL 101 or 111.

ENGL 261 American Literature: Colonial to Present 3 cr.
A survey of American literature from colonial times to the present. Includes works from each period to provide historical perspective. Designed for English majors and minors. Every semester. 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. 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. Spring. 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 Into 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 adopted. Weekly film viewing. Variable. Prerequisite: C or better in ENGL 101 or 111 or equivalent.

ENGL 282 Shakespeare on Film 3 cr.
An examination of Shakespeare's plays on film, considering the films as interpretations and adaptations. The emphasis will be both literary - how do the films interpret and revise Shakespeare's dramas - and cultural - what do those 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 Introduction to English Linguistics 3 cr.
A study of the grammars and grammatical aspects of English as well as of language use in society, language change, and language acquisition and processing. Every semester. 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. Every semester. 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. Prerequisites: ENGL 101 or 111 or equivalent, ENGL 207 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. Credit cannot be earned for both ENGL 371 and ENGL 411. 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. Credit cannot be earned for both ENGL 372 and ENGL 307. Variable. Prerequisite: C or better in ENGL 101 or 111 or equivalent.

ENGL 373 Literature of the Enlightenment 3 cr.
Literature of 1650-1750 in Great Britain and America that represents movements toward philosophical, spiritual, scientific, social, and personal enlightenment. Credit cannot be earned for both ENGL 373 and either ENGL 322 or ENGL 352. 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. Credit cannot be earned for both ENGL 374 and either ENGL 332 or ENGL 352. 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. Credit cannot be earned for both ENGL 375 and either ENGL 303 or ENGL 313. 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. Credit cannot be earned for both ENGL 376 and either ENGL 323 or ENGL 407. Variable. Prerequisite: C or better in ENGL 101 or 111 or equivalent.

ENGL 377 Modernism 3 cr.
Literature from the turn of the twentieth century to WWII from both sides of the Atlantic. Credit cannot be earned for both ENGL 377 and either ENGL 407, ENGL 404, or ENGL 426. Variable. 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. Credit cannot be earned for both ENGL 378 and either ENGL 408, ENGL 424, or ENGL 426. Variable. 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 416 History of the English Language 3 cr.
From the beginning to contemporary usage; changes in sounds, grammatical and spelling forms, syntax, and vocabulary. Spring. Prerequisite: C or better in ENGL 101 or 111.

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 421 Jane Austen in Literature and Film 3 cr.
Examination of the five major novels of Jane Austen in literature and in film versions. Variable. Prerequisite: C or better in ENGL 101/111.

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. Fall, even-numbered years. 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.
**Exercise and Sport Science**

**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** 1 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. Every semester. 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. Seniors only. 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. Spring. 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**

You cannot receive credit for an EXSS course and the same course previously labeled PHEC or HEED.

**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.

**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. Variable; 3 credits. Prerequisite: EXSS 200.

**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 makeup 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 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 Health Fitness** 1 to 6 cr.
Field experience in health fitness. Sites of study may vary. Offered as needed. Repeatable for maximum of 6 credits if placement sites are different.

**EXSS 492 Seminar in Health Fitness** 3 cr.
A separately graded component of the Health Fitness 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 Health Fitness** 9 cr.
Special work experiences related to the health fitness 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.

**PHEC 413 Rehabilitation Techniques in Sport Medicine** 3 cr.
Various aspects of the rehabilitation process for the physically active or athletic population. Goals, techniques, evaluation methods and specific rehabilitation programs covered. Fall. Prerequisite: ATTR 319.
Finance

You cannot receive credit for both a FINA course and the same course formerly labeled BUAD.

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. Prerequisite: 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 118 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 4 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.
### Foreign Languages & Literature

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<td>Selected Topics in Foreign Language &amp; Literature</td>
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<tr>
<td>MDFL 390</td>
<td>Selected Topics in Foreign Language &amp; Literature</td>
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<tr>
<td>LING 301</td>
<td>Introduction to Language</td>
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<td>FREN 101</td>
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<tr>
<td>FREN 211</td>
<td>French Grammar, Composition, and Conversation I</td>
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<tr>
<td>FREN 212</td>
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<tr>
<td>FREN 250</td>
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<td>FREN 430</td>
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<tr>
<td>FREN 490</td>
<td>Special Topics in French Language and Literature</td>
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<td>FREN 493</td>
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<td>FREN 495</td>
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<tr>
<td>FREN 498</td>
<td>Readings in French</td>
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**French Language Studies**

- **MDFL 290 Selected Topics in Foreign Language & Literature**: A variable topic in a foreign language, literature, or culture other than French or Spanish such as Italian, Japanese, German, Arabic or Chinese more advanced than MDFL 190. Specific title listed in course schedule. Repeatable for a maximum of 15 credits if topics are substantially different. Variable.

- **MDFL 390 Selected Topics in Foreign Language & Literature**: A variable topic on language, literature or culture. Specific title listed on course schedule. Repeatable for a maximum of 15 credits if topics are substantially different. Variable. Prerequisite: permission of department.

**Literature in Translation**

- **MDFL 211 Introduction to World Literature I**: 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**: 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**: 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**: 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**: 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**: 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**: Fundamental skills: listening, speaking, reading, writing. Emphasis on active performance. Language laboratory. Not for students with high school or college French except by special placement. Fall.

- **FREN 102 Basic Elements of French II**: Continued development of basic skills. Emphasis on active performance. Language laboratory. Spring. Prerequisite: FREN 101.

- **FREN 211 French Grammar, Composition, and Conversation I**: Intensive grammar, oral command of the language, introduction to expository writing. Language laboratory. For students with two or more years of high school French, or FREN 102. Fall.

- **FREN 212 French Grammar, Composition & Conversation II**: Sequel to FREN 211. Spring.

- **FREN 250 Overview of French Language and Culture**: 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. GEP Group B.

- **FREN 330 Advanced Conversation**: 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**: 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**: 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**: Introduction to the current methodologies of literary analysis through the chronological study of selected writers 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 permission of instructor.

- **FREN 336 French Civilization Through Film and Literature**: 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 aural/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**: 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**: 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**: 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**: 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**: 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**: 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**: 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**: Capstone in French Professional Studies incorporating dossier of written work, oral presentation, and internship or research project. Prerequisite: 90 credits or permission of department chair.

- **FREN 498 Readings in French**: Intensive readings and a term paper. Repeatable for a maximum of 6 credits if topics are substantially different. Variable. Prerequisite: FREN 250 or equivalent.
FOREIGNLANGUAGES&LITERATURE

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.  Language laboratory.  Not for students with high school or college Spanish except by special placement.  Every semester.


SPAN 211 Spanish Grammar, Composition, & Conversation I  3 cr.  Intensive grammar, oral command of the language, introduction to expository writing.  Language laboratory.  For students with at least two years of high school Spanish, or SPAN 102.  Every semester.

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.  GEP Group B.

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 & 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 401 Literature of Spain I  3 cr.  Survey of literature of Spain from the Middle Ages through the seventeenth century.  Representative figures and major literary developments.  Variable.  Prerequisites: SPAN 250 and two 300-level Spanish courses.

SPAN 402 Literature of Spain II  3 cr.  Survey of literature in Spain from the eighteenth century to the present.  Representative figures and major literary developments.  Variable.  Prerequisites: SPAN 250 and two 300-level Spanish courses.

SPAN 403 Spanish American Literature I  3 cr.  Survey of literature in Latin America from the Pre-Hispanic period through the early twentieth century.  Representative figures and major literary developments.  Variable.  Prerequisites: SPAN 250 and two 300-level Spanish courses.

SPAN 404 Spanish American Literature II  3 cr.  Survey of literature in Latin America from the early twentieth century to the present.  Representative figures and major literary developments.  Variable.  Prerequisites: SPAN 250 and two 300-level Spanish courses.

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.  Prerequisites: 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 425 Latinos in the USA  3 cr.  Identification, study, analysis, and consideration of the different origins, circumstances of living, problems and achievements of Latino communities in the United States.  Variable.  Prerequisites: Two 300-level Spanish courses or permission of the instructor.

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 435 Literature of Women Writers  3 cr.  Critical survey of the work of women writers from the Spanish-speaking world including some writers from the U.S.A. who write in Spanish.  The survey includes ample range of writing from poetry to movie scripts.  Variable.  Prerequisites: Two 300-level Spanish courses or permission of instructor.

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.  Every semester.  Prerequisite: 90 credits or permission of department chair.

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 to 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.
COURSE DESCRIPTIONS

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 114 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 114. 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.
Aspects 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. Spring. GEOG 103 recommended.

**GEOG 207 Physical Geology and Geomorphology**
4 cr.
A process oriented approach to develop a fundamental understanding of geology and geomorphology. Experiential laboratory and field experiences of subsurface and surficial interactions with tectonic, hydrologic and atmospheric processes. At least one field trip will be required. Three hrs. lecture and 2 hrs. lab. Not open to students who have credit for former GEOG 307. Spring. 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, paleoecotectonics, 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. Fall. Prerequisite: GEOG 103/113 or GEOG 104/114 or GEOG 110 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. Fall. 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 co-requisites: GEOG 103 (or 113) and MATH 109/209, or permission of instructor. Tech. Fluency.

**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 (or 113) or GEOG 104 (or 114), or GEOG 110 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 and GEOG 380 or completion of one additional MATH course or a Level II Math class or DVMT 100 or proficiency at Level III on the Math placement test, 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. Spring, even-numbered years. 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. Spring. Prerequisite: GEOG 104/114 or GEOG 110 or sophomore standing.

**GEOG 335 Oceanography**
3 cr.
Basic principles of oceanographic science and discussion of the role of oceans in global environmental systems. Fall, even-numbered years. Also offered as SCIE 335. Prerequisites: GEOG 103 (or 113), BIOL 149 and completion of a college-level mathematics course.

**GEOG 340 Soils: Genesis, Nature and Characterization**
3 cr.
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. Spring. 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 geography 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 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 systems that have shaped the current landscapes and societies of North Africa, the Middle East, the Islamic republics of the former Soviet Union and Afghanistan. Spring, even-numbered years. 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 and GEOG 205/PHSC 205 and MATH 220/MATH 236 recommended.

GEOG 406 Management & Conservation of Nat. 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. Fall. 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. Fall. 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. Spring. 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. Fall. Prerequisite: GEOG 325 or permission of instructor.

GEOG 423 Geography of the Suburbs 3 cr.
Geographic patterns of suburbanization in North America. Economic, social, political and environmental issues and planning challenges of modern suburbs. Comparative suburbanization in global perspective. Variable. Intersession and summer. Prerequisites: GEOG 104/114 and 12 credits in GEOG, SOC, ECON, and/or POSC.

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. Fall, even-numbered years. Prerequisite: GEOG 104/114 or GEOG 110 or junior standing. (GEP Group F).

GEOG 429 Synoptic Climatology 3 cr.
Relating global atmospheric circulation principles and patterns to regional and local weather. Introduction to forecasting and weather modeling. Spring of even numbered years. Prerequisite: GEOG 405 or permission of instructor. GEOG 205/PHSC 205 and MATH 220/MATH 236 recommended.

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. Spring. 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. Fall. 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. Spring. 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. Spring. Prerequisite: GEOG 324 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. Fall, odd-numbered years. Prerequisite: GEOG 104/114 or GEOG 110 or junior standing.

GEOG 455 Tourism Planning 3 cr.
Planning activities associated with the development and marketing of tourist activities. Consideration of both business and leisure travel. Group project focus. Spring, even-numbered years. 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 Dynamics 3 cr.
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, odd-numbered years. Prerequisite: GEOG 405, MATH220/ MATH 236 or permission of instructor.

GEOG 470 Soil and Water Engineering 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. Fall. Prerequisites: Completion of GEOG 103 and GEOG 275, or permission of 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 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. Spring. 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 Glacial & Periglacial Geomorphology 3 cr.
Examination of the process, history and characteristics of the cryosphere. Glacial dynamics, associated sedimentary deposits and cold non-glacial frost dominated geomorphic processes and landforms. Analysis of glacial and periglacial landscapes using field data, sedimentary and biological evidence, remote sensing imagery and numerical models. Two hrs. lecture, 2 hrs. lab. Spring, odd-numbered years. Prerequisites: GEOG 103/113 and GEOG 207.

GEOG 476 Fluvial/Coastal Geomorphology 3 cr.
An examination of fluvial and near-shore coastal landscapes and sediments developed under the influence of moving water. Analysis of fluvial and near-shore landforms using field data, sedimentary and biological evidence, remote sensing imagery and numerical models. Two hours of lecture, two hours of lab. Variable. Prerequisites: GEOG 103 and GEOG

GEOG 477 Geomorphology of the Earth's Surface 3 cr.
The processes that shape the Earth's surface. Glacial, fluvial, coastal, and desert landforms and processes. Principles of surface process analysis. Fall. Prerequisites: GEOG 103 and GEOG 275.

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. Grade P/F. 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.

GEOG 488 Environmental Practicum 3 cr.
A self-paced, independent research study capstone course for concentrators in Environmental Science in Earth Science. The student will select an environmentally-related topic in consultation with his/her advisory committee, prepare a research proposal, conduct a literature review and/or collect field data, and complete a substantive research paper (adhering to the format of a major professional journal) which is also presented in an open public forum. Every semester, summer. Prerequisites: completion of 24 credit hours in this concentration, senior standing, GPA of at least 2.0 in the concentration and approval of department chair prior to registration.

GEOG 490 Special Topics in Geography 3 cr.
A specialized topic or recent development in geography. Variable. Repeatable for maximum of 6 credits if topics are substantially different. Prerequisite: 6 hrs. of geography or permission of instructor.

GEOG 492 Internship: Research in Geography 3 or 6 cr.
Academic component of internship. Requires co-registration in 495. Graded A-F. Every semester, summer.

GEOG 495 Internship in Geography 6 or 9 cr.
Experiential component of internship: guided work experience in conjunction with 492; must directly relate to academic program. Interns register for 9 credits in 495 and 6 credits in 492 or 6 credits in 495 and 3 credits in 492. Co-registration in other courses requires prior approval of the internship coordinator. Graded P/F. Every semester, summer. Prerequisites: major in Geography, Earth Science, Urban and Regional Planning, or Environmental Analysis and Planning with 24 hrs. completed, senior status, GPA of at least 2.5 in the major; approval of Department Chair; attendance at orientation meeting in semester prior to internship; submission of internship application by fifth week of semester prior to internship (application includes a resume and an internship proposal); requirements of cooperating agency, if any.

GEOG 499 Research in Geography 1-6 cr.
Research in field of interest chosen by student and faculty. Every semester, summer. Repeatable for maximum of 6 credits. Prerequisites: minimum of 15 hrs. of geography completed, GEOG 380 and 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. Every semester. 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.

INTR 491 Global Business Seminar 3 cr.
Serves as the culmination of studies in the global business concentration by providing students with an in-depth immersion into all aspects of global business from international trade policy and marketing practice to entry decisions. Spring. Prerequisites: INTR 330, ECON 400 and senior standing. Capstone.

Health & Physical Education

HPED 103 Foundations of Physical Education 3 cr.
Theories and practices guiding instructional planning in physical education. Foundational knowledge for TOPE program. Prerequisite: Major in Health and Physical Education.

HPED 104 Foundations of Health Education 3 cr.
Introduction to theories and practices guiding professional health educator responsibilities and competencies. Spring. Prerequisite: Major in Health and Physical Education.

HPED 201 Teaching Fitness 3 cr.
Content and pedagogy related to teaching fitness in elementary and secondary physical education. Fall. Prerequisite: HPED 103.

HPED 202 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 203 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. Every semester. 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. Every semester. Prerequisite: HPED 103.

HPED 208 Inclusion Strategies in Health Education 1 cr.
Special understanding necessary to the adaptation of health education to disabilities of individual persons. 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; major in Health and PE.

HPED 232 Teaching Health Content I: ATOD & Safety Education 2 cr.
Content and theory in the teaching of alcohol, tobacco, drugs, safety and injury prevention in a school health education program. May not be taken by students who have credit for former HEED 207 or 209. Fall. Prerequisite: HPED 104.

HPED 233 Teaching Health Content II: Human Sexuality & Nutrition Education 3 cr.
Content and theory in the teaching of family life and human sexuality, mental and emotional health, and nutrition in a school health education program. May not be taken by students who have credit for former HEED 220, 221 or 224. Spring. Prerequisite: HPED 104.

HPED 234 Teaching Health Content III: Disease Prevention 3 cr.
Content and theory in the teaching of personal, consumer, community and environmental disease prevention in a school health education program. May not be taken by students who have credit for former HEED 225, 226 or 227. 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. May not be taken by students who have credit for PHEC 303. Every semester. Prerequisite: BIOL 211.

HPED 310 Technology in Health and Physical Education 3 cr.
Introduction to content and practical applications of technology for the health and physical educator, including Microsoft Office programs, online presentation tools and discipline-specific technology devices. Spring. Prerequisites: HPED 103 and HPED 104. Tech. Fluency.

HPED 402 Adapted Physical Education 4 cr.
Adapting physical activities to individual disabilities. Three hrs. lecture, 3 hrs. lab. Prerequisite: HPED 416.

HPED 404 Health Instruction 3 cr.
Basic concepts of health education. Implementing a health education program for grades K-12. Every semester. Required in BLOCK semester prior to HPED 497 for Teacher Education. Prerequisites: HPED 416 and admission to PHASE II.

HPED 406 Applied Physiology 3 cr.
Understanding how the cardio-respiratory, digestive and muscle/neural systems function in the human body; how to teach physiological principles of training; how to promote a physically active lifestyle. May not be taken by students who have credit for PHEC 401. Every semester. Prerequisite: BIOL 211.

HPED 407 Motor Learning and Performance 3 cr.

HPED 408 Elementary Methods of Physical Education 3 cr.
Neuromuscular skills appropriate to grades K-6. Enhancing capacities for movement as a way to express oneself. One lecture and 2 labs per week. Every semester. Prerequisites: Admission to Phase II teacher education; HPED 416.

HPED 416 Curriculum Design in Health and Physical Education 3 cr.
Health and physical education curriculum development and evaluation. Instructional planning that is standards-based, developmentally appropriate and progressive. Spring. Prerequisites: Health and Physical Education majors only; junior standing.

HPED 418 Secondary Methods of Physical Education 3 cr.
Materials and methods of instruction in physical education at the secondary level. Teaching experience at local high school. Required in BLOCK semester prior to HPED 497 in Teacher Education. Every semester. Prerequisites: Admission to Phase II teacher education; HPED 416.

HPED 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: Phase III admission.
HEALTH - HEALTH PROMOTION - HEALTH SCIENCE - HISTORY

Health

HEED 100 Personal Wellness 2 cr.
Students will be assisted in developing an understanding of and appreciation for the importance of lifelong wellness practices and physical activities in their daily lives. Students plan, implement and evaluate own wellness plan. Every semester.

HEED 311 Assessment & Evaluation Methodology 3 cr.
Testing and measurement techniques; evaluation procedures. Practice in testing and interpretation. May not be taken by students who have credit for former PHEC 311. Fall. Prerequisite: HPED 230.

HEED 330 Epidemiology of Health and Disease 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. Variable. Prerequisite: HEED 101.

HEED 416 Curriculum Design in Health Education 3 cr.
Health Education curriculum development, implementation, and evaluation; implementation of program strategies from evaluation results. Variable. Prerequisite: Major in Health and Physical Education; junior standing.

HEED 418 Current Issues in Health 3 cr.
Identification and investigation of problems and solutions relevant to existing or emergent health topics. Variable.

HEED 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. AF majors only.

HEED 492 Seminar in Health Promotion 3 cr.
Monthly full day seminar meetings addressing work-related topics. Students must be enrolled in HEED 495 and have completed all other course work. Every semester.

HEED 495 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. Spring. Prerequisites: 6 hours in HLTH.

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: HLTH 430.

HLTH 483 Field Experience in Health Promotion 1 to 6 cr.
Field experience in health promotion. Sites of study may vary. Offered as needed. Repeatable for maximum of six credits if placement sites are different. 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 491 Health Science Seminar 1 cr.
Demonstration of disciplinary knowledge in a seminar format on a 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 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 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 3 cr.
Survey of Western and Non-Western Civilizations and cultures from the earliest times to 1500. Fall.

HIST 114 World History 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: completion of at least one of HIST 103/104/113/114 and enrollment 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 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 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, social, 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 Napoleon. 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 ninth-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 464 The Civil War and Reconstruction, 1849-1877 3 cr.
From the end of the Mexican-American War through the end of Reconstruction. Consequences of the Mexican-American War and Compromise of 1850, growing sectional conflict over the expansion of slavery in the West, the ascent of Lincoln and the Republican Party, the social, political, military, and economic impact of the Civil War, emancipation of slaves and efforts to reconstruct American laws and society within a new Constitutional framework of civil rights. Variable.

HIST 465 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 466 The 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 467 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 470 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 475 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 480 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 489 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 490 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 in Summer. Prerequisites: junior or senior status, in good academic standing, submission of Internship Agreement form to internship director prior to registering.

HIST 495 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,
Course Descriptions

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. Prerequisite: ITEC 315 or COSC 241.

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. Prerequisite: Grade of C or better in ITEC 315 or COSC 241.

ITEC 445 Database Systems II 3 cr.
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. Prerequisite: Grade of C or better in ITEC 345.

ITEC 452 Network and Administration Security 3 cr.
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. Prerequisite: Grade of C or better in ITEC 355.

ITEC 462 Emerging Issues and Technologies 3 cr.
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. Prerequisite: Grade of C or better in ITEC 360.

ITEC 470 Security and Risk Management 3 cr.
Security 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 3 cr.
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 3 cr.
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. Prerequisite: Grade of C or better in ITEC 355 or ITEC 460.

ITEC 480 Project Management 3 cr.
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. Prerequisite: At least 72 credits earned or permission of instructor.

ITEC 489 Capstone 1 cr.
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. Prerequisite: 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.
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 freshman 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: freshman 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 409 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 more challenging than those in other first-year colloquim classes. Readings emphasize primary rather than secondary sources. Assignments emphasize active learning experiences. Every semester. 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. To be completed within first 45 hours or soon after transfer if applicable. 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 inquiry and research. Variable. 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 examination of a unique topic related to the interdisciplinary 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 re-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 and develops basic skills for effective leadership in group, organization and community contexts. Spring.

LEAD 201 Leadership Theories and Practices 3 cr.
Examines traditional and contemporary leadership theories and their application to current leadership challenges. Fall. Prerequisite: LEAD 101.

LEAD 401 Citizen Leader 4 cr.
Theoretical and experiential exploration of the opportunities, obstacles and benefits involved in becoming engaged in civic life and social change. Six hours of integrated lecture/lab/discussion per week. Variable. Prerequisites: CMST 102, LEAD 101, LEAD 201 and 6 credits from approved elective list.

LEAD 499 Independent Study 1-4 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
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. Prerequisite: 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. Prerequisite: a grade of C or better in MATH 109/209/110/380, 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 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: MGMT 351.

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 361 and FINA 370 or FINA 476. Accounting, General Management, Human Resource Management, International Business, Small Business/Entrepreneurship Capstone.
COURSE DESCRIPTIONS

MARKETING

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 3 or 6 cr.
Guided work experience in management for business, nonprofit or government organizations. Minimum of 135 clock hours of experience for 3 credits (270 hours for 6 credits). Academic components include, but not limited to, one internship paper, internship log and site supervisor's evaluation of the student's performance. Previous experience not acceptable for credit. Repeatable for maximum of 6 credits. Every semester and summer. Prerequisites: Junior or senior 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 361 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: 29 credits. Additional 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 361.

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 361.

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 territories, creating sales strategies and understanding the importance of customer relationship management. Fall. Prerequisite: a grade of C or better in MKTG 361.

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 361.

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 361.

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 361 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 361 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 361.

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. Spring. Prerequisite: a grade of C or better in MKTG 361.

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 365, 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 Mass Communication Radio Workshop 1 cr.
Enter-level work experience in applying mass communication theories at radio station WFWM. Repeatable for maximum of 4 credits. May not be applied to fulfillment of major requirements. Variable. Prerequisite: permission of instructor.

MCOM 101 Mass Communication Television Workshop 1 cr.
Hands-on television experience. Serve as technical personnel for student-produced newscast. Repeatable for maximum of 4 credits. May not be applied to fulfillment of major requirements. Variable.
MCOM 105 Introduction to Mass Communication 3 cr
Historical evolution of today's media industries and career paths. Emphasis on contemporary issues affecting those industries and careers. Consideration given to emerging media, required skills, including professional expectations, standards, ethical considerations, and social impacts. Every semester.

MCOM 150 Introduction to Radio 3 cr
Study of radio in the United States, both AM and FM, with presentations on the basic electronics, operation, regulation, staffing and selling. Variable.

MCOM 213 Audio Production 3 cr
Examines the theories and technology used in audio production for music, radio, TV, and film. Provides students with a useful vocabulary and the basic theory upon which production skills can be built. Two hrs. lecture, 2 hrs. lab. Every semester.

MCOM 246 Intro to Mass Communication Research Methods 3 cr
Introduction to methods employed in both theoretical and applied research in Mass Communication. Basic assumptions, strengths, weaknesses in quantitative, qualitative, historical, critical cultural methods. Application of methods in theory development and industry decisions. 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 audio and video formats. Variable.

MCOM 287 Introduction to Video Production 3 cr
Principles and practices of video field production. Focus on visual composition, lighting and sound, production, planning and operation of portable video recording equipment. Emphasis on shooting and editing for broadcast, non-broadcast and multimedia applications. Not open to students who have credit for MCOM 311. Two hrs. lecture, 2 hrs. lab. Every semester.

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 287 and MCOM 213.

MCOM 313 Advanced 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 and CD authoring techniques. Fall. Prerequisite: MCOM 213 or permission of instructor.

MCOM 316 Electronic Media Management 3 cr
A study of problems of organization and management of radio and television stations with attention to problems of programming, sales, public relations, governmental agencies, and audiences. Also a consideration of regulatory, station, personnel, and affiliation restraints upon decision-making in management. Variable. Prerequisite: MCOM 105.

MCOM 325 Seminar in Public Relations 3 cr
Provides an overview of the public relations process: planning, execution and evaluation. Emphasis is placed on news releases, media pitches, backdrops, features, websites and social media, reports, proposals, newsletters, brochures, public service announcements and posters. Not open to students who have credit for former MCOM 490 Introduction to Public Relations. Variable. Prerequisite: C or better in GEP Advanced Writing (Core Skill 2).

MCOM 326 Writing for Electronic Media 3 cr
Fundamentals of media and multi-media writing; vocabulary, syntax, organizing ideas according to industry needs. Sound message versus print message; print versus electronic writing. Every semester. Prerequisite: MCOM 105.

MCOM 336 Broadcast-Cable Programming 3 cr
Study of the general theoretical principles of scheduling and selecting programming for broadcasting, cable, and internet uses. An examination of general programming principles and practices, regulatory constraints upon programming, the nature and interpretation of ratings and their influence upon programming. Variable. Prerequisite: MCOM 105.

MCOM 346 Mass Communication Theory 3 cr
Theories of the process of mass communication, how media affect society, the evolution within a social and cultural context, ethical and social dimensions. Extensive reading in theory, history, and research. Every semester. Prerequisites: MCOM 105 and MCOM 246.

MCOM 350 Beginning Television Screenwriting 3 cr
Introduction to and overview of the elements of theme, plot, character and dialogue in dramatic writing for television. Exercises in episodic research, story creation, pitching and drafting and the application of each step to the development of the student's dramatic writing. By the end of the course, each student will have completed a "spec" script for a current television drama to use as a writing sample suitable for submission to festivals, agents, managers and producers. Variable.

MCOM 387 Multi-Camera Studio Production 3 cr
Survey of professional uses of video production, including television, corporate video, web-based video and educational video. Introduction to the production process, shooting techniques, digital editing techniques and Internet streaming. Not open to students who have credit for MCOM 212. Two hrs. lecture, 2 hrs. lab. Fall. Prerequisite: MCOM 287.

MCOM 447 Telecommunications Law 3 cr
Survey of both constitutional and administrative laws, regulations and public policies that govern the United States' telecommunications systems. Every semester. Prerequisites: MCOM 105, 60 hours and good academic standing, or permission of instructor.

MCOM 456 Creative Strategies in Advertising and Media Buying 3 cr
Investigation of how effective advertising campaigns are mounted by agencies. Creative strategies emphasized. A campaign for a new product is researched, designed, and presented by students. A basic understanding of media placement, rates and rate cards included. Variable. Prerequisites: MCOM 105 and MCOM 246 or permission of the instructor.

MCOM 465 Music Promotion and Production 3 cr
Students will apply promotion and production skills to a real world situation by organizing, promoting and producing a full-length audio CD. Students will also organize and promote a live concert featuring artists from the CD. Repeatable for maximum of 6 credits. Spring. Prerequisite: permission of instructor.

MCOM 485 Electronic Media Aesthetics and Criticism 3 cr
Study of the aesthetic principles guiding development of electronic media products. Examination of approaches to analyzing and critiquing media products. Critical viewing and analysis of media texts. Emphasis on aural and visual media: radio, television and film. Every semester. Prerequisites: MCOM 105 and a C or better in GEP Advanced Writing (Core Skill 2) or permission of instructor.

MCOM 486 Current Issues and New Technologies in Mass Comm. 3 cr
Examines a variety of new and emerging telecommunications technologies. Considers the historical and ethical impacts of these technologies on the media; issues and economics driving the implementation of these technologies; and their adoption and use by consumers. Every semester. Prerequisites: MCOM 105, MCOM 246 and MCOM 346.

MCOM 487 Advanced Video Production 3 cr
Combines studio and field production elements. Emphasis on advanced production, editing, and post-production techniques. Two hrs. lecture, 2 hrs. lab. Spring. Prerequisites: MCOM 287, MCOM 387 or permission of instructor.

MCOM 488 Multi-Camera Field Production 3 cr
Techniques and skills necessary to utilize multi-cameras in a variety of field productions. Two hrs. lecture, 2 hrs. lab. Every semester. Repeatable for a maximum of 6 credits if roles are substantially different. Prerequisites: MCOM 287, MCOM 387 or permission of instructor.

MCOM 490 Special Topics in Mass Communication 3 cr
Research or applied experience on an announced selected topic. Repeatable if topics are substantially different. Variable. Prerequisite: permission of instructor.

MCOM 492 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 Mass Communication Internship 1 to 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/senior status, declared major in mass communication, minimum 12 cr. in mass communica-
Mathematics

COURSE DESCRIPTIONS

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. MAY NOT BE USED TO SATISFY THE REQUIREMENTS FOR A MAJOR OR MINOR IN MATHEMATICS.

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, numeral 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 B 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
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 315 Foundations of Mathematics 3 cr.
Theory of sets; mathematical logic; quantifiers; methods of proof in mathematics. Variable. Prerequisite: A grade of C or better in MATH 237 or permission of the instructor.

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. Fall. Prerequisite: MATH 236 or MATH 220 or concurrent enrollment in MATH 226 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: A grade of C or better in either MATH 220 or MATH 236 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. Variable. 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 432 Differential Equations 3 cr.
Solution of ordinary differential equations, Laplace transforms, numerical methods using mathematical software, solution by series. Every semester. Prerequisite: MATH 237.

MATH 436 (also 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, odd-numbered years. Prerequisite: MATH 432 and PHYS 216 or PHYS 262, or permission of instructor.

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. Every three semesters beginning in spring 2003. Prerequisites: MATH 237 and permission of instructor.

MATH 480 Probability and Statistics 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. Fall, odd-numbered years. Prerequisite: MATH 238 or permission of instructor.

MATH 490 Selected Topics in Mathematics 3 cr.
A deeper study of probability and statistics than MATH 380. Continuous probability distributions and their statistical applications. Variable. See department secretary for up-to-date schedule. Prerequisites: MATH 238, MATH 380, 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 intern 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

Applied Music

MUSA 101 Student Recital Attendance .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 (MUSA 415). 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 (MUSA 415). 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 or music 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 each semester in lieu of a final examination. Every semester. Prerequisites: concurrent enrollment in an ensemble (MUSC 315, 319, 327, 329, 330, 331, 335, 336, 337, 339 or 340); permission of instructor; audition required.

MUSA 208 Class Instruments II: Woodwinds 1 cr. 
Class instruction in the standard woodwind 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 209 Class Instruments III: Brass 1 cr. 
Class instruction in the standard brass instruments, designed to prepare future instrumental teachers at all levels of the public schools. Meets 100 minutes per week. Spring. Prerequisite: permission of instructor; enrollment preference given to music majors/minors.

MUSA 213 Piano Pedagogy 2 cr. 
A methods and materials course for those preparing for piano studio teaching. Prerequisite: permission of instructor.

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 287 Sophomore Evaluation — Music Education 0 cr. 
Sophomore review 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 majoring in music education. Repeatable only by permission of department chair. Graded P/F. Every semester. Prerequisites: permission of instructor; completion of MUSC 205, MUSC 207 and MUSA 415.

MUSA 289 Sophomore Evaluation — Music Performance 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 291 Sophomore Evaluation — Music Management 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; enrollment preference given to music majors/minors.

MUSA 300 Junior Recital 1 cr. 
Junior Recital for the Bachelor of Arts or Science Music Degree. Preparation and performance of the junior recital. 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 301 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.

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, 319, 327, 329, 330, 331, 335, 336, 337, 339 or 340); permission of instructor; audition required.

MUSA 359 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 360 Music of the Renaissance 1 cr. 
Music of the Renaissance added for the music faculty. Required of all music majors. Repeatable only by permission of department chair. P/F only. Every semester. Prerequisites: concurrent enrollment in an ensemble (MUSC 315, 319, 327, 329, 330, 331, 335, 336, 337, 339 or 340); permission of instructor; audition required.

MUSA 401 Basic Ear Training 1 cr. 
Beginning ear training in music theory and practice. Required of all music majors. Repeatable only by permission of department chair. P/F only. Every semester. Prerequisites: concurrent enrollment in an ensemble (MUSC 315, 319, 327, 329, 330, 331, 335, 336, 337, 339 or 340); permission of instructor; audition required.

MUSA 415 Piano Proficiency Exam 0 cr. 
Successful demonstration of functional keyboard skills for Music Teaching Certification, Performance and Music Management majors. Includes technical facility, sight-reading, transposition, improvisation and prepared repertoire. Required for all music majors for admission to upper division courses. Scheduled by appointment. P/F only.

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 tonization 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 1 cr.
First in the series that emphasizes strategies for effective and expressive 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 1 cr.
Completes 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 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 125 Introduction to Music Education 3 cr.
Provides 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 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 tonization 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 1 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 1 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 that changes meter asymmetrically. All harmonic, melodic, rhythmic, and formal procedures build on materials mastered in MUSC 206. Required for music majors. Meets 100 minutes per week. Spring. Prerequisites: MUSC 204 and MUSC 206 or permission of the instructor. Concurrent enrollment in MUSC 205: Tonal Analysis IV, except by permission of the instructor.

MUSC 210 Diction I 1 cr.
Acquaints students with the symbols and sounds of the International Phonetic Alphabet and with the application of the IPA to the English, French, German, Italian, Latin and Spanish languages. Differences between spoken and sung languages explored and physical processes required to produce the various sounds investigated and practiced. (Required for vocal performance and choral education majors.) Fall.

MUSC 211 Diction II 1 cr.
Acquaints students with the symbols and sounds of the International Phonetic Alphabet and its application to German and French languages. Differences between spoken and sung languages explored and physical processes required to produce the various sound investigated and practiced. Required for vocal performance and choral education majors. Spring.

MUSC 214 Jazz Theory & Analysis 3 cr.
Emphasis on the development of analytical skills and vocabulary as applied to jazz composition and improvisation. Students will demonstrate their increased skills through written assignments and performance. Spring. Prerequisites: MUSC 102 and MUSC 104.

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 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 252 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 305 Orchestration 2 cr.
Study of ranges, tonal possibilities, technical limitations and necessary transpositions for all orchestral and band instruments; scoring of short pieces in various styles for orchestra. Variable. Prerequisite: MUSC 205.

MUSC 308 Music History I: 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 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 303 and MUSC 310. Fall. Prerequisite: MUSC 205 or permission of instructor.

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; examination 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 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 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 melodies. Required for vocal performance majors. Prerequisite: MUSC 210 and MUSC 211. 150 minutes per week.

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 352 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 voice and piano majors in the music teacher education program. Spring. Prerequisites: MUSA 287 and MUSA 415.

MUSC 353 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 356 Computer Music Technology  2 cr.
Practical approach to the use of various music applications computers, Musical Instrument Digital Interface synthesizers and associated software (sequencer and notation). Designed to give students an introductory survey of computer music technology as it applies to performance and academic areas within the field of music. Classes are laboratory in nature, held in the Electronic Music Lab. Variable. Prerequisite: permission of the Department.

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 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.

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 401 Post-tonal Analysis 3 cr.
Combines a survey of 20th-century compositional styles with advanced musicianship exercises focusing on the post-tonal repertoire. Variable. Prerequisite: MUSC 205.

### MUSC 407 Counterpoint 2 cr.
A stylistic approach to the study of counterpoint based on the harmonic-contrapuntal style of J.S. Bach as found in his Two- and Three-Part Inventions, Well-Tempered Clavier and choral preludes. Variable. Prerequisite: MUSC 205.

### 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 404 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 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 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. Prerequisites: minimum of 2 yrs. of vocal study and the ability to play simple piano accompaniments.

### 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. Prerequisites: MUSA 287; completion of 12 credits of 300-level private instruction. Corequisite: MUSA 300-level private instruction. Capstone for Music Studies Track.

### 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 Project Paper. Graded P/F. Every semester. Prerequisites: MUSA 287 and MUSA 415; 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.

## Nursing

### 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. 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. 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. 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. 3 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. 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. Summer and fall. Prerequisites: Admission to the RN to BSN program; prerequisite or co-require: 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. 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. 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. 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 EXSS 200.

### 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
Orientation - 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.

PHIL 303 Philosophy of Art 3 cr.
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 3 cr.
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 3 cr.
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 3 cr.
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 3 cr.
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 3 cr.
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 3 cr.
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 3 cr.
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 3 cr.
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 3 cr.
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 3 cr.
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 3 cr.
Investigates 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 3 cr.
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 intersects 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 3 cr.
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 3 cr.
Contemporary approaches to problems in 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 3 cr.
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 3 cr.
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 3 cr.
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 6-12 cr.
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 Aerobic Fitness** 2 cr.
Leadership and technical skills for safe and effective group exercise programs. Every semester.

**PHEC 115 Methods of Group Exercise Instruction** 3 cr.
Leadership and technical skills for safe and effective group exercise programs. 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 146 Teaching of Physical Education Through Outdoor Adventure Education** 1 cr.
Fundamental skills of rock climbing, canoeing, backpacking, cycling and in-line skating. Every semester. Prerequisite: HPED 103 or PHEC 170.

**PHEC 165 Teaching of Physical Education Through Cooperative Team Challenges** 1 cr.
Fundamental skills of cooperative and initiative activities. Every semester. Prerequisite: HPED 103 or PHEC 170.

**PHEC 166 Teaching of Physical Education Through Game and Activity Skills** 1 cr.
Fundamental skills of game and activity, team play and strategy. Every semester. Prerequisite: HPED 103 or PHEC 170.

**PHEC 167 Teaching of Physical Education Through Educational Gymnastics** 1 cr.
Fundamental skills of educational gymnastics. Every semester. Prerequisite: HPED 103 or PHEC 170.

**PHEC 168 Teaching of Physical Education Through Dance Forms** 1 cr.
Fundamental skills of dance. Every semester. Prerequisite: HPED 103 or PHEC 170.

**PHEC 169 Teaching of Physical Education Through Health Fitness** 1 cr.
Fundamental skills of health fitness. Every semester. Prerequisite: HPED 103 or PHEC 170.

**PHEC 170 Physical Education Teaching Lab** 1 cr.
Lesson plan components for physical education. Foundational knowledge for TOPE program. Prerequisite: Transfer students entering with credit for HPED 103 or permission of instructor only.

**PHEC 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.

**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 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.

**PHEC 309 Health and Physical Education for the Elementary Classroom Teacher** 3 cr.
Developmentally appropriate content, skills and activities in health and physical education. Primary emphasis on regular classroom teacher role. For early childhood and elementary education majors. Students required to earn CPR certification outside regular class hours. Every semester, summer. Prerequisite: EDUC 100 or concurrent with EDUC 335.
PHEC 310 Organization and Administration of Health and Physical Education 3 cr.
Non-instructional aspects of the health and physical education program. Classroom management and discipline, budgets and equipment inventory, legal considerations, program advocacy and the role of physical education in society. Spring. Prerequisite: health and physical education majors only.

PHEC 341 Psychology of Physical Activity 3 cr.
Concepts related to psychology and physical activity. Theory-to-practice approach on how social psychological variables influence motor behavior and how physical activity affects the psychological make up of the individual. Spring. Prerequisite: Psychology 150.

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, odd-numbered years.

PHEC 361 Theory of Football 3 cr.
Concepts, advanced strategies, and organization and administration of a football program. Spring, odd-numbered years.

PHEC 362 Theory of Baseball 3 cr.
Concepts, advanced strategies and organization and administration of a baseball program. Fall, odd-numbered years.

PHEC 363 Theory of Basketball 3 cr.
Concepts, advanced strategies and organization and administration of a basketball program. Fall, even-numbered years.

PHEC 364 Theory of Soccer 3 cr.
Concepts, advanced strategies and organization and administration of a soccer program. Spring, odd-numbered years.

PHEC 365 Theory of Volleyball 3 cr.
Concepts, advanced strategies and organization and administration of a volleyball program. Spring, even-numbered years.

PHEC 366 Theory of Tennis 3 cr.
Concepts, advanced strategies, and organization and administration of a tennis program. Spring, even-numbered years.

PHEC 367 Theory of Softball 3 cr.
Concepts, strategy and organization and administration of a softball program. Fall, even-numbered years.

PHEC 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.

PHEC 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. Variable.

PHEC 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: PHEC 175 and PHEC 303.

PHEC 411 Evaluation and Prescription in Fitness 3 cr.
In-depth examination of evaluation and components applicable to the development of exercise programs. Every semester. Prerequisite: PHEC 401.

PHEC 412 Principles of Coaching 3 cr.
Introduces students to learning about coaching education and the responsibilities of the coach. Spring, odd-numbered years.

PHEC 413 Rehabilitation Techniques in Sport Medicine 3 cr.
Various aspects of the rehabilitation process for the physically active or athletic population. Goals, techniques, evaluation methods and specific rehabilitation programs covered. Fall. Prerequisite: HEED 319.

PHEC 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.

PHEC 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. Variable.

PHEC 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.

PHEC 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.

PHEC 480 Field Experience in Athletic Training 1 to 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.

PHEC 481 Field Experience in Coaching 1 to 6 cr.
Field experience in coaching. Sites of study may vary. Offered as needed. Repeatable for maximum of 6 credits if placement sites are different.

PHEC 482 Field Experience in Health Fitness 1 to 6 cr.
Field experience in health fitness. Sites of study may vary. Offered as needed. Repeatable for maximum of 6 credits if placement sites are different.

PHEC 490 Special Topics in Health and Physical Education 1 to 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.

PHEC 492 Seminar in Health Fitness 3 cr.
A separately graded component of the Health Fitness Internship, required in conjunction with PHEC 495. This course will address worksite issues encountered during the internship experience. Every semester.

PHEC 495 Internship in Health Fitness 9 cr.
Special work experiences related to the health fitness academic program. Full-time students must register for a minimum of 9 credit hours of internship. Graded P/F. Prerequisites: Completion of 90 credit hours or more with a C or better in the major and senior status. Exercise and Sport Science Capstone.

PHEC 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: Phase III admission or permission of Department Chair.

PHEC 498 Readings in Health and Physical Education 1 to 4 cr.
Intensive reading on selected topic. Every semester. Repeatable for maximum of 4 credits if topics are substantially different. Prerequisites: major or minor in HPE or Exercise and Sport Science and permission of instructor.

PHEC 499 Individual Problems in Health and Phys. Ed. 1 to 4 cr.
Individual activity requiring submission of a final paper or completed project. Every semester. Repeatable for maximum of 4 credits if topics are substantially different. Prerequisites: major or minor in HPE or Exercise and Sport Science and permission of instructor.
**COURSE DESCRIPTIONS**

**Physics**

**Physical Science**

**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. Prequisite 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 220 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.  

**Physics**

**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**  
4 cr.  
Calculus-based introduction to the theoretical and experimental foundations of physics focusing on mechanics. Topics to include kinematics, dynamics, energy, momentum, rotational dynamics, and continuum mechanics. Intended primarily for physical science, engineering and math majors. Six hours of integrated lecture/lab, two hours 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, thermodynamics, kinetic, theory, electrostatics, electrodynamics, magnetostatics, and electromagnetic induction. Six hours of integrated lecture/lab/discussion per week. Spring. Prerequisite: PHYS 261. Corequisite: MATH 237.

**PHYS 263 Principles of Physics III: Sound & Light**  
4 cr.  
Calculus-based introduction to the theoretical and experimental foundations of physics focusing on sound and light. Topics to include vibration, wave motion, acoustics, Maxwell’s equations, geometrical optics, physical optics, and special relativity. 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 282 Thermodynamics**  
3 cr.  
Introduction to thermodynamics. Thermodynamic properties of matter. Three laws of thermodynamics, cycles, reactions, mixtures. Fall, odd numbered years. Also offered as ENME 232. Prerequisites: PHYS 261 and 262.

**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 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 ENES 304. Prerequisites: PHYS 216 or PHYS 262, and MATH 237, or permission of the instructor.

**PHYS 310 Classical Mechanics**  
4 cr.  
PHYSICS

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 331.

PHYS 335: Energy Generation & 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 216.

PHYS 340 Audio Engineering 3 cr.
Basic principles of audio engineering including acoustics, electrowaoustic 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 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 238, 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.

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 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 311. Prerequisites: POSC 110/112 or POSC 113/114 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. Prerequisite: 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, juries, 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 United States. Positions on basic issues; public opinion 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 133/134 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 American Constitutional Law I 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 American Constitutional Law II 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 422 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 110/114 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.

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 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 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 register for 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 to 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 in 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.
PSY 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.

PSY 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.

PSY 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.

PSY 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.

PSY 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.

PSY 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.

PSY 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.

PSY 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.

PSY 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.

PSY 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: PSYC 150/151 with a "C" or better.

PSY 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, violence against women and spirituality. Spring. Prerequisite: PSYC 150/151 with a "C" or better. GEP Group F.

PSY 250 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.

PSY 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.

PSY 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.

PSY 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.

PSY 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.

PSY 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.

PSY 317 Abnormal Psychology 3 cr.
In-depth examination of psychological disorders. Relevant research and evidence-based treatment are discussed. Spring and intersession. Not open to students with credit for former PSYC 417. Prerequisite: PSYC 150/151 with a "C" or better. Recommended PSYC 208/210/212.

PSY 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.

PSY 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.

PSY 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.

PSY 360 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 workplace. Considers personnel psychology,
organizational psychology and consumer psychology. Variable. Prerequisite: PSYC 150/151 with a C or better.

**PSYC 385 Group Processes** 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 Drugs and Human Behavior** 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 Treatment Issues and Theory in Addictions** 3 cr.
Prerequisite: PSYC 150/151 with a C or better. 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.
Prerequisite: PSYC 208 or 210 or 212; at least 75 credits. 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.
Prerequisite: PSYC 210 or 212, or permission of instructor. 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.
Prerequisite: PSYC 150/151 with a "C" or better. 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.
Prerequisite: PSYC 150/151 with a C or better. 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 408 Tests and Measurements** 3 cr.
Prerequisite: PSYC 150/151 with a C or better. 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.
Prerequisite: PSYC 150/151 with a C or better. 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 Introduction to Counseling** 3 cr.
Prerequisite: PSYC 150/151 with a C or better. Practical and theoretical foundation for further study. The nature of helping relationships, conditions for counseling, stages in the counseling process, and the counselor as a professional helper. Role playing, audio and video tape experiences, and related skill-development exercises. Every semester and summer. Prerequisite: PSYC 150/151 with a C or better.

**PSYC 420 Physiological Psychology** 3 cr.
Prerequisite: PSYC 150/151 with a "C" or better. 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 426 Historical Foundations of Psychology** 3 cr.
Prerequisite: PSYC 301 with a "C" or better. 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 470 Research Methods Applications** 3 cr.
Prerequisite: PSYC 210 or 212; at least 75 credits. 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 485 Behavioral Approaches to Human Problems** 3 cr.
Prerequisite: PSYC 150/151 with a "C" or better. Extensive examination of behavior therapy principles and strategies/procedures. Spring. Prerequisite: PSYC 150/151 with a "C" or better. 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 487 Advanced Study in Psychology** 2-4 cr.
Prerequisite: PSYC 301 with a "C" or better. 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 488 Environmental Psychology** 3 cr.
Prerequisite: PSYC 150/151 with a "C" or better. 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.
Prerequisite: PSYC 150/151 with a "C" or better. 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** 4 cr.
Prerequisite: PSYC 150/151 with a "C" or better. 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 credit hrs. are required (such as 2 hrs. lab and 3 hrs. lecture). Repeatable for maximum of 9 credits if topics are substantially different. Variable. Prerequisites: PSYC 150/151 with a C or better.

**PSYC 491 Seminar in Psychology** 3 cr.
Oral reports on a selected theme topic presented and discussed by students in a group setting. Written reports may also be required. Attendance at all seminar meetings ex-
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. Every semester.

RECR 321 Therapeutic Recreation Practices and Procedures  3 cr.
An 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. Fall.

RECR 342 Park and Facility Design  3 cr.
Study of park and recreation areas including acquisition, design and operating policies. Spring.

RECR 380 Recreation Leadership  3 cr.
Leadership techniques involved in recreation and park settings, including leadership in small and large groups. 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.
Nature of scientific inquiry, research designs, survey research, program evaluation, unobtrusive research and elementary quantitative analysis in recreation and parks. 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. Variable.

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. Variable.

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. Spring. 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. Fall. Prerequisites: RECR 221 and RECR 321.

RECR 423 Advanced Facilitation Methods for Clinical and 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. Spring. Prerequisites: RECR 221 and RECR 321.

RECR 440 Organization and Administration of Recreation and Parks  3 cr.
Management and administration of recreation and parks agencies, including concepts and principles of management, supervisory leadership, human resource management and operations and maintenance. Fall. Prerequisite: 75 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: 75 credits or permission of instructor.
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, SOCI 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 & 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 379 or permission of the Department. Enrollment limited to Social Work majors.

SOWK 471 Generalist Practice with Communities & Organizations 3 cr.
Advanced theories and techniques of social work intervention within social systems utilizing an eclectic, ecological, problem-solving approach. Every semester. Prerequisites:
COURSE DESCRIPTIONS

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 SOCI 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 SOCI 306. Prerequisite: SOCI 100 or SOCI 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 SOCI 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. Also offered as SOWK 305.  

SOCI 312 Social Work Seminar 3 cr.
Professional capstone course to integrate classroom and field experience. Required co-registration in SOWK 494. 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.  

SOCI 395 Internship in Social Work 12 cr.
Required, integral part of Social Work major. Provides semester of full-time, generalist social service activity and social work intervention. Required co-registration in SOWK 492. Graded P/F. Every semester. Enrollment limited to Social Work majors. Prerequisites: SOWK 471; senior status; 2.3 GPA in major and overall; completion of all prerequisite major and GEP course work; attendance at orientation meeting in semester prior to internship; submission of internship application at the beginning of the semester preceding internship which includes resume. Fieldwork coordinator must approve all internships.  

SOCI 498 Readings in Social Work 1-3 cr.
Directed reading on a specific topic designed for the individual student. Summaries of readings and conclusions constitute a formal written report to be filed with the Department. Not to duplicate any other course offered by the Department. Open to any Junior or Senior Social Work major who submits a proposal to the Department. Every semester. Repeatable for maximum of 6 credits if topics are substantially different. Prerequisite: permission of instructor and Department Chair.  

SOCI 499 Individual Problems in Social Work 1-3 cr.
Special research project open to any Junior or Senior Social Work major who submits a proposal prior to the semester of the project to the faculty instructor. Must result in a written analysis of research findings. Every semester. Repeatable for maximum of 6 credits if topics are substantially different. Prerequisite: permission of instructor and Department Chair.  

Sociology
COURSES DESCRIPTIONS

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.

SOCI 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, focusing on the social dimensions of the surrounding natural and human-made environments. Spring. Prerequisite: SOCI 100/111.

SOCI 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.

SOCI 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.

SOCI 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.

SOCI 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.

SOCI 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.

SOCI 420 Animals in Human Society 3 cr.
Students will develop an understanding of how sociological perspectives and theories can be 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 SOCI 111.

SOCI 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.

SOCI 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: 9 hrs. of sociology or permission of instructor.

SOCI 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.

SOCI 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.

SOCI 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: 21 hrs. in Sociology or permission of instructor.

SOCI 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; 21 hrs. of Sociology or permission of instructor.

SOCI 466 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.

SOCI 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.

SOCI 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.

SOCI 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.

SOCI 492 Internship Seminar/Research Paper 3 cr.
Academic component of internship. Required co-registration in 495. Graded A-F. Every semester.

SOCI 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) resumé, (2) proposal, (3) letter of acceptance from proposed agency.

SOCI 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.

SOCI 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 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 246 Sustainability in Action 3 cr.
Practical aspects of sustainability are considered at the individual, household and community levels. Challenges and opportunities for more sustainable decision making are examined. Required field trip. Fall. Prerequisite: SUST 155.
SUST 455 Seminar in Sustainability Studies  
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.

SUST 494 Field Experience in Sustainability Studies  
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  
Practical application of principles of technical theatre. Work on departmental productions required in the scene shop, costume shop, or on electrics crew. Minimum of 45 clock hours required. Repeatable for credit each semester of enrollment. Every semester.

THEA 103 Front of House Practicum  
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  
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  
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  
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  
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 lab consisting of practical experience in design shops and performance spaces. Every semester. GEP Group A.

THEA 110 Introduction to Acting  
Introductory preparation for acting through developmental exercises. Every semester.

THEA 202 Stage Management  
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  
Introduction of the use of costume crafts in theatre. Course will focus on principles, techniques and practical application of make-up and hair (for both the actor and designer) as well as pattern making, 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 the instructor.

THEA 204 Stagecraft  
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 Drama  
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. Also offered as ENGL 206. Spring. Prerequisites: THEA 106 and ENGL 101/111.

THEA 207 Theatre CAD  
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  
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  
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  
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  
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  
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 306 Stage Lighting  
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  
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.

THEA 308 Directing  
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  
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  
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 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. 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. 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 theatre. Credit cannot be earned for both THEA 400 and THEA 409. Variable. Prerequisite: permission of 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. Fall and Spring.

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. Prerequisite: THEA 318.

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 Renaissance with emphasis on the conventions of the Greek 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 Elizabethan Age to early 20th century with emphasis on the rise of realism and the anti-realistic movements that arose in response. 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, auditon 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. Fall, even-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 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. Repeatable 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: pre-modern, 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. Variable. Corequisite: THEA 495

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. Repeatable 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

Personnel Information current as of 5/5/2017

Administration

OFFICE OF THE PRESIDENT

RONALD H. NOWACZYK, President. B.A., Northwestern University; M.A., Ph.D., Miami University of Ohio.

M. KATHERINE SNYDER, Vice President of Human Resources. B.S., M.B.A., Frostburg State University.

BETH W. HOFFMAN, Director of ADA/EEO and Immigration Compliance. B.S., Shenandoah College; M.Ed., Frostburg State University.

ELIZABETH M. THOMAS, Associate Director of Human Resources. A.A., Allegany College of Maryland; B.S., University of Maryland University College.

LEE ANN NIGHTINGALE, Manager of Benefits and Wellness Program. B.S., M.B.A., Frostburg State University.


LISA D. HERSCH, Senior Human Resources Specialist. B.A., Seton Hill University.

JOHN F. BOWMAN II, Interim Vice President for International and Government Affairs. B.S., The Ohio State University; M.A., University of Kentucky; Ph.D., University of Pittsburgh.

AARON M. HOEL, Director of Research and Sponsored Programs. B.A., University of Northern Iowa; M.A., University of Kansas.

DAVID A. WEBB, Contract and Grant Specialist. B.A., Frostburg State University.

VACANT, Title IX and University Compliance Coordinator.

JODI L. TERNENT, Business Analyst, Student Records. A.A., Allegany College of Maryland; B.S., Frostburg State University.

CAROL E. COSNER, Business Analyst, Student Records.

HARRIET B. DOUGLAS, Director of Programs Advancing Student Success (P.A.S.S.). B.A., Gettysburg College; M.Ed., Frostburg State University.

TAMARA E. LOWRY, Director of Student Support Services. B.S., M.Ed., Frostburg State University.

DONALD W. MAXWELL, Academic Counselor/Math Specialist. B.S., M.S., Youngstown State University.

R. SHAWN JONES, Student Development Specialist. B.S., University of South Carolina; M.A., Webster University.

HOLLY S. CLARK, Student Development Specialist. B.S., M.Ed., Frostburg State University.

MARK E. SMITH, Director of the Writing/Tutoring Center. B.A., M.A., West Virginia University.

HOLLY H. VEITH, Director of Disability Support Services. B.S., M.S.W., Radford University.

KIMBERLY M. KUREK, Director of Developmental Mathematics. A.A., Allegany College of Maryland; B.S., M.Ed., Frostburg State University.

JUSTIN C. ZIMMERMANN, Instructional Coordinator for Developmental Mathematics. A.S., Allegany College of Maryland; B.S., Frostburg State University.

LATISHA V. COOPER, Learning Specialist. B.A., Lynchburg College; M.A., Union College.

BETH A. STALLINGS, Director of Freshman Advising and Retention. B.S., Frostburg State University; M.S., Virginia University.

KEITH E. DAVIDSON, Jr., Academic Counselor. B.S., Frostburg State University; M.A., Indiana University of Pennsylvania.

MICHELLE A. HOUSE, Academic Counselor. B.A., Frostburg State University; M.S.W., West Virginia University.

TIMOTHY J. MALLOY, Director of Upward Bound. B.S., M.B.A., Frostburg State University.

CONSTANCE A. RALSTON, Assistant Director of Upward Bound. B.A., Alma College; M.Ed., Frostburg State University.

RITA M. HEGEMAN, Director of the Regional Math/Science Center. B.S., Frostburg State University.

ANGELA D. FERGUSON, Assistant Director of the Regional Math/Science Center. B.S., Frostburg State University; M.S., Virginia University.

WRAY N. BLAIR, Associate Provost for Enrollment Management. B.S., M.S., West Virginia University.

ANGELA L. HOVATTER, Director of Student Financial Aid. B.S., M.Ed., Frostburg State University.


PAMELA S. WILLIAMS, Associate Director for Library User Services. B.A., St. Joseph College; M.L.S., Kent State University.

LEA M. MESSMAN-MANDICOTT, Director of the Library. B.A., M.L.S., State University of New York at Geneseo; Ed.D., West Virginia University.

PAMELA S. WILLIAMS, Associate Director for Library User Services. B.A., St. Joseph College; M.L.S., Kent State University.

JOSEPH M. HOFFMAN, Dean, College of Liberal Arts and Sciences. B.S., The Pennsylvania State University; M.S., Ph.D., University of Colorado.

CINDY E. HERZOG, Associate Dean, College of Liberal Arts and Sciences. B.A., Bloomburg University of Pennsylvania; M.A., Psy.D., Indiana University of Pennsylvania.


MELANIE K. LOMBARDI, FSU TV Cable Channel 3 Manager. B.S., Frostburg State University.

R. SCOTT FRITZ, Associate Dean, College of Liberal Arts and Sciences. B.S., St. Vincent College; M.S., Indiana University of Pennsylvania; Ph.D., West Virginia University.

LINDA A. STEELE, Program Coordinator. B.S., M.B.A., Frostburg State University.

VALERIE K. FRITZ, Academic Laboratory Manager/Biology. B.S., Washington and Jefferson College; B.S., M.S., West Virginia University.

DUANE L. MILLER, Academic Laboratory Manager/Physics and Engineering.

BLAIRE K. KNOUSE, Academic Laboratory Manager/Chemistry. B.S., M.A., Frostburg State University.

JOSEPH K. LITKEN, Geospatial Laboratory Manager. B.S., Frostburg State University.
ERICA B. BREIGNER, Geographic Information Specialist. B.S., Frostburg State University.

JOHN R. NINESTEEL, Geographic Information Specialist. B.S., University of Pittsburgh at Johnstown; B.S., Frostburg State University.

AHMAD TOOOGHACHI, Dean, College of Business. B.S., Gilan College of Management; M.S., Ph.D., U.S. International University.

SUDHIR SINGH, Associate Dean, College of Business. M.M.S., Birla Institute of Technology and Science; M.B.A., Georgia Institute of Technology; Ph.D., Virginia Polytechnic Institute and State University.

CLARENCE E. GOLDEN, JR., Dean, College of Education. A.A., Allegany College of Maryland; B.S., M.B.A., Frostburg State University; Ed.D., University of Maryland.

JENNIFER J. DELANEY, Program Coordinator, Unit Assessment and Learning. B.S., M.Ed., Frostburg State University.

VICKIE M. MIZER, Director of Graduate Services. A.A., University of Minnesota; B.S., M.S., West Virginia University; Ed.D., Frostburg State University.

DONNA R. YODER, Graduate Services Coordinator. A.A., Garrett Community College.

BRITTNI K. KAETZEL, Director of Special Academic Services. A.A., Allegany College of Maryland; B.S., Frostburg State University.

UNIVERSITY ADVANCEMENT

JOHN T. SHORT, JR., Vice President for University Advancement and Executive Director of the FSU Foundation, Inc. B.A., Franklin and Marshall College; J.D., University of Connecticut School of Law.

TODD R. MOFFETT, Director of Advancement Services. B.S., West Virginia Wesleyan College.

LYNN B. KETTERMAN, Prospect Research Analyst. B.S., University of Delaware.

SHANNON L. GRIBBLE, Director of Alumni and Donor Relations. B.S., Frostburg State University.

BROOKE R. KIRCHNER, Alumni Relations and Events Specialist. B.S., Seton Hill University.

ELISABETH A. NELSON, Director of Annual Giving. B.S., Frostburg State University.

JASON P. ANDRICK, Major Gifts Officer. B.S., Frostburg State University; M.B.A., University of Maryland, College Park.

ZACHARY T. HEETER, Development Officer. B.S., University of Pennsylvania.

COLLEEN C. STUMP, Associate Vice President for University Advancement. B.S., M.Ed., Indiana University of Pennsylvania.

ELIZABETH D. MEDCALF, Director of News and Media Services. B.A., Roanoke College.

CANDIS V. JOHNSON, Public Information Specialist. B.A., Emory University.

ANN TOWNSELL, Director of Publications. B.S., Frostburg State University.

CHARLES D. DICKEN, Director of Radio Station WFWM. A.A., Allegany College of Maryland; B.S., Frostburg State University; M.A., The Catholic University of America.

ROBERT S. SPAHR, Public Relations Specialist. B.S., Frostburg State University.

STUDENT AFFAIRS

THOMAS L. BOWLING, Vice President for Student Affairs. B.A., Illinois State University; M.Ed., Wayne State University; Ph.D., Florida State University.

JEFFREY L. GRAHAM, Assistant Vice President for Student Affairs. B.A., M.S.W., West Virginia University; Ed.D., Frostburg State University.

CARL W. CROWE, Student Conduct Administrator. B.S., Frostburg State University; M.Ed., Salisbury University.

ROBBIE L. CORDELE, Director of Career Services. B.A., University of Richmond; M.S., Virginia Commonwealth University; Ed.D., The College of William and Mary.

AMY L. SHIMKO, Director of Student Development. B.S., Frostburg State University; M.P.H., University of South Carolina.

DONALD E. SWOGGER, Director of Substance Abuse Prevention. B.A., Alderson-Broadus College; M.Ed., Frostburg State University.

DANIELLE L. DABROWSKI, Director of Veterans Services. A.A., Harrisburg Area Community College; B.S.B.A., M.S., Shippensburg University.

WILLIAM MANDICOTT, Assistant Vice President for Student and Community Involvement. B.A., State University of New York at Geneseo; M.A., Indiana University of Pennsylvania.

ALLEN FLANAGAN, Director of Lane University Center. B.A., M.P.A., M.L.S., West Virginia University.

JACKIE BUCZKOWSKI, Events Management Coordinator. B.S.B.A., Western New England University; M.S., Western Chester University of Pennsylvania.

ROBERT N. COOPER, Director of Student Activities. B.A., M.Ed., Lynchburg College.

JAMIE M. WINTERS, Assistant Director of Student Activities and Greek Life. B.S., M.Ed., Frostburg State University.

PATRICK W. O’BRION, Director of Civic Engagement. B.S., Frostburg State University.

LISA T. CLARK, Director of ASTAR! AmeriCorps Program. B.S., Salisbury University.

ASHLEY M. DANIELS, National Service Coordinator. B.S., Frostburg State University; M.A., Indiana University of Pennsylvania.

VACANT, Director of Cultural Events.

MELANIE A. MOORE, Assistant Director of Production Services. B.S., M.Ed., Frostburg State University.

DONNA L. BRINER, Box Office Manager. A.A., Allegany College of Maryland.

KEVIN R. SIMONSON, Staff Psychologist/Training Director. B.S., Eastern Nazarene College; M.A., Marist College; Ph.D., Radford University.

AMY S. KIDDY, Nurse. M.A., Allegany College of Maryland; B.S., University of Maryland, Baltimore.

JULIA Y. MILLER, Nurse. B.A., A.A., Allegany College of Maryland; B.S., Frostburg State University.

VACANT, Director of Counseling and Psychological Services.

PATRICIA J. ROBINSON, Staff Psychologist. B.S., Washington College; M.A., The Fielding Institute; Ph.D., Thomas Jefferson University.

ANN TOWNSELL, Bursar. A.A., Potomac State College; B.S., Frostburg State University.

LINDA T. BURL, Accountant. B.S., Frostburg State University.

TINA S. BURRI, Assistant Director of Residence Life. B.A., M.B.A., Frostburg State University.


DAVID A. TREBER, Director of Conferences and Events. B.A., Goshen College; M.B.A., Frostburg State University.

KENNETH M. EMERICK, JR., Assistant Manager of the University Store/Textbooks and Store Operations. B.S., Frostburg State University.

RACHEL L. FARRIS, Assistant Manager of the University Store/Merchandising and Store Operations. B.S., M.B.A., Frostburg State University.

ADMINISTRATION AND FINANCE

DAVID C. ROSE, Vice President for Administration and Finance. B.S., Shippensburg University.

RICHARD A. REPA, Associate Vice President for Finance and Comptroller. A.A., Hagerstown Junior College; B.S., University of Maryland; M.B.A., Frostburg State University.

MICHAEL E. SHEETZ, Director of General Accounting. A.A., Allegany College of Maryland; B.S., Frostburg State University.

SARA L. WILHELM, Restricted Funds Accountant. B.S., Frostburg State University.

LINDA T. BURL, Accountant. B.S., Frostburg State University.

TINA S. NIGHTINGALE, Bursar. A.A., Potomac State College; B.S., M.B.A., Frostburg State University.

BRENDA L. KANE, Assistant Bursar. A.A., Potomac State College; B.S., West Virginia University; M.B.A., Frostburg State University.


DAVID A. TREBER, Director of Conferences and Events. B.A., Goshen College; M.B.A., Frostburg State University.

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RACHEL L. FARRIS, Assistant Manager of the University Store/Merchandising and Store Operations. B.S., M.B.A., Frostburg State University.
DENISE L. MURPHY, Director of Budget. B.S., M.Ed., Frostburg State University.
KEVIN D. GREIG, Director of Mail and Printing Services.
AMY J. NIGHTENGALE, Payroll Services Manager. A.A., Allegany College of Maryland.
ALAN R. SNYDER, Coordinator of Procurement.
SHERRI L. SHEEFTZ, Budget Analyst. B.S., Frostburg State University.
CYNTHIA R. SMITH, Chief of Police. A.A., Garrett Community College; B.S., M.S., Johns Hopkins Police Executive Leadership Program.
ROBERT J. BOYCE, Director of Facilities. Associate Degree in Electrical Engineering. The Pennsylvania State University; B.S., University of Pittsburgh.
JOHN L. BREWER, Assistant Director of Facilities/Planning, Maintenance and Housekeeping. B.S., Frostburg State University.
DOUGLAS MCKENZIE, Project Manager.
JASON I. HILL, Assistant Director of Facilities/Construction, Operations and Engineering. A.A., Potomac State College; B.S., West Virginia University.
JON F. DIAMOND, Program Administrative Specialist. B.S., Frostburg State University.
D. TROY DONOWAY, Chief Information Officer. B.S., M.B.A., Frostburg State University.
BETH L. KENNEY, Director of Technology Services and Telecommunications. A.S., Allegany College of Maryland; B.S., Frostburg State University.
JORDAN D. SWOGGER, IT Programmer Analyst. B.S., Frostburg State University.
KEVIN J. ROBISON, Systems Programmer Senior. A.A., Allegany College of Maryland; B.S., Frostburg State University.
LARRY A. WARD, Systems Programmer Senior. B.S., Frostburg State University.
JORDAN D. SWOGGER, IT Programmer Analyst. B.S., Frostburg State University.
JUSTIN L. MILLER, IT Programmer Analyst. A.S., Allegany College of Maryland; B.S., Frostburg State University.
BETH L. KENNEY, Director of Technology Services and Instructional Design and Delivery. A.S., Allegany College of Maryland; B.S., M.B.A., Frostburg State University.
KAREN S. KERN, Help Desk Manager. B.S., University of Maryland Baltimore County.
CINDY D. HAY, IT Support Analyst. B.S., Arkansas Tech University; M.S., Frostburg State University; M.D.E., M.B.A., University of Maryland University College.
BRIAN K. WILSON, Multimedia Programmer/Distance Education Specialist. B.S., M.Ed., Frostburg State University.
RITA M. THOMAS, Instructional Designer/Technologist. A.S., Allegany College of Maryland; B.T.P.S., M.Ed., Frostburg State University.
JUSTIN M. KEEL, Instructional Designer. A.S., Allegany College of Maryland; B.S., Frostburg State University; M.E.T., Boise State University.
TRAVIS R. GLESSNER, Director of Systems Engineering. A.A., Delaware Technical and Community College; B.S., Wilmingon University.
V. ANDREW WOODKIN, Database Administrator. B.S.E.E., West Virginia University.
E. WADE BLUEBAUGH, Systems Engineer. A.S., Allegany College of Maryland.
JOHN C. HELMAN, Systems Engineer. A.A.S., Potomac State College; B.S., Fairmont State University.
REID D. BLUEBAUGH, Director of Web and Mobile Applications. B.S., Frostburg State University.
STEPHANIE R. CESNICK, Web Services Manager. B.S., Frostburg State University.
JOSHUA A. RAY, Web Support Specialist. A.S., Allegany College of Maryland; B.S., Frostburg State University.
JOSEPH M. LITTLEY, Data Warehouse Architect. B.S., Frostburg State University; M.S., West Virginia University.
TROY A. DELL, Director of Athletics. B.A., Gettysburg College; M.S., McDaniel College.
RUBIN STEVENSON, Associate Director of Athletics. B.A., Salisbury University; M.S., Central Connecticut State University.
GUY S. ROBERTSON, Assistant Director of Athletics and Head Coach, Baseball. B.S., M.S., McDaniel College.
KEITH E. BYRNES, Assistant Director of Athletics and Head Coach, Men’s Soccer. B.A., Plattsburgh State University.
CRYSTAL G. REDINGER, Assistant Director of Athletics for Business Operations and Senior Women’s Administrator. B.S., University of Maryland University College.
NOAH Z. BECKER, Sports Information Director. B.S., California University of Pennsylvania; M.S., Frostburg State University.
DELANE L. FITZGERALD, Head Coach, Football. B.S. James Madison University; M.A., Bethel University.
TIRELL W. HIATT, Assistant Coach, Football. B.S., Southern Virginia University.
JOHN A. KELLING, Assistant Coach, Football. B.S., University of Minnesota, Mankato; M.S., Ohio University.
R. WEBB HATCH, Head Coach, Men’s Basketball. B.A., Virginia Military Institute; M.S., Old Dominion University.
CARRIE E. SAUNDERS, Head Coach, Women’s Basketball. B.S., Shepherd University; M.Ed., Frostburg State University.
KENDALL M. LUY, Assistant Coach, Men’s and Women’s Swimming. B.A., The University of Mary Washington; M.A., Trinity College.
AARON M. WILT, Head Coach, Men’s and Women’s Tennis. B.A., Dickinson College.
THOMAS D. PEARCE, Head Coach, Men’s Lacrosse. B.A., Gettyburg College; M.S., McDaniel College.
HAYLEY M. ENGSTER, Head Coach, Women’s Lacrosse. B.S., Lynchburg College; M.S., Salisbury University.
WESELY W. LANDRUM, Head Coach, Women’s Softball. B.S., M.Ed., Frostburg State University.
BRIAN D. PARKER, Head Coach, Women’s Soccer. B.S., Frostburg State University; M.A., West Virginia University.
CARLY A. SWEENEY, Head Coach, Women’s Field Hockey. B.A., Keene State College; M.B.A. Argosy University.
KARLA R. SCHOLENY, Head Athletic Trainer. B.S., M.S., Frostburg State University.
KRIS ANDREWS, Assistant Athletic Trainer. B.S., Frostburg State University; M.S., California University of Pennsylvania.
KYLY J. LINHART, Director of Fitness/Strength and Conditioning. B.S., Kent State University; M.Ed., Frostburg State University.
AMY S. NELROD, Coordinator of Activities for Life, Intramurals and Club Sports. B.S., Frostburg State University.
ALEMSEGED ABBAY, Professor of History. B.A., M.A., Addis Ababa University, Ethiopia; M.A., Ph.D., University of California, Berkeley.

PHILLIP P. ALLEN, Associate Professor of Geography. B.S., Middlesex University; M.S., Royal Holloway and Bedford New College, University of London; Ph.D., Coventry University, England.

FRANK K. AMMER, Professor of Biology. B.S., Carlow College; M.S., Clarion University of Pennsylvania; Ph.D., West Virginia University.

WILLIAM L. ANDERSON, Professor of Economics and M.B.A. Coordinator. B.S., University of Tennessee-Knoxville; M.A., Clemson University; Ph.D., Auburn University.

JOAN ANDORFER, Professor of Political Science. B.A., King’s College; M.A., Ph.D., The Pennsylvania State University.

EHSAN ARJDANID, Assistant Professor of Management. B.S., Amir Kabir University of Technology, Iran; M.S., Tarbiat Modares University, Iran; Ph.D., Ohio University.

ALI ASHRAF, Assistant Professor of Marketing and Finance. B.S., Bangladesh University of Engineering and Technology; M.B.A., University of Dhaka, Bangladesh; M.A., Ph.D., The University of New Orleans.

WILLIAM J. AUMILLER, Assistant Professor of Educational Professions. B.S., Frostburg State University; M.M., West Virginia University; Ed.D., University of Maryland, College Park.

RANDALL P. BANDURA, Professor of Accounting. B.S., Clarion University; M.S., The Pennsylvania State University; CPA.

YAN BAO, Professor of Accounting. B.S., M.S., Xiamen University, China; Ph.D., Kent State University; CPA.

BRADFORD E. BARKLEY, Professor of English and Foreign Languages. B.A., University of North Carolina; M.F.A., University of Arkansas.

FRANK BARNET, Associate Professor of Mathematics. B.A., Canisius College; Ph.D., University of Notre Dame.

D. ALAN BENSLY, Professor of Psychology. B.A., Grinnell College; B.A., Morningside College; M.S., Ph.D., Rutgers University.

PAUL C. BERNHARDT, Associate Professor of Psychology. B.M.E., Georgia Institute of Technology; M.S., Ph.D., University of Utah.

PEGGY S. BISER, Associate Professor of Chemistry. A.A., Potomac State College; B.A., Frostburg State University; Ph.D., West Virginia University.

JENNIFER L. BISHOFF, Assistant Professor of Educational Professions. B.S., Frostburg State University; M.S., University of North Carolina at Wilmington; Ed.D., West Virginia University.

DIANE C. BLANKENSHIP, Professor of Kinesiology and Recreation. B.A., M.S., Radford University; Ed.D., Temple University.

FANNIA L. BOAVUE, Associate Professor of Educational Professions. B.S., Culthington University College, Liberia; M.A., Ed.D., West Virginia University.

TIANNA A. BOGART, Assistant Professor of Geography. B.S., M.S., Ph.D., University of Delaware.

SALLY A. BONIECE, Professor and Chair of the Department of History. B.A., M.A., Ph.D., Indiana University.

NICOLE L. BOSLEY, Assistant Professor of Kinesiology and Recreation. B.S., The Pennsylvania State University; B.S., M.Ed., Ed.D., Frostburg State University.

JOHN F. BOWMAN II, Professor of Political Science. B.S., The Ohio State University; M.A., University of Kentucky; Ph.D., University of Pittsburgh.

AMY C. BRANAM-ARMIENTO, Associate Professor of English and Foreign Languages. B.A., University of Saint Francis; M.A., Ball State University; Ph.D., Marquette University.

SHOSHANA R. BRASSFIELD, Associate Professor of Philosophy. B.A., University of California, Los Angeles; Ph.D., University of California, Berkeley.

RALPH L. BREWER, Associate Professor of English and Foreign Languages. B.S., M.A., Austin Peay State University.

H. SKOTT BRILL, Associate Professor of Philosophy. B.A., Western Michigan University; M.A., Ph.D., Michigan State University.

SUNSHINE L. BROSI, Associate Professor of Biology. B.A., Warner Wilson College; M.S., University of Kentucky; Ph.D., University of Tennessee.


NATALIA BUTA, Associate Professor of Kinesiology and Recreation. B.S., University of Ograde, Romania; M.A., Central Michigan University; Ph.D., University of Florida.

JILL S. BUTERBAUGH, Assistant Professor of Nursing. R.N., A.A., Allegany College of Maryland; B.S.N., University of Pittsburgh at Johnstown; M.S.N., Widener University.

PAUL J. CHARNEY, Associate Professor of History. B.A., University of Connecticut at Storrs; M.A., Ph.D., The University of Texas at Austin.

WILLIAM P. CHILDS, Professor of Educational Professions. B.A., University of Richmond; M.Ed., University of Virginia; Ed.D., Virginia Polytechnic Institute and State University.

MOHSEN CHITSAZ, Professor of Computer Science and Information Technologies. M.S., North Dakota State University; M.S., Moorhead State University; Ph.D., University of North Dakota.

REBECCA M. CHORY, Associate Professor of Management. B.A., M.A., West Virginia University; Ph.D., Michigan State University.

HEATHER C. CISHIEROS, Assistant Professor of English and Foreign Languages. B.A., M.A.T., Frostburg State University; Ed.D., Argosy University, Phoenix.

MATTHEW J. CRAWFORD, Associate Professor of Chemistry. B.S., Frostburg State University; Ph.D., Carnegie Mellon University.

HOLLY N. CURRIE, Assistant Professor of Chemistry. B.S., California University of Pennsylvania; Ph.D., West Virginia University.

ANNIE M. DANZ, Assistant Professor of Communication. B.A., George Mason University; M.A., University of Florida; M.F.A., Wake Forest University.

DUSTIN P. DAVIS, Professor of Visual Arts. B.S., Northland College; M.F.A., University of Wisconsin.

DWANE H. DeAN, Associate Professor of Marketing and Finance. B.S., Oklahoma State University; D.D.S., The University of Oklahoma; M.S., University of Alabama at Birmingham; Ph.D., Louisiana State University.

HANG DEING-LUZADER, Professor of Physics. B.S., Beijing Teachers College; M.S., Beijing Normal University; M.S., Northeastern University; Ph.D., University of Maryland, College Park.

JUDITH A. DIERUF, Professor of Visual Arts. B.A., Montana State University; B.F.A., University of Washington; M.F.A., Montana State University.

SARAH C. DUMNICH, Assistant Professor of Mathematics. B.A., Washington and Jefferson College; M.S., Ph.D., Lehigh University.

ANDREW R. DUNCAN, Associate Professor of English and Foreign Languages. B.A., University of South Carolina; M.A., North Carolina State University; M.F.A., University of Alabama.

SYDNEY B. DUNCAN, Associate Professor and Chair of the Department of English and Foreign Languages. B.A., Roanoke College; M.F.A., Virginia Commonwealth University; Ph.D., University of Alabama.

JUSTIN R. DUNMYRE, Assistant Professor of Mathematics. B.S., The Pennsylvania State University; M.A., Ph.D., University of Pittsburgh.

JACQUELINE R. DURST, Associate Professor of Kinesiology and Recreation and Clinical Education Coordinator of the Athletic Training Education Program. B.S., Frostburg State University; M.S., California University of Pennsylvania; D.Ed., Indiana University of Pennsylvania.

JASON H. EDWARDS, Professor of Psychology. B.A., University of New Hampshire; M.A., Ph.D., Georgia State University.

MOHAMMED S. ELTAEBY, Associate Professor of Physics and Engineering. B.S., University of Khartoum, Sudan; M.S., University of Akron; Ph.D., The Ohio State University.

TRAVIS W. ENGLISH, Assistant Professor of Visual Arts. B.A., Hiram College; Ph.D., State University of New York at Stony Brook.

JENNIFER A. FLINN, Associate Professor and Chair of the Department of Psychology. B.S., M.A., Geneva College; Ph.D., West Virginia University.

MICHAEL B. FLINN, Associate Professor of Computer Science and Information Technologies. B.S., M.S., Frostburg State University; D.Sc., Robert Morris University.

JONATHAN M. FLOOD, Assistant Professor of Geography. B.A., M.A., University of North Carolina at Greensboro; Ph.D., The University of Texas at Austin.

ROBERT C. FORSYTHE, Assistant Professor of Mathematics. B.S., M.A., University of Pittsburgh; Ph.D., University of Wisconsin, Madison.

R. SCOTT FROITZ, Professor of Biology. B.S., St. Vincent College; M.S., Indiana University of Pennsylvania; Ph.D., West Virginia University.

HEATHER A. GABLE, Associate Professor and Chair of the Department of Nursing. R.N., A.S., Allegany College of Maryland; B.S.N., M.S., D.N.P., University of Maryland, Baltimore.

MARK A. GALLAGHER, Associate Professor of Music. B.M., Oberlin Conservatory of Music; M.M., Eastman School of
HEATHER L. HURST, Assistant Professor of Educational Professions. B.S., M.Ed., East Stroudsburg University of Pennsylvania; Ph.D., University of Pennsylvania.

FARHAD B. IDRIS, Professor of English and Foreign Languages. B.A., M.A., University of Dhaka, Bangladesh; M.A., Clemson University; Ph.D., University of Arkansas.

SCOTT P. JOHNSON, Professor of Political Science. B.A., Youngstown State University; M.A., University of Akron; Ph.D., Kent State University.

MOONSOO KANG, Assistant Professor of Marketing and Finance. B.B.A., M.B.A., Seoul National University; M.S., The University of Texas at Austin; Ph.D., University of Colorado at Boulder.

ROBERT B. KAUFMAN, Professor of Kinesiology and Recreation. B.S., M.S., The Pennsylvania State University; Ph.D., University of Maryland, College Park.

KEVIN J. KEHRWALD, Professor of English and Foreign Languages. B.A., The University of Oklahoma; M.A., Arizona State University; Ph.D., Purdue University.

KAREN L. KELLER, Associate Professor of Biology. B.A., M.S., Frostburg State University; Ph.D., The University of Georgia.

ERICA H. KENNEY, Associate Professor of Psychology. B.A., Franklin & Marshall College; M.S., Ph.D., The University of Georgia.

MELODY M. KENTRUS, Assistant Professor of Kinesiology and Recreation. B.S., Frostburg State University; D.P.T., Shenandoah University.

DAVID M. KIRIAZIS, Associate Professor and Chair of the Department of Economics. B.A., Ph.D., Wayne State University.

KEVIN W. KNOTT, Assistant Professor of English and Foreign Languages. B.A., Bridgewater College; M.A., The Ohio State University; M.A., Miami University of Ohio; Ph.D., Indiana University.

OLEG A. KUCHER, Assistant Professor of Economics. B.S., Bila Tserkva National Agricultural University, Ukraine; M.A., Ph.D., West Virginia University.

GERARD R. LaFEMINA, Associate Professor of English and Foreign Languages. A.B., Sarah Lawrence College; M.A., M.F.A., Western Michigan University.

THOMAS D. LAMBERT, Assistant Professor of Biology. B.S., M.S., University of Wisconsin-Milwaukee; M.F.A., University of Wisconsin-Madison.

ROBERT J. LARIVEE, Professor and Chair of the Department of Chemistry. B.A., Rhode Island College; Ph.D., University of Delaware.

GREGORY P. LATTA, Professor of Physics. B.S., M.A., Ph.D., Kent State University.

KURTIS H. LEMMERT, Professor of Mathematics. B.S., Frostburg State University; M.S., Ed.D., West Virginia University.

KENNETH J. LEVITT, Assistant Professor of Management. B.S., State University of New York at Oneonta; M.S., Fairleigh Dickinson University; Ph.D., Stevens Institute of Technology.

DAVID A. LEWIS, Professor of Political Science. B.A., Occidental College; M.A., Ph.D., University of California, Davis.

ROBERT W. LEWIS, Professor of Kinesiology and Recreation. B.S., Capital University; M.A., Ph.D., The Ohio State University.

HONGQI LI, Professor of Biology. B.S., Nanjing University; M.S., China University of Mining and Technology; Ph.D., The Ohio State University.

WEI LI, Associate Professor of Sociology. A.B., University for Chinese People's Police Officers; M.A., Beijing Center for Japanese Studies; Ph.D., Georgia State University.

ZHEN LIU, Assistant Professor of Physics and Engineering. B.S., Lanzhou University, China; M.S., Tufts University; Ph.D., Auburn University.

JOHN J. LOMBardi, Professor of Communication. B.S., James Madison University; M.S., Arkansas State University; Ph.D., University of Tennessee.

MARY ANNE S. LUTZ, Professor of English and Foreign Languages. B.A., La Salle University; M.A., Ph.D., Rutgers University.

HAYFUN MA, Assistant Professor of History. B.A., M.A., Central University of Nationalities, China; Ph.D., Georgetown University.

JEAN-MARIE MAKANG, Professor of Philosophy. Baccalauréat en Philosophie, St. Pierre Canisius, Zaire; Master of Divinity, Hekima College, Kenya; Ph.D., Boston College.

CHRISTOPHER M. MASCIOCCI, Assistant Professor of Psychology. B.A., Goucher College; M.S., Ph.D., Iowa State University.

MICHAEL B. MATHIAS, Associate Professor and Chair of the Department of Philosophy. B.A., West Virginia University; M.A., Ph.D., University of Rochester.

MARTHA M. MATTARE, Associate Professor of Management. B.S., Kansas State University; M.B.A., Frostburg State University; M.A., Ph.D., Fielding Graduate University.

JANET A. MATTERN, Assistant Professor of Educational Professions. B.S.Ed., M.Ed., Ed.D., Indiana University of Pennsylvania.

NICOLE A. MATTIS, Associate Professor and Chair of the Department of Theatre and Dance. B.A., Northern Michigan University; M.F.A., University of Illinois at Urbana-Champaign.

JEFFREY L. MCCLELLAN, Associate Professor of Management. B.A., Brigham Young University; M.A., University of Phoenix; Ph.D., Gonzaga University.

MARY BETH McCLOUD, Assistant Professor of Nursing. A.A., Allegany College of Maryland; B.S.N., West Virginia University; M.S.N., Western Governor's University.

ELEANOR H. MCCONNELL, Assistant Professor of History. B.A., Smith College; M.A., The University of Alabama; Ph.D., The University of Iowa.

SUZANNE K. MCCOSKEY, Associate Professor of Economics. B.A., Oberlin College; M.S., Ph.D., Syracuse University.

KRISTINE E. MCGEE, Assistant Professor of Educational Professions. B.S., Towson University; M.E., Frostburg State University; Ed.D., West Virginia University.

JOHN C. McMULLEN, Associate Professor of Sociology. B.S., Frostburg State University; M.A., West Virginia University; Ph.D., Virginia Polytechnic Institute and State University.
MARC D. MICHAEL, Associate Professor and Chair of the Department of Mathematics. B.A., California University of Pennsylvania; M.S., Ed.D., West Virginia University.

EMILY K. MILLESON, Associate Professor of Educational Professions. B.A., M.Ed., West Virginia University.

MICHAEL L. MONAHAN, Associate Professor and Chair of the Department of Management. B.A., Westminster College; M.B.A., Frostburg State University; Ed.D., West Virginia University.

ERIC J. MOORE, Associate Professor and Chair of the Department of Physics and Engineering. B.S., Frostburg State University; M.S., Ph.D., University of Maryland, Baltimore County.

ROBERT M. MOORE III, Professor and Chair of the Department of Sociology. B.A., State University of New York at Albany; M.A., State University of New York at Albany; Ph.D., University of Maryland.

JOHN J. O’ROKKE, Professor of Political Science. B.A., Williams College; M.P.A., State University of New York at Albany; Ph.D., University of Pennsylvania.

XUNYU PAN, Associate Professor of Computer Science and Information Technologies. B.S., Nanjing University; M.S., The University of Georgia; Ph.D., State University of New York at Albany.

KEVIN H. PETERSON, Professor of Psychology. B.S., University of Steubenville; M.S., Frostburg State University; Ed.D., West Virginia University.

KARA N. PLATT, Assistant Professor of Nursing. B.S.N., Shenandoah University; M.S.N., University of Maryland, Baltimore; D.N.P., The Johns Hopkins University.

GEORGE R. PLUTNIK, Professor of Physics. B.A., B.S., Lebanon Valley College; M.A., Wake Forest University; Ph.D., Brigham Young University.

KATHLEEN H. POWELL, Professor of Social Work. B.S.W., West Virginia University; M.S.W., Boston University; Ph.D., University of Maryland.

FRANCIS L. PRECHT, Professor of Geography. B.S., Towson University; M.A., Michigan State University; Ph.D., The University of Georgia.

DAVID P. PUTHOFF, Associate Professor and Chair of the Department of Biology. B.S., Ph.D., University of California, Riverside.

ARMOND A. ROSSI, Assistant Professor of Economics. A.B., Brown University; B.S., M.S., University of Pennsylvania; Ph.D., Duquesne University.

JOSIE L. ROTH, Associate Professor of Social Work. B.A., University of Miami; M.A., Florida State University; Ph.D., University of Maryland.

TERRY J. RUSSELL, Professor of Sociology and Social Work and Chair of the Department of Social Work. B.A., Florida State University; M.F.A., Virginia Commonwealth University.

JAMIE C. RYAN, Associate Professor of Educational Professions. A.A., Allegany College of Maryland; B.S., Frostburg State University; Ed.D., West Virginia University.

BRENDA C. RYAN, Associate Professor of Educational Professions. B.S., Frostburg State University; Ed.D., West Virginia University.

JILL A. RYAN, Associate Professor of History. B.A., M.A., Ph.D., University of Michigan.

JOHN A. RYAN, Associate Professor of Music and Dance. B.A., M.M., D.M.A., Florida State University; M.F.A., Virginia Commonwealth University.

MARIA-LUISA SANCHEZ, Professor of English and Foreign Languages. B.A., Universidad Autónoma de Guadalajara, Mexico; M.A., Ph.D., Rutgers University.

ROBERT M. MOORE III, Professor and Chair of the Department of Sociology. B.A., State University of New York at Albany; M.A., State University of New York at Albany; Ph.D., University of Maryland.

JOHN J. O’ROKKE, Professor of Political Science. B.A., Williams College; M.P.A., State University of New York at Albany; Ph.D., University of Pennsylvania.

XUNYU PAN, Associate Professor of Computer Science and Information Technologies. B.S., Nanjing University; M.S., The University of Georgia; Ph.D., State University of New York at Albany.

KEVIN H. PETERSON, Professor of Psychology. B.S., University of Steubenville; M.S., Frostburg State University; Ed.D., West Virginia University.

KARA N. PLATT, Assistant Professor of Nursing. B.S.N., Shenandoah University; M.S.N., University of Maryland, Baltimore; D.N.P., The Johns Hopkins University.

GEORGE R. PLUTNIK, Professor of Physics. B.A., B.S., Lebanon Valley College; M.A., Wake Forest University; Ph.D., Brigham Young University.

KATHLEEN H. POWELL, Professor of Social Work. B.S.W., West Virginia University; M.S.W., Boston University; Ph.D., University of Maryland.

FRANCIS L. PRECHT, Professor of Geography. B.S., Towson University; M.A., Michigan State University; Ph.D., The University of Georgia.

DAVID P. PUTHOFF, Associate Professor and Chair of the Department of Biology. B.S., Ph.D., University of California, Riverside.

ARMOND A. ROSSI, Assistant Professor of Economics. A.B., Brown University; B.S., M.S., University of Pennsylvania; Ph.D., Duquesne University.

JOSIE L. ROTH, Associate Professor of Social Work. B.A., University of Miami; M.A., Florida State University; Ph.D., University of Maryland.

TERRY J. RUSSELL, Professor of Sociology and Social Work and Chair of the Department of Social Work. B.A., Florida State University; M.F.A., Virginia Commonwealth University.

JAMIE C. RYAN, Associate Professor of Educational Professions. A.A., Allegany College of Maryland; B.S., Frostburg State University; Ed.D., Argosy University, Sarasota.
THOMAS D. SIGERSTAD, Associate Professor of Management. B.S., University of Pittsburgh; M.B.A., University of North Texas; Ph.D., The University of Oklahoma.

JERALD A. SIMON, Associate Professor of Chemistry. B.S., Massachusetts Institute of Technology; Ph.D., University of California, Santa Barbara.

LISA L. SIMPSON, Assistant Professor and Chair of the Department of Kinesiology and Recreation. B.S., M.Ed., Frostburg State University; Ed.D., West Virginia University.

STEPHEN J. SIMPSON, Professor of Political Science. B.A., Dickinson College; M.A., Ph.D., Princeton University.

SUDHIR SINGH, Professor of Marketing and Finance. M.M.S., Birla Institute of Technology and Science; M.B.A., Georgia Institute of Technology; Ph.D., Virginia Polytechnic Institute and State University.

ROCHELLE F. SMITH, Professor of English and Foreign Languages. B.A., Oberlin College; M.A., Ph.D., University of Chicago.

Gerald F. Snelson, Professor of English and Foreign Languages. B.A., Frostburg State University; M.Ed., Ed.D., University of Maryland.

Bill Southery, Professor of Psychology. A.B., B.S., West Virginia University; M.S., Ph.D., Purdue University.

Oguz A. Soyasal, Professor of Physics and Engineering. B.S., M.S., Ph.D., Istanbul Technical University.

Jason C. Speights, Assistant Professor of Physics and Engineering and Director of the Multimedia Learning Center. A.A., Maple Woods Community College; B.S., M.S., Ph.D., New Mexico Institute of Mining and Technology.

Anthony G. Stair, Professor of Economics. B.S., M.S., The Pennsylvania State University; Ph.D., West Virginia University.

Sally D. Stephenson, Professor of Educational Professions. B.A., Prescott College; M.A., Ed.D., West Virginia University.

David B. Stern, Instructor of Communication. B.A., Rider University; M.A., West Chester University of Pennsylvania.

John L. Stothoff, Associate Professor of Educational Professions. B.A., Hartwick College; M.S., State University College at Oneonta; M.S., Ph.D., State University of New York at Albany.

Jered M. Studinski, Assistant Professor of Biology. B.S., University of Wisconsin; M.S., Western Kentucky University; Ph.D., West Virginia University.

Rebekah T. Taylor, Assistant Professor of Biology. B.A., Lehigh University; Ph.D., Emory University.

Kara Rogers Thomas, Associate Professor of Sociology and Folklorist. B.A., University of Missouri; M.A., Ph.D., Indiana University.

Glen M. Thompson, Assistant Professor of Educational Professions. B.S., Lock Haven University; M.S., West Virginia University; Ph.D., The Pennsylvania State University.

Patricia A. Tillery, Assistant Professor of Accounting. B.A., M.L.I.S., University of California at Berkeley; M.S., California State University at Hayward; Ph.D., Florida State University.

Janelyn C. Tobery-Nystrom, Associate Professor of Educational Professions. B.A., Hood College; M.L.A., Western Maryland College; Ed.D., The George Washington University.

Ahmad Toootoonchi, Professor of Management. B.S., Gilan College of Management; M.S., Ph.D., U.S. International University.

Nazarin S. Toootoonchi, Assistant Professor of Mathematics. B.S., San Diego State University; B.S., M.Ed., Frostburg State University; Ed.D., Morgan State University.

Stephen W. Twing, Professor and Chair of the Department of Political Science. B.A., Wofford College; M.A., Ph.D., University of South Carolina.

Chiulien Chuang Venezia, Associate Professor of Accounting. B.B.A., Fu-Jen Catholic University, Taiwan; M.S., University of Missouri at Kansas City; D.B.A., Nova Southeastern University; CPA.

Gerald Venezia, Assistant Professor of Marketing and Finance. B.A., School of Visual Arts; M.P.A., D.P.A., Nova Southeastern University.

Julie Yi-Zun Wang, Professor of Physics and Engineering. B.S., Beijing University; M.S., Ph.D., Lehigh University.

Brent M. Weber, Assistant Professor and Chair of the Department of Music. B.A., Southern Oregon University; M.M., D.M.A., University of Georgia.

Jodi G. Welsch, Associate Professor and Associate Chair of the Department of Educational Professions. B.S., Frostburg State University; M.Ed., Ph.D., University of Virginia.

William A. Wetherholt, Assistant Professor of Geography. B.A., Kent State University; M.A., University of North Dakota; Ph.D., Kansas State University.

Sheri A. Whalen, Associate Professor and Chair of the Department of Communication. B.A., M.S., State University of New York at Buffalo; Ph.D., University of Missouri-Columbia.

G. Gerard Wojnar, Associate Professor of Mathematics. B.S., Cleveland State University; M.S., Stanford University; M.B.A., Weatherhead School of Management, Case Western Reserve University; Ph.D., Indiana University.

Wudyalew T. Wondmagegen, Assistant Professor of Physics and Engineering. B.S., M.S., Addis Ababa University, Ethiopia; Ph.D., New Mexico State University.

Gregory J. Wood, Associate Professor of History and Coordinator of the Honors Program. B.S., Northern Michigan University; M.A., Wayne State University; Ph.D., University of Pittsburgh.

John W. Wright, Assistant Professor of Kinesiology and Recreation. B.S., Frostburg State University; M.S., Ohio University.

Lianguang Xiao, Assistant Professor of Computer Science and Information Technologies. Ph.D., Academy of Mathematics and Systems Sciences, China; Ph.D., University of Texas at Dallas.

Guobin Xu, Assistant Professor of Computer Science and Information Technologies. B.S., Qingdao University; M.S., D.Sc., Towson University.

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Lei “Lily” Ye, Associate Professor of Marketing and Finance. B.E., Beijing Second Foreign Language University; M.B.A., University of Louisiana at Monroe; Ph.D., University of North Texas.

Mary E. Yost-Rushton, Professor of Theatre and Dance. B.A., Allentown College; M.F.A., University of Connecticut.

Eyad Yousef, Assistant Professor of Marketing and Finance. B.S., Norfolk State University; M.B.A., Ph.D., Old Dominion University.

Xinjiang “David” Zheng, Associate Professor of Computer Science and Information Technologies. B.S., Beijing University of Physical Education; M.E., Ph.D., University of South Carolina.

Ying “Joy” Zheng, Assistant Professor of Computer Science and Information Technologies. B.A., Towson University; M.S., University of Northern Virginia; D.Sc., Towson University.

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PATRICK J. DEASY, Counselor/Coordinator of Veterans Affairs. B.S., M.S., Springfield College.

Faculty

ELIZABETH C. ADAMS, B.A., College of Wooster; M.A., The University of Iowa; M.A., Columbia University; Ph.D., West Virginia University.

ALICE C. ALEXANDER, B.A., West Virginia Wesleyan College; M.Ed., Frostburg State University; Ed.D., West Virginia University.

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RONALD E. BARRY, JR., B.A., University of Connecticut; M.A., Indiana State University; Ph.D., University of New Hampshire.

GUINN R. BAUGHER, B.A., Emory & Henry College; M.A., Ph.D., Teluane University.

WILLIAM S. BINGMAN, B.S., M.A., Ed.D., West Virginia University.

JORN K. BRAMANN, M.A., University of Iowa.

MARIE J. BRISTOW, B.S., M.S., Ph.D., Virginia Commonwealth University.

JAMES A. GRIFFIN, B.A., Hiram College; M.A., Ph.D., Duquesne University.

HENRY W. BULLMORE, B.A., Valparaiso University; M.A., University of Illinois at Urbana-Champaign; Ph.D., The University of Iowa.

CRAG L. CAUPE, B.S., Ball State University; M.S., Indiana University; Ph.D., Utah State University.

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CAROL CLEVELAND, B.S., Alabama College; M.S., University of Tennessee; Ph.D., University of Alabama.

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MAUREEN P. CONNELLY, B.A., Saint John's University; M.A., Ph.D., The Ohio State University; M.S.W., University of Maryland.

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ALBERT M. CRALL, A.B., Marietta College; M.S., Ph.D., The Pennsylvania State University.

SARAH R. CRALL, B.A., Marietta College; M.Ed., Frostburg State University; M.S., University of Pittsburgh.

JAMES M. CRAWLEY, B.A., Lynchburg College; M.A., George Peabody College.

NANCY W. CRAWLEY, B.A., Lynchburg College; M.Ed., Frostburg State University.

ANTHONY E. CROSSY, JR., B.S.J., Ohio University; Ph.D., University of Kentucky.

MARGARET M. DALTON, B.S., University of New Hampshire; M.S., University of Minnesota; Ph.D., West Virginia University.

DAVID D. DANIELS, B.S., University of Kentucky; M.A., University of Virginia.

JOAN DEVEE DIXON, B.M., M.M., Drake University; D.M.A., Southwestern Baptist Theological Seminary.

ROBERT S. DONNELLY, A.S., University of Alaska; M.B.A., Harvard University; Ed.D., University of Massachusetts.

ROBERT J. DOYLE, B.S., Georgia Institute of Technology; M.A., Ph.D., University of Virginia.

DONALD W. DUCKSON, A.B., University of California; M.A., San Diego State College; Ph.D., University of Colorado.

THOMAS H. DULZ, B.S., Lawrence Technological University; Ph.D., Michigan State University.

KATHLEEN S. ELDERS, A.B., University of Nebraska; F.S.A.

DON A. EMERSON, A.B., M.A., West Virginia University.

CHARLES J. EVERS, B.A., Georgetown University; M.S., Towson University; Ph.D., The Catholic University of America.

CHARLES J. FARMER, A.B., University of North Carolina; M.A., Indiana University; Ph.D., University of Maryland.

DAVID J. FELL, B.A., Ball State University; Ph.D., Kent State University.

MARY K. FINAN, B.A., Loyola College; M.Ed., Frostburg State University; Ed.D., University of Maryland, College Park.

HUOT FISHER, B.M., Oberlin College; M.M., M.A., University of Illinois; D.M.A., University of Arizona.

DENNIS D. GARTNER, B.A., M.A., University of North Dakota; Ph.D., University of Wisconsin.

ELLEN K. GROLMAN, B.M., University of Massachusetts; M.M., Wichita State University; D.M.A., University of Missouri at Kansas City.

AMY L. HARMAN, B.A., Elon College; M.S., Virginia Polytechnic Institute and State University; Ph.D., University of Maryland.

Gloria J. HARRIS-COOK, B.S., University of North Carolina at Pembroke; M.A., Ph.D., University of Illinois.

THOMAS F. HAYES, B.S., U.S. Naval Academy; M.B.A., Harvard University; Ph.D., University of Pittsburgh.

BONNIE L. HICOK, B.S., The Ohio State University; M.S., Frostburg State University; Ed.D., West Virginia University.

CHARLES H. HICOK, B.A., M.S., University of Nebraska at Kearney; Ph.D., The Ohio State University.

KAREN S. HOLBROOK, B.A., College of Wooster; M.Ed., University of Toledo.

JUDY E. HOLMES, B.S., Ed.D., University of Southern Maine; Ed.D., University of Massachusetts at Amherst.

PAUL P. HUNT, B.S., A.B., Glenville State College; M.S., Ph.D., University of Tennessee.

BARBARA HURD, B.A., College of William and Mary; M.Ed., Frostburg State University; Ed.D., University of Maryland.

RICHARD A. JOHNSON, B.S., M.B.A., Virginia Polytechnic Institute and State University; Ph.D., The University of Georgia; CPA.

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JOY KROEGER-MAPPS, B.S., DePaul University; M.A., Ph.D., Georgetown University.

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PAUL R. LIONS, B.S., University of the State of New York; B.A., University of South Florida; M.S.M., Frostburg State University; M.R.C., Ph.D., University of Florida.

THOMAS A. MAPPS, B.S., University of Dayton; Ph.D., Georgetown University.

JAMES O. MARTIN, B.S., Massachusetts Institute of Technology; Ph.D., University of North Dakota.

MARTHE A. McCLIVE, B.A., Hiram College; M.B.A., West Virginia University; Ph.D., University of Southern California.

LINDA G. McCULLOCH, B.A., M.A.T., University of Tennessee; M.F.A., Northwestern University.

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CONSTANCE M. McGOVERN, B.A., College of Our Lady of the Elms; M.A., Ph.D., University of Massachusetts at Amherst.
ZITA M. McSHANE, B.S., Ursuline College; M.A., Cleveland State University; Ph.D., Case Western Reserve University.

JOYCE M. MIDDLETON, B.S., Frostburg State University; M.A., Ph.D., The University of Georgia; CPA.

MARY W. MUMPER, B.S., Indiana University of Pennsylvania; Ph.D., University of Maryland, Graduate School Baltimore.

NORMAN W. NIGHTEGALE, B.S., Frostburg State University; Ed.D., University of Maryland, College Park.

WILLIAM NIZINSKI, B.S., California State College; M.S., The Pennsylvania State University.

MICHAEL R. OLSON, B.A., Augustana College; M.A., Southern Illinois University; Ph.D., The University of Iowa.

STEPHEN C. OWENS, B.S., Frostburg State University; M.A., Ed.D., Teachers College, Columbia University.

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THOMAS J. PALARDY, B.S., M.A., Ph.D., The Ohio State University.

JOHN C. PARK, A.B., College of St. Thomas; M.A., Ph.D., University of Nebraska.

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EIRA PATNAIK, B.A., M.A., Allahabad University, India; M.A., D.A., Syracuse University.

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RICHARD E. PESTA, B.S., Rider College; M.S.B.A., Bucknell University.

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JAMES G. PIERCE, B.M., Friends University; M.M., Conservatory of Music, Kansas City.

SARA L. PIERCE, B.M., Friends University; M.M., Northwestern University.

ROBERT E. PLETIT, B.A., Baldwin Wallace College; M.A., Vanderbilt University.

KERAMAT POORSOLTAN, B.A., M.A., University of Tehran; M.A., Ph.D., The University of Georgia.

DAVID R. PRESS, B.S., M.A., Northwestern University; Ph.D., Carnegie Mellon University.

JUDITH J. PULI, B.A., M.Ed., Frostburg State University; Ph.D., Indiana University of Pennsylvania.

ROBERT M. RIGGS, B.A., Indiana University of Pennsylvania; Ph.D., University of Illinois.

JOHN M. RILEY, B.S., M.Ed., Indiana University of Pennsylvania; Ph.D., University of Maryland.

ROBERT RILEY, B.S., M.Ed., Indiana University of Pennsylvania; Ph.D., West Virginia University.

SHARON L. ROBINSON, A.A., Virginia Intermont College; B.S., Carson-Newman College; M.P.A., Texas Christian University; CPA.

EDWARD L. ROOT, B.S., M.Ed., Frostburg State University; Ed.D., University of Maryland.

ALAN M. ROSE, A.B., The Johns Hopkins University; A.M., Ph.D., Columbia University.

LEE B. ROSS, B.A., M.A., DePauw University; Ph.D., Miami University of Ohio.

PATRICIA A. SANTORO, B.A., Mary Washington College of the University of Virginia; M.A., Ph.D., University of North Carolina at Greensboro.

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KEITH W. SCHLEGEL, B.A., Miami University; Ph.D., West Virginia University.

CARLETON A. SHORE, B.S., Frostburg State University; M.Ed., Ed.D., West Virginia University.

DONALD F. SHRINER, B.S., Shippensburg University; M.S., University of Notre Dame; Ph.D., University of Maryland.

DONALD C. SIMMONS, B.A., Bridgewater College, M.B.A., James Madison University, CPA.

CARL F. SLEMMER, B.S., Bethany College; M.Ed., Frostburg State University; Ed.D., University of Maryland, College Park.

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BARRABA A. SURGENT, B.A., Trenton State College; M.Ed., Frostburg State University.

FREDERICK C. SURGENT, B.A., M.A., Trenton State College; Ed.D., West Virginia University.

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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.

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

1. To earn credit by examination, you must be currently enrolled at Frostburg State University as a full-time or part-time student.
2. An examination cannot be used to remove a failure in a course completed at Frostburg or elsewhere.
3. An examination cannot be used to remove a low grade earned in a course completed at Frostburg or elsewhere.
4. An examination may not be repeated or retaken in order to earn a higher score.
5. Students currently registered for an equivalent course are ineligible to receive credit-by-examination. If you believe you may qualify for credit-by-exam, you should take the examination prior to enrollment in the course. You cannot receive credit-by-exam and credit through course completion for the same course.

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.
2. 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.
3. The credit will be recorded on your transcript without charge.

College Level Examination Program (CLEP)

CLEP is administered by the College Entrance Examination Board also. 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 a specific course or subject.

Procedures

Procedures are identical with those noted above for the Advanced Placement Examinations.

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.

**Procedures**

1. Request permission from the Department Chair to be evaluated for credit in a particular course.
2. Pay a $25 administrative testing fee at the University & Student Billing Office.
3. 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.
4. 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.
5. 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.
6. Pay a processing fee of $10 per credit hour to get the credit recorded on your transcript.
7. You may take such exams only once.

**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>
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<tbody>
<tr>
<td>Art History</td>
<td>Score of 3 or 4:</td>
<td></td>
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<tr>
<td></td>
<td>ART 100 Art Appreciation</td>
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<tr>
<td>Biology</td>
<td>Score of 5:</td>
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<tr>
<td></td>
<td>ART 111 Honors: Art Appreciation</td>
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<tr>
<td>Calculus AB*</td>
<td>Score of 3:</td>
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<tr>
<td></td>
<td>MATH 120 Pre-Calculus Mathematics</td>
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<td></td>
<td>Score of 4 or 5:</td>
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<tr>
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<td>MATH 236 Calculus I</td>
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<td>Calculus BC</td>
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<td>MATH 236 Calculus I</td>
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<td>MATH 236 Calculus I</td>
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<td>MATH 237 Calculus II</td>
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<td>Cambridge Capstone Seminar</td>
<td>Score of 3 or 4:</td>
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<td>IDIS 150 First-Year FSU Colloquium</td>
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<td>IDIS 151 Honors: First-Year FSU Colloquium</td>
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<td>Cambridge Capstone Research Project</td>
<td>Score of 3:</td>
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<td>IDIS 195</td>
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<td>Cambridge A Level Global Perspectives and Research</td>
<td>Score of 3 or 4:</td>
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<td>IDIS 150 First-Year FSU Colloquium</td>
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<td>IDIS 151 Honors: First-Year FSU Colloquium</td>
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<td>and IDIS 195</td>
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<tr>
<td>Chemistry</td>
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<td>CHEM 201 General Chemistry I</td>
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<td>CHEM 202 General Chemistry II</td>
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<td>Computer Science A</td>
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<td>ECON 201 Principles of Economics (Macro)</td>
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<td></td>
<td>ECON 211 Honors: Principles of Macroeconomics</td>
<td></td>
</tr>
<tr>
<td>Economics: Micro</td>
<td>Score of 3 or 4:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ECON 202 Principles of Economics (Micro)</td>
<td></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></td>
</tr>
<tr>
<td>English Language &amp; Composition</td>
<td>Score of 3 or 4:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ENGL 101 Freshman Composition</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Score of 5:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ENGL 111 Honors: Freshman Composition</td>
<td></td>
</tr>
<tr>
<td>Environmental Science</td>
<td>IDIS 160 Science, Technology and Society</td>
<td></td>
</tr>
<tr>
<td>European History</td>
<td>IDIS 195 History Elective</td>
<td></td>
</tr>
<tr>
<td>French Language</td>
<td>FREN 101 Basic Elements of French I</td>
<td></td>
</tr>
<tr>
<td></td>
<td>FREN 102 Basic Elements of French II</td>
<td></td>
</tr>
<tr>
<td>French Literature</td>
<td>FREN 195 French Elective</td>
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</tr>
<tr>
<td>German Language</td>
<td>MDFL 195 Foreign Language Elective</td>
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<tr>
<td>Govt. &amp; Politics: Comparative</td>
<td>POSC 131 Introduction to Comparative Politics</td>
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</tr>
<tr>
<td>Govt. &amp; Politics: U.S.</td>
<td>Score of 3 or 4:</td>
<td></td>
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<tr>
<td></td>
<td>POSC 110 Introduction to American Politics</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Score of 5:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>POSC 112 Honors: Introduction to American Politics</td>
<td></td>
</tr>
<tr>
<td>Human Geography</td>
<td>Score of 3 or 4:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>GEOG 104 Human Geography</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Score of 5:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>GEOG 114 Human Geography</td>
<td></td>
</tr>
<tr>
<td>Internatl. English Language/APIEL</td>
<td>Not accepted</td>
<td></td>
</tr>
<tr>
<td>Latin Literature</td>
<td>Evaluated at student request</td>
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<tr>
<td>Latin: Vergil</td>
<td>Evaluated at student request</td>
<td></td>
</tr>
<tr>
<td>Music Theory</td>
<td>Score of 3 minimum: MUSC 102 Theory I</td>
<td></td>
</tr>
<tr>
<td>Aural Subscore</td>
<td>Score of 3 minimum: MUSC 104 Aural Skills I</td>
<td></td>
</tr>
</tbody>
</table>

*FSU does not give credit for sub-scores.
<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>English 101 Freshman Composition 3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Score of 6 or 7 (Standard):</td>
<td>English 111 Honors: Freshman Composition 3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Score of 4 (Higher Level):</td>
<td>English 250 Honors: Comparative Literature 3</td>
</tr>
<tr>
<td>Physics 1</td>
<td>Score of 3:</td>
<td>Physical 100 Cosmic Concepts 3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physics 2</td>
<td>Score of 3:</td>
<td>Physical 100 Cosmic Concepts 3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Score of 4 or 5:</td>
<td>Physical 215 General Physics I 4</td>
</tr>
<tr>
<td>Physics C: Electricity &amp; Magnetism</td>
<td>Score of 3:</td>
<td>Physical 100 Cosmic Concepts 3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Score of 4 or 5:</td>
<td>Physical 262 Principles of Physics II: Electricity &amp; Magnetism 4</td>
</tr>
<tr>
<td>Physics C: Mechanics</td>
<td>Score of 3:</td>
<td>Physical 100 Cosmic Concepts 3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Score of 4 or 5:</td>
<td>Physical 261 Principles of Physics I: Mechanics 4</td>
</tr>
</tbody>
</table>

**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 B A1</td>
<td>Score of 4 (Standard):</td>
<td>French 101 Basic Elements of French I 3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Score of 5, 6 or 7 (Standard):</td>
<td>French 101 and 102 Basic Elements of French I and II 6</td>
</tr>
<tr>
<td>Language B</td>
<td>Score of 4 (Standard):</td>
<td>Spanish 101 Basic Elements of Spanish I 3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Score of 4:</td>
<td>Spanish 101 and 102 Basic Elements of Spanish I and II 6</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Score of 6 or 7 (Higher Level):</td>
<td>Spanish 101 and 102 Basic Elements of Spanish I and II 6</td>
</tr>
<tr>
<td>Language B</td>
<td>Syllabus review required.</td>
<td>Contact Foreign Language Department.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Language B A2</td>
<td>Syllabus review required.</td>
<td>Contact Foreign Language Department.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Language B (French)</td>
<td>Score of 4 (Standard):</td>
<td>French 101 Basic Elements of French I 3</td>
</tr>
<tr>
<td>(Spanish)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Score of 5, 6 or 7 (Standard):</td>
<td>French 101 and 102 Basic Elements of French I and II 6</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Score of 4 (Standard):</td>
<td>Spanish 101 Basic Elements of Spanish I 3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Score of 4:</td>
<td>Spanish 101 and 102 Basic Elements of Spanish I and II 6</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Score of 6 or 7 (Higher Level):</td>
<td>Spanish 101 and 102 Basic Elements of Spanish I and II 6</td>
</tr>
<tr>
<td>Language B</td>
<td>Syllabus review required.</td>
<td>Contact Foreign Language Department.</td>
</tr>
<tr>
<td>(Other languages)</td>
<td>Syllabus review required.</td>
<td>Contact Foreign Language Department.</td>
</tr>
<tr>
<td>Language ab initio</td>
<td>Syllabus review required.</td>
<td>Contact Foreign Language Department.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Syllabus review required.</td>
<td>Contact Foreign Language Department.</td>
</tr>
<tr>
<td>Business &amp; Management</td>
<td>Score of 4 or 5:</td>
<td>Business Administration 3</td>
</tr>
<tr>
<td>Economics</td>
<td>Score of 4 or 5:</td>
<td>Economics 200 Basic Economics 3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Score of 6 or 7:</td>
<td>Economics 211 Honors: Principles of Macroeconomics 3</td>
</tr>
</tbody>
</table>

**Title of Exam** | **FSU Course Equivalent(s)** | **Credit Hrs.**
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Physics</td>
<td></td>
<td></td>
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<tr>
<td>Psychology</td>
<td></td>
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<tr>
<td>Spanish Language</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spanish Literature</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Statistics</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Studio Art: Drawing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Studio Art: 2D Design</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Studio Art: 3D Design</td>
<td></td>
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<tr>
<td>U.S. History</td>
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<tr>
<td>World History</td>
<td></td>
<td></td>
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<tr>
<td>Geography</td>
<td></td>
<td></td>
</tr>
<tr>
<td>History</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Special Topics in History</td>
<td>Syllabus review required.</td>
<td>Contact History Department.</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></td>
<td></td>
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<tr>
<td>Social &amp; Cultural Anthropology</td>
<td>Contact Sociology Department for review</td>
<td>3</td>
</tr>
<tr>
<td>Biology</td>
<td></td>
<td></td>
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<tr>
<td>Chemistry</td>
<td></td>
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<tr>
<td>Design Technology</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Environmental Systems</td>
<td></td>
<td>IDIS 160 Science, Technology and Society 3</td>
</tr>
</tbody>
</table>

**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.
### 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. Awarded</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GENERAL</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>College Composition</td>
<td>ENGL 101 Freshman Composition</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Score of 70 or higher:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ENGL 111 Honors: Freshman Composition</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></td>
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</tr>
<tr>
<td>American Literature</td>
<td>ENGL 261 American Lit.: Colonial to Present</td>
<td>3</td>
</tr>
<tr>
<td>Analyzing &amp; Interpreting Literature</td>
<td>ENGL 150 Introduction to Literature</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Score of 70 or higher:</td>
<td></td>
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<tr>
<td></td>
<td>ENGL 250 Honors: Comparative Literature</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>ENGL 101 Freshman Composition</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Score of 70 or higher:</td>
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</tr>
<tr>
<td></td>
<td>ENGL 250 Honors: Comparative Literature</td>
<td>3</td>
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<tr>
<td><strong>Foreign Languages</strong></td>
<td></td>
<td></td>
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<tr>
<td>College-level French</td>
<td>FREN 101 Basic Elements of French I</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>FREN 102 Basic Elements of French II</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Level II: Score of 59 minimum:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>FREN 101 Basic Elements of French I</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>FREN 102 Basic Elements of French II</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>FREN 211 French Grammar, Composition, and Conversation I</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>FREN 212 French Grammar, Composition, and Conversation II</td>
<td>3</td>
</tr>
<tr>
<td>College-level German</td>
<td>Evaluated at student request</td>
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<tr>
<td>College-level Spanish</td>
<td>Level I: Score of 50 minimum:</td>
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<tr>
<td></td>
<td>SPAN 101 Basic Elements of Spanish I</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>SPAN 102 Basic Elements of Spanish II</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Level II: Score of 63 minimum:</td>
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<tr>
<td></td>
<td>SPAN 101 Basic Elements of Spanish I</td>
<td>3</td>
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<tr>
<td></td>
<td>SPAN 102 Basic Elements of Spanish II</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>SPAN 211 Spanish Grammar, Composition, and Conversation I</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>SPAN 212 Spanish Grammar, Composition, and Conversation II</td>
<td>3</td>
</tr>
</tbody>
</table>
### Special Departmental Exams

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</td>
<td>Financial Accounting</td>
</tr>
<tr>
<td>ACCT 212</td>
<td>Managerial Accounting</td>
</tr>
<tr>
<td>ACCT 311</td>
<td>Intermediate Accounting I</td>
</tr>
<tr>
<td>BIOL 109</td>
<td>Human Biology &amp; the Environment</td>
</tr>
<tr>
<td>BIOL 149</td>
<td>General Biology I</td>
</tr>
<tr>
<td>BIOL 220</td>
<td>Advanced Computer Applications in Business</td>
</tr>
<tr>
<td>COSC 100</td>
<td>Intro. to Computer Science</td>
</tr>
<tr>
<td>COSC 101</td>
<td>The Discipline of Computer Science</td>
</tr>
<tr>
<td>COSC 240</td>
<td>Computer Science I</td>
</tr>
<tr>
<td>COSC 350</td>
<td>Computer Org./Assem.Language</td>
</tr>
<tr>
<td>ENGL 101</td>
<td>Freshman Comp.</td>
</tr>
<tr>
<td>ENGL 308</td>
<td>Soc. Science Adv. Comp</td>
</tr>
<tr>
<td>ENGL 310</td>
<td>General Adv. Comp.</td>
</tr>
<tr>
<td>GEOG 103</td>
<td>Physical Geography</td>
</tr>
<tr>
<td>GEOG 104</td>
<td>Human Geography</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).
RESIDENCY POLICY

USM Bylaws, Policies and Procedures of the Board of Regents

Policy on Student Classification For Admission and Tuition Purposes

(Approved by the Board of Regents August 28, 1990; Amended July 10, 1998; Amended November 27, 2000; Amended April 11, 2003; Amended June 23, 2006, Amended February 15, 2008, Amended October 24, 2014; Amended April 10, 2015; Amended February 17, 2017. This policy to be amended June 2017. Check the USM website (www.usmd.edu/regents/bylaws/Section/VIII) 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 tuition categories of in-state and out-of-state students for the purpose of admission and assessing tuition at USM institutions.

B. Burden of Proof

The person 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 the applicable USM institution upon a review of the totality of facts known or presented to it.

C. In-state Status

To qualify for in-state tuition, a student must demonstrate that, for 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, the student had the continuous intent to:
1. Make Maryland his or her permanent home; and
2. Abandon his or her former home state; and
3. Reside in Maryland indefinitely; and
4. Reside in Maryland primarily for a purpose other than that of attending an educational institution in Maryland.

Satisfying all of the requirements in Section II (and Section III, when applicable) of this policy demonstrates continuous intent and qualifies a student for in-state tuition. Students not entitled to in-state status under this policy shall be assigned out-of-state status for admission and tuition purposes.

D. Presumption

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.

This presumption may be rebutted. The student bears the burden of rebutting the presumption. See "III. Rebuttal Evidence" below.

II. Requirements

Before a request for classification to in-state status will be considered, a student must comply with all of the following requirements for 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. The student must demonstrate he or she:

A. Source of financial support:
1. 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
2. Evidence the student is Financially Dependent upon a person who is a resident of Maryland.

B. 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.

C. Registration as a Maryland resident with the Selective Service, if male.

D. Has registered all owned or leased motor vehicles in Maryland.
E. Possesses a valid Maryland driver's license, if licensed.
F. Is registered to vote in Maryland, if registered to vote.
G. 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.
H. Has a legal ability under Federal and Maryland law to live permanently without interruption in Maryland.
I. Has rebutted the presumption that he or she is in Maryland primarily to attend an educational institution, if the student's circumstances have raised the presumption.

III. Rebuttal Evidence

Satisfying the requirements listed in paragraphs A through I of Section II, does not rebut the presumption that a student is in Maryland primarily to attend an educational institution. To overcome the presumption, a student must present additional evidence.

To determine a student’s intent, the University will evaluate evidence of a student’s objectively verifiable conduct. 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. 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.

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.

Additional evidence that will be considered includes, but is not limited to, the following:

A. Source of financial support:
1. 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
2. Evidence the student is Financially Dependent upon a person who is a resident of Maryland.
B. 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.
C. Registration as a Maryland resident with the Selective Service, if male.
D. 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.

E. 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 live permanently in Maryland.

IV. Non-Residents Who May Temporarily Qualify For In-State Status

In addition, persons with the following status shall be accorded the benefits of in-state status for the period in which they hold such status:

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 who is stationed in Maryland, resides in Maryland, or is domiciled in Maryland, or the spouse or a Financially Dependent child of such an active duty member. Spouses and children who qualify for exemptions under this provision will retain in-state status for tuition purposes as long as they are continuously enrolled, regardless of whether the active duty member’s station assignment, residence, or domicile remains in Maryland.

D. A veteran who provides documentation that he/she was honorably discharged from the United States Armed Forces 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; 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 unified 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)).

An individual as described in F.(1) will continue to retain in-state status if the individual is enrolled prior to the expiration of the three-year period following the veteran’s discharge, is using educational benefits under chapter 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, a full-time active member of the Armed Forces of the United States on active duty, or the spouse of a member of the Armed Forces of the United States on active duty.

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. Procedures

A. An initial determination of in-state status will be made at the time of admission. The determination made at that time, and any determination made thereafter, shall prevail for each semester/term until the determination is successfully challenged in a timely manner.

B. A change in status must be requested by submitting a USM institution’s “Petition for Change in Classification for Tuition.” A student applying for a change in in-state status must furnish all evidence that the student wishes the USM institution to consider at the time the petition is due. The due date is based on the deadline set forth by the USM institution at which the student seeks to enroll. If the applicable USM institution has no such deadline, the due date is the last published date to register for the forthcoming semester/term for which the change in classification is sought.

C. The student shall notify the USM institution in writing within fifteen (15) days of any change in circumstances which may alter in-state status.

D. 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 policy. Such action may include suspension or expulsion.

E. 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 is claimed as a dependent for tax purposes.

B. 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.

C. Guardian: A guardian is a person so appointed by a court order recognized under the law of the State of Maryland.

D. Spouse: A spouse is a partner in a legally contracted marriage.

E. Child: A child is a natural child or a child legally adopted pursuant to a court order recognized under the law of Maryland.

F. 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.

G. Continuous Enrollment:

1. Graduate and Professional - Continuous enrollment for a graduate or professional student is defined by the institution in accordance with program requirements.
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 Affairs, 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 who completed the "PETITION FOR CHANGE IN CLASSIFICATION FOR TUITION PURPOSES" and has subsequently been denied in-state status has the option to appeal the decision. The student should contact the office that made the residency determination – Office of the Registrar or the Admissions Office – to obtain the appeal form "Student Appeal Information and Decision Form."

General Education and Transfer

TITLE 13B - MARYLAND HIGHER EDUCATION COMMISSION
Subtitle 06 General Education and Transfer
Chapter 01 Public Institutions of Higher Education
Authority: Education Article, 11-201 - 11-206   Annotated Code of Maryland

.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 life-long 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 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 insti-
tion 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 transferable 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 carry at least 3 semester hours.

(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.

(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 the 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 freshman/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.
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.

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.

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.

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.

Associate's Degrees.

(a) While there may be variance in the number 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.

Student Responsibilities. A student is held:

(a) Accountable for the loss of credits that:

(i) Were earned for remedial course work; or

(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.

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 transferability 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.

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.

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.

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.

.09 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.

Effective date: December 4, 1995 (22:24 Md. R. 1901)
Regulation .02B amended effective July 1, 1996 (23:13 Md. R. 946)
Regulation .02-1 adopted effective April 6, 1998 (25:7 Md. R. 528)
Regulation .03 amended effective July 1, 1996 (23:13 Md. R. 946); July 18, 2016 (43:14 Md. R. 779)
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 and evaluation 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 pre-condition 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.
Student Records Annual Notification

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.

Upon request, the University also discloses education records without consent to officials of another school in which a student seeks or intends to enroll. 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.

The Directory Restrictions Form in PAWS can be found using the following path: Student Center> “other academics” drop down box> FERPA-Restrict Directory Info.

4. 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.

5. 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.
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Welcome to Frostburg State University
For Visits and Further Information

Visitors are always welcome at Frostburg State University. Applicants can contact the Office of Admissions, 301.687.4201, to arrange a date and time. Administrative offices are generally open from 8:30 a.m. to 4:30 p.m., Monday through Friday. The mailing address for the Frostburg State University main campus is 101 Braddock Road, Frostburg, Maryland 21532-2303.

Information 301.687.4000
Academic Programs and Policies Hitchins 213 301.687.4211 jennifer@frostburg.edu
Admissions Pullen 114 301.687.4201 FSUAdmissions@frostburg.edu
Center for Advising & Career Services Sand Spring Hall 301.687.4403 CAAR@frostburg.edu
Financial Aid Pullen 114 301.687.4301 FinAid@frostburg.edu
On-Campus Housing - Residence Life Office basement, Annapolis Hall 301.687.4121 ResLife@frostburg.edu
Registration and Transcripts Pullen 144 301.687.4321 Reginfo@frostburg.edu
Student Affairs Hitchins 116 301.687.4311 StudentAffairs@frostburg.edu
Extramural Programs
Intramural Programs
Frostburg State University
101 Braddock Road
Frostburg, MD 21532-2303
301.687.4000

FSU AT A GLANCE

Majors
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Admissions
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Computer Information Systems
Computer Science
Early Childhood/Elemntary Education
Earth Science
Economics
Elementary Education
Elementary/Middle School Dual Certification
Engineering
English
Environmental Analysis & Planning
Ethnomedicine
Exercise & Sport Science
Foreign Language & Literature
Geography
Health & Physical Education
Health Science
History
Information Technology
International Studies
Interpretive Biology & Natural History
Law and Society
Liberal Studies
Music
Communication
Mathematics
Mechanical Engineering
Music
Nursing (B.S. to BSN)
Philosophy
Physics
Political Science
Psychology
Recreation & Parks Management
Secondary Teacher Education
Senior Computer & Information Assurance
Social Science
Social Work
Sociology
Theatre
Wildlife & Fisheries

Pre-Professional Programs
Dental Hygiene
Dentistry
Law
Medical Technology
Medicine
Nursing
Occupational Therapy
Optometry
Pharmacy
Physical Therapy
Veterinary Medicine

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