



Undergraduate Catalog

2003-2005

Frostburg State University
101 Braddock Road
Frostburg, Maryland 21532-1099

www.frostburg.edu

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 Schedule Booklet, 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.

Frostburg State University is a constituent institution of the University System of Maryland.

Connections

When it seems, as the poet William Butler Yeats wrote, that “things fall apart” and “the center will not hold,” it is through connections — relationships — that we bring a sense of order and purpose to our lives.

To enter Frostburg State University as a student is to enter a community that values relationships. We want you to be fully engaged while you are here, connecting with ideas and people, both inside and outside the classroom. Our faculty are dedicated to helping you learn, but they expect you to be active learners, responsible for your own intellectual and personal development. Our small classes foster interpersonal relationships and the lively exchange of ideas among faculty and students. Our library and our laboratories permit you to access virtually limitless sources of information through modern technology and to engage in electronic dialogue with others in remote sites who share your interests.

Opportunities to build personal relationships abound in our student activities and athletic programs as well, whether it be participation in the student government association, one of the many campus special interest clubs, or intramural or intermural sports. Cultural events — drama productions, dance recitals, music concerts, performances by renowned guest artists, lectures — all provide occasions for the campus community and visitors from the surrounding area to come together as an extended, connected community.

And there are other ways in which we encourage our students to establish good relationships with the community around us. Frostburg State University values and promotes learning through active community service. Our students devote thousands of hours each semester to helping others through participation in activities like Big Brother and Big Sister programs, AmeriCorps, service to senior citizens, fund raising for organizations like the Maryland Food Bank and the American Heart Association, blood drives for the Red Cross, and cleanup and adopt-a-neighbor programs. Through service they learn to be responsible citizens and to use their talents and their knowledge to improve the communities of which they are a part.

This catalog is a sort of road map to possible connections you can make as a student at Frostburg. It tells you about our academic programs, our faculty, and some of the activities available to you. With it comes an invitation to consider joining us as a campus community that truly cares about relationships, about connections.

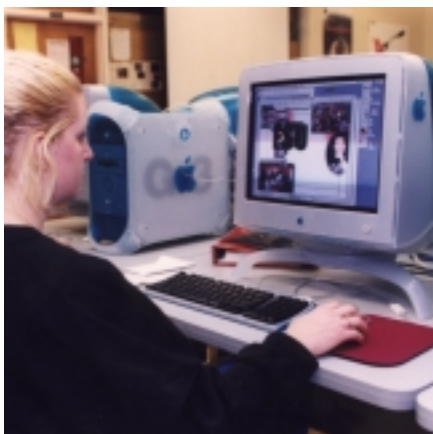
Sincerely,



Catherine R. Gira, President



Dr. Catherine R. Gira
President, Frostburg State University



Academic Calendar 2003-2004

Fall Semester 2003

Testing - new non-registered students only	August 28
Advising and Registration - new non-registered students only	August 29
Residence halls open 9 a.m.	August 31
Labor Day - no classes	September 1
Classes begin	September 2
Late registration/drop/add	Sept. 2-9
Last day to add classes	September 9
Family Weekend	Oct. 3-5
Last day to withdraw with W - graduate students	October 13
Last day for removal of incomplete grades - undergraduate students	October 13
Mid-semester warnings distributed to undergraduate students	October 14
Homecoming	Oct. 17-19
Last day to withdraw with W - undergraduate students	October 27
Spring 2004 & Intersession registration, without payment	Nov. 3 - Nov. 21
Intersession registration, with payment	Nov. 24 - Dec. 12
Residence Halls close - 7 p.m.	Nov. 26
Thanksgiving Recess	Nov. 27 - 30
Residence Halls open - noon	Nov. 30
Classes resume	Dec. 1
Last day for removal of incomplete grades - graduate students	December 12
Last day to withdraw from courses with WF	December 12
Last day of classes	December 12
Reading Days/Common Exams	Dec. 13-14
Final Exams	Dec. 15 - 19
Intersession course cancellations	December 15
Late Intersession registration, with late fees	Dec. 15 - Jan. 5
Residence halls close 7 p.m.	December 19
Commencement	December 20

Spring Semester 2004

Testing, new non-registered students only	January 22
Advising and Registration - new non-registered students only	January 23
Residence halls open-9 a.m.	January 25
Classes begin	January 26
Late registration/drop/add	Jan. 26-30
Last day to add classes	January 30
Summer school registration (without late fees)	March 1 - May 7
Last day for removal of incomplete grades - undergraduate students	March 5
Last day to withdraw from courses with W - graduate students	March 5
Mid-semester warnings distributed to undergraduate students	March 8
Last day to withdraw from courses with W - undergraduate students	March 19
Residence Halls close - 7 p.m.	March 19
Spring Break	March 20-28
Residence Halls open - 12 noon	March 28
Classes resume	March 29
Fall 2004 registration	April 5 - 23
Late registration for Summer, with late fees	May 10 - 26
Summer sessions course cancellations	May 11
Last day for removal of incomplete grades - graduate students	May 11
Last day to withdraw from courses with WF	May 11
Last day of classes	May 11
Reading Day	May 12
Final Exams/Common Exam	May 13-14
Common Exams	May 15
Reading Day	May 16
Final Exams	May 17-19
Residence halls close 7 p.m.	May 19
Honors Convocation	May 21
Commencement	May 22
Hagerstown/Frederick Commencement	May 24

Intersession 2004

Residence halls open, noon	Jan. 4
Classes begin	Jan. 5
Martin Luther King Day, no classes	Jan. 19
Last day of classes	Jan. 23

Summer Sessions 2004

First Summer Session	May 25-July 2
Second Summer Session	July 6-Aug. 12
Internship Session	May 25-Aug. 12
MBA Session	May 25-Aug. 12

Calendar subject to change without notice.

Academic Calendar 2004-2005

Fall Semester 2004

Testing - new non-registered students only	August 26
Advising and Registration - new non-registered students only	August 27
Residence halls open 9 a.m.	August 29
Classes begin	August 30
Late registration/drop/add	Aug. 30 - Sept. 3
Last day to add classes	September 3
Labor Day - no classes	September 6
Last day to withdraw with W - graduate students	October 11
Last day for removal of incomplete grades - undergrad. students	October 11
Mid-semester warnings distributed to undergraduate students	October 12
Last day to withdraw with W - undergraduate students	October 25
Spring 2005 & Intersession registration, without payment	Nov. 1 - Nov. 19
Intersession registration, with payment	Nov. 22 - Dec. 10
Residence Halls close - 7 p.m.	Nov. 24
Thanksgiving Recess	Nov. 25 - Nov. 28
Residence Halls open - noon	November 28
Classes resume	November 29
Last day for removal of incomplete grades - graduate students	December 10
Last day to withdraw from courses with WF	December 10
Last day of classes	December 10
Reading Days/Common Finals	Dec. 11 - 12
Intersession course cancellations	December 13
Late Intersession registration, with late fees	Dec. 13 - Jan. 3
Final Exams	Dec. 13 - 17
Residence halls close 7 p.m.	December 17
Commencement	December 18
Parents' Weekend and Homecoming Weekend to be determined	

Spring Semester 2005

Residence halls open-9 a.m.	January 23
Testing, new non-registered students only	January 24
Advising and Registration - new non-registered students only	January 25
Classes begin	January 26
Late registration/drop/add	Jan. 26 - Feb. 2
Last day to add classes	February 2
Summer school registration (without late fees)	Feb. 28 - May 6
Last day for removal of incomplete grades - undergraduate students	March 8
Last day to withdraw from courses with W - graduate students	March 8
Mid-semester warnings distributed to undergraduate students	March 9
Residence Halls close - 7 p.m.	March 18
Spring Break	March 19 - 27
Residence Halls open - 12 noon	March 27
Classes resume	March 28
Last day to withdraw from courses with W - undergraduate students	March 29
Fall 2005 registration	April 4 - 22
Late registration for Summer, with late fees	May 9 - 25
Summer sessions course cancellations	May 12
Last day for removal of incomplete grades - graduate students	May 12
Last day to withdraw from courses with WF	May 12
Last day of classes	May 12
Reading Days/Common Exams	May 13 - 15
Final Exams	May 16 - 20
Residence halls close 7 p.m.	May 20
Honors Convocation	May 20
Commencement	May 21
Hagerstown/Frederick Commencement	May 23

Intersession 2005

Residence halls open, noon	Jan. 2
Classes begin	Jan. 3
Martin Luther King Day, no classes	Jan. 17
Last day of classes	Jan. 25

Summer Sessions 2005

First Summer Session	May 24-July 1
Second Summer Session	July 5-Aug. 12
Internship Session	May 24-Aug. 12
MBA Session	May 24-Aug. 12

Calendar subject to change without notice.

The University

The Mission of the University

As approved by the University System of Maryland Board of Regents October 27, 2000

Institutional Identity

Founded in 1898, Frostburg State University (FSU) is a comprehensive, largely residential, regional university. It is the only four-year institution of the University System of Maryland (USM) west of the Baltimore-Washington metropolitan area, thereby serving as the premier educational and cultural center for western Maryland. In addition to offering an excellent academic program, the University continues to be an integral component of regional economic development initiatives. It is also nationally recognized for its programs in community service and leadership, thus providing "real-life" experiences for students in virtually every discipline offered. As a result, FSU holds the distinction of being one of the USM institutions most fully woven into the fabric of the surrounding region.

Frostburg State University is distinguished by an excellent, diverse faculty, dedicated staff, and service to the communities of western Maryland. Students are afforded a supportive environment in which to expand their knowledge, understanding, communication skills, and appreciation for cultural diversity. Couched within a liberal arts tradition, undergraduate programs promote intellectual growth and equip learners with problem-solving and decision-making abilities useful in developing global understanding and effecting civic responsibility and constructive change. Graduate programs provide specialized instruction for students engaged in or preparing to enter particular professional fields.

The primary program emphasis at the University is high-quality, affordable undergraduate education. FSU offers a comprehensive array of baccalaureate degrees with an emphasis on arts and humanities, business, applied technologies, education, natural and environmental sciences, human services, and social and behavioral sciences. Collaboration with other educational institutions enables the University to offer programs in allied health, engineering, environmental research, and other fields responsive to State and area needs. Graduate studies also constitute a significant component of the educational enterprise. In response to community and regional needs, high-quality master's programs are offered in such professional fields as business, education, psychology, human performance, environmental sciences, applied technology, and recreation management. Through distance learning technologies, the University provides expanded learning and research opportunities for students throughout the State.

The faculty of FSU represent its greatest resource in providing excellent educational experiences for students. Teaching is the most important professional activity and responsibility of the faculty; research and scholarly activity, including collaborations with the Appalachian Laboratory of the Center for Environmental Sciences, and community and professional service also contribute to the vitality of the University and are encouraged and rewarded.

The University draws its diverse student body from all counties of Maryland, nearby states, and a growing number of foreign countries. The majority of students come from the Baltimore and Washington areas. In addition to offering affordable opportunities for undergraduate and graduate education at its main campus in Frostburg, the University, through its Hagerstown and Frederick centers, offers upper-division courses leading to the baccalaureate degree and selected graduate degrees in education and business. Professional Development Schools established by the University serve as valuable resources for teachers throughout western Maryland and from neighboring states. The student population of the University includes students from various ethnic and racial backgrounds (15% minorities), from both traditional and non-traditional age groups (12% over age 25), and from rural, suburban, and metropolitan areas. In sum, the student body at FSU is broadly reflective of contemporary multicultural society.

The University acknowledges its responsibility to enrich the educational opportunities for students throughout the State and to provide programs and services responsive to the cultural, community service, and economic development needs of the region.

The Carnegie Classification of the University is Master's Comprehensive I.

Institutional Capabilities

Building on a foundation of excellence, Frostburg State University will continue to grow and to develop programs responsive to the diverse needs and interests of students. In the immediate future, the University will implement several recently approved programs in special education, applied computer science, occupational therapy (with Towson University), community health (with Allegany College and



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"Application of knowledge is the epitome of academic experience."

Professor John Bambacus,
Political Science

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"FSU has helped me to determine what I value in life and to appreciate the importance of education."

Mollie S. Gerhard
English, 2001

West Virginia University), therapeutic recreation (with Catonsville Community College), and health system administration (with Allegany College).

New undergraduate initiatives currently under discussion include collaborative degrees or specializations in biotechnology, computer engineering, and ethnobotany. New graduate programs being planned include an M.A.T. in secondary education, a collaborative doctorate in education, and additional collaborative programs in the environmental sciences.

To assist the State in addressing the critical shortage of teachers and information technology professionals, the University will seek to expand the number of qualified undergraduate and graduate students recruited to and graduating in those disciplines. Expanded curricular offerings in education, computer science, and engineering will be accompanied by increased efforts in retention in those fields.

FSU acknowledges its responsibility to strengthen public schools through the preparation of certified teacher-education graduates and K-16 partnerships directed at improving curriculum and pedagogy. Increased opportunities for the continuing education of teachers will be accomplished through the expansion of Professional Development Schools in the westernmost counties of the State.

The University collaborates with government agencies, other educational institutions, and business and non-profit organizations to address the emerging needs of the broader community. The institution's highly acclaimed programs in volunteerism and community service (AmeriCorps, America Reads, Vista, Voice, Learn and Serve) have brought the University national eminence. Special recognition and awards have been received from the Governor's Commission on Service and Volunteerism and the national Corporation for Public Service. Approximately one-half of all undergraduate students in residence on the main campus engage in community service to elderly shut-ins, institutionalized mental patients, illiterate youth and adults, participants in community recreation centers, and countless other constituents.

The Performing Arts Center, opened in 1994, along with other campus facilities, has brought to the region outstanding national productions in opera, dance, theatre, and symphony and serves as the home for a rich array of student productions. These programs and prominent lecturers speaking on a wide range of topics draw audiences from the far reaches of Allegany and Garrett Counties and adjacent counties of neighboring states. Both private and University resources have combined to make the institution the premier cultural center of the region.

The University recognizes its role as a major force for economic development in the region. FSU is a major employer in the area, providing a positive stimulus for the regional economy and opportunities for advanced learning for the employees of area businesses and professions. Each year the University attracts thousands of visitors to the region through special events such as homecoming, parents' weekend, and commencements and through its vigorous summer programming, which brings additional resources to the institution and to the area. Excellent campus facilities and the expertise of University personnel also enable FSU to serve as a center for applied research in the environmental and social sciences, teaching and learning, and other disciplines responsive to societal needs.

Increasingly, the University plays a role in attracting new businesses to the area. Various resources, including the Regional Internet Laboratory and the Small Business Development Center, are available to stimulate business activity. The Center for Regional Progress conducts research and analyses for the local Chamber of Commerce and numerous other area agencies. Currently, the University is working with the Allegany County Department of Economic Development and the Maryland Department of Business and Economic Development to establish a business park (Allegany Business Center) on campus to attract science and technology companies to the area. Substantial financial support for the project has been received from the federal Economic Development Agency, the Appalachian Regional Commission, the state of Maryland, and Allegany County. A major attraction for both the University and the private sector will be the excellent location and the availability of University resources, including faculty and student interns.

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"I encountered professors who were tough but fair and who cared that each student's time at FSU was a positive experience."

Gregory M. Davis,
Geography, 1984

Accreditation

The University and its programs are accredited by the following associations and agencies:

- ▶ Frostburg State University -- Middle States Association of Colleges and Schools
- ▶ Teacher Education Programs -- Accredited by the National Council for the Accreditation of Teacher Education (NCATE) under the new performance standards, approved by the Maryland State Department of Education (MSDE) as consistent with the Maryland Redesign of Teacher Education, and recognized by 14 professional content associations for compliance with national standards.
- ▶ M.S. in Counseling Psychology -- Interorganizational Board for Accreditation of Masters in Psychology Programs
- ▶ B.A./B.S. in Social Work -- Council on Social Work Education
- ▶ Counseling Service -- International Association of Counseling Services
- ▶ Recreation Programs -- National Recreation and Park Association/American Association for Leisure and Recreation

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 43 different undergraduate majors, many of which allow you to choose a specialization within a broader field of study. In addition, two engineering majors are 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
- ▶human resource management
- ▶marketing
- ▶small business/entrepreneurship

Economics

- ▶business economics
- ▶public policy economics
- ▶quantitative economics

College of Education

Athletic Training

Business Education

Early Childhood/Elementary Education

Elementary Education

Exercise and Sport Science

- ▶health fitness
- ▶health promotion

Health and Physical Education

Recreation and Parks Management

- ▶adventure sports
- ▶community program delivery
- ▶hospitality management & tourism
- ▶therapeutic recreation

College of Liberal Arts & Sciences:

Actuarial Science

Art and Design+

Biology+

- ▶biotechnology
- ▶environmental science

Chemistry+

- ▶biochemistry
- ▶professional chemistry
- * traditional chemistry

Communication Studies

- * professional communication
- * interdisciplinary

Computer Science

▶information systems

Criminal Justice

Dance

Earth Science+

▶environmental science

Electrical Engineering (in collaboration w/UMCP)

English+

- ▶creative writing
- ▶literature
- ▶professional writing

Environmental Analysis and Planning

Foreign Languages and Literature+

- ▶French
- ▶Spanish

Geography

- ▶global systems analysis
- ▶mapping sciences

History

- ▶international history
- ▶history of the Americas
- ▶public history

Interpretive Biology and Natural History

Law and Society

- ▶criminal justice
- ▶legal studies

Mass Communication

Mathematics+
Mechanical Engineering (in collaboration w/UMCP)

Music+

- * instrumental performance
- ▶music management
- ▶vocal performance
- * piano performance

Philosophy

Physics+

- * engineering physics
- * traditional physics

Political Science

Psychology

Social Work

Sociology

*applied social research

*general sociology

Theatre

- *acting
- *directing
- *general theatre
- *production

Urban and Regional Planning

Wildlife and Fisheries

Inter-college Programs

Health Science Administration

Information Technology Management

International Studies

- ▶international business
- ▶international development
- ▶international economics
- ▶international politics

Liberal Studies

Social Science+

Minors

You may also select from 35 minors. Minors require a minimum of 18 credit hours in an area of study outside your major. Minors are offered in most of the major fields. Distinctive minors (no similar majors offered), listed separately in the Courses of Study section, include:

African American Studies
Art History
Business for Science & Technology majors
Coaching
Environmental Humanities
Environmental Policy
Fine Arts
Forestry
Graphic Design
Leadership Studies
Public Relations
Women's Studies
Writing



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"Take as many courses above the required number as you can. Only the most knowledgeable and well-spoken are going to make it to the top."

Jocelyn Dequenne,
Speech Communication, 1987

- ▶ = concentration
- * = track
- + = teaching certification option

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"Poetry is meant to be read; it is a treat for the ears for anyone who appreciates rich language. It awakens some kind of hunger, then increases it."

Professor Barbara Hurd,
English

Distinctive Areas of Study and Focuses

The University offers a number of special course groupings which prepare you for different professions, or graduate programs, or give you academic distinction. Each of these areas of study is fully described in the Courses of Study section.

B.S. Accounting/MBA Dual Degree
 B.S. Chemistry/Doctor of Pharmacy Dual Degree
 B.S. Physics/M.S. Applied Physics Dual Degree
 Dental Hygiene Preparation
 Educational Professions
 Education: K-12 Programs
 Education: Secondary Programs
 Engineering: Dual Degree Program
 Honors Program
 Law: Law School Preparation, Bachelors/Juris Doctor Dual Degree Program
 Mathematical Sciences (Focus)
 Medical Technology Preparation
 Medicine, Dentistry, Optometry, Veterinary Medicine Preparation
 Nursing Preparation
 Occupational Therapy Preparation
 Pharmacy Preparation
 Physical Therapy Preparation

Certificate Programs

Degree-seeking undergraduates and non-degree-seeking community members may earn a certificate in several specialized areas. Certificate programs are designed to provide specialized skills and knowledge that may enhance your undergraduate program and/or provide skills useful in employment. Undergraduate certificates include a minimum of 12 credit hours.

The following certificate programs currently are offered. See the descriptions in the Courses of Study section of this catalog.

Addictions Counseling
 (Psychology)
 Computer Print Graphics
 (Visual Arts)
 Computing Technology
 (Computer Science)
 Software Development
 (Computer Science)
 Programming
 (Computer Science)
 Networking
 (Computer Science)
 International Area Studies
 (International Studies)
 Child and Family
 (currently open only to degree-seeking Psychology majors)

Choosing a Major

Career Services publishes a guide to selecting a major which is available in Sand Spring Hall. This office can also offer you counseling in selecting a major. Here is a list of additional campus resources which can help you decide.

- ▶ Career Day: annually in October
- ▶ DISCOVER: an on-line career guidance program
- ▶ Faculty in departments offering majors which interest you
- ▶ ORIE 101: Introduction to Higher Education
- ▶ Office of Student and Educational Services
- ▶ Counseling Services
- ▶ Programs for Academic Support and Study (PASS)

Declaring a Major

You may declare a major during admission, in your first semester through ORIE 101: Introduction to Higher Education, or by obtaining a declaration of major form from your academic advisor or from the Office of Student and Educational Services in Hitchins 116.

Many students become concerned about declaring the "right" major, but a major is never a final choice. You may change majors as many times as you like. Other students feel uncomfortable because they are not ready to declare a major. You may take up to 60 credits, however, before you are expected to declare a major.

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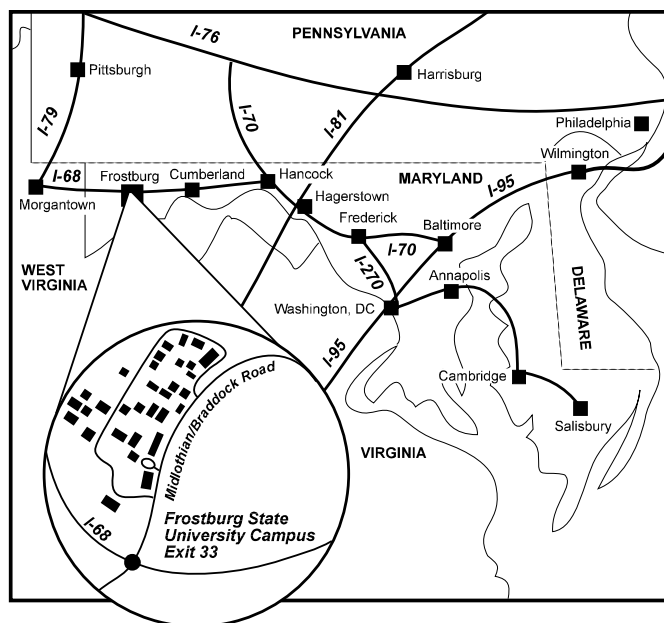
"We try to emphasize the practical, to address issues our students are going to face out there in the workplace every day. We teach management in human terms."

Professor Tom Hawk,
MBA Program

The Campus and Its Surroundings

Frostburg State University is located in the Appalachian highlands (elevation 2,000 feet) of western Maryland. The main campus covers 260 acres within the town limits of Frostburg (population 7,500). The University also offers courses in Frederick, Maryland, at the Center in Hagerstown and on the Catonsville Campus of the Community College of Baltimore County.

The local region is rich in both history and outdoor activities. Students can visit nearby recreational areas—Rocky Gap, New Germany, and Deep Creek Lake State Parks—which offer camping, boating, swimming, hiking, and skiing.



Getting to FSU

From Baltimore and east: take I-70 west to I-68 west at Hancock, MD. Continue to the second exit for Frostburg, Exit 33 (Midlothian / Braddock Road). Bear right and proceed approximately one mile to the main entrance to the FSU campus.

From Morgantown, WV, and west: take I-68 east to Exit 33 (Midlothian / Braddock Road). Turn left onto Braddock Road and proceed approximately one mile to the main entrance to the campus.

To the Center in Hagerstown, take I-70 west from Baltimore and exit onto I-81 north. Take the Downtown Hagerstown exit and follow Route 40 east to the Center on the downtown Public Square.

To the Frederick Center, take I-270 to Exit 31B; travel south on MD85. Turn right onto Crestwood, into the Westview Corporate Campus. Turn right on Westview Drive. The Center is located at 5300 Westview Drive, Suite 406.

Facilities

The University buildings and grounds make learning, living and working on our campus a special pleasure. Nature easily enters into the daily lives of students: buildings are set around grassy quads; varieties of plants and the surrounding woods change with the seasons.

The University facilities include the 260-acre main campus, the Center in Hagerstown, and the Center in Frederick.

The Main Campus

Our classroom buildings include Compton, Dunkle, Fine Arts, Framptom, Gunter, Lowndes, Old Main, Pullen, Tawes and the Guild Human Resources Center. Students also attend classes in the Performing Arts Center and the Cordts Physical Education Center.

In addition to specialized departmental labs in all departments, science facilities include a planetarium, greenhouse, live animal rooms, centrifuge, herbarium, arboretum, biotechnology center and electron microscope. Recently, science facilities have greatly expanded and improved through the renovation of Gunter Hall, and the addition of a new Compton Science Center. The state-of-the-art Appalachian Laboratory of the USM Center for Environmental Studies also provides research facilities for FSU students and faculty, as will a new research park.

Forty-five per cent of our students live on campus in eleven residence halls: Allen, Annapolis, Cambridge, Cumberland, Diehl, Frederick, Frost, Gray, Simpson, Sowers, and Westminster. Edgewood Commons, a privately owned apartment-style complex on campus, will open in Fall 2003.

Student meals are served in the Chesapeake Dining Hall, the Appalachian Station in the Lane Center and at the Sub Connection in Sowers Hall.

“The electronic microscopy laboratory is one way the University and the biology department contribute to bringing new and diversified industry into the region. This sophisticated instrumentation is usually restricted to large, urban universities.”

Dr. David Morton,
Biology Department

Executive offices are located in the Hitchins Administration Building.

Pullen and Sand Spring Halls house most student services offices. In Pullen, you will find Admissions and Financial Aid, the Registrar, University and Student Billing, Graduate Admissions and Services, Programs for Academic Support and Studies (P.A.S.S.), Disability Support Services, and Student Support Services. Sand Spring Hall is the temporary home to Counseling and Psychological Services, Career Services, the Career Resource Center, Veterans' Affairs, Upward Bound and the Regional Math/Science Center. The University Children's Center has its own building next door.

Specialized Facilities

The Library

The Lewis J. Ort Library provides a wealth of research and reference materials for student and community use.

- ▶ Over one-half million print titles in the collection
- ▶ Web access to library holdings and to other University System of Maryland campus libraries
- ▶ Media center of non-print materials and teacher materials collection
- ▶ U.S. and Maryland Government documents and maps
- ▶ Periodical collection with over 1,000 subscriptions and 20,022 Web access titles
- ▶ Special collections with emphasis on Western Maryland
- ▶ Extensive archival research collections on Western Maryland's two U.S. Senators (J. Glenn Beall and J. Glenn Beall, Jr.), the Communist Party USA, and railroad photography.
- ▶ Interlibrary loan services
- ▶ Individual and group instruction for use of the library's print/electronic resources and effective research strategies
- ▶ Public Internet work stations, plus a 24-station electronic classroom
- ▶ Library's homepage at www.frostburg.edu/dept/library/library.htm with access to the MdUSA interface which provides access to all of the library's Web databases on-campus or off-campus.

Performing Arts Center

Students studying dance, music, theatre and communication can flourish in the Performing Arts Center. It contains three state-of-the-art theaters (Pealer Recital Hall, Drama Theater, Studio Theater), rehearsal spaces, music practice rooms and electronic labs, shops, offices, classrooms and facilities for the hearing-impaired. Campus and community audiences are welcome at a wealth of concerts and performances. For information, contact the Facilities Manager at 301/687-7460.

Lane University Center

This student union was built and operates with student fees. It contains student organization offices, the FSU Bookstore, meeting and game rooms, The Appalachian Station restaurant, The Loft and the Cat Trax convenience store. Lane University Center programs and services are described in the Campus Life chapter.



FSU's Performing Arts Center

Harold J. Cordts Physical Education Center

Students with valid University identification can use the extensive indoor and outdoor facilities of the Harold J. Cordts Physical Education Center:

- ▶ Three gymnasiums for basketball and other sports
- ▶ Swimming pool with 12-ft diving well
- ▶ Weight rooms, free weights, and Badger Magnum machines
- ▶ Racquetball and squash courts
- ▶ Outdoor tennis courts, football stadium, track facilities
- ▶ Baseball, soccer and other athletic fields

For information, contact the Director at 301/687-4471.

Academic Computing

Students have access to a rich computing environment that includes specialized department labs housed in various campus buildings as well as the main University Computer Center located in Pullen Hall. The University Computer Center offers:

- ▶ Apple, Windows, and SUN workstations connected to the campus network and the Internet.
- ▶ Scanning and printing facilities.
- ▶ Standard software including word processing, spreadsheets, databases, Internet browsers, Email, programming languages, graphics production and library access.
- ▶ Access to statistics packages, programming languages, and database programs through academic servers.

Additionally, Academic Computing offers:

- ▶ Internet and Email accounts for students, faculty, and staff.
- ▶ Support for students on connections from the residence halls to the University's fiber network (Port per Pillow).
- ▶ Internet dial-up service for off-campus students.
- ▶ Lab support for various labs located at Frostburg and Hagerstown campus.
- ▶ 24 hours 7 days a week lab access via student ID in Ort Library 210.
- ▶ Web development and programming for departments, offices, local government, and non-profit organizations through the Internet Publishing Lab.
- ▶ Training for computer lab assistants in other departments

Academic Computing may be reached at 301/687-7090. Visit our website at www.frostburg.edu/admin/acacom

Distance Learning

Interactive video, on-line courses, web-assisted courseware and multi-media applications are impacting the way students learn at Frostburg State University. FSU realizes the importance of integrating technologies into the curriculum and has a well-articulated vision of providing opportunities and resources to students and for establishing an exceptional environment of support for teaching and learning.

There is a growing availability of technologically enhanced instructional opportunities at Frostburg. Both synchronous (real-time) and asynchronous (e-mail and newsgroups) learning options abound. There are three distance learning classrooms where students have the opportunity for interaction and collaboration with students and faculty from other institutions within the State of Maryland and to share on-campus classes with students at FSU's Hagerstown Center. Web-enhanced and on-line courses provide students a blend of instructional options within their fields of study sharpening individual skills for technological growth and accomplishment.

Frostburg is working toward creating an on-campus educational environment that embraces the newest of technologies. Several customized "smart classrooms" have been established which incorporate cutting-edge equipment designed to facilitate classroom instruction. There are several computing labs throughout campus where students may work including one available for access 24-7.

Student involvement in distance education is encouraged and faculty are committed to providing the highest levels of academic support to our students for the distance learning opportunities on campus. For more information about distance learning, contact the Instructional Technology Support Center 301/687-4353.

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"In the Performing Arts Center, we showcase the best performance work available in this region, open access to external examples of creativity, and render extraordinary services in the performing arts and communication to local schools and the community at large."

Dr. Philip Allen,
Dean, School of Arts and Humanities
1987-1999

University Children's Center

The University operates a licensed Pre-School/Extended Child Care Program for the children of students, employees and community residents from Monday through Friday, 7:45 a.m. to 5:00 p.m. Developmentally-appropriate experiences are provided for three, four and five-year-olds in art, math, science, cooking, music and movement, dramatic play, large muscle and fine motor activities. The Center is located on University Drive (across from Bobcat Stadium). For more information, call 301/687-4027.

Women's Studies Resource Center

The Women's Studies Resource Center provides a place for students to find resource materials on gender issues and to get information about the Women's Studies Program. The Center is located in Room 510 of the Ort Library. Hours vary, so contact a Women's Studies coordinator for more information: 301/687-4130 or 301/687-4047.

Frederick and Hagerstown Centers and Other Instructional Sites

The Hagerstown Center (301/791-4020) offers a full MBA degree, most specializations in the Master's of Education and the Master of Arts in Teaching - Elementary. Students may enroll in junior/senior-level courses leading to a bachelor's degree in accounting, business administration, law and society, liberal studies or sociology. The Center offers classes from 9:00 a.m. through 11:00 p.m., Monday through Friday, and on Saturday mornings. Most classes are offered late afternoon or evening, although classes utilizing interactive distance learning are offered throughout the day.

The Frederick Center (301/695-3965) offers a full MBA degree through evening classes Monday through Thursday; and undergraduate majors in business administration and law and society through evening and weekend classes.

The B.A./B.S. in recreation and parks management, including the therapeutic recreation concentration, is offered at the Catonsville Campus of the Community College of Baltimore County. The M.S. in Park and Recreation Resource Management is currently offered at the Maryland-National Capital Park and Planning Commission's headquarters in Silver Spring.

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, 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 Office of Affirmative Action/Equal Opportunity (301/687-4101).

- Affirmative Action/Equal Employment Opportunity (PN 1.002)
- Sexual Harassment Policy (PN 1.004 Revised)
- 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)

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

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"Diversity is important because we need to know more about each other. It is not realistic at this stage in history to know only about our own culture. It is a necessity to relate to and understand a variety of cultures in the workplace and in the global community."

Tracee Wilkins '97,
Mass Communication

disabilities. If a program or service is inaccessible to disabled persons, the University maintains responsibility for providing reasonable accommodations 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. You may request accommodations through the ADA Compliance Office (301/687-4481; TDD 301/687-7955).

FSU's Teacher Education Report Card

Contextual Information

Total number of students admitted into teacher preparation, all specializations, AY 2001-02	640
Number of students in supervised student teaching	133
Number of faculty members who supervised student teachers:	
Full-time faculty in professional education	16
Part-time faculty in professional education but full-time in the institution	5
Part-time faculty in professional education, not otherwise employed by the institution	3
Total faculty student teaching supervisors	24
Student teacher/faculty ratio	5.3
The average number of student teaching hours per week required*	35
The total number of weeks of supervised student teaching required	20
Average total number of hours required	700

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

Individual Assessments completed by 10 or more students

Type of Assessment	Frostburg State University			Statewide		
	Number Taking Assessment	Number Passing Assessment	Institutional Pass Rate	Number Taking Assessment	Number Passing Assessment	Statewide Pass Rate
Professional Knowledge						
ELEM ED CONTENT AREA EXERCISES	92	86	93%	874	824	94%
Academic Content Areas						
ELEMENTARY ED CONTENT KNOWLEDGE	93	93	100%	881	879	100%
EARLY CHILDHOOD EDUCATION	46	38	83%	238	222	93%
PHYSICAL ED: CONTENT KNOWLEDGE	12	9	75%	64	55	86%
PHYSICAL ED VIDEO EVALUATION	12	12	100%	64	61	95%

Aggregate and Summary Institutional-level Pass-rate Data: Regular Teacher Preparation Program

Academic Year: 2001-02

Number of Program Completers: 133¹

Type of Assessment ²	Number Taking Assessment ³	Number Passing Assessment ⁴	Institutional Pass Rate	Statewide Pass Rate
Aggregate - Basic Skills	131	131	100%	97%
Aggregate - Professional Knowledge	108	100	93%	94%
Aggregate - Academic Content Areas**	168	157	93%	96%
Summary Totals and Pass Rates⁵	133	130	98%	90%

See College of Education web site for detailed report.

**Math, English, Biology, etc.

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.

University History

1898	The Maryland General Assembly authorized State Normal School #2 and a \$20,000 appropriation for a building. The Governor selected Frostburg as a site because the residents offered the best suitable location without cost to the State.
1898	Townsppeople raised the money to buy Beall's Park—a two-acre site—for the State Normal School.
1900	Old Main—the first campus building—was completed.
1902	Fifty-seven students attended the first classes of the State Normal School at Frostburg. We offered a two-year program of elementary school teacher training.
1904	Our first commencement. Students received a diploma and a life-time teaching certificate.
1913	The Model School began operating in its new building. This was our first campus training school which allowed student teachers to work directly with children in the classroom.
1919	We opened our first residence hall.
1930	A six-room training school for student teachers replaced the 1913 Model School.
1931	Our teacher training program expanded from two to three years, and then from three to four years in 1934.
1935	<ul style="list-style-type: none"> ● The institution's name changed to State Teachers College at Frostburg. ● The first four-year degree students graduated with Bachelors in Science in Elementary Education.
1946	The college first offered a liberal arts junior college program. This degree was discontinued in 1960 when four-year programs replaced it.
1947	We completed our first science building. It was followed by the Garrett Science Building in 1952, the Tawes Science Hall and Planetarium in 1968 and the Compton Science Center in 2003.
1949-50	50th Anniversary Year
1950-51	The State Legislature funded a 40-acre expansion to our campus and 5 new buildings.
1959	The new teacher-training laboratory school was completed and named after State Superintendent of Schools Thomas G. Pullen. It continued operating as an elementary school until 1976.
1960	The Board of Trustees granted Frostburg State Teachers College the right to confer the Bachelor of Arts degree and the Master of Education.
1961	Our first black student (Leon Brumback) graduated.
1963	In July, we became Frostburg State College.
1964-79	We experienced significant growth during these fifteen years. Six residence halls were completed as well as eleven campus buildings including the Chesapeake Dining Hall, Framptom Hall, Fine Arts, Dunkle Hall, Lane Center, the Lewis J. Ort Library, the Physical Education Center, Hitchins Administration Building, and the Stangle Service Building.
1971	The Master of Science in Management Degree was first offered. This degree was replaced by the MBA in 1989.
1975	The Appalachian Environmental Laboratory—part of the Center for Environmental Science of the University System of Maryland —opened on our campus.
1986	The Nelson P. Guild Center was completed to house the Social Sciences and Business programs.
1987	In July, our institution was granted University status.
1988	<ul style="list-style-type: none"> ● We joined the University System of Maryland which is comprised of 11 of the State's 4-year institutions and two research institutions. ● The Center in Hagerstown opened.
1989	The first FSU Medallion was presented to Lewis J. Ort. Our second recipient was Governor William Donald Schaefer in 1990 and Gerald Arpino in 1994.
1990	The Frederick MBA program opened.
1991	Dr. Catherine Gira became the second woman president of our institution. Lillian C. Compton served as president from 1945-55.
1994	The Performing Arts Center was completed. On April 24, The Joffrey Ballet performed in the new Center in celebration of its debut on our campus 37 years ago.
1995	Bell Atlantic distance education classrooms were installed at Frostburg and the Hagerstown Center.
1998	The University celebrated its Centennial with a year-long series of events.
1999	The Center for Environmental Science's new Appalachian Laboratory building opens.
2000	FSU was the first-ever recipient of the Corporation for National Service's Higher Education Award for Leadership in National Service.
2001	<ul style="list-style-type: none"> ● Groundbreaking for Allegany Business Center at FSU ● FSU moves from Tier 3 to Tier 2 in <i>U.S. News and World Report's</i> ranking of colleges and universities.
2002	Gunter Hall renovated and reopens.
2003	Compton Science Center and Edgewood Commons apartment complex open.

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"Students would teach students [at the Frostburg Normal School]. You went straight on through high school to college. There was only one man in my class because teaching was more a woman's work. Men were often working in the mines."

Mabel Myers,
Education, 1913

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"Student Government and the College Center Board brought wonderful social, cultural and intellectual activities to campus. I remember picking up Strom Thurmond from the airport two days after George Wallace was shot."

The Honorable Martin Welch,
Political Science/Social Science, 1974

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"We spent at least two hours talking with [the students]. We found they had never seen a pair of pointe shoes. They wanted to know when and how a dancer began. It was revealing to us; we were preaching the gospel of dance!"

Gerald Arpino,
Artistic Director of the Joffrey Ballet,
describing the debut performance of the
Joffrey at FSU on Oct. 2, 1956.

Admission

Office of Enrollment Services
(Admissions/Financial Aid)
114 Pullen Hall
301/687-4201; FAX 301/687-7074
e-mail: FSUAdmissions@frostburg.edu

Office. A non-refundable application fee of \$30 (check or money order) should be included.

As part of your application, you must provide the Admissions Office with an official copy of your academic records. Applicants may use the records request form included in the application, but 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 University Admissions Office. Frostburg State University's College Board identification code is 5402. Frostburg's ACT identification code is 1714.

Application Dates

The University may have to close admissions when no further space for students is available. Consequently, applicants from high school should apply in the fall or early winter of the senior year. Beginning on September 15, the admissions office will start accepting applications for the fall semester of the following year.

Admission for the spring semester is granted on a space-available basis. Applications will be considered if received no later than December 1 for the subsequent spring semester. The University does accept applications from first-year students who would like to begin in the spring semester.

Preferential Admission of First-Year Students

Because we evaluate all applications individually, it is difficult to set specific minimum standards when we review a student's academic credentials. However, you may use the following chart to help you make plans concerning admission to the University. If space is available, students will be given preference in admission when they meet or exceed the requirements listed for a combined SAT/ACT score and grade point average. *Please note: SAT scores are combined on this chart, but the Admissions Office works with the individual scores on each SAT section.*

Students whose academic records and test scores do not match this preferential admission chart will be evaluated using different numerical criteria. Basically, if your high school grade point average and SAT scores predict reasonable success, you can gain admission. However, admission

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 in academic subjects, performance on the SAT, completion of a college preparatory program, optional letters of recommendation, and an optional admissions essay.

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 verbal and math sections of 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 science in at least two different subject areas (with 2 of the units including a laboratory experience); 3 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. The foreign language requirement may be waived for a student who demonstrates proficiency in a foreign language if the high school will provide certification of equivalent course work completed before high school.

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.

Diagnostic Placement Tests

All entering first-year students with less than 13 transfer credits, and any transfer student with 13 or more transfer credits 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 a predetermined standard on these examinations, you will be required to enroll in specified courses your first semester to develop your skills to a level which will enable you to function successfully at the University. You are expected to reach these levels within two semesters.

Transfer students

See separate section on the next page.

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 Vice President 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.

First Year Admissions Procedures

Applications for admission are generally available through your high school guidance office, by contacting the Admissions Office at the University, or on the Internet at www.GoBobcats.frostburg.edu.

After completing the application, you should send it directly to the Admissions

Combined SAT Score	Grade Point Average of Academic Subjects	Combined SAT Score	Grade Point Average of Academic Subjects
920	3.36	1020	3.16
930	3.34	1030	3.14
940	3.32	1040	3.12
950	3.30	1050	3.10
960	3.28	1060	3.08
970	3.26	1070	3.06
980	3.24	1080	3.04
990	3.22	1090	3.02
1000	3.20	1100 or above	3.00
1010	3.18		

will not seriously be considered for any student whose high school academic average is lower than 2.0 and whose SAT scores are below 850.

Campus Visits

The University does not require a campus visit for admission, but touring our facilities and speaking with students, faculty and administrators can give you a valuable perspective. Campus tours and personal interviews can be scheduled throughout the year. Contact the Office of Admissions between 8:30 a.m. and 4:30 p.m. to set up an appointment.

Admission for GED Recipients

Applicants who received a general equivalency diploma must show GED subtest scores of at least 50 in English composition, social studies, natural sciences and literature (reading) and a score of at least 60 in mathematics. They must earn the same minimum SAT scores as other applicants.

Admission of International Students

The University welcomes applications from undergraduate international students who demonstrate university-level language proficiency in English. Students with international credentials, those who have completed part or all of their secondary and/or tertiary level education outside the United States, must follow the guidelines below in preparing their application. Students who are already studying in the U.S. on an F1 visa must provide all admissions documents and complete a "Transfer Eligibility" form in order to receive a new I-20. Exchange students and students who plan to study at FSU for only one or two semesters should contact the Center for International Education directly for application materials (301/687-4747).

- 1) Submit an application for admission along with a \$30 non-refundable application fee. We accept U.S. currency only.
- 2) If your native language is not English, you are required to take the Test of English as a Foreign Language (TOEFL) and

request that the Office of Admissions receive the results. To receive information on test dates and test centers for the TOEFL, contact Test of English as a Foreign Language, P.O. Box 6151, Princeton, NJ 08541-6151. A minimum score of 550 (paper-based test) or 213 (computer-based test) is required for admission to the University.

- 3) Provide official or notarized secondary school academic records which show grades earned, annual mark sheets, examination sheets and leaving certificates as they apply in your home country.
- 4) Have transcripts for institutions other than American institutions translated and evaluated by an approved evaluation service. Your credentials will be evaluated and a report forwarded to the Office of Admissions. No final action will be taken on your application for admission until the evaluation has been received.
- 5) Complete the Financial Confirmation form and submit it to the Office of Admissions. This form attests that either you or your sponsor is aware of the educational and living expenses and is prepared to provide the necessary funds. You must pay all educational costs for the semester in full at registration.
- 6) Beginning with the Fall 2001 semester, international F and J students are required to purchase health insurance through the University. Cost of health insurance will be included on the students' bill each term. Each student will receive a health insurance enrollment form when the I-20 (F students) or IAP-66 (J student) is issued by Frostburg State University.
- 7) Make sure all supporting documents are on file in the Admissions Office six months prior to the semester when you plan to begin your studies.

You cannot be granted admission or issued an I-20/IAP-66 until all information required has been received by the Office of Admissions. If you are an international student residing outside the United States, you should not come to Frostburg State University before receiving a formal letter of admission and an I-20/IAP-66.

More detailed information about these requirements can be obtained by contacting the Office of Admissions or the Center for International Education.



Admission for Transfer Students

Applicants who want to transfer to our University from a two-year or four-year institution will have their academic records audited by our Transfer Coordinator in the Admissions Office. The Coordinator will follow the guidelines listed below. If you have questions about the evaluation of transferable credits, graduation requirements for transfer students, or the appeals process for this audit, please call the Vice President for Enrollment Management.

- 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 an applicant has 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) Transfer students are required to complete at least half their academic major requirements at Frostburg State. Additional requirements to complete a degree are listed in the Academic Program chapter.
- 5) When a student transfers, grades are not recorded on the FSU transcript for credits earned at other institutions and those credits are not computed into the student's FSU grade point average.
- 6) You will be given the option of satisfying the graduation requirements which were in effect at Frostburg State during the time 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 Frostburg State University 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 to Frostburg State.

The complete text of the Maryland Higher Education Commission General Education and Transfer Policy is reprinted in the Policies chapter of this catalog and is summarized below.

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 Frostburg State.

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 Frostburg State.

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.

Admission for Mature Adults

To apply under this category, you must have a high school diploma or a GED and you must not have attended high school for at least three years. You should submit an application and an official transcript of your academic work, but you are excused from the SAT requirement.

Readmission

If you previously were admitted and attended the University, but 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 returning to the University 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.

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 Residency Questionnaire 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 Residency Questionnaire from the Registrar's Office.

Certificate Programs

Degree-seeking undergraduates and non-degree-seeking community members may earn a certificate in specialized areas. Certificate programs are designed to provide specialized skills and knowledge that may enhance your undergraduate program and/or provide skills useful in employment. Undergraduate certificates include a minimum of 12 credit hours.

If you are not currently an FSU student, you may be admitted as a non-degree-seeking student to complete a certificate program. You must file an admission application and present evidence that you have a high school diploma or GED, or that you have been approved to participate in the dual enrollment high school/college program. Particular certificate programs may have additional admission requirements. Credits earned towards a certificate may later be applied to a degree if you choose to request, and qualify for, admission as a degree-seeking student. Credits also are transferable.



Spring arrives in Frostburg. Time to hang out in the Quad and share a laugh.

Academic Common Market

Frostburg State University participates in the Academic Common Market of the Southern Regional Education Board (SREB). Through this program, students pay resident tuition rates to attend unusual, specialized programs in other participating states.

As of April 2003, the following Frostburg State University programs are accessible to legal residents of the state specified at Maryland resident rates: B.A./B.S. in Actuarial Science (Delaware, Kentucky, Virginia); B.A./B.S. in Actuarial Science/Mathematics (Kentucky, Virginia); B.A./B.S. in Dance (Delaware); B.A./B.S. in Recreation and Parks Management/Adventure Sports Concentration (Delaware, South Carolina, Virginia); B.A./B.S. in Theatre/Acting and Directing Tracks (Delaware); B.A./B.S. in Wildlife and Fisheries (Virginia); M.S. in Park and Recreation Resource Management (Delaware); M.S. in Wildlife/Fisheries Biology (Delaware, Kentucky); and M.A. in Modern Humanities (Tennessee). Programs may be added to, or deleted from, the inventory at any time. 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 (410/2604585, toll free 800/974/0203) or the Assistant 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 Golden ID Card application.

Expenses, financial aid and scholarships

Expenses

This information applies to the academic year 2003-2004 only. Please see appropriate Academic Schedule Booklets for 2004-2005 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 \$2,079 per semester plus all other applicable fees at the University. Tuition for out-of-state students is \$5,403 per semester plus all other applicable fees at the University. Tuition for residents of the contiguous counties* is \$4,158 per semester plus all other applicable fees at the University.

Evening and part-time tuition is \$172 per credit hour for resident undergraduate students, \$304 per credit hour for non-resident undergraduate students, \$225 per credit hour for resident graduate students, and \$261 per credit hour for non-resident graduate students.

Summer tuition is \$172 per credit hour for resident undergraduate students, \$304 per credit hour for non-resident undergraduate students, \$225 per credit hour for resident graduate students and \$261 per credit hour for non-resident graduate 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

\$5,158 per year to \$6,356 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.

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 \$65 per semester for full-time students or \$9 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 \$206 per

Undergraduate Tuition & Fees 2003-2004

	1st Semester	2nd Semester	Total
Tuition - full time (12 cr. or more)			
Maryland Residents	\$2,079	\$2,079	\$4,158
Out-of-State Residents	5,403	5,403	10,806
Contiguous County Residents	4,158	4,158	8,316

Mandatory Fees

	1st Semester	2nd Semester	Total
Technology Fee	\$60	\$60	\$120
Activities Fee	65	65	130
Athletic Fee	206	206	412
Auxiliary Facilities Fee	65	65	130
Student Union Operating Fee	107	107	214
Transportation Fee	10	10	20
Total Fees	\$513	\$513	\$1,026

Total Tuition and Fees

	1st Semester	2nd Semester	Total
Maryland Residents	\$2,592	\$2,592	\$5,184
Out-of-State Residents	5,916	5,916	11,832
Contiguous County* Residents	4,671	4,671	9,342

Room Charges

	1st Semester	2nd Semester	Total
Frederick, Westminster double	\$1,511	\$1,511	\$3,022
All other halls double	1,477	1,477	2,954
small single	1,631	1,631	3,262
large single	1,769	1,769	3,538

Board Charges

	1st Semester	2nd Semester	Total
Gold Plan with \$200 bonus bucks	\$1,409	\$1,409	\$2,818
Silver Plan 19 meals/week w/\$100 bonus bucks	1,361	1,361	2,722
14-meal with \$100 bonus bucks	1,288	1,288	2,576
12-meal with \$250 bonus bucks	1,397	1,397	2,794
10-meal with \$75 bonus bucks	1,177	1,177	2,354
Straight 10-meal	1,102	1,102	2,204

Total tuition, fees, room and board**

	1st Semester	2nd Semester	Total
Maryland Residents	\$5,512	\$5,512	\$11,024
Out-of-State Residents	8,836	8,836	17,672
Contiguous County* Residents	7,591	7,591	15,182

**based on \$3,022 room rate and \$2,818 board rate

*Contiguous counties include Berkeley, Grant, Hampshire, Jefferson, Mineral and Morgan counties in West Virginia; Bedford, Fulton, Franklin and Somerset counties in Pennsylvania; and Loudoun County, Virginia.

semester for full-time students and a \$22 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 \$65 per semester for full-time students and \$6 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 \$107 per semester for full-time students and \$12 per credit hour for part-time students is charged for operating expenses of the Lane Center.

Transportation Fee: A Transportation fee of \$10 per semester for full-time students and \$1 per credit hour for part-time students is charged, allowing students to ride Allegheny Transit Authority buses by showing a student ID.

Technology Fee: A Technology fee of \$60 per semester for full-time students and \$8 per credit hour for part-time students is assessed to fund technology initiatives for student enhancement.

Other fees & expenses

See detailed explanation above.

Application Fee, one time only	\$30
Career Services Credential Fee	\$10
Deferment Fee	\$50 per semester
Directed Practice Fee	\$100
Duplicate Copy	\$3
Late Registration Fee	\$30
Late Payment Fee	\$30
Lost ID Card	\$10
Private Music Fee	\$100 per credit
Returned Check Fee	\$30
Vehicle Registration	day \$20 per year evening only \$5 per year

Special Instruction Fees

Accounting (ACCT 305)	\$25
Art (ART 236, 307, 407, 414)	\$25
Art (ART 202, 402)	\$20
Art (ART 110, 207, 212, 221, 232, 235, 240)	\$10
Art (ART 412, 421, 432, 435, 440)	\$10
Biology (BIOL 109, 149)	\$20
Business Admin. (BUAD 320)	\$25
Chemistry (CHEM 100, 101, 113)	\$20
Computer Science (COSC 100, 110, 220, 330)	\$25
Geography (GEOG 103,113)	\$20
Mathematics (MATH 102)	\$100
Physical Science (PHSC 101, 203)	\$20
Physics (PHYS 215, 261)	\$20
Sociology (SOCI 310/SOWK 310)	\$25
Student Teaching Internship	\$350

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.

Deferred Payment Participation Fee: A \$50 participation fee is charged by semester to each student signing a deferred payment promissory note. A \$30 late payment charge is assessed each time students fail to make deferred payments on the due date.

Career Services Credential Fee: A \$10 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 Check Charge: A \$30 fee is charged whenever a check given in payment of any obligation is returned by the bank. 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 checks returned to the University by the bank as "unpaid" (this includes checks on which payment has been stopped or uncollected funds) must be paid within seven days of the University's notification to the student.

Motor Vehicle Registration: A \$20 motor vehicle registration fee is charged for students registering a vehicle. Vehicle registration for summer school and evening classes is \$5.

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 \$100 per credit hour.

Special Instruction Fees: Fees of \$10, \$20, \$25 and \$100 respectively 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.

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 Deposits

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.

If you are accepted for admission, you will be asked to pay a non-refundable acceptance fee of \$150. Your letter of acceptance will contain a bill for this fee which must be paid within thirty days and which acts as a binding agreement for admission. This \$150 acceptance fee is non-refundable; but when you enroll as a student, it will be deducted from what you owe the University.

Residence Hall Damage Deposit

You will be charged a \$100 damage deposit before you move on campus your first semester. Money will be deducted from this deposit for the following:

- (1) damages to your room and room furnishings;
- (2) damages to common areas within your residence hall if these damages are unreported and/or unclaimed. These damages will be charged collectively to the residents.

If your deposit drops below \$25, you will be sent a bill to replenish your deposit to the \$100 level.

The balance of this damage deposit remains in your account until you leave the residence halls for any reason. Because this refund is processed through the State Comptroller's Office, it will be refunded at the end of the semester in which you withdraw. This deposit will not be deducted from the total due on your bill.

Payment of Fees

Make all checks or money orders payable to Frostburg State University for the exact amount on the bill you receive. All fees must be paid prior to the beginning of each semester or before the date shown on the statement of fees. Students will not be admitted to classes until all bills have been paid or they have made approved arrangements with the University and Student Billing Office and they may not register for the next semester. Failure to meet the due date will result in the cancellation of the student's schedule. A previous balance results in the grades and transcripts of the student being withheld until full payment is made.

Deferred Payment Plans

Two deferred payment plans allow you to spread the cost of registration over a speci-

fied period: FSU's 60 day deferred payment plan and FSU interest free 10-month Monthly Payment Plan.

60-day Deferred Payment Plan

You may apply for the 60-day deferred payment plan by completing the application form mailed with your bill and returning it to the University and Student Billing Office before the bill payment deadline. The following guidelines apply to the deferred payment plan.

- One-third of the semester bill plus the \$50 deferment fee must be submitted with the deferred payment plan form to the University and Student Billing Office before the bill payment deadline each semester.
- Another one-third of the semester bill is due within thirty days.
- The final one-third of the semester bill is due within the following thirty days.
- A late payment charge of \$30.00 will be added each time the student fails to make payment on the due date.
- If deferred payments are more than 10 days late, the student may be dismissed from classes.
- The deferment plan cannot be extended beyond the 60-day period, but pre-payment is accepted anytime within the 60-day period.
- If the account remains unpaid after 60 days, the student cannot register for the following semester.
- Deferred payments do not affect the way refunds are computed.

The FSU Monthly Payment Plan

The FSU Interest Free Monthly Payment Plan allows you to pay University fees in 10 convenient monthly payments, beginning in June for the Fall semester. There is a 5 month plan available for graduating seniors. A \$10 handling charge is assessed for payments



Refund Schedules

Fall and Spring Semester

Before the end of each registration period	100% tuition refunded
Before the 15th calendar day after the official start of classes for that session	80% tuition refunded
From the 15th day until the end of third week after the official start of classes	60% tuition refunded
During the 4th week after the official start of classes	40% tuition refunded
During the 5th week after the official start of classes	20% tuition refunded
At the end of the 5th week after the official start of classes	0% tuition refunded

Fee Refund Schedule (including summer session)

Application fee	0% refund
Board fee	- Up to mid-semester prorated on a weekly basis plus one week - After mid-semester 0% refund

Summer Sessions

Before the end of the summer registration period	100% tuition refunded
Before the end of one-fifth of the length of the session, but in no case beyond the 7th calendar day of the session	80% tuition refunded
Before the end of two-fifths of the length of the session	40% tuition refunded
At the end of two fifths of the length of the session, but in all cases beginning with at least the 15th calendar day of the session	0% tuition refunded

*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:

Room rent fee	Auxiliary Facilities fee	Directed Practice fee
Activities fee	Private Music fee	University fee
Athletic fee	Student Union Operating fee	Vehicle Registration fee
Special Instruction Fee		

received after the due date. The cost of this plan is \$60.

You may request additional information by calling the University and Student Billing Office at 301/687-4321.

Charges for Collection of Unpaid Bills

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

Refund Policy

The following regulations govern refunds available upon withdrawal from the University or when other changes of status take place. To withdraw from the University, you must complete an official withdrawal card and file it in the Registrar's Office before you are entitled to any refund. Because refund amounts change depending upon when you file, the date used to determine refunds will

be the date on which you submit the final filing or change of status to the Registrar's Office.

If you register for a full schedule (12 credits or more) and you drop courses to 11 credits or fewer after the end of the registration period, you are not entitled to a refund based on a credit-hour charge.

Students dismissed for disciplinary reasons are not entitled to any tuition or fee refund.

Student Refund Policy for Title IV Recipients

Federal regulations mandate a student refund policy for Title IV recipients. The policy requires institutions to provide a pro-rata refund to any new student withdrawing before 60% of the enrollment period has elapsed. Information in regard to the calculation process or details of the policy may be obtained from the Financial Aid Office, Pullen Hall, 301/687-4301.

Personal Funds

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

Financial Aid

Office of Enrollment Services
(Admissions/Financial Aid)
114 Pullen Hall: 301/687-4301
FAX 301/687-3029

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 in late November/early December through our office, through high school guidance offices, higher education financial aid offices throughout the country, and online at www.fafsa.ed.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 in the next two pages. For more detailed descriptions of the programs, see the Financial Aid and Scholarship brochure distributed by the Financial Aid Office for the year in which you want to receive the 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 indicating eligibility after submitting the FAFSA.

Federal Supplemental Educational Opportunity Grant Program (SEOG) - Criteria established by the Federal Government state 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.

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 Perkins Loan - Students enrolled at least half-time at FSU who demonstrate significant financial need by filing the Free Application for Federal Student Aid are eligible for a Perkins Loan. This program provides long-term loans at a 5% interest rate with repayment beginning nine months after graduating or leaving school for other reasons. The Financial Aid and Scholarship brochure gives detailed information regarding deferment and cancellation provisions. Borrowers should be aware that if default occurs and accounts are transferred to the Office of Education for collection purposes, grade transcripts from the Registrar's Office will be held until the debt is satisfied.

Federal Stafford Loans

NOTE: In order to borrow through any of the following Federal Family Education 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 from a lending institution. The interest rate is variable with a ceiling of 8.25%*. 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 \$2,625 per year; sophomores, \$3,500; and for those who have attained junior class standing, \$5,500 per



*rate subject to change

Educational Expenses

	In-State Resident	Contiguous County Resident**	Out-Of-State Resident
*Tuition	\$4158	\$8316	\$10806
*Fees	1026	1026	1026
*Room and Board	5772	5772	5772
Books	800	800	800
Transportation	500	500	700
Personal	1000	1000	1000

*Amounts subject to change

The above figures are based on a 9-month academic year. Expenses for tuition, fees, room and board are subject to change. 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.

** Out-of-state discount for full-time students from the following counties in PA: Bedford, Franklin, Fulton and Somerset; in VA: Loudoun; and in WV: Berkeley, Grant, Hampshire, Jefferson, Mineral and Morgan

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 \$23,000.

A graduate or professional student may borrow up to \$8,500 per year. The maximum outstanding debt for graduate or professional students, which includes any outstanding Federal Subsidized Stafford Loan borrowed for undergraduate study, is \$65,500 (excluding unsubsidized loans).

To apply for a Federal Subsidized Stafford Loan, you must complete a Free Application for Federal Student Aid and other forms as required. As with the Perkins Loan, the amount of your loan is based on several factors: amount of documented need, enrollment status and academic progress.

All first-time Federal Subsidized Stafford Loan borrowers must attend an entrance interview. 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 being in default is that FSU has the right to, and will, withhold the processing of all academic transcripts.

Federal Unsubsidized Stafford Loans

Same terms and conditions apply as Federal Subsidized Stafford Loans, 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 limits for dependent students are the same as for borrowers in the Federal Subsidized Stafford Loan program. 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 which will be mailed to you along with your award letter. 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:

- Educational Assistance Grant
- Guaranteed Access Grant
- Senatorial Scholarship
- Delegate Scholarship
- Science and Technology Scholarship
- Hope General Scholarship
- Maryland Teacher
- Community College Transfer

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.
- You must demonstrate financial need through the federal application process.
- You must file the FAFSA as soon after January 1 as possible. The Financial Aid Office must receive the results by March 1.

Students 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. Jobs are processed through the Financial Aid Office. 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 electrical or mechanical engineering programs 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 Administrative Aide for Engineering, Ms. Linda Alderton Steele, at 301/687-4137.

Refund\Repayment Policy

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

Law Governing Financial Aid and Withdrawal

The Higher Education Act of 1998 established new rules regarding how colleges and universities determine the amount of financial aid that a student can retain if he/she withdraws. The new law was implemented at Frostburg State University in Fall 2000. The following information describes how this law will be applied using a specific formula that the government has defined.

Implications of Withdrawal from the University

Effective Fall 2000, 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), Perkins Loan, 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, 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

The United States Department of Education has mandated that colleges and universities have in place satisfactory progress standards that must be met in order for a student to receive Title IV funds (Federal Pell Grants,

Federal Subsidized and Unsubsidized Loans, Federal PLUS Loans, Federal Supplemental Educational Opportunity Grants, Federal Work-Study, and Federal Perkins Loans). The standards listed below apply to the regular academic year. In addition, the Financial Aid Office uses these standards to determine your eligibility for FSU grants, as well as Maryland State Scholarship awards.

Maximum Period of Eligibility

Financial aid recipients at FSU are allowed a maximum of six academic years (an academic year equals two semesters) to complete their undergraduate courses of study. In order to receive financial aid, the maximum number of credit hours that can be **attempted is 160.**

Academic Progress Standards

In addition to the minimum G.P.A. requirements described below, the Financial Aid Office will implement a new policy regarding the completion rate of credits attempted (effective 5/26/01). The policy states, "A student must have successfully completed 67% of his/her cumulative attempted credits at FSU (including attempted hours for summer session and intersession enrollments) in order to maintain financial aid eligibility for the ensuing academic year." Minimum G.P.A. requirements will also be determined by using the chart below.

Exceptions

All students must attain a minimum G.P.A. of 1.0. Students who fail to meet this standard will lose their financial aid **immediately.** Students with cumulative G.P.A.s of 1.0 but less than 2.0, will be allowed to enroll for one semester on financial aid probation even though they do not meet the minimum standards listed in the table below. At the

Total Hours Earned*	Minimum FSU Cumulative G.P.A.**
0-14	1.00
15-29	1.40
30-44	1.60
45-59	1.80
60-above	2.00

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

**Cumulative FSU G.P.A. = all letter grades (A,B,C,D,F,FX,W,F) earned in all courses attempted at Frostburg State University, excluding authorized grade repeats and grade forgiveness. Enrollment at schools other than FSU cannot improve the G.P.A. because credits, not grades, transfer from these institutions. (See special note for consortium participants.)

end of this probationary semester, students must attain the minimum G.P.A. for their total number of earned hours or they will be ineligible to receive financial aid.

Transfer credits will not affect the calculation of the student's G.P.A., but will be considered in determining the student's total earned hours. For example, a transfer student who has completed 30 credits at Frostburg State University and 20 credits elsewhere, must have a cumulative G.P.A. of 1.8 in courses taken at Frostburg State University to remain eligible for financial aid.

Additional Information

To receive financial aid, in addition to maintaining satisfactory academic progress as outlined in this policy, students must be eligible to enroll at the University. Suspension or dismissal from the University will result in an automatic cancellation of financial aid.

Notes

1. The following grade symbols will be considered as credits passed:

A, B, C, D, P

In addition, to those grades listed as credits passed, the following grades will be calculated in hours attempted:

W, WF, CS, NC, F, FX, N, I

2. Credit hours in which the student has received an incomplete (I) will not be considered as credits completed.
3. Courses that a student repeats will be included in hours attempted.
4. If you have been ineligible for financial aid during a previous semester and now meet our academic standards, it is your responsibility to notify the Financial Aid Office.

Appeal Process

All students have the right to appeal when they are notified that they are ineligible to receive financial aid because they are not making satisfactory academic progress. The appeals should be based on mitigating circumstances, such as serious physical or emotional problems. All appeals must be written and clearly state the student's special circumstances. You must provide supporting documentation. For example, a letter from a physician is required in the case of a physical problem. The appeals should also state the specific means by which a student intends to attain satisfactory academic progress.

Students who fail to meet the satisfactory progress standards based on their cumula-

tive Frostburg State University G.P.A. will be notified by the Office of the Provost. Students wishing to appeal must submit their appeals to the Office of the Provost. Such appeals are reviewed by the Academic Standards Subcommittee.

Students who fail to meet the satisfactory progress standards based on the number of credit hours completed or exceeding the maximum period of eligibility, or who are consortium participants, will be notified by the Financial Aid Office. Students wishing to appeal must submit their appeals to the Financial Aid Office. Such appeals are reviewed by the Financial Aid Appeals Committee.

Deadlines for appeals are stated in the letters notifying students of their ineligibility. Letters of appeal received after the deadline will not be considered. The University makes every effort to notify you by first-class mail to your permanent address at the end of the semester if you fail to meet the academic standards and informs you of the deadline date for appeals; however, it is your respon-

sibility to recognize your ineligibility and actively pursue appeal procedures where mitigating circumstances exist. The deadline for appeals is normally within two weeks of the semester's ending date.

Note to consortium participants:

Students participating in consortium agreements are required to provide a transcript of grades from the "host institution" at the end of each consortium semester. It is the responsibility of the student to have the transcript submitted to the Financial Aid Office. Failure to provide the transcript will result in the suspension of aid for any subsequent semester. In addition, it should be understood that grades received from the host institution will be included in determining whether a student meets our defined satisfactory progress standards.

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 Frostburg State University 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 **Financial Aid and Scholarships** booklet that describes all of these scholarships and lists 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 a copy of this booklet.

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. (A description of these scholarships is provided on the next page.)

University-Wide Scholarships

Admissions Awards

Admission applications are **automatically screened** by the Admissions Office to select recipients for the following awards:

Note: Students awarded these scholarships must accept offer of admission by May 1.



Award: Academic Excellence Award

Amount: Varies from \$1,000 to \$3,500 per academic year. Award will be applied toward total cost of education for up to eight semesters for freshmen and up to six semesters for transfers provided student maintains a minimum 3.0 cumulative GPA and completes at least 24 credits per academic year. Degree of student's academic excellence will determine actual amount of award.

Criteria: Must enroll full-time, Available to Maryland residents and non-residents,

Entering freshmen: minimum high school GPA of 3.0 or higher AND minimum combined SAT of 1050 (or ACT of 23)

OR talent in the arts (students must provide appropriate documentation - portfolio, audition - to the sponsoring department - Theatre, Music, Visual Arts)

OR leadership qualities (students must provide at least three letters of recommendation, documenting the applicant's leadership roles or activities, to the Office of Admissions).

Entering transfers: minimum of 30 transferrable credits at time of application AND 3.5 cumulative GPA

Contact: Ms. Patricia Gregory, FSU Admissions Office, (301) 687-4201.

Application Deadline Date: Priority given to students who have a completed admissions application by December 1.

Award: Alumni Achievement Scholarship

Amount: Units of \$500 (number of units determined annually)

Criteria: Applicants must have a combined SAT score of 1100 or above. Selection preference will include one recipient from each of the following Alumni Achievement chapter service areas: Allegany County, Annapolis, Baltimore, Frederick County, Garrett County, Northern Virginia, Washington County, Washington metro area including Montgomery County and Southern Maryland as well as other qualified applicants from an area where an FSU alumni chapter serves. This award is non-renewable.

Contact: Ms. Patricia Gregory, FSU Admissions Office, (301) 687-4201

Application Deadline Date: Priority given to students who have a completed admissions application by February 1.

Award: Emma and P.P. Dailey Scholarship

Amount: Units of \$250

Criteria: Incoming freshman. Combined SAT score of 1100 or above and a high school academic GPA of 3.5 or above. Recipient must be enrolled full time.

Contact: Ms. Patricia Gregory, FSU Admissions Office, (301) 687-4201

Application Deadline Date: Priority given to students who have a completed admissions application by February 1.

Award: Donahue Tri-State Scholarship

Amount: Units of \$500

Criteria: Incoming freshman, full-time, combined SAT score of 1100 and high school academic GPA of 3.5 or above. Applicant must be a resident of Maryland, West Virginia or Pennsylvania.

Contact: Ms. Patricia Gregory, FSU Admissions Office, (301) 687-4201

Application Deadline Date: Priority given to students who have a completed admissions application by February 1.

Award: FSU Outstanding Scholar Award

Amount: Two awards, representing room and board waiver plus \$1,000 Senatorial Award — one each for a student from Allegany and Garrett Counties.

Criteria: Incoming full-time freshman; resident of Allegany or Garrett County. High school GPA of 3.5 or above; SAT scores 1200 or above. Qualified applicants will be invited to apply.

Contact: Scholarship Coordinator, Financial Aid Office, (301) 687-4301

Application Deadline Date: April 1

Award: N. Rose Atwood Scholarship

Amount: Units of \$500

Criteria: Incoming freshman, resident of Maryland, full-time, high school academic GPA of 3.0 or above.

Contact: Ms. Patricia Gregory, FSU Admissions Office, (301) 687-4201.

Application Deadline Date: Priority given to students who have a completed admissions application by February 1.

Award: Lewis J. Ort Scholarship

Amount: Awarded in units of \$250

Criteria: Entering freshman. Combined SAT score of 1100 and high school academic GPA of 3.5 or above. Student must be enrolled full time. Preference will be given to Allegany County residents.

Contact: Ms. Patricia Gregory, FSU Admissions Office, (301) 687-4201.

Application Deadline Date: Priority given to students who have a completed admissions application by February 1.

Scholarships for Collaborative Engineering Program

Students enrolled in the electrical or mechanical engineering programs offered by FSU in collaboration with University of Maryland, College Park are eligible to apply for scholarships through FSU during the freshman and sophomore years. 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. A student must then apply for scholarships through UMCP. Students will not be eligible for any type of FSU scholarships after being accepted into the UMCP program.

UMCP scholarship opportunities are available through the Clark School of Engineering, the Departments of Mechanical and Electrical Engineering, as well as the Office of Student Financial Aid. For assistance in the application process, contact FSU's Administrative Aide for Engineering, Ms. Linda Steele, at (301)687-4137.

IMPORTANT: The criteria and dollar amounts listed are subject to change. In addition, please keep in mind that meeting minimum criteria for any scholarship listed does not guarantee selection.

Campus Life & Activities

Residence Life

The mission of Residence Life is to create a comprehensive living-learning environment that complements the academic mission of the University. We seek to provide students with a safe, civil, and healthy living experience, and we nurture an inclusive community which balances self-expression with the rights of others. You will have the opportunity to live with others of differing backgrounds, ideas and values and to participate in a wide range of activities. Residence hall handbooks and *The Pathfinder* provide detailed information about living on campus. Information and handbooks are available by contacting 301/687-4121.

Housing

Eleven residence halls give students a range of options: coed or same-sex housing, a leadership development hall, international and honor student housing, smoke-free and substance-free halls. Housing is made available without regard to race, color, religion, disability, or country of national origin.

- You must apply for housing on a separate housing request form before you will be assigned a room. Housing is assigned to new students on the basis of the date they pay their advanced fee deposit and the date their Housing Request form is received by the Residence Life Office.

Residential Options

Each year, Residence Life offers a number of special interest housing options from which to choose. These options bring together students with common interests or goals, and serve to enhance students' adjustment to college life. Listed below are some of the options presently available:

HallSTARS! Community Service Hall:

Allen HallSTARS! is a coed living-learning-serving program for first-year students living in Allen Hall. This Learning Community is designed to integrate service activities with first-year curriculum courses. Residents completing a prescribed number of hours of service per week will be eligible for an educational award/scholarship. A separate application is required for admission to this program.

G.O.L.D.: Generating Opportunities for Leadership Development:

Located in Frost Hall for over eight years, G.O.L.D. is an enriching coed leadership program for first-year students. G.O.L.D. pro-

vides participating residents with a supportive and challenging community for the development of leadership skills during their first year. The program emphasizes learning and applying leadership skills to academics, co-curricular activities, and career environments; past graduates represent a large proportion of the presidents and executive officers of student organizations at FSU. A separate application is required for admission to this program.

First Year Experience Program:

Residence Life Staff in four of the traditional residence halls in our Uphill area offer special support and activities for new students in making the transition from high school to college life. Students have the option of attending frequent in-hall programs which offer information and resources on topics of critical importance to college students. FYE participants benefit from lower staff-student ratios and a heightened sense of community with other new students.

Substance-Free Floor:

The third floor of Cumberland Hall houses new and returning students who want to make a conscious choice to live substance-free with other like-minded students. While the University alcohol policy applies in all of our residence halls, residents of this floor sign an agreement not to use alcohol or other drugs in their community, nor to return to their community after having consumed alcohol or other drugs.

Residence Hall Contract

Students living in the residence halls are required to sign a residence hall housing contract. The housing contract applies to the entire academic year. See the Expenses, Financial Aid and Scholarships chapter of this catalog for housing costs.

Meal Plans

If you live in the residence halls, you must purchase a resident's meal plan. Off-campus students may also purchase plans. Meal plans may change each semester and the deadline for selecting plans will be announced before the semester begins.

- Once you select a meal plan, that plan will continue unless you notify the University and Student Billing Office by the deadline. If you do not select a plan, the University and Student Billing Office will automatically assign you a meal option. See the Expenses, Financial Aid and Scholarships chapter for meal plan costs.

Residence Hall Association

Every student living in a residence hall becomes part of a hall council which elects an executive board and floor representatives to the Residence Hall Association. The student representatives develop a budget for spending the hall activity fees, recommend activities and programs, and act as representatives at leadership conferences. For more information, contact either the RHA Office (301/687-7389) or the Residence Life Office (301/687-4121).

Automobile Policy

All currently enrolled students can operate and park their vehicles on campus. On-campus students must register their car at the University and Student Billing Office but there is no fee. Students who do not live on campus must pay a fee when they register their cars in the University and Student Billing Office.



Cambridge Residence Hall

Student Services

Student Services can assist you in achieving your intellectual, social, cultural, career, physical and spiritual goals. We offer counseling, testing, student employment, learning assistance, placement, health services, student activities and many other programs.

Information and regulations pertaining to student life are found in *The Pathfinder*, the Residence Hall handbooks, and other bulletins issued by the University. Contact Student and Educational Services (301/687-4311) for more information about these services.

Learning Assistance Programs

Learning assistance services are available for all students and can help you develop the basic academic and study skills you need to master college courses. Programs for Academic Support and Studies (PASS) provides:

- basic skills assessment in mathematics, English and reading for all freshmen;
- individual tutoring in entry level courses;
- group tutoring for most science courses;
- study skills assessment and instruction;
- walk-in assistance for writing and mathematics in the Writing Center and Math Centers, respectively;
- access to computers in the Writing Center;
- and developmental mathematics instruction.

(301/687-4441)

Diversity Center

The Diversity Center offers activities, workshops and programs to help **all students** develop an understanding of cultural differences as well as the skills needed to work effectively with individuals from various cultural/ethnic groups. Additionally, the center staff members serve as allies and advocates for minority students and organizations as they learn to negotiate the University environment. Mentoring, academic monitoring and social adjustment monitoring are also available for students through this center.

(301/687-4050)

Student Support Services

Student Support Services (SSS) is an academic support program entirely funded by the U.S. Department of Education with an annual budget of over \$200,000 to serve 275 eligible Frostburg State University enrolled students. Eligible students must meet one of the following criteria: first generation, low-income or documented physical or learning disability. The program's purpose is to help students stay in college until they graduate

and to foster an institutional environment supportive of them. Through cooperation and collaborative planning efforts with FSU departments, faculty, and staff, the SSS program provides a comprehensive program of personal and academic services. Some project services include:

- academic advisement, advocacy and monitoring
- personal counseling
- student financial aid assistance
- professional tutoring
- academic success workshops
- educational and cultural event tickets
- assistance in developing educational goals
- career exploration and guidance

(301/687-4481; TDD 301/687-7955; FAX 301/687-4671)

Disability Support Services

The DSS mission is to facilitate equal academic opportunity and enhance functional learning for students with any type of disability. Services include notetakers, taped

textbooks and reader services, testing accommodations, and advocacy. Students must present documentation of their disability in order to qualify for services.

(301/687-4483; TTD 301/687-7955)

Veterans Affairs

This office assists anyone eligible for Veterans Administration educational benefits. If you are a new or re-entering student who is or may be eligible for these benefits, please contact Veteran Affairs well in advance of the semester you plan to register and when you anticipate any change in academic status.

(301/687-4409)

Upward Bound

Upward Bound provides academic and personal development programs for sixty educationally and/or economically disadvantaged high school students in Allegany County. Eligible students attend academic and enrichment programs on the University campus both during the school year and during a six-week residential summer program. For information and an application, call 301/687-4994.

Regional Math/Science Center

Traditionally under-represented high school students from Maryland, Pennsylvania, and West Virginia are eligible for a program which helps them develop skills needed for entering and succeeding in post-secondary education—specifically in math and science. We offer a residential summer program at the University and academic year programs. For information and application, contact 301/687-4295 or this toll-free number: 1-800/646-6004.



The Library Quad

Student Development Services

Our Student Development staff offers a variety of workshops, programs, and services for students which enhance both their personal development and the teaching/learning environment of the University. The Dean of Student Development (301/687-4311) can provide you with general information about regularly scheduled programs and individual services. The Office of Student Development also provides information on Parents Orientation, non-traditional students and off-campus housing for commuting students.

Health Services

- **Required Medical Form:** When you are accepted at the University, you will receive a medical form to be completed and returned to the Brady Health Center. A complete physical examination by your physician is strongly recommended.
- **Required Immunization Form:** The University requires all students to be immunized for rubeola, rubella, diphtheria, tetanus, mumps, polio, and to have documentation of these immunizations on file in the Brady Health Center prior to registration. Tuberculosis screening is recommended for all students. If you were born before 1957, you are exempt from documentation for mumps, rubeola, and rubella.
Effective June 1, 2000, the Maryland General Assembly passed a law requiring students enrolled in institutions or higher education in Maryland, who reside in on-campus housing, be vaccinated against meningococcal disease or, if they choose not to be vaccinated, they must sign a waiver indicating this decision.
- **Health Insurance and Fees:** Currently, there is no fee for service at the health center; however, there are some miscellaneous charges, such as diagnostic tests, immunizations, treatments and prescription medications. Payment may be made at the center by cash, check or Bobcat Express card. Health insurance is strongly recommended. If you do not have health insurance, the University offers an affordable Student Health Plan through Sentry Insurance. For information, contact the Brady Health Center at 301/687-4310.
- **Services:** The Health Center is accredited by the AAAHC (Accreditation Association for Ambulatory Health Care). The services of the Health Center are available to all currently enrolled students. The health services program emphasizes prevention of health problems and offers limited direct health services combined with referrals to community health agencies, hospitals and specialists. You can find a

list of the services offered by the Health Center in the Brady Health Booklet, *The Pathfinder* (student handbook) and on-line at www.frostburg.edu

Counseling and Psychological Services

The Counseling Service (301/687-4234) offers a variety of counseling and developmental services to students and the University community. The services are accredited by the International Association of Counseling Services and provided by experienced counselors, psychologists and supervised graduate practicum students. There are no fees charged to FSU students.

- **Individual Counseling:** Personal counseling is available to students who may wish to improve their personal or academic effectiveness, or who may be experiencing personal (relationships, anxiety, adjustment, depression, self-concept, etc.), social, career or academic concerns. Counseling sessions are private and confidential and do not become part of the student's academic record. Psychiatric consultation and evaluation is available through the Counseling or Health Services Offices.
- **Group Counseling and Personal Development:** Counseling groups and developmental programs are available on topics such as career development, stress management, eating concerns, and relationships.
- **Consultation and Training:** The Counseling Center staff consults with individuals, student organizations and other groups on helping skills, goal-setting, empathetic listening, team building, crisis prevention and other topics. The staff also offers a variety of training programs for University employees.
- **University Testing Program:** The Counseling Service provides information, applications, and coordinates the administration of a number of tests students need for admission to graduate school or to fulfill professional standards required by states or other agencies. These tests in-

clude the Graduate Record Exam, PRAXIS, Law School Admission Test, Medical College Admissions Test and others.

- **Alcohol/Drug Education Program:** The Counseling Service sponsors an alcohol/drug education resource center (S.A.F.E. Communities Office, 301/687-4761) that contains educational material on alcohol and other drugs. Individual and group counseling concerning substance abuse issues is also provided for students.

Career Development

The University encourages you to explore career options and to use the career development opportunities on campus from the beginning of your undergraduate education. Two offices help students explore occupations, find a graduate school, enter into professional careers, and develop job search skills: Career Services and the Career Resource Center.

Career Resource Center

The Career Resource Center (Sand Spring 129) contains the following information to help you explore occupations, plan a career or search for a graduate school:

- Microfiche collection of graduate school catalogs nation-wide
- DISCOVER, a computerized self-exploration and career information system
- Materials on careers and graduate study for minorities and women.

Career Services

The Career Services Office (301/687-4403) can assist you in planning a career and preparing for life after graduation. The services range from helping you identify a major which matches your ability and interests to connecting you with future employers. Here is a sampling of our programs and services:

- Career exploration through research, interviews, summer jobs, internships, and networking with alumni on Career Day
- Workshops to improve job search skills like resume-writing and interviewing
- Senior Career Orientations that teach seniors competitive skills for the job market.
- Credential File Services
- Job fairs and on-campus interview opportunities with major employers.
- World wide web resources for internships/jobs.

Campus Activities

The Lane University Center—the FSU “Student Union” located in the center of campus—serves as the hub of student activities. Student organization offices, the University Bookstore, a bank, an information center, a lounge, game rooms, ticket office, a restaurant, and meeting rooms are all located here. The campus community uses the Lane University Center for gathering with friends as well as for attending banquets, concerts, dances, performances, conferences and many other events.

Campus activities at the University are largely administered by students with support from the Lane University Center and Office of Student and Community Involvement (301/687-4151). This office can provide you with complete information on all student organizations and activities and on special campus events.

Student Government Association

All students are represented by the two branches of the Student Government Association: the Executive Council and the Senate. The SGA develops and administers student self-government policies, provides many services to students, communicates with faculty and administration and decides how the student activity fees will be spent. Students from all undergraduate classes are encouraged to run for office in SGA and participate in shaping the future of the University. The Student Government Association Office (301/687-4304) can help you to get involved.

Campus Activities Board

The Campus Activities Board (CAB) is a student-directed organization which provides many well-balanced and entertaining activities, programs, and services for students on campus. CAB's annual activities include:

- Welcome Week
- major concerts, dances and special events
- a film, a lecture and a comedy series.

If you want to join CAB or find out about its activities, call 301/687-4192.

Cultural Events

Each year the University sponsors many cultural events in the fine and performing arts which you can attend or join as a participant. The Cultural Events Series (301/687-3137) presents programs by such distinguished performers and speakers as Jack Klugman, *The Nutcracker*, Pittsburgh Ballet Theatre, Chamber Orchestra Kremlin, Brazilian Guitar Quartet, Three Irish Tenors, as well as Broadway musicals like *Crazy for You*, *Copacabana* and *Hello Dolly*.

University departments also present major theatre productions featuring student actors, numerous music performances, poetry

readings, lectures, art shows and other events.

Volunteerism and National Service

University students provide over 30,000 hours of service each year. Volunteer work is coordinated through the Center for Volunteerism and National Service which sponsors numerous projects.

- READ TO SUCCEED! Program
- VOICE Program (Volunteer Opportunities in the Community Environment)
- Allen HallSTARS!
- Winter and spring Alternative Break trips

If you want more information about volunteer opportunities, call 301/687-4210.

Black Student Alliance

The Black Student Alliance members work to foster understanding of their culture and

heritage in the campus community. The Alliance sponsors programs, events, and activities, provides an office where students can discuss issues and relax, maintains a library, and raises funds for charities and other organizations. Call 301/687-7402 for information.

International Students

International students can receive help in dealing with the Immigration and Naturalization Service, learning about local customs and culture, adjusting to campus life and understanding the U.S. educational system. For advising, programs and further information, please contact the Center for International Education at 301/687-4714.

Media and Student Publications

Students who want invaluable experience in media can take part in several extracurricular activities. Writers, editors, and artists/designers can join the staffs of two official student publications: (1) *The Bottom Line*, a student newspaper and (2) *Bittersweet*, a literary magazine. Students interested in broadcasting can work at WFWM, the campus radio station. FSU-TV transmits important campus information over Channel 3.

Department of Athletics

Frostburg State University has one of the finest and most comprehensive varsity sports programs in the country. FSU offers 20 intercollegiate sports, 11 for women, nine for men. Women's sports include basketball, cross country, field hockey, lacrosse, soccer, softball, swimming, tennis, indoor and outdoor track, and volleyball. Men compete in base-



The Lane University Center is the place to meet friends and relax.



ball, basketball, cross country, football, soccer, swimming, tennis, and indoor and outdoor track.

Competing in Division III of the National Collegiate Athletic Association (NCAA), Frostburg State University is a member of the Eastern College Athletic Conference (ECAC), the Allegheny Mountain Collegiate Conference (AMCC), the Atlantic Central Football Conference and the Mason-Dixon Conference. Frostburg State has won championships in the NCAA, ECAC, AMCC, and the Mason-Dixon Conference. As a member of NCAA Division III, FSU can offer no athletic scholarships. Hundreds of FSU athletes have earned All-American honors over the years.

As a result of paying an athletic fee, students are admitted free of charge to home athletic events, have access to recreation facilities, and may participate in intramural and club sports.

The athletic department administers and funds the intramural and club sports programs at the university. A wide variety of intramural activities are held each year for both men and women.

Check out Bobcat Athletics on the Internet at www.frostburg.edu.

University Organizations

If you've got a special hobby or academic interest, join a club to find other people who like the same sort of thing! A partial list of clubs and organizations currently active at FSU follows, but the listing is by no means complete because you can start your own club with some friends and add it to the list. All student organizations register in the Lane Center Campus Activities Office (301/687-4151) where you can find information about them.

Honor Societies

To encourage and recognize student scholarship within disciplines, more than sixteen academic departments at the University sponsor an honor society organization. First-year students may be eligible to join Phi Eta Sigma. In addition, there are special societies for students in the honors program and students studying wildlife.

Professional Organizations

Over eighteen professional organizations can help you learn about and pursue the career you have chosen. These organizations include the Accounting Association, Finance Club, Justice Studies Club, Student Education Association, Frostburg Business Association, and many others.

Greek Organizations

You may join one FSU's 15 recognized fraternities/sororities on campus which offer students opportunities in

- leadership
- community service
- personal development

- scholarship
- brotherhood/sisterhood.

The Director of Greek Life at the University (301/687-4151) can provide you with detailed information about these social organizations and membership.

Religious Organizations

Campus religious organizations—both denominational and ecumenical—have established offices and offer programs to students. During orientation, you may voluntarily complete a form about your religious preferences so that these organizations can provide you with information about their services and about opportunities for worship in the community.

Special Interest Organizations

Students have many opportunities to join or to create organizations which fit their interests. Students have created clubs and special interest groups in sports, music, computers, politics, the arts, and wildlife. Non-traditional students have created a network to support students over 25 years old.



The Spring Carnival features a variety of fun activities such as human bowling.

Registered Student Organizations

Major Organizations

Black Student Alliance
 Campus Activities Board
 Residence Hall Association
 Student Government Association

Media and Publications

Bittersweet - literary magazine
The Bottom Line - newspaper
 WFWM - radio station

Academic

Accounting Association
 American Chemical Society
 American Marketing Association
 Art Club
 Computer Club
 Dance Club
 Delta Omicron
 Finance Club
 French Club
 Frostburg Business Association
 Geography Club
 International Relations Club
 Maryland Student Education Association
 Philosophy Club
 Physics & Engineering Club
 Politics, Law & Society Club
 Pre-Med Society
 Psychology Club
 Society for Advancement of Management
 Social Work Student Alliance
 Sociology Club
 Spanish Club
 Wildlife Society

Honor Societies

Alpha Kappa Delta - sociology
 Beta Beta Beta - biology
 Gamma Theta Upsilon - geography
 Honors Student Association
 Kappa Mu Epsilon - math
 National Residence Hall Honorary
 Omicron Delta Epsilon - economics
 Order of Omega - Greek life
 Phi Alpha - social work
 Phi Alpha Theta - history
 Phi Epsilon Kappa - phys. ed. & recreation
 Phi Eta Sigma - first year students
 Pi Sigma Alpha - political science
 Pinnacle Non-Traditional Students
 Psi Chi - psychology
 Sigma Beta Delta - business
 Sigma Delta Pi - Spanish
 Sigma Tau Delta - English
 Upsilon Pi Epsilon - computing sciences



Last year, FSU students gave 41,000 hours of service to the community helping with literacy, health services and environmental restoration. These students make a "clean sweep" of Frostburg's Main Street after Homecoming.

Community Service

Alpha Phi Omega
 Alternative Break
 Sierra Student Coalition

Greek Life

Independently Recognized
 Alpha Gamma
 Brothers of Brown & Gold
 Phi Tau
 Zeta Phi
 I.F.C. (Inter Fraternity Council)
 Delta Chi
 Pi Lambda Phi
 Sigma Alpha Epsilon
 N.P.C. (National Panhellenic Conference)
 Alpha Sigma Tau
 Alpha Xi Delta
 Delta Zeta
 N.P.H.C. (National Pan-Hellenic Council)
 Alpha Phi Alpha
 Delta Sigma Theta
 Omega Psi Phi

Special Interest

Advertising Club
 AIDS Peer Educators
 Amnesty International
 BURG/Peer Education Network
 Climbing Club
 College Republicans
 Collegiate Music Educators Nat. Conference
 Fourth Dimension Science Fi & Anime Club
 Frostburg Pagan Association
 FSU Orienteering
 Gamers Inc.
 G.O.L.D. (Generating Opportunities
 for Leadership Development)

Ice Hockey Club
 Intramural Club Sports
 Lacrosse Club
 Maryland Student Legislature
 National Broadcasting Society
 Noble Order of the Unicorn
 Recreation Society
 Rugby Club (Men's)
 Student Action Organization
 Student Health Advisory Council
 Unified Voices Under God's Dominion
 Western MD Society for the Prevention of
 Cruelty to Animals
 Young Democrats

Religious Organizations

Baptist Student Union
 Catholic Campus Ministry
 Chi Alpha Campus Ministries
 Hillel Organization
 Inter-Varsity Christian Fellowship
 United Campus Ministry

Multicultural

Civil Action for Truth Awareness
 Encore - Non-Traditional Students
 Feminist Majority Leadership Alliance
 Gay, Lesbian, Bisexual, Transgenders &
 Allies
 Ladies of Distinction
 NAACP
 Students Promoting, Educating and
 Encouraging Diversity

Academic Life

The Academic Program

The University offers courses of study in the Liberal Arts and Sciences, Business, and Education leading to the following degrees: (1) Bachelor of Science, (2) Bachelor of Arts, (3) Bachelor of Fine Arts, (4) Bachelor of Science in Urban and Regional Planning and (5) Bachelor of Technical and Professional Studies.

We also offer the degrees of Master of Business Administration, Master of Education, Master of Arts, 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 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.
4. 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.
5. 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.
6. Completion of all course work taken at FSU with a cumulative grade point average of at least 2.0.
7. Completion of all approved student outcomes assessment activities required by the University and the academic programs.
8. 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 K-12 teacher education certification.
9. Completion of at least 39 credits at the upper division (300-400) level.
10. Completion of all required professional education courses and requirements for students in teacher education programs.
11. Completion of all semester credit hours beyond 90 credits at Frostburg State University, except for up to seven credit hours following the stipulations in the policies concerning attendance at another institution.
12. Completion of an application for diploma and graduation when student completes 70 credit hours (forms available in the Registrar's Office).
13. Fulfillment of all financial obligations to the University.

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 Urban and Regional Planning

The Bachelor of Science in Urban and Regional Planning is a professional degree awarded only to students who major in Urban and Regional Planning. Candidates for this degree must complete all requirements listed for the Bachelor of Science degree.

Bachelor of Technical and Professional Studies Degree

The Bachelor of Technical and Professional Studies (B.T.P.S.) degree is designed to meet the needs of students who have completed an Associate of Applied Science (A.A.S.) degree at a community college in a technical, specialized field and want to broaden their educational background and prepare for career advancement.

Currently, collaborative programs with Allegany College of Maryland are offered in the following areas of concentration: health science administration (for students with an A.A.S. in a health professions discipline), information technology management (for students with an A.A.S. in computer science and technology), and criminal justice (for students with an A.A.S. in criminal justice). Students with equivalent degrees from other institutions also may apply.

In addition to the requirements specified in the description of each major, candidates for the Bachelor of Technical and Professional Studies degree must meet all the requirements listed for the Bachelor of Science degree.

General Education Program (GEP)

GEP Grading Policy

- The P/F grading option is not permitted in the General Education Program.

- The grading policy for all **Basic Requirements** 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; 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 Basic Requirement.

University Basic Requirements in which grades of CS, D, F, FX, or WF are awarded must be repeated at Frostburg State University.

Basic Requirements (BR)

Courses required of all students

- All Basic Requirements may be satisfied by examination.
- You are expected to take these courses during your first 30 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 department teaching the course 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.

+minimum of 11 credit hours or waiver by exam

* Honors course equivalent

Goals of the General Education Program

- To encourage greater appreciation of significant achievements in the arts and sciences, of the development and workings of social institutions, of the ideas and events that have shaped the present world, and of the processes by which knowledge is acquired and transmitted.
- To introduce students to the subjects, methods, and values that characterize various academic fields of study.
- To promote a sense of the worth of and accomplishment in the various fields of human knowledge as they have developed and been transmitted over long periods of time and across various cultures.
- To stimulate the interest and desire in students to pursue knowledge in fields beyond that of their majors as a lifelong endeavor.
- To enable students to participate in a community of learning in which the skills and attitudes of objectivity, critical analysis, and respect for differing conclusions are paramount.
- To provide practice in the evaluation of personal and societal value systems including what is involved in the commitment to a given value system.

Double-counting GEP Courses

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.

For all students

Minimum Hours Required:

11+

Objectives:

- To provide general skills in reading, listening, speaking, writing, problem solving, and clarifying values.
- To provide skills needed for investigating, developing, and communicating knowledge in any field of study.
- To provide knowledge and skills which will promote one's physical and mental well-being throughout life.

Summary of Basic Requirements

1. English:

(6 hours)

ENGL 101/111* Freshman Composition

and one of the following **advanced writing** courses:

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

2. Mathematics:

(3-4 hours)

One of the following courses in mathematical problem solving:

MATH 104 Mathematical Problem Solving

MATH 102 College Algebra

MATH 120 Precalculus

MATH 209/219* Elements of Applied Probability & Statistics

MATH 236 Calculus I

3. Health Education:

(2 hours)

HEED 100 Personal Wellness

Liberal Arts Component (LAC)

Required of all students

Objectives:

- To provide knowledge of cultural heritages in the broad fields of arts and humanities, social sciences, and natural sciences.
- To provide a survey of representative fields of knowledge, including their characteristic methods of investigation, content, forms of communication, and intellectual values.
- To provide experience in using the methods of thought characteristic of the major areas of human knowledge.
- To provide knowledge, experience, and appreciation of human constructs and behavior, scientific methods and laboratory procedures, and critical judgment and artistic achievement.

Criteria:

- Courses in the Liberal Arts Component should ordinarily be completed in the first 90 hours.

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-year students with less than 13 semester hours of transfer credit, and may be elected by any first-year student. 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. You may select an *ORIE 101* section that best fits with your schedule and have the opportunity to learn with and from a broad cross-section of first-time students. Alternatively, you may select from a wide array of special interest sections to meet other students who share your academic interests and needs. Sections are offered as part of learning communities that study a shared theme across a group of courses, by departments for potential majors, and by student support offices for students who are interested in using their services.

For all students

Minimum Hours for Liberal Arts Component:

at least 29

Summary of Liberal Arts Component

A. Fine Arts:

(3 hours)

Select at least one of the following:

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

B. Humanities:

(6 hours)

Choose Option 1 or 2:

Option 1: Select at least two of the following:

- History: HIST 100/111* The Contemporary World in Historical Perspective
- Philosophy: PHIL 101/111* Introduction to Philosophy
or PHIL 102 Contemporary Ethical Problems
- Literature: ENGL 150/250* **or** MDFL 150 Introduction to Literature
or ENGL 221 Intro. to Literature/ Intermediate Composition

Option 2: A minor in a foreign language, or two majors, one of which is in a foreign language

C. Natural Sciences:

(8 hours)

Select at least two of the following:

- Biology: BIOL 109 Human Biology and the Environment
or BIOL 149 General Biology I
- Chemistry: CHEM 100/113* Chemistry and Society
or CHEM 101 General Chemistry I
- Geography: GEOG 103/113* Physical Geography
- Physical Science: PHYS 215 General Physics I
or PHYS 261 Principles of Physics I
or PHSC 203 Physical Science
or PHSC 100 Cosmic Concepts **and** PHSC 101 Measurement

D. Social Sciences:

(6 hours)

Select at least two of the following:

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

E. Liberal Arts Component Electives:

(6 hours)

Select a minimum of six additional credits chosen from the Liberal Arts Component courses listed above

Students may not count more than one course or option where there are alternates listed (as designated by *or*) to meet Liberal Arts Component Requirements.

* Honors course equivalent

Majors offered at FSU	Career Cluster**
Accounting*	2
Actuarial Science*	2
Art and Design	6
Athletic Training	5
Biology*	3,4,5
Business Administration*	1,2
Business Education	2,8
Chemistry*	3,4,5
Communication Studies*	6
Computer Science*	10
Criminal Justice	8
Dance*	6
Earth Science	4
Economics*	2
Elementary/Early Childhood	8
Elementary Education	8
Engineering, Electrical (w/UMCP)	3
Engineering, Mechanical (w/UMCP)	3
English*	3,6
Environmental Analysis & Planning	4,9
Exercise and Sport Science	1,5,8
Foreign Languages & Literature*	1,6
Geography*	1,4,7,9
Health & Physical Education	5,8
Health Science Administration	2,5,8
History*	6
Information Technology Management	2,10
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
Philosophy*	6
Physics*	3,4,5
Political Science*	8
Psychology*	5,8
Recreation & Parks Mgmt.	1,4,5,8
Social Science	8
Social Work	5,8
Sociology*	8
Theatre*	6
Urban & Regional Planning	1,4,7,8,9
Wildlife & Fisheries	4

Minors

*Minors are offered in the fields starred above, as well as in African American Studies, Art History, Business for Science and Technology Majors, Coaching, Environmental Humanities, Environmental Policy, Fine Arts, Forestry, Graphic Design, Leadership Studies, Public Relations, Women's Studies and Writing.

Majors and Minors

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

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

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

You are responsible for planning your major in consultation with the chair of the major department and with your academic advisor. You should officially declare a major prior to the completion of 60 semester hours of credit. If you declare two majors and/or a minor, you must consult with your advisor and with the chairs of all departments involved. To be recorded on your transcript, a second major and/or a minor must be officially declared at least one semester prior to graduation. You are responsible for following departmental requirements, course sequences and prerequisites.

Majors offered at the FSU Frederick and Hagerstown Centers

Upper division course work required for the majors in accounting, business administration, law and society, liberal studies and sociology is offered at the FSU Center at Hagerstown.

The Frederick Center offers business administration and law and society.

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 Criminal Justice, Environmental Analysis and Planning, Earth Science, Health Science Administration, Information Technology Management, International Studies, Law and Society, Liberal Studies, Social Science, and Urban and Regional Planning. You may also elect to complete an interdisciplinary minor such as African-American Studies, Environmental Humanities, En-

vironmental Policy, International Studies, Leadership Studies, Public Relations 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).

The Freshman Learning Communities also foster the development of interdisciplinary insights by grouping students, faculty and courses to look at a common theme from different perspectives.

**Career Connections

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

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

The 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

Internships

Every program at FSU offers you the opportunity to apply your knowledge to real-world situations through internships, field experiences, 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.

Catalog Governing Graduation Requirements

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

1. If you begin your college course work at Frostburg State University, you must meet the graduation requirements of the catalog in effect when you first enroll.
2. If you transfer to Frostburg State University after having begun your college course work at another institution, you must meet the graduation requirements of the Frostburg State University catalog in effect when you first enrolled at the other institution. Or, you may choose to meet the requirements of a later Frostburg State University catalog, provided that you indicate your choice when you are admitted to this university and that you meet all the requirements of the later catalog chosen.
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.

Additional Academic Opportunities

Special Academic Services

The Office of Special Academic Services provides a wide variety of support programs that complement the University's academic programs. Services include coordination of academic assessment program; management of Summer School and Intersession; coordination of Commencements at both the FSU campus and the Center at Hagerstown; coordination of the Learning Community initiative; development of services for transfer students; and administration of the University's academic eligibility compliance policy for all NCAA Division III sports.

You are welcome to visit the office at any time if you have questions or concerns about any of these areas. Special Academic Services is located in Suite 127 of the Performing Arts Center.

Learning Communities

Learning communities at FSU 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 a major. In addition, learning communities provide an environment which fosters the development of support networks

with faculty and other students, relationships that are important contributors to academic success. Each learning community consists of three or four classes linked by theme; all communities include "Introduction to Higher Education." Learning community students take their courses together as a group during the fall semester, with no more than 25 students enrolled in each class. Normally, learning community students have room in their class schedules to take one or two additional courses outside their community. Enrollment in learning communities is an optional first-year experience offered exclusively during the fall semester. Enrollment is limited to entering freshmen.

The faculty who teach learning communities work collaboratively to coordinate readings and assignments. They also arrange supplemental learning activities that highlight the themes of the community. Since the inception of the learning communities program in the fall of 1997, a wide variety of themes have been explored. A partial list of topics includes business communication, leadership, international issues, self-esteem and wellness, the world of public education, engineering, the medical professions, art and

design, and the environment. New communities are developed each year.

Learning communities also offer entering students easier class registration and the opportunity to more closely interact with faculty. A vast majority of learning community courses fulfill FSU's requirements in general education.

For further information contact Special Academic Services.

Intersession

Each January, the University offers a compressed semester allowing students to pursue course work in the General Education program, in their majors (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 (i.e., during fall and spring). 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, or contact Special Academic Services.

Summer School

From May to August each year, the University offers a program of courses during two sessions of five to six weeks (for regular classes) and one session of twelve weeks (for internships). Within sessions, courses are offered during the day and evening, in compressed times, and at multiple sites at both the undergraduate and graduate levels. Refer to the summer school bulletin, distributed each spring, for further information, or contact Special Academic Services.

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.

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.

Study Abroad

The Center for International Education

The Center for International Education (CIE) promotes, coordinates and supports FSU's study abroad 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. CIE's library includes program materials, guides to study abroad programs and financial aid information. The Center also supplies the ISIC (International Student Identity Card) to students planning to study abroad, and hosts orientation sessions.

The Center also serves the FSU international student community by providing orientation programs for new students, advice concerning immigration and visa issues, guidance about immigration regulations, and extracurricular programming.

Study Abroad Programs at Frostburg State University

Currently, FSU students may choose from a wide range of study abroad programs which are designed to suit a variety of aca-

Study Abroad Opportunities

Program	Country/University	Terms Offered	Language of Instruction	Subject Specialties
Africa:	University of Ghana	Summer	English	Humanities and Social Sciences or Art and Design
Various Locations:	American Institute of Foreign Study (AIFS)	Fall or Spring Semester, Summer	English	Arts, Humanities, and Sciences, Environmental Sciences, Computer Science, Education
Australia/New Zealand:	AustraLearn	Fall or Spring Semester, Summer Intersession	English	Arts, Humanities, and Sciences, Environmental Sciences, Computer Science, Education
Canada:	University of Quebec	Intersession, Summer	French	French Language and Culture
Denmark:	Copenhagen Day & Evening Teaching College	Spring Semester	English	Education
Ecuador:	Centro de Estudios Interamericanos	Intersession, Summer	Spanish English	Spanish, Latin American Studies, Biology, TEFL Certificate
England:	University of Northumbria at Newcastle	Semester or Academic Year	English	Art History, Design, Economics, Political Science, Psychology
England:	Oxford University	Summer	English	Art, Literature, Social Sciences
Germany:	Schwabisch Gmund	Summer	English	Arts, Humanities, and Sciences
Various Locations:	International Student Exchange Programs (ISEP)	Semester, Academic Year or Summer	Optional	Arts, Humanities, and Social Sciences Foreign Language
Ireland:	Mary Immaculate College Social Work Field Experience in Limerick	Semester or Academic Year Summer	English English	Arts, Humanities, and Sciences Social Work, Human Services
Italy:	American University of Rome (Towson)	Semester or Academic Year	English	Arts, Humanities, and Sciences
Italy:	Conservatorio Statale Di Musica 'A. Buzzola', Adria	Spring Semester	Italian/English	Music
Madagascar:	Human Biology Program	Intersession	English	Biology
Spain:	University of Navarra, Pamplona	Semester or Academic Year	Spanish	Spanish Language, Literature, History & Culture
Various locations:	School for International Training	Semester, academic year	Optional	Arts, Humanities, Social Sciences, Environmental Science, Political Science, Cultural Studies



FSU students in London.

demographic 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 and academic focus. Some programs are designed specifically for graduate students. Interested students are advised to attend the annual study abroad fair in September, come by the CIE Office for individual guidance in choosing a program, or to attend one of the CIE study abroad information sessions which take place on a weekly basis every semester. For further information, either phone the CIE Office at 301-687-4714 or visit the CIE web page at www.frostburg.edu/admin/cie/cie.htm.

Other Opportunities Abroad

In addition to the programs mentioned above, FSU students may benefit from the hundreds of external programs available to all US university students. These programs allow students to study, work and travel abroad, and are offered through other universities, government institutions and international organizations. The Center for International Education library can provide students with resources for searching through these programs, and the CIE helps students to transfer credit back to FSU from all study abroad programs.

Study Abroad Scholarships

Most 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 are awarded twice a year for

programs taking place during the fall and spring semesters, the academic year, the intercession and the summer session. The CIE also provides information on state, federal and other institutional scholarships, such as the Gilman Scholarship and scholarships through Rotary, NSEP, and Fulbright. Students may apply at the CIE Office.

The International Program at Frostburg State University

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 naturalization, visa administration, employment, academic counseling, and orientation programs, the CIE organizes social events, weekend excursions and fun days out for international students and faculty. The CIE also administers the Rowe Scholarship program which awards funding to a number of international students each semester. Awards are available both to incoming and returning international students in F or J status. For further information, call the Center for International Education at 301-687-4747 or visit the CIE web site at <http://www.frostburg.edu/admin/cie/cie.htm>.

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 MA, MBA, M.Ed., MAT, and MS. More than 900 students are enrolled in these programs each semester. Most students study part-time in the evening. You may enroll in courses and complete programs at the main campus in Frostburg or at our centers in Hagerstown and Frederick.

See the Graduate Catalog 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 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. Inform the Registrar's Office in writing at least one semester prior to the time you expect to finish the major and wish it to be recorded.
7. Fulfill all financial obligations to the University.
8. In the event that the additional major would culminate in a degree other than the first degree earned by the student, a second diploma will be issued by the Registrar's Office. For details, check with the Registrar's Office one semester before the anticipated completion of the additional major.

Teaching Certification

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

1. Complete all the requirements of a Maryland state approved program in teacher education as a second major (FSU gradu-

- ates) or a second baccalaureate degree (graduates of other institutions).
2. 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*.
3. If you wish to teach in a state other than Maryland, it is your responsibility to ascertain if a Maryland state approved program will meet certification requirements.

General Course Work:

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

Certificate Programs

Degree-seeking undergraduates and non-degree-seeking community members may earn a certificate in several specialized areas. Certificate programs are designed to provide specialized skills and knowledge that may enhance your undergraduate program and/or provide skills useful in employment. Undergraduate certificates include a minimum of 12 credit hours.

If you are a currently enrolled, degree-seeking undergraduate student you may declare your intent to complete a certificate on the declaration of major form and the application for graduation. You must meet all prerequisites stated by the offering department for the particular certificate.

If you are not currently an FSU student, you may be admitted as a non-degree-seeking student to complete a certificate program. You must file an admission application and present evidence that you have a high school diploma or GED, or that you have been approved to participate in the dual enrollment high school/college program. Particular certificate programs may have additional admission requirements. Credits earned towards a certificate may later be applied to a degree if you choose to request admission, and are accepted, as a degree-seeking student. Credits also are transferable.

In order to earn a formal certificate, you must:

1. Earn at least one-half of the credit hours required in the certificate

through course work or special departmental exams offered by Frostburg State University, and

2. Earn a minimum of a 2.0 grade point average in courses required in the certificate and completed at Frostburg State University.

(Exceptions to these standards may apply in the case of collaborative programs.)

Successful completion of a certificate program will be noted on your official Frostburg State University transcript. You also will receive a paper certificate to document your accomplishment.

The following certificate programs currently are offered. See the descriptions, and any special admission, prerequisite, and academic standards in the individual descriptions in the Courses of Study section of this catalog.

1. Addictions Counseling (Psychology)
2. Computer Print Graphics (Visual Arts)
3. Computing Technology (Computer Science)
4. Software Development (Computer Science)
5. Programming (Computer Science)
6. Networking (Computer Science)
7. International Area Studies (International Studies)
8. Child and Family (currently open only to degree-seeking Psychology majors)

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 Schedule Booklet, 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.**
- After you declare a major, you are assigned an academic advisor in the department in which you desire to major. **It is your responsibility to promptly declare or change your major** so that an appropriate advisor can be assigned.
Forms for the declaration of a major, change of major, and change of advisor are available in the Office of Student and Educational Services.

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 give you an advising code that will allow you to register, and drop/add, by telephone

or on the web. Most advisors post appointment sheets outside their office doors prior to registration, or you can call 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 the Summer Planning Conference, our freshman orientation program. At Summer Planning, you will work with an experienced faculty advisor who enjoys, and is specially trained, to work with first time students. During your first semester, your advisor will be the instructor of your ORIE 101, Introduction to Higher Education, class. ORIE instructors/advisors include faculty and administrators

who volunteer to assist in your transition to college. You will see your ORIE advisor at least once a week, so take advantage of this contact to ask any question you have. At the end of your first semester, you will have the opportunity to officially declare your major. You then will be assigned a faculty advisor in your major department. If you aren't ready to declare your major, your ORIE instructor will continue to advise you until you do, or you may work with a faculty member who enjoys working with exploratory students.

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 the Director of Special Academic Services, or with a faculty member trained to assist exploratory students, until you are ready to declare your major.

If all goes well, 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 or visit the Office of Student and Educational Services, Hitchins 116, 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, using forms available in the Registrar's Office. 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 15-17.5 semester hours of credit. The minimum load for a full-time student is 12 semester hours of credit; the maximum, 17.5 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 17.5 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 Assistant Provost if the student has not declared a major). Forms for requesting an overload must be submitted prior to registration. If you register for an overload without permission, you will be dropped to a 15-17.5 credit load.

Course Changes (Drop/add)

To change a course (to add or drop a course or change sections or credits), you must complete the change-of-course form and *file it with the Registrar's Office*. 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." To add a course to your schedule, you must have the approval of the chair of the department involved. You may not add courses after the first week of classes.

You are responsible for dropping/adding courses/sections at all times. However, if you 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. All other drops must be initiated by you.

If you drop a course during the first eight weeks (beginning with the first day of classes) of full semester courses or the first half of a course less than a semester in length, 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 eight weeks or first half of a course. (USED in computation of average.)

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

Class Attendance

Faculty members individually set their policy on class attendance. You must understand clearly the attendance policy of each of your instructors and act accordingly. You are responsible for explaining the reason for any absence to your instructor. If at all possible, contact the instructor prior to your absence.

The Health Center does not issue verification notices for routine treatment. In cases of significant or prolonged impairment, the Center will provide appropriate written verification of treatment at your request.

If forced by an emergency to be absent from classes, you may notify the Office of the Vice President for Student and Educational Services, which will keep such information on file should instructors wish to confirm your absence.

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 candidate at Frostburg State University, you must request *prior* permission to pursue course work at another institution and transfer it into your program at Frostburg State. This procedure is for your protection to ensure that course work is transferable and is equivalent to the requirement you are trying to meet.

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

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

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

If you have 90 or more total credits (including previous transfer credits and credits in which you currently are enrolled at FSU or elsewhere), you may transfer a maximum of seven 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.

You cannot repeat a Basic University Requirement at another institution if you have received a grade of D, F, FX, CS, or WF in a course that meets that requirement through

enrollment at Frostburg State University. Such course work must be repeated at FSU. An exception will be granted if you have not attended Frostburg State University for at least five years and have earned an associate or bachelor's degree at another institution during your absence.

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 Assistant 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-year students with fewer than 13 credits 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. If you receive an *F* or *FX* in the second semester (or any subsequent semester of required enrollment) you will be academically dismissed from the University.

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 up to 30 additional 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 from the Registrar's Office. 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 nota-

tions, 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 eight weeks of classes; *W* or *WF* depending on the circumstances surrounding your withdrawal after eight weeks; or *FX*, unofficial withdrawal. A *W* or *WF* will not be considered after the last day of classes.

To be eligible for the *W* after the first eight weeks of classes, you must provide written documentation of extenuating circumstances (such as medical problems) to the Office of the Vice President for Student and Educational Services. With approval of the Office of the Provost, the Registrar's Office will post a *W* for all courses and notify all other relevant campus offices of your withdrawal.

If you withdraw without notification, the date of withdrawal will not be known, and you will not be entitled to *Ws* on your transcript; grades will reflect instructors' appraisal of your overall performance, usually *FX*.

If you officially withdraw from the University near the end of a semester because of academic difficulty and receive *WFs* in courses for which you were registered, you may, as a result of your new cumulative grade point average, be academically dismissed from the University.

Once you withdraw, particularly for reasons other than medical, the University is not obliged to readmit you. Readmission especially will not be approved if you withdraw to circumvent regulations.

Call to Active Military Duty

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

Veterans' Affairs Sand Spring Hall 110
Phone: 301/687-4409 Fax: 301/687-3065

Office of the Registrar Pullen 144
Phone: 301/687-4347 Fax: 301/687-4597

Student and Educational Services
Hitchins 116
Phone: 301/687-4311 Fax: 301/687-4937

Leave of Absence

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

To be eligible for a leave of absence, you must have 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 Intersession, or by carrying more than 15 semester hours per semester. To accelerate, you should plan your program well in advance with your advisor.

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

To graduate on a given date, you must make application on a form furnished by the Registrar's Office. 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
PT	Pass by examination
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, mathematics, and health education courses that meet Basic University Requirements.
N	Non-pass (not permitted except where P/N is the only method of evaluation for a particular course)

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-Withdraw; WF-Withdraw After Deadline (Failing); FX-Withdraw 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 time grades are posted.

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 is not permitted to be used in the General Education Program.
2. The P/F option may not be used for any course taught by your major or minor department or which fulfills your major or

minor requirements, including those courses which are required by, but offered outside of, the major or minor department.

3. If you are on academic probation, you are not eligible to enroll in a course on a P/F basis.
4. You may not elect to take more than one course per semester for P/F credit. The total number of courses you may elect to take for P/F credits is four.
5. Once registered in a course on a P/F basis, you may not later choose to take the course on the conventional letter-grade system, except as noted in number 6 below.
6. If you change your academic program so that a course previously taken for P/F credit becomes a requirement for a major, minor, or a professional program, you will receive the conventional grade originally reported by the instructor.
7. You may drop a P/F course the same as any other course.
8. You are subject to the same prerequisites and requirements for the course as is the student enrolled in the course under the standard grading system.
9. To be eligible for the Dean's List, you must take 12 semester hours of graded credit; thus 9 graded credits and 3 credits on a P/F basis do not qualify you for consideration.

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

Mid-semester Warnings

Faculty members will assess students' progress in all 100- and 200-level courses, and in all courses that meet Basic University 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:

Grade points per semester hour

A	4
B	3
C	2
D	1
F, WF, FX	0

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, each grade earned is included in the computation. (See Course Repetition section below for a limited, optional exception to this rule.)

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

Calculation of GPA in Major:

1. All courses taken in the major *department* count in calculating the grade point average for that major (unless specifically excluded).
2. Courses required for the major but taken outside the major department are not counted in the computation, unless specified in the catalog description of the major requirements.
3. Interdisciplinary majors, however, count all courses specifically listed as meeting the requirements for the major. Interdisciplinary majors include Criminal Justice; Environmental Analysis and Planning; Earth Science; Health Science Administration; Information Technology Management; International Studies; Law



and Society; Liberal Studies; Social Science; and Urban and Regional Planning.

4. Prior written approval of the advisor and the department chair is required to repeat a course in which a satisfactory grade has been earned (whether a grade is considered "satisfactory" in a given major is defined by each department).
5. If a course is repeated, each grade earned is included in the computation. (See Course Repetition section below for a limited, optional exception to this rule.)

Calculation of GPA in Minor:

All courses required for the completion of a minor are used in calculating the grade point average.

Course Repetition and Grading

Any course taken at Frostburg State University for the Basic University Requirements of the General Education Program must be repeated at FSU until a satisfactory grade is achieved — at least a C in all courses.

A course may be counted toward graduation requirements only once regardless of how many times it is repeated. All grades earned during repeated courses are counted in your grade point average. (See the special rule above concerning approvals required for course repetitions in your major.)

You are permitted to repeat a maximum of 13 semester hours of course work in which you received a grade of D, F, FX, or WF. The second grade received (A, B, C, D, F, FX or WF *only*), whether higher or lower, then will count in your cumulative grade point average. The first grade will continue to appear on your transcript, but the credit hours at-

tempted and the grade earned in the first attempt will not be used in calculating the cumulative grade point average and cumulative credits. You may select this option only once for a particular course. The course work must be repeated at Frostburg State University.

To request implementation of this option, you must file the Repeat Grade Authorization Form, preferably at the time of initial registration, but no later than the end of the drop/add (late registration) period for the semester in which the course is repeated. If you previously have requested the option for the maximum of 13 credits or for the same course, the Registrar's Office will deny the request in person or by mail.

This regulation applies only to courses repeated in Fall 1993 or after. There will be no exceptions to the regulations stated. You should use this option carefully after consultation with your advisor.

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 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 either or both summer sessions. You will need to meet the standard prescribed for your number of earned hours and number of semesters on probation at the end of the summer sessions, 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 cumulative grade point average falls below 1.0;
2. You fail to meet the basic skill standard in reading, writing, and/or mathematics (as defined in the section of this 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 below);
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 this catalog.)

Dismissal Appeals

You may appeal your dismissal for unsatisfactory scholarship. To do so:

1. Submit a letter of appeal to the Academic Standards Subcommittee, c/o the Assistant 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. If you are a first time FSU student whose FSU GPA is less than 1.0:

a. Your letter of appeal must demonstrate that you understand the circumstances that led to your poor performance and have a **specific and realistic** plan concerning what you are going to do differently to insure academic success in the future.

b. If you are reinstated on appeal and your cumulative GPA is less than 1.0, you are not allowed to enroll in more than 13 credit hours during the following semester and you must enroll in a specified section of ORIE 101, Introduction to Higher Education.

4. If you previously were placed on academic probation:

a. 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.

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

Academic Probation

1. You will be placed on academic probation if your cumulative grade point average is 1.0 or above, but below 2.0.
2. You will be allowed to continue to enroll on academic probation if you meet the minimum academic progress standard for your number of earned hours (see table

below), but for no longer than three successive semesters.

3. If you are readmitted or reinstated on appeal on an individual probation contract, you will be allowed to continue to enroll on academic probation as long as you meet the conditions specified each semester.

Minimum Academic Progress Standards

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

Total Hours Earned ¹	Minimum FSU Cumulative GPA ²
0-14	1.00
15-29	1.40
30-44	1.60
45-59	1.80
60-above	2.00

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 authorized grade repeats 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.)
3. If you are on academic probation during the fall semester, you may not register for January Intersession courses.

Academic Eligibility for Athletes

As a student-athlete, you must be eligible according to the regulations of the National Collegiate Athletic Association and you are subject to the same standards of scholarship as are all students of the institution. 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 transferrable degree credit and at least two semesters (or three 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
 - b. Meet the minimum academic progress standards defined for your academic level (see table above).
 - c. If you are readmitted after academic dismissal or allowed to re-enroll based on a successful appeal of academic dismissal, 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 credit hours earned, 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

Total Hours Earned ¹	Minimum FSU Cumulative GPA ²
0-14	1.00
15-29	1.40
30-44	1.60
45-59	1.80
60-above	2.00

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 authorized grade repeats and grade forgiveness. Enrollment at schools other than FSU can not improve the GPA because credits, not grades, transfer from these institutions.

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.

Courses of Study

Accounting

Major

Minor

Combined BS/MBA Option

Professors:

Bandura, R. Johnson,
Robinson (Chair), Shaffer-
Wilson, D. Simmons

Associate Professors:

Groer, Hollar, Middleton

Instructors:

Bao, Gilmore

- This program may be completed on the Frostburg campus or at the Center in Hagerstown.
- 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/MBA option may be completed at the Frostburg campus or at the Centers in Hagerstown or Frederick.

	For Major	For Minor	Combined BS/MBA
Hours Required in Accounting:	36	18	39
Hours Required in Other Departments:	45	0	111
Total Hours Required:	81	18	150

Summary of Requirements for Major/Minor in Accounting

Major	Minor
1. Introductory Level Courses: (6 hours)	
ACCT 201* Introductory Accounting I	ACCT 201 Introductory Accounting I
ACCT 202* Introductory Accounting II	ACCT 202 Introductory Accounting II
2. Intermediate Level Courses: (9 hours)	
ACCT 301* Intermediate Accounting I	ACCT 301 Intermediate Accounting I
ACCT 302* Intermediate Accounting II	
ACCT 305* Accounting Systems	
3. Distribution Within Department: (15 hours)	
ACCT 315 Cost Accounting	
ACCT 316 Advanced Cost Accounting	
ACCT 325 Auditing	
ACCT 401 Advanced Financial Accounting I	
ACCT 420 Tax	
4. Elective Hours in Department: (6 hours)	
	(9 hours) From courses numbered higher than 301
5. Required Courses in Other Departments:	
Business (12 hours)	
BUAD 291 Legal Environment of Business	
BUAD 351 Management of Organizations	
BUAD 361 Principles of Marketing	
BUAD 476 Financial Management	
Communication Studies: (3 hours)	
CMST 102* Introduction to Human Communication	
Computer Science: (6 hours)	
COSC 100* Introduction to Computer Science	
COSC 220 Introduction to Software Applications	
Economics: (6 hours)	
ECON 201 Principles of Economics (Macro) (GEP LAC Group D)	
ECON 202 Principles of Economics (Micro)	
Mathematics: (6 hours)	
MATH 209 Elements of Applied Probability & Statistics (GEP BR Math)	
and one from among:	
MATH 106 Algebra with Calculus for Business	
MATH 220 Calculus for Applications I	
Philosophy: (3 hours)	
PHIL 314 Business Ethics	

6. Elective Courses: (9 hours)

3 hours in Economics (numbered higher than 202);

6 hours from among courses in Accounting, Business (numbered higher than BUAD 309), Computer Science and/or Economics (numbered higher than ECON 202). **Students who are accepted into the 150-hour combined BS in Accounting/MBA option must take MGMT 509 Managerial Communication and MGMT 512 Management Decision Analysis** (see option description for eligibility requirements).

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

Combined B.S. in Accounting/MBA Program

A 150-hour combined BS/MBA program enables eligible students to complete FSU's B.S. in Accounting and MBA degree programs with 150 hours of academic credit. Separate pursuit of these degrees would require 168 hours of course work. All CPA exam candidates in Maryland are required to complete 150 hours of academic credit. Completion of this combined BS/MBA program will meet all course work requirements for CPA exam candidacy in Maryland.

Eligibility requirements for the combined BS/MBA

- a) declared accounting major at FSU
- b) approved application for admission to 150-hour program
- c) cumulative and major GPA of 2.5 or better at the time of registration for MBA courses listed in item d below
- d) completion of MGMT 509 and 512 during the final semester of the undergraduate senior year.

Summary of Requirements for Combined BS/MBA Option

Undergraduate Requirements for BS in Accounting

1. Complete requirements 1.-5. for major in accounting listed above.

6. Elective Courses:

(3 hours)

3 hours in Economics (numbered higher than 202)

7. Management courses required during final semester of senior year:

(6 hours)

MGMT 509 Managerial Communication

MGMT 512 Management Decision Analysis

Graduate Requirements for MBA

8. Complete the following MBA courses:

(30 hours)

MGMT 510 The Leadership Process

MGMT 542 Human and Organizational Performance Systems

MGMT 554 The Political, Ethical, Regulatory and Legal Dimensions of Managing

MGMT 580 Strategic Planning and Analysis

MGMT 610 Financial Management

MGMT 620 Managing Organizational Change and Human Resource Policy

MGMT 630 Process Management

MGMT 640 Marketing Management

MGMT 680 Strategic Integration

MGMT 693 Field Experience in Management

Actuarial Science

Major

Minor

Coordinator:

Kathleen Elder, Associate Professor, Department of Mathematics

- The actuarial science program provides an environment which integrates the necessary knowledge and skills of a business executive, a mathematician, a financier and an investment manager.
- 66 credit hours of course work are required from five disciplines: mathematics, accounting, business administration, computer science, and economics.
- The program has two interrelated goals: to provide each student with a strong foundation in mathematics, and to help each student begin his/her preparation for a career as an actuary.
- Legal residents of Delaware, Kentucky, and Virginia may complete an actuarial science degree at Maryland resident tuition rates through the SREB Academic Common Market (see Admission section of this catalog).

	For Major	For Minor
Hours Required in Mathematics:	39	18
Hours Required in Other Departments:	28	3
Total Hours Required:	67	21

A strong background in mathematics and statistics is essential for persons interested in a career as an actuary. It is an advantage to pass, while still in school, one or more of the examinations offered by either the Society of Actuaries (SOA) or the Casualty Actuarial Society (CAS) in order to gain membership status. An actuarial science minor is available for students majoring in business-related disciplines.

The general curricular requirements focus on four broad areas:

- Courses involving concepts and principles of mathematics and statistics: MATH 236, 237, 238, 350, 380, 452, 480
- Courses involving applications: MATH 380, 435, 480, 481, 483, 484, 485
- Courses involving actuarial science: MATH 483, 484, 485
- Courses involving business-related areas: BUAD 371, ECON 201, 202, ACCT 201, 202, BUAD 351, 370

Summary of Requirements for Major/Minor in Actuarial Science

Major	Minor
<p>1. Required Courses in Mathematics: (39 hours)</p> <p>MATH 236 Calculus I (<i>GEP BR Math</i>) MATH 237 Calculus II MATH 238 Calculus III MATH 350 Matrix Algebra MATH 452 Linear Algebra MATH 380 Introduction to Probability & Statistics MATH 480 Probability & Statistics MATH 481 Applied Regression Analysis MATH 435 Numerical Analysis MATH 483 Theory of Interest MATH 484 Actuarial Mathematics I MATH 485 Actuarial Mathematics II</p>	<p>(18 hours)</p> <p>MATH 236 Calculus I (<i>GEP BR Math</i>) MATH 237 Calculus II MATH 238 Calculus III MATH 380 Introduction to Probability & Statistics MATH 484 Actuarial Mathematics I</p>
<p>2. Required Courses in Other Departments: (28 hours)</p> <p>ACCT 201 Introductory Accounting I ACCT 202 Introductory Accounting II BUAD 351 Management of Organizations BUAD 370 Corporate Finance BUAD 371 Principles of Insurance COSC 240 Computer Science I ECON 201 Principles of Economics (Macro) (<i>GEP LAC Group D</i>) ECON 202 Principles of Economics (Micro) CMST 102* Introduction to Human Communication</p>	<p>(3 hours)</p> <p>BUAD 371 Principles of Insurance</p>

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

Addictions Counselor Preparation

Professional Certification Program

Certificate

Advisor:

Ann R. Bristow, Professor,
Department of Psychology

- You cannot major or minor in addictions counseling.
- You may receive credit-by-examination for the following courses: PSYC 386, 387, 388, 389, 417.

- Since the Addictions Counseling program is a regional collaboration with Allegany College of Maryland, with shared courses and faculty, you may count enrollments at either Frostburg State University or Allegany College of Maryland to meet the requirement that at least one-half of the credit hours required in the certificate be completed in residence. In addition, grades from courses completed while enrolled through Allegany will count in determining whether you meet the 2.0 minimum grade point average in certificate courses.

Addictions Counselor Preparation

The Board of Examiners of Professional Counselors oversees the following regulations for Addictions Counselors in Maryland. There are three levels of certification, two of which are relevant to the undergraduate student and are briefly described below. For complete requirements for certification, please contact:

State Board of Examiners of Professional Counselors
4201 Patterson Avenue
Baltimore, Maryland 21215-2299
(410) 764-4732

Certified Supervised Counselor – Alcohol and Drug (CSC-AD): 15 credit hours of alcohol and drug counselor training required and an associate's degree in a health or a human service counseling field.

Certified Associate Counselor – Alcohol and Drug (CAC-AD): 20 credit hours of alcohol and drug counselor training required and a 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 or sociology will be considered on a case-by-case basis. 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 3000 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.

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. Please 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 385 |
| 4. Abnormal Psychology | PSYC 417 |
| 5. Addictions Treatment Delivery | PSYC 387 |
| 6. Treatment Issues and Theory in Addictions | PSYC 388 |
| 7. Family Counseling* | no undergraduate course offered |
| 8. Theories of Counseling and Psychotherapy | no undergraduate course offered |
| 9. Human Life Span Development | PSYC 210 and 212, SOWK 375 |
| 10. Ethics for the Addiction Counselor (1 credit hour) | PSYC 389 |

* Although FSU does not currently offer an undergraduate course in family counseling, SOWK majors taking SOWK 470, Generalist Practice I, will find this course helpful in their preparation for family counseling issues covered on the examination.

Addictions Counseling Certificate

If you would like to get a head start on professional certification for addictions counselors, you may complete the following undergraduate certificate as a degree-seeking or non degree-seeking student. You still must complete a bachelor's degree in one of the human services fields noted above as well as complete additional course work in order to sit for the state exam.

Required Courses:

(16 hours)

- PSYC 150 General Psychology
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

ONE of the following.

- SOWK 385 or PSYC 385 Generalist Practice with Groups OR Group Processes
SOWK 379 or PSYC 410 Foundations for Social Work Practice OR Introduction to Counseling

African American Studies

Minor

Coordinator:

Jean-Marie Makang
Assistant Professor,
Department of Philosophy

Professors:

Bucchino (Philosophy),
Bullamore (Geography),
Wiseman (History)

Associate Professors:

Coward (English),
McLellan (Business
Management), Moore
(Sociology), O'Rorke
(Political Science), Rhodes
(Visual Arts), Saku
(Geography)

Assistant Professors:

Makang (Philosophy),
Redmond (Psychology),
Rossi (Economics)

- You may minor in African American Studies. There is no major available.
- All courses in African American Studies may be taken whether or not you wish to pursue the minor.
- A listing of Special Topics courses offered for the minor in future semesters is available through the Coordinator.

	For Minor
Hours Required in African American Studies:	9
Hours Required in Other Departments:	12
Total Hours Required:	21

Summary of Requirements for Minor in African American Studies

Minor

1. Required Core Courses:

(9 hours)

AAST 200 Introduction to African American Studies
AAST 300/HIST 301 Traditional Africa
AAST 400 Africans of the Diaspora

2. Elective Courses:

(12 hours)

A minimum of 3 hours must be taken from Humanities, and 3 hours from Social Sciences.

Humanities

ART 302 Artistic Traditions: Africa and the Americas
ENGL 231 African American Literature
HIST 406 20th Century African American Leadership in the United States
HIST 453 Contemporary Africa
PHIL 311 Asian and African Philosophy
Special Topics courses numbered 290, 403, 490, or 491 when approved by Coordinator

Social Sciences

ECON 313 Economics of Race and Gender
GEOG 324 Urban Geography: Internal City Patterns
GEOG 403 Geography of Sub-Sahara Africa
POSC 456 Urban Politics and Policy
PSYC 418 Social Psychology
SOC 305 Racial and Cultural Minorities
SOC 306 The Sociology of African Americans
Special Topics courses numbered 290, 403, 490, or 491 when approved by Coordinator

Other

AAST 494 Practicum - limited to one 3 hour total enrollment
BUAD 352 Employment Law
PHEC 415 The Black Athlete in American Society
Independent Studies courses numbered 499 when approved by the Coordinator, limited to one 3-hour total enrollment.

Art & Design

Major

Teaching Certification Option

Professors:

Brown, Davis (chair),
Dieruf, Llewellyn

Associate Professor:

Rhodes

Assistant Professors:

Erdman, Hodges

- 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. A certificate is offered in Computer Print Graphics. See separate sections of catalog.
- You must successfully pass the 30 hour Core Review and Senior Review.
- 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, particularly in graphic design. Student interns have been placed in government services, design studios, public relations firms and advertising businesses.
- You may elect the teaching certification option (internship required).

	For Major	For Teaching Cert. Option
Hours Required in Art:	60	60
Hours Required in Other Departments:	0	38.5
Total Hours Required:	60	98.5

Summary of Requirements for BFA in Art & Design

Major

1. Basic Courses:

(12 hours)

ART 104 Two-Dimensional Design
ART 105 Three-Dimensional Design
ART 212 Drawing
ART 412 Advanced Drawing

2. Introductory Studio:

(18 hours)

Choose from:

ART 202 Ceramics
ART 207 Graphic Design
ART 221 Painting
ART 232 Printmaking
ART 235 Photography
ART 240 Sculpture
ART 307 Computer Graphics *or* 236 Digital Imaging

Note: Students wishing to specialize in Graphic Design must include 207, 235, 307. Students seeking certification to teach art must include 202, 221, 232, 240.

3. Core Review:

(0 hours)

ART 291 Core Review

4. Art History and Critical Studies:

(12 hours)

ART 301 Artistic Traditions: Asia
or ART 302 Artistic Traditions: Africa and the Americas
ART 360 Western Art History
ART 408 20th Century Art History
ART 415 Art Criticism

5. Advanced Studio Focus **OR**

(15 hours -12 credit hours in focus and 3 credit hours in secondary area.)

ART 402 Advanced Ceramics
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 and Video Media

*ART 414 Advanced Graphic Design: Interactive
Multimedia Design

Dual-Media Studio Focus+

(15 hours - 9 credit hours in focus and 6 hours in secondary area.)

ART 402 Advanced Ceramics
ART ___Advanced Graphic Design+
ART 421 Advanced Painting
ART 432 Advanced Printmaking
ART 435 Advanced Photography
ART 440 Advanced Sculpture

+Note: Only students seeking certification to teach art may have a Dual-Media focus in Graphic Design.

6. Senior Portfolio:

(3 hours)

ART 411 Senior Portfolio (*co-registration in ART 491 required*)

7. Senior Review:

(0 hours)

ART 491 Senior Review (*co-registration in ART 411 required*)

Summary of Requirements for 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.
- Select the following courses in partial fulfillment of the Introductory Studio requirement:
 - ART 202 Ceramics
 - ART 221 Painting
 - ART 232 Printmaking
 - ART 240 Sculpture
- Meet the phase admissions requirements summarized in the Educational Professions section.
- Complete the professional education sequence described in Education: K-12 Programs.

For Minor

Hours Required in Art:	15-18
Hours Required in Other Departments:	3-0
Total Hours Required:	18

Art History

Minor

Professors:

Brown, Davis (chair),
Dieruf, Llewellyn

Associate Professor:

Rhodes

Assistant Professors:

Erdman, Hodges

- 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.
- You cannot major in Art History.

Summary of Requirements for Minor in Art History

Minor

1. Basic Courses:

(3 hours)

Choose from:

ART 100 Art Appreciation (*GEP LAC Group A*)

HIST 100 The Twentieth Century World (*GEP LAC Group B*)

2. Core Courses:

(12 hours)

ART 301 Artistic Traditions: Asia

or ART 302 Artistic Traditions: Africa and the Americas

ART 360 Western Art History

ART 408 20th Century Art History

ART 415 Art Criticism

3. Elective:

(3 hours)

Choose from:

ART 370 Women/Gender and the Visual Arts

ART 380 19th Century Art History

ART 430 Greek and Roman Art

ART 460 Renaissance and Baroque Art History

Athletic Training

Major

Director:

James Racchini, Instructor,
Department of Health, Physical
Education and Recreation

Assistant Professor:

Wright

Head Athletic Trainer:

Zaloga

Assistant Athletic Trainers:

Bray, Wright

- The Athletic Training Program is in candidacy status for accreditation by the Commission on Accreditation of Allied Health Education Programs (CAAHEP).
- Special entrance requirements are designed to insure that students are capable of completing the rigorous curriculum and will have the ability to pass the National Athletic Trainers' Association Board of Certification (NATABOC) exam.
- You must pass the NATABOC exam to become a Certified Athletic Trainer.

	For Major
Hours Required in HPE:	55
Hours Required in Other Departments:	27
Total Hours Required	82

Admission Requirements

To be considered for full admission into the Athletic Training Education Program (ATEP), 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 Program Director.
2. A minimum 2.5 overall GPA.
3. A minimum of a "C" grade in each of the following courses:
 - a. BIOL 149 General Biology
 - b. HEED 101 Community Health Promotion
 - c. HEED 103 Foundations of Exercise & Sport Science
4. Satisfactory completion of 50 observational hours in the FSU athletic training room. The student must make arrangements with the Program Director prior to starting observation.
5. A completed formal application for admission into the ATEP including an essay.
6. Two completed recommendation forms from non-Athletic Training faculty members.
7. Completion of a formal interview with the ATEP selection committee.

In addition to the previous criteria, the student must complete a physical examination that includes each of the following:

- Clearance on TB testing
- Meningococcal vaccination
- Hepatitis B vaccination

Application Review Process

1. Students who have met the above minimum requirements will be evaluated on the following scale:

Overall GPA	25 points possible
Prerequisite GPA	25 points possible
Faculty Recommendations	20 points possible
Interview	15 points possible
Application/Essay	15 points possible
	100 points possible

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

100 – 75 points	Student recommended for full admission
74 - 70 points	Student <i>provisionally admitted</i> for one academic year (if clinical placements available)
Below 70 points	Student rejected for admission/may reapply next academic year
Provisional Admission	Student is admitted into program with the stipulation that he/she must rectify deficiencies identified by the ATEP admission committee by the end of the next academic year

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 2.5
2. A minimum grade of "C" 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 ATEP.

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/Minor in Athletic Training

Major

1. HPE Courses:

(55 hours)

HEED 101 Community Health Promotion
 HEED 103 Foundations of Exercise & Sport Science
 HEED 200 Nutrition
 HEED 206 Introduction to Athletic Training
 HEED 210 Athletic Taping and Bracing Techniques
 HEED 222 Clinical Experiences in Athletic Training I
 HEED 223 Clinical Experiences in Athletic Training II
 HEED 306 Organization & Administration of Exercise & Sport Science
 HEED 318 Orthopedic Assessment I Upper Extremity
 HEED 319 Orthopedic Assessment II Lower Extremity
 HEED 320 Pharmacology and General Medical Conditions
 HEED 322 Clinical Experiences in Athletic Training III
 HEED 323 Clinical Experiences in Athletic Training IV
 HEED 408 Therapeutic Modalities in Sports Medicine
 HEED 422 Clinical Experiences in Athletic Training V
 HEED 423 Clinical Experiences in Athletic Training VI
 PHEC 163 Strength Training & Conditioning
 PHEC 303 Biomechanics for Exercise and Sport Science
 PHEC 401 Physiology of Exercise
 PHEC 410 Advanced Strength Training
 PHEC 411 Evaluation and Prescription in Fitness
 PHEC 413 Rehabilitation Techniques in Sports Medicine
 PHEC 435 Lifespan Health and Fitness

2. Courses in Other Departments:

(27 hours)

BIOL 149 General Biology (*GEP LAC Group C*)
 BIOL 201 Anatomy & Physiology I
 BIOL 202 Anatomy & Physiology II
 MATH 209 Elements of Applied Probability and Statistics (*GEP BR Math*)
 PHIL 101 Introduction to Philosophy (*GEP LAC Group B*)
 PHIL 313 Biomedical Ethics
 PSYC 150 General Psychology (*GEP LAC Group D*)
 PSYC 430 Health Psychology

Biology

Major

Minor

Pre-health Professions Option

Concentrations in biotechnology environmental science

Teaching Certification Option

Professors:

Barry, Harman, Morton,
Riley, Yoder

Associate Professor:

Pegg, Raesly, Seddon
(Chair), Serfass, Shumway

Assistant Professors:

Fritz, Li

Instructor:

Lyon

- You may elect the teaching certification option (internship required). Select the biology major without concentration to meet certification requirements..

- The Department of Biology also offers majors in Interpretive Biology and Natural History and Wildlife & Fisheries, as well as a minor in Forestry. The department collaborates with geography to offer the degree in Environmental Analysis and Planning. See separate catalog sections for descriptions of these programs.

	For Major	For Minor	Pre-Health Prof. Option	Biotech. Concen.	Env. Science Concen.	Teaching Cert. Option
Hours Required in Biology:	39-40	24	40	43-44	36-42	39-40
Hours Required in Other Depts.:	32	0	32	39-40	45-51	74.5
Total Hours Required:	71-72	24	72	82-84	87	113.5-114.5

Summary of Requirements for Major/Minor in Biology

Major	Minor
<p>1. Introductory Level Courses: (8 hours) BIOL 149 General Biology I (GEP LAC Group C) BIOL 150 General Biology II</p>	<p>(8 hours) BIOL 149 General Biology I (GEP LAC Group C) BIOL 150 General Biology II</p>
<p>2. Advanced Level Courses: (15 hours) BIOL 304 Microbiology BIOL 310 Cell Biology BIOL 340 General Ecology BIOL 350 Genetics</p>	
<p>3. Distribution Within Department: (16-17 hours) Total of 4 courses in 3 groups; at least 1 in each group: Group I BIOL 302 Animal Physiology BIOL 303 Plant Physiology Group II BIOL 411 Invertebrate Zoology Either BIOL 327 Comparative Anatomy or BIOL 426 Vertebrate Zoology Group III BIOL 311 Morphology of Thallophytes BIOL 312 Morphology of Embryophytes</p>	
<p>4. Elective Hours in Department: (0 hours)</p>	<p>(16 hours) Select from biology courses at the 200 level or higher.</p>
<p>5. Required Courses in Other Departments: Chemistry: (18 hours) CHEM 101, 102 General Chemistry (101-GEP LAC Group C) CHEM 301, 302 Organic Chemistry Mathematics: (6 hours) MATH 209 Elements of Applied Probability & Statistics (GEP BR Math) or MATH 219 Honors: Elements of Applied Probability & Statistics Select one from: MATH 102 College Algebra (GEP BR Math) MATH 103 Trigonometry MATH 120 Pre-Calculus Mathematics (GEP BR Math) or any course above 210 Physics: (8 hours) PHYS 215, 216 General Physics I and II (215-GEP LAC Group C) or PHYS 261, 262 Principles of Physics I and II (261-GEP LAC Group C)</p>	

- Biology is often selected as a major by students planning to enter medicine and other health professions careers. If you plan advanced study in the health professions, you should choose the pre-health professions option.

Pre-Health Professions Option for Biology Majors

(Pre-Dental, Pre-Medical, Pre-Optometry and Pre-Veterinary)

1. Introductory Level Courses:

(8 hours)

BIOL 149 General Biology I *(GEP LAC Group C)*

BIOL 150 General Biology II

2. Advanced Level Courses:

(28 hours)

BIOL 302 Animal Physiology

BIOL 304 Microbiology

BIOL 310 Cell Biology

BIOL 311 Morphology of the Thallophytes

or BIOL 312 Morphology of the Embryophytes

BIOL 327 Comparative Anatomy

BIOL 340 General Ecology

BIOL 350 Genetics

3. Elective Hours in Biology Department:

(4 hours)

Choose 1 course:

BIOL 306 Vertebrate Embryology

BIOL 404 Histology

BIOL 412 General Parasitology

4. Required Advanced Courses in Other Departments:

(32 hours)

Same as major. See #5 above.

- The biotechnology concentration in biology offers you an interdisciplinary program with a strong emphasis on laboratory experiences in biology and chemistry, while maintaining a strong biology core. The option is best suited for students who wish to pursue an advanced degree in cell or molecular biology or to find employment in the biotechnology industry.

Summary of Requirements for Major in Biology - Biotechnology Concentration

1. Introductory Level Courses:

(8 hours)

BIOL 149 General Biology I *(GEP LAC Group C)*

BIOL 150 General Biology II

2. Advanced Level Courses:

(15 hours)

BIOL 304 Microbiology

BIOL 310 Cell Biology

BIOL 340 General Ecology

BIOL 350 Genetics

3. Biotechnology Option:

(17 hours)

BIOL 401 Genetics Lab

BIOL 435 Molecular Biology

BIOL 437 Molecular Biology Seminar

BIOL 438 Biotechnology Laboratory *(3 hours)*

BIOL 440 Developmental Biology

BIOL 445 Immunology

4. Select one from:

(3-4 hours)

BIOL 302 Animal Physiology

BIOL 303 Plant Physiology

BIOL 404 Histology

BIOL 436 Electron Microscopy

BIOL 499 Special Problems in Biology

or IDIS 493 Honors Thesis

5. Required Courses in Other Departments:**Chemistry:***(25 hours)*CHEM 101 General Chemistry I (*GEP LAC Group C*)

CHEM 102 General Chemistry II

CHEM 301 Organic Chemistry I

CHEM 302 Organic Chemistry II

CHEM 455 Biochemistry I

CHEM 456 Biochemistry Lab

CHEM 457 Biochemistry II

Mathematics:*(6-7 hours)*

MATH 209 Elements of Applied Probability & Statistics

or Math 219 Honors: Elements of Applied Probability & Statistics*Select one from:*

MATH 220 Calculus for Applications I

MATH 236 Calculus I

Physics:*(8 hours)*

PHYS 215, 216 General Physics I and II

or PHYS 261, 262 Principles of Physics I and II

- 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:***(17 hours)*BIOL 149 General Biology I (*GEP LAC Group C*)

BIOL 150 General Biology II

ECON 201/211* Macroeconomics (*GEP LAC Group D*)GEOG 103/113* Physical Geography (*GEP LAC Group C*)

POSC 110/112* Introduction to American Politics

or POSC 113/114* Introduction to World Politics (*GEP LAC Group D*)*or* POSC 131 Introduction to Comparative Politics*(Check the prerequisites for other POSC courses before choosing your introductory POSC course)***2. Advanced Level Courses:***(43 hours)*

BIOL 200 Scientific Investigation and Communication

BIOL 304 Microbiology

BIOL 310 Cell Biology

BIOL 340 General Ecology

BIOL 350 Genetics

BIOL 406 Ornithology

or BIOL 423 Mammalogy*or* BIOL 426 Vertebrate Zoology

BIOL 425 Forest Science

BIOL 450 Ecology and Management of Wildlife Populations

or BIOL 420 Fish Management and Culture

GEOG 473 Environmental Law

ECON 202 Microeconomics

BIOL 494 Field Experiences in Biological Sciences

or ECON 495 Internship in Economics (*co-registration in ECON 492 is required*)*or* POSC 495 Internship in Political Science (*co-registration in POSC 492 is required*)*(6 credits minimum)*

3. Required Supporting Courses:*(18 hours)*CHEM 101 General Chemistry I (*GEP LAC Group C*)

CHEM 102 General Chemistry II

CHEM 420 Environmental Chemical Analysis

MATH 209/219* Elements of Applied Probability & Statistics (*GEP BR Math*)MATH 102 College Algebra (*GEP BR Math*)*or* MATH 103 Trigonometry*or* MATH 120 Pre-Calculus Mathematics (*GEP BR Math*)*or any MATH course above 210***4. Electives:***(9 hours)**Select at least three courses listed below. At least one course must be taken from each group.***Group I Advanced Economics**

ECON 309 Comparative Economic Systems

ECON 405 Economic Growth and Development: The Developing Economies

Group II Advanced Political Science

POSC 330 Politics of Africa

POSC 331 Politics of Latin America

POSC 332 Politics of the Middle East

POSC 450 Environmental Public Policy

GEOG 407 Political Geography

Group III Advanced Humanities

ENGL 440 Literature of the Environment

HIST 309 World Environmental History

PHIL 315 Philosophy and the Environment

Summary of Requirements for Teaching Certification Option in Biology

If you wish to complete a Maryland State approved program in teaching Biology, you must:

- Complete the BA/BS in Biology (without concentration).
- Meet the phase admissions requirements summarized in the Educational Professions section.
- Complete the professional education sequence described in Education: Secondary School Programs.

Business Administration

	For Major	For Minor
Hours Required in Business Administration:	39-51	15
Hours Required in Other Departments:	27-39	6
Total Hours Required:	78	21

Major

Minor

Concentrations in:

- general management
- human resource management
- small business/entrepreneurship
- marketing
- finance

Professors:

Hawk, Leonard, Lyons,
McClive, Plucinski,
Poorsoltan, Rahman, Shah,
Tootoonchi, Wilkinson

Associate Professors:

Ashkeboussi, Ashley-Cotleur,
Dulz, LaFief, McLellan, Ross,
Shin, Singh

Assistant Professors:

Anderson, Harrell-Cook,
Parker

Instructors:

Gaumer, Higgins, Shore,
Sigerstad (Chair)

- All concentrations may be completed on the Frostburg campus. The concentration in general management may be completed at the Center in Hagerstown, or at the Center in Frederick.

Summary of Requirements for Major/Minor in Business Administration

Major	Minor
1. Required Courses in Business Administration:	
<i>(24 hours)</i>	<i>(15 hours)</i>
BUAD 291 *Legal Environment of Business	BUAD 100 Introduction to Business
BUAD 351 *Management of Organizations	or BUAD 291 Legal Environment of Business
BUAD 355 Operations Management	BUAD 351 Management of Organizations
BUAD 356 Leadership & Interpersonal Skills	BUAD 361 Principles of Marketing
BUAD 361 *Principles of Marketing	BUAD 303 Principles of Finance
BUAD 370 *Corporate Finance	or BUAD 370 Corporate Finance
BUAD 380 Social Responsibility in Business	or BUAD 376 Financial Management
BUAD 485 *Business Policy and Strategy	BUAD 356 Leadership & Interpersonal Skills
	or BUAD 320 Advanced Computer Applications in Business
2. Required Courses in Other Departments:	
Accounting <i>(6 hours)</i>	<i>(3 hours)</i>
ACCT 201 *Introductory Accounting I	ACCT 100 Financial Accounting
ACCT 202 *Introductory Accounting II	or ACCT 201 Introductory Accounting I
Communication Studies <i>(3 hours)</i>	
CMST 102 *Intro. to Human Communication	
Computer Science <i>(6 hours)</i>	
COSC 100 *Introduction to Computer Science	
COSC 220 Introduction to Software Applications	
Economics <i>(6 hours)</i>	<i>(3 hours)</i>
ECON 201 *Principles of Economics (Macro)	ECON 200 Basic Economics
<i>(GEP LAC Group D)</i>	or ECON 201 Principles of Economics (Macro)
ECON 202 *Principles of Economics (Micro)	<i>(GEP LAC Group D)</i>
Mathematics <i>(6 hours)</i>	
MATH 106 Algebra w/Calculus for Business	
or MATH 220 Calculus for Applications I	
MATH 209 Elements of Applied Probability and Statistics <i>(GEP BR Math)</i>	
3. Area of Concentration:	
<i>(27 hours)</i>	
<i>Majors must choose to concentrate in one of the following:</i>	
● General Management	
● Human Resource Management	
● Small Business/Entrepreneurship	
● Marketing	
● Finance	
<i>(Requirements for each are specified below.)</i>	

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

Requirements for Concentration in General Management

- 1. Core Courses (51 hours):**
Required of all majors in Business Administration
- 2. Required courses in Concentration (12 hours):**
BUAD 320 Advanced Computer Applications in Business
BUAD 330 International Business
BUAD 357 Human Resources Management
ACCT 310 Managerial Accounting for Business *or* BUAD 476 Financial Management
- 3. Elective Courses (15 hours):**
Five courses from among the following:
Any BUAD courses numbered 310 and above not used to meet core or concentration requirements
ECON 305 Managerial Economics
CMST 300 Interpersonal Communication, *or* CMST 322 Presentational Communication, *or* CMST 335 Organizational Communication

Requirements for Concentration in Human Resource Management

- 1. Core Courses (51 hours):**
Required of all majors in Business Administration
- 2. Required courses in Concentration (18 hours):**
BUAD 320 Advanced Computer Applications in Business
BUAD 352 Employment Law
BUAD 357 Human Resources Management
BUAD 452 Staffing and Development
BUAD 456 Compensation Management
BUAD 457 Labor Relations
- 3. Elective Courses (9 hours):**
Three from among the following:
Any BUAD courses numbered 310 and above not used to meet core or concentration requirements
ECON 301 Labor Economics
PSYC 360 Industrial/Organizational Psychology
CMST 300 Interpersonal Communication, *or* CMST 322 Presentational Communication, *or* CMST 335 Organizational Communication

Requirements for Concentration in Small Business / Entrepreneurship

- 1. Core Courses (51 hours):**
Required of all majors in Business Administration
- 2. Required courses in Concentration (15 hours):**
BUAD 320 Advanced Computer Applications in Business
BUAD 357 Human Resources Management
BUAD 359 Total Quality Management
BUAD 366 Consumer Behavior
BUAD 415 New Business Ventures

- 3. Elective Courses (12 hours):**
Four courses from among the following:
Any BUAD courses numbered 310 and above not used to meet core or concentration requirements
CMST 300 Interpersonal Communication, *or* CMST 322 Presentational Communication, *or* CMST 335 Organizational Communication

Requirements for Concentration in Marketing

- 1. Core Courses (51 hours):**
Required of all majors in Business Administration; listed above.
- 2. Required Courses in Concentration (15 hours):**
BUAD 363 Advertising
BUAD 366 Consumer Behavior
BUAD 462 Marketing Research
BUAD 465 Marketing Strategies
BUAD 469 Marketing Plans Development
- 3. Elective Courses (12 hours):**
Select four courses from:
BUAD 364 Retail Management
BUAD 365 Principles of Selling
BUAD 460 International Marketing
BUAD 466 Services Marketing
BUAD 467 Internet Marketing
ECON 460 Econometrics
GEOG 410 Locational Analysis
MATH 481 Applied Regression Analysis
SOC 310 Statistics for Social Science

Requirements for Concentration in Finance

- 1. Core Courses (51 hours):**
Required of all majors in Business Administration.
- 2. Required Courses in Concentration (12 hours):**
BUAD 375 Financial Institutions Management
BUAD 475 Securities Investment
BUAD 476 Financial Management
BUAD 479 Financial Policy
- 3. Elective Courses (15 hours):**
Three courses from among the following:
BUAD 371 Insurance Planning and Risk Management
BUAD 373 Commercial Bank Management
BUAD 377 Retirement Income Planning
BUAD 381 Principles of Real Estate
BUAD 470 International Financial Management

Two courses from among the following:
ACCT 301 Intermediate Accounting I
ACCT 302 Intermediate Accounting II
ACCT 340 Financial Reporting Issues
ACCT 420 Tax
ECON 351 Intermediate Macro-Economics
ECON 352 Intermediate Micro-Economics
ECON 401 International Finance
ECON 407 Business Cycles and Forecasting

Business Minor for Science & Technology Majors

Minor

Coordinator:

Thomas Sigerstad, Chair,
Department of Business
Management

- The combination of your science/technology disciplinary training and an understanding of modern business and managerial practices can give you a competitive advantage in the workplace.
- This minor is open only to students majoring in:
 - Biology
 - Chemistry
 - Computer Science
 - Earth Science
 - Engineering
 - Environmental Analysis and Planning
 - Mathematics
 - Physics

	For Minor
Hours Required in Business Administration:	18
Hours Required in Other Departments:	6
Total Hours Required:	24

Summary of Requirements for Minor in Business for Science & Technology Majors

Minor

1. Business Administration Courses:

(18 hours)

BUAD 100 Introduction to Business
 BUAD 303 Principles of Finance
 BUAD 351 Management of Organizations
 BUAD 356 Leadership & Interpersonal Skills
 BUAD 361 Principles of Marketing
 BUAD 494 Field Experience in Business Administration
 or BUAD 492 & 495 [Optional] Internship, including research paper

2. Economics

(3 hours)

ECON 200 Basic Economics *(GEP LAC Group D)*

3. Accounting

(3 hours)

ACCT 100 Financial Accounting

Business Education

Major

Coordinator:

Thomas Palardy, Professor,
Department of Educational
Professions

- A cooperative program between the Business Administration and Educational Professions Departments of FSU and the Office Technologies Department of Allegany College of Maryland. We prefer that you complete the requirements of the first two years elsewhere and take the last two years at FSU. The following are the minimum lower division undergraduate requirements which must be completed if you transfer to FSU from a two-year college other than Allegany College of Maryland:

Keyboarding (2 semesters including intermediate and one more advanced course, or the completion of the more advanced course with a grade of at least C.)

Shorthand/Transcription (2 semesters including intermediate and one more advanced course, or the completion of the more advanced course with a grade of at least C.)

One 3-hour course in each of the following: office communications, office applications, word processing, and secretarial office procedures.

- Required secretarial internship and teaching internship.

For Major

Hours Required at ACM*	33
Hours Required at FSU	66.5
Total Hours Required:	99.5

Summary of Requirements for Major in Business Education

Required Courses at Allegany College of Maryland*

1. Secretarial Science:

(24 hours)

- Off.Tech. 102 Intermediate Keyboarding
- Off.Tech. — Keyboarding/Information Processing Elective
- Off.Tech. 103 Office Notetaking *or* Off.Tech. 104 Office Transcription
- Off.Tech. — Transcription Elective
- Off.Tech. 106 Office Communication
- Off.Tech. 114 Word Processing I
- Off.Tech. 201 Electronic Office Applications
- Off.Tech. 210 Secretarial Office Procedures

2. Data Processing:

(3 hours)

- Comp Tech 101 Introduction to Computer Science

3. Business Administration:

(6 hours)

- BusAd. 201 Principles of Accounting, I
- BusAd. 202 Principles of Accounting, II

Note: Business Administration courses are also offered at Frostburg.

Required Courses at Frostburg State University

1. Business Administration:

(12 hours)

- BUAD 291 Legal Environment of Business
- BUAD 320 Advanced Computer Applications in Business
- BUAD 351 Management of Organizations
- BUAD 361 Principles of Marketing

2. Computer Science:

(3 hours)

- COSC 220 Introduction to Software Applications

3. Economics:

(6 hours)

- ECON 201 Principles of Economics (Macro)
- ECON 202 Principles of Economics (Micro)

4. Mathematics:

(3 hours)

- A mathematics course acceptable in FSU's General Education Program

5. Professional Education Sequence:

(42.5 hours)

See professional education sequence described in Education: Secondary Programs and the Phase Admissions requirements summarized in the Educational Professions section of this catalog.

**Note: Allegany College of Maryland courses are used to determine the equivalency of other two-year college courses.*

Chemistry

Major

Minor

Track in traditional chemistry

Concentrations in: professional chemistry biochemistry

Teaching certification option

Professors:

Larivee, Weser

Associate Professors:

Mumper (Chair), Senese

Assistant Professor:

Simon

- 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.

	Trad. Track	For Major Profess. Con.	Biochem. Con.	Teaching Certification	For Minor
Hours Required in Chemistry:	38	48	40	41	25
Hours Required in Other Departments:	20	20	31	66.5	0
Total Hours Required:	58	68	71	107.5	25

Summary of Requirements for Major/Minor in Chemistry

Major	Minor
<p>1. Core Introductory Level Courses: (8 hours) CHEM 101 General Chemistry I (GEP LAC Group C) CHEM 102 General Chemistry II</p>	<p>(8 hours) CHEM 101 General Chemistry I (GEP LAC Group C) CHEM 102 General Chemistry II</p>
<p>2. Core Advanced Courses: (22 hours) CHEM 300 Computational Tech. in Chem CHEM 301 Organic Chemistry I CHEM 302 Organic Chemistry II CHEM 320 Quantitative Anal. Chem. CHEM 441 Physical Chem. Lecture I CHEM 445 Physical Chemistry Lab I CHEM 491 Seminar in Chemistry I CHEM 492 Seminar in Chemistry II</p>	<p>(17 hours) CHEM 301 Organic Chemistry I CHEM 302 Organic Chemistry II 7 additional hours in Chemistry, 300 level or above</p>

3. Required Courses in Other Departments:

Mathematics: (8 hours)

MATH 236 Calculus I (GEP BR Math)

MATH 237 Calculus II

Physics: (8 hours)

PHYS 215, 216 General Physics I, II (215: GEP BR Group C)

or PHYS 261, 262 Principles of Physics I, II (261: GEP BR Group C)

4. Choice of Specialization:

(12 - 61.5 hours)

Majors must choose the Traditional Track, Professional Concentration, Biochemistry Concentration or Teaching Certification Option. Requirements listed below.

Requirements for the Traditional Track for Chemistry Majors

1. Core Courses:

(46 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

Requirements for the Professional Concentration for Chemistry Majors

1. Core Courses:

(46 hours)

Required of all Chemistry majors, listed above.

2. Additional Core Courses:

(12 hours)

CHEM 411 Advanced Inorganic Chemistry

CHEM 421 Instrumental Analysis

CHEM 442 Physical Chemistry II

CHEM 446 Physical Chemistry Lab II

3. Advanced Courses

(6-7 hours)

CHEM 455 Biochemistry I

CHEM 493 Advanced Chemistry Research *(1-3 hours)*

If less than three hours of CHEM 493 are taken, then one additional advanced course from among the following is required:

CHEM 438 Advanced Organic Chemistry

CHEM 457 Biochemistry II

CHEM 460 Environmental Chemistry

CHEM 490 Selected Topics in Chemistry

4. Required Courses in Other Departments

Mathematics: *(4 hours)*

MATH 238 Calculus III

Requirements for the Biochemistry Concentration for Chemistry Majors

(Pre-Dental, Pre-Medical, Pre-Optometry, Pre-Veterinary, Pre-Pharmacy)

1. Core Courses:

(46 hours)

Required of all Chemistry majors, listed above.

2. Advanced Courses:

(7 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

BIOL 304 Microbiology

BIOL 350 Genetics

BIOL 435 Molecular Biology

4. Required Electives:

(3-4 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 *(3 hours minimum)*

MATH 238 Calculus III

Requirements for the Teaching Certification Option in Chemistry

1. Core Courses:

(46 hours)

Required of all Chemistry majors, listed above.

2. Advanced Courses:

(11 hours)

CHEM 442 Physical Chemistry II

CHEM 446 Physical Chemistry Lab II

CHEM 455 Biochemistry I

CHEM 460 Environmental Chemistry

CHEM 493 Advanced Chemistry Research (1 hour)

3. Required Courses in Other Departments

(8 hours)

MATH 238 Calculus III

BIOL 149 General Biology

4. Required Courses in Education

(42.5 hours)

See Professional Education sequence for Secondary Programs in the Educational Professions section of this catalog.

BS in Chemistry/ Doctor of Pharmacy

Dual-degree program

Coordinator:

Don Weser, Professor,
Department of Chemistry

- This program allows you to earn both degrees in a seven-year period.
- The chemistry degree from FSU will be a BS in Chemistry, Biochemistry concentration.
- In this program you attend FSU for three years and the University of Maryland School of Pharmacy for four years. After completing the academic requirements at FSU (three years for most students), you will take the PCAT (entrance exam) and

For Pre-professional Program

Hours Required at Frostburg State University:	90
Hours Required at UM School of Pharmacy:	30
Total Hours for B.S. in Chemistry:	120

Summary of Requirements at FSU for Dual-degree in Chemistry/Pharmacy

1. Chemistry

(26 hours)

CHEM 101 & 102 General Chemistry I & II (101 - GEP LAC Group C)

CHEM 301 & 302 Organic Chemistry I & II

CHEM 300 Computational Techniques in Chemistry

CHEM 320 Quantitative Analysis

CHEM 491 & 492 Seminar in Chemistry I & II

2. Biology

(15 hours)

BIOL 149 General Biology I (GEP LAC Group C)

BIOL 304 Microbiology

BIOL 350 Genetics

BIOL 435 Molecular Biology

3. Mathematics

(11 hours)

MATH 236 & 237 Calculus I & II (MATH 236 - GEP BR Math)

MATH 209 Elements of Prob. and Stat. (GEP BR Math)

or MATH 380 Intro. to Prob. and Stat.

4. Physics

(8 hours)

PHYS 215 & 216 Gen. Physics I & II (215 - GEP BR Group C)

or PHYS 261 & 262 Princ. of Physics I & II (261 - GEP BR Group C)

apply for admission to UM School of Pharmacy. If granted admission, you will attend the UM School of Pharmacy for four years and attain the Doctor of Pharmacy. After completion of a year at the UM School of Pharmacy with at least a 2.0 (C) average, you will apply for, and be granted a BS in Chemistry from FSU.

- In the event you are not admitted to the UM School of Pharmacy, you will be equipped to apply to other Pharmacy schools, or to complete the BS in Chemistry at FSU.
- The Department of Chemistry also offers concentrations in Professional Chemistry and Biochemistry, a Traditional Chemistry track, and a secondary teaching certification option.

Dual Degree Requirements at FSU

1. Completion of required courses in the dual degree study program (listed above), 60 semester hours.
2. Completion of a minimum of ninety (90) semester hours, including at least a minimum of thirty (30) credits total and fifteen (15) upper-division credits at Frostburg State University.
3. Completion of the FSU General Education Program.
4. Completion of at least one-half of the semester hours required in the biochemistry concentration of the chemistry degree program through course work or special departmental exams at FSU.
5. Be admitted to the University of Maryland School of Pharmacy and successfully complete the first year courses in the Doctor of Pharmacy degree program with a grade point average of 2.0 (C) or better.
6. Admission to the University of Maryland School of Pharmacy is not guaranteed. If not accepted into the University of Maryland School of Pharmacy, complete BS in chemistry, biochemistry track at FSU.

Coaching

Minor

Coordinator:

Sharon Irwin, Assistant Professor of Health, Physical Education & Recreation

Professors:

Lewis, Surgent

Assistant Professors:

Strieby, Wright

Head Athletic Trainer:

Zaloga

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

	For Minor
Hours Required in HPE:	22
Hours Required in Other Departments:	0
Total Hours Required:	22

Summary of Requirements for Minor in Coaching

Minor

*All of the following:
(16 hours)*

- HEED 305 Care and Prevention of Athletic Injuries
- PHEC 163 Strength Training and Conditioning
- 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

Communication Studies

	For Major	For Minor
Hours Required in Communication Studies:	21-33	21
Hours Required in Other Departments:	6-18	3
Total Hours Required:	39	24

Summary of Requirements for Major/Minor In Communication Studies

Major

Minor

Professors:

Routhier, M. Wallinger

Associate Professor:

Kagey

- Only courses in which you earn a grade of C or better may count towards satisfaction of major or minor requirements.
- All grades earned in courses completed for the major in Communication Studies count in determining whether you meet the graduation requirement of a 2.0 cumulative grade point average in the major.

Major

Minor

1. Communication Studies Core Courses:

(18 hours)

All of the following:

CMST 102/112 Intro. to Human Comm.
 CMST 300 Interpersonal Communication
 CMST 302 Argumentation & Advocacy
 CMST 312 Language Behavior & Comm.
 CMST 485 Issues & Responsibilities of Comm.

and one from:

CMST 422 Seminar in Comm. Analysis
 CMST 451 Seminar in Communication Theory

2. Communication Studies Tracks:

(12 hours)

Select one of the following tracks:

a. Professional Communication

CMST 215 Small Group Communication
 CMST 225 Interviewing
 CMST 322 Presentational Communication
 CMST 335 Organizational Communication

b. Interdisciplinary Track

Select an additional four courses to create a definable Communication Studies Track. *This option requires the collaboration and written approval of your faculty advisor.*

You may select courses in art and design, business administration, communication studies, computer science, English, mass communication, philosophy, political science, psychology, and sociology.

3. Practicum:

(3 hours)

You are required to participate in a three-credit Practicum. This requirement may be met by completing three credits of CMST 494 Communication Studies Practicum, or by completing the graded academic portion of the internship course CMST 492 Internship Project.

4. Required Courses in Other Departments:

(6 hours)

COSC 100 Introduction to Computer Science
 MCOM 105 Intro. to Mass Communication

(21 hours)

All of the following:

CMST 102/112 Introduction to Human Communication
 CMST 485 Issues & Responsibilities of Communication

and one from:

CMST 300 Interpersonal Communication
 CMST 302 Argumentation and Advocacy
 CMST 312 Language Behavior & Comm.

and one from:

CMST 422 Seminar in Comm. Analysis
 CMST 451 Seminar in Communication Theory

and three additional courses from:

CMST 215 Small Group Communication
 CMST 225 Interviewing
 CMST 300 Interpersonal Communication
 CMST 302 Argumentation and Advocacy
 CMST 312 Language Behavior & Comm.
 CMST 322 Presentational Communication
 CMST 335 Organizational Communication
 CMST 422 Seminar in Comm. Analysis
 CMST 451 Seminar in Communication Theory

2. Required Courses in Other Departments:

(3 hours)

MCOM 105 Intro. to Mass Communication

Computer Print Graphics

Certificate

Professors:

Brown, Davis (chair),
Dieruf, Llewellyn

Associate Professor:

Rhodes

Assistant Professors:

Erdman, Hodges

- The certificate 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 certificate 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 certificate in four semesters.

	For Certificate
Hours Required in Art:	24
Hours Required in Other Departments:	0
Total Hours Required:	24

The certificate 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, 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.

Students may transfer a maximum of 12 credits into the program selected from ART 104, ART 105, ART 207, ART 212, and ART 412.

Summary of Requirements for Certificate in Computer Print Graphics

Minor

1. Required Courses:

(24 hours)

ART 104 Two-dimensional Design
 ART 105 Three-dimensional Design
 ART 207 Graphic Design*
 ART 212 Drawing
 ART 307 Computer Graphics
 ART 407 Advanced Graphic Design - Print (Level I)
 ART 407 Advanced Graphic Design - Print (Level II)
 ART 412 Advanced Drawing

** For students taking courses concurrently, the prerequisite of ART 104 may be waived by permission of the instructor.*

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.

Computer Science

Major

Minor

Concentration in: information systems

Professors:

Chitsaz, Tracy

Associate Professors:

Owens (Chair), Rinard,
Slemmer, Thiel

Assistant Professor:

Crall

Lecturers:

J. Hughes, Wortman

- 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: 100, 240, 350.
- The Department of Computer Science also offers four certificates to students in other majors and community members. (See separate section).

	For Major	For Minor	For Info. Systems Concentration
Hours Required in Computer Science:	43	20	43
Hours Required in Other Departments:	20	0	18-19
Total Hours Required:	63	20	61-62

Summary of Requirements for Major/Minor in Computer Science

Major	Minor
1. Core Courses:	
<i>(18 hours)</i>	<i>(11 hours)</i>
COSC 101 The Discipline of Computer Science	COSC 101 The Discipline of Computer Science
COSC 240 Computer Science I	COSC 240 Computer Science I
COSC 241 Computer Science II	COSC 241 Computer Science II
COSC 325 Software Engineering	
COSC 365 Digital Logic & Computer Design	
2. Required Advanced Courses:	
<i>(13 hours)</i>	
COSC 310 Data Structures & File Organization	
COSC 450 Programming Language Structures	
COSC 460 Operating Systems Concepts	
COSC 470 Compiler Designs and Constructions	
COSC 489 Computer Science Capstone	
3. Other Required Courses:	
Mathematics (14 hours)	
MATH 236, 237 Calculus I, II (<i>236 - GEP BR Math</i>)	
MATH 380 Introduction to Probability & Statistics	
MATH 350 Matrix Algebra	
<i>or</i> MATH 432 Differential Equations	
<i>or</i> MATH 437 Combinatorics and Graph Theory	
<i>or</i> MATH 470 Mathematical Models and Applications	
Other (6 hours)	
CMST 102 Introduction to Human Communication	
ENGL 338 Technical Writing (<i>GEP BR Adv. Comp.</i>)	
4. Electives:	
<i>(12 hours)</i>	<i>(9 hours)</i>
<i>Four additional computer science courses from:</i>	<i>Three additional computer science courses.</i>
COSC 305 Computer Ethics	<i>Two must be at the 300-level or above.</i>
COSC 335 Network Architecture Design	
COSC 345 The Internet and Multimedia Communications	
COSC 350 Computer Organization & Assembly Language	
COSC 390 Topics in Modern Programming Languages	
COSC 415 Computer Interfacing	
COSC 420 Robotics and Industrial Computer Applications	
COSC 430 Computer Education	
COSC 435 Network Implementation and Testing	
COSC 440 Database Management Systems	
COSC 445 Network and Distributed System Management	
COSC 455 Artificial Intelligence	
COSC 465 Computer Systems Architecture	
COSC 475 Interactive Computer Graphics	
COSC 485 Theory of Computation	
COSC 491 Seminar in Computer Science	
COSC 494 Field Exp. in Computer/Information Science	
COSC 499 Individual Problems in Computer Science	

Requirements for Major Concentrating in Information Systems

1. Core Courses:

(18 hours)

COSC 101 The Discipline of Computer Science
 COSC 240 Computer Science I
 COSC 241 Computer Science II
 COSC 325 Software Engineering
 COSC 365 Digital Logic & Computer Design

2. Required Advanced Courses:

(13 hours)

COSC 300 Structured System Analysis and Design
 COSC 335 Network Architecture Design
 COSC 440 Database Management Systems
 COSC 460 Operating Systems Concepts
 COSC 489 Computer Science Capstone

3. Other Required Courses:

Mathematics *(6-7 hours)*

MATH 220 Calculus for Applications
or MATH 236 Calculus I *(GEP BR Math)*
 MATH 209/219 Elements of Applied Probability & Statistics *(GEP BR Math)*
or MATH 380 Intro. to Probability & Statistics

Other *(9 hours)*

ENGL 338 Technical Writing *(GEP BR Adv. Comp.)*
 ACCT 201 Introductory Accounting I
 CMST 102 Introduction to Human Communication

4. Electives:

(12 hours)

Four additional computer science courses from:

COSC 305 Computer Ethics
 COSC 320 Business Programming
 COSC 345 The Internet and Multimedia Communications
 COSC 350 Computer Organization and Assembly Language
 COSC 380 Computer-Based Information Systems
 COSC 390 Topics in Modern Programming Languages
 COSC 415 Computer Interfacing
 COSC 420 Robotics and Industrial Computer Applications
 COSC 430 Computer Education
 COSC 435 Network Implementation and Testing
 COSC 445 Network and Distributed System Management
 COSC 455 Artificial Intelligence
 COSC 465 Computer Systems Architecture
 COSC 475 Interactive Graphics
 COSC 480 Knowledge-Based Systems
 COSC 485 Theory of Computation
 COSC 491 Seminar in Computer Science
 COSC 494 Field Experience in Computer/Information Science
 COSC 499 Individual Problems in Computer Science

5. Elective in Business

(3 hours)

Any 300- or 400-level course in Business Administration

Computer Science

Certificates

**computing technology
software development
programming
networking**

Professors:

Chitsaz, Tracy

Associate Professors:

Owens (Chair), Rinard,
Slemmer, Thiel

Assistant Professor:

Crall

Lecturers:

J. Hughes, Wortman

The four computer science certificates offer learning opportunities to a range of students, from computing novices to computing professionals. Interested students might include:

- degree-seeking undergraduates in any major who wish to develop computing skills beyond those required in their degree program. The certificate represents a credential that may enhance career opportunities in any field.
- non-degree-seeking students who wish to develop computing and technical skills to increase opportunities for employment.
- bachelor's degree holders and professionals in the field looking for career enhancement or change.

Computing Technology

- A course of study for a learner with little or no computing experience looking to develop a solid skill set in computing basics.

(12 hours)

COSC 100/110 Introduction to Computer Science *(You may test out of 100/110)*

COSC 120 Introduction to Cyberspace

COSC 130 Introduction to Programming

COSC 220 Introduction to Software Applications

Software Development

- A study of programming fundamentals and software development methods for a student with basic computing skills.

(14 hours)

COSC 101 The Discipline of Computer Science

COSC 240 Computer Science I

COSC 241 Computer Science II

COSC 325 Software Engineering

Programming

- A study sequence for students with basic computing skills that provides a foundation in computer programming fundamentals and working expertise in an object-oriented programming language.

(14 hours)

COSC 101 The Discipline of Computer Science

COSC 240 Computer Science I

COSC 241 Computer Science II

And one of the following:

COSC 310 Data Structures & File Organization

COSC 390 Topics in Modern Programming Languages

Networking

- A study sequence for students with programming experience wishing to develop expertise in network theory, design, and application. Permission of department chair required.

(17 hours)

COSC 241 Computer Science II *(COSC 240 is prerequisite for COSC 241. Students may test out of COSC 240)*

COSC 335 Network Architecture and Design

COSC 365 Digital Logic and Computer Design

COSC 435 Network Implementation and Testing

COSC 445 Network and Distributed System Management

Criminal Justice

Collaborative Program

Major

Coordinator:

David Lewis, Department of Political Science

Coordinating Committee:

Professors:

T. Mappes (Philosophy)

Associate Professors:

Lewis (Political Science),
Olson (Sociology)

Assistant Professors:

Johnson (Political Science),
McMullen (Sociology)

- If you complete the major in criminal justice, you will earn the Bachelor of Technical and Professional Studies (BTPS) degree.
- Since criminal justice is an interdisciplinary program, grades in all program courses completed at FSU count in the major grade point average.
- A nine-credit internship is required.
- Students who do not hold an AAS degree in criminal justice should see the Law and Society major with concentrations in criminal justice and legal studies for additional paths to careers in law and law enforcement.

	For Major
Hours required at Allegany College of Maryland	69
Hours required at Frostburg State University	51
Total Hours Required	120

The Bachelor of Technical and Professional Studies degree in criminal justice is a collaborative program between Frostburg State University and Allegany College of Maryland designed to provide advanced career opportunities for students who hold an Associate of Applied Science degree in criminal justice. If you hold a similar degree from another program, you may be considered for admission based on an articulation agreement between FSU and the other undergraduate institution.

The program is designed to prepare students for advancement in careers in law enforcement, corrections, and probation and parole. Building on the technical skills gained in the associate degree program, and on experience in the field, the baccalaureate program will enhance your understanding of societal issues, political processes, and administrative structures that impact the criminal justice system, and provide opportunities to hone your research and management skills.

Summary of Requirements for a Major in Criminal Justice

1. An Associate of Applied Science in Criminal Justice degree from Allegany College of Maryland.

A maximum of 70 credits will transfer from all community colleges you have attended.

2. General Education Requirements:

You must complete a minimum of 40 credits in general education as part of the baccalaureate program.

a. General Education and Elective Courses at Allegany College of Maryland:

(30 hours)

- English 101 Freshman English I
- English 102 or 112 Freshman English II *or* Business & Tech. Comm.
- Phys. Ed. 153 Cardio. Resuscitation and First Aid
- Speech 101 Speech Communication I
- Humanities 110 Interdisciplinary Leadership I
- Natural Science elective with lab
- Physical Activity elective
- Mathematics 102, 105, *or* 221: College Algebra, Elements of Math, *or* Statistics
- Computer Tech 101 Introduction to Computer Science
- Business Administration 110 Business Professionalism & Ethics
- General Elective

b. General Education Courses at Frostburg State University (see section on the General Education

Program in this catalog for specific courses that apply):

(12 hours)

- Advanced Writing (300/400-level)
- Fine Arts
- Natural Science (with lab)
- HEED 100
- FSU Group A
- FSU Group C
- Personal Wellness

3. Program Core Courses at Allegany College of Maryland:

(39 hours)

- Political Science 101 American National Government
- Political Science/Criminal Justice 205 American Constitutional Law
- Sociology 101 Introduction to Sociology
- Psychology 101 General Psychology
- Psychology 202 Human Adjustment *or* Psychology 205 Abnormal Psychology
- Criminal Justice 101 Introduction to Criminal Justice
- Criminal Justice 102 Police Administration and Organization
- Criminal Justice 103 Criminal Law
- Criminal Justice 104 Criminal Evidence and Procedure
- Criminal Justice 105 Criminal Investigation
- Criminal Justice 106 Introduction to Corrections
- Criminal Justice 108 American Courts and Legal System
- Criminal Justice 201 Criminalistics

4. Program Core Courses at Frostburg State University:*(24 hours)*

SOCI 200 Social Problems *or* SOCI 203 Deviant Behavior
SOCI 305 Racial and Cultural Minorities
SOCI 340 Criminology
SOCI 442 Juvenile Delinquency
POSC 321 State and Local Politics
POSC 323 Public Administration
POSC 311 Research Methods *or* SOCI 311 Basic Research Methods
POSC 423 American Constitutional Law II

5. Program Elective Courses at Frostburg State University:*(6 hours)*

PSYC 386 Drugs and Human Behavior
BUAD 351 Management of Organizations
BUAD 356 Leadership and Interpersonal Skills*
BUAD 357 Human Resources Management*
PHIL 304 Social Philosophy
PHIL 410 Philosophy of Law

6. Internship at Frostburg State University:*(9 hours)*

POSC 492 Internship Seminar (3 credits)
POSC 495 Internship in Political Science (6 credits)

**Requires BUAD 351 as prerequisite.*

Dance

Major

Minor

Coordinator:

Claudia Palumbo,
Instructor, Dance,
Division of Performing Arts

Associate Professor:

Fischer

- You are required to participate in either the annual Fall or Spring Dance Concert.
- You may not receive credit for both a DANC course and the same course formerly labelled PHEC.
- Legal residents of Delaware may complete a dance degree at Maryland resident tuition rates through the SREB Academic Common Market (see Admissions section of this catalog).

	For Major	For Minor
Hours Required in Dance:	48	23
Hours Required in Other Departments:	15	2-3
Total Hours Required:	63	25-26

Summary of Requirements for Major/Minor in Dance

Major	Minor
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1. Courses in Dance Technique:

(20 hours)

16 hours in Modern Dance Technique from among:

DANC 142 Modern I

DANC 242 Modern II

DANC 342 Modern III

DANC 442 Modern IV *(repeated at least 3 times for credit)*

4 hours in Ballet Technique from among:

DANC 231 Ballet II

DANC 332 Ballet III *(may be repeated for credit)*

(13 hours)

DANC 131 Ballet I

DANC 142 Modern I

DANC 154 Jazz I

DANC 231 Ballet II

DANC 242 Modern II

DANC 254 Jazz II

DANC 342 Modern III

2. Courses in Dance Composition and Theory

(28 hours)

DANC 105 Improvisation

DANC 110 Dance Appreciation *(GEP LAC Group A)*

DANC 209 Dance Composition I

DANC 309 Dance Composition II

DANC 360 Repertory

DANC 382 Dance History

DANC 408 Choreography and Production

DANC 429 Special Topics in Dance *(minimum of 6 credits required)*

DANC 471 Principles of Teaching Dance

DANC 479 Teaching Practicum

DANC 498 Senior Project

(10 hours)

DANC 110 Dance Appreciation *(GEP LAC Group A)*

DANC 408 Choreography & Production

DANC 429 Special Topics in Dance

(4 credits required)

3. Required Courses in Other Departments

(15 hours)

MUSC 101 Music Fundamentals

BIOL 211 Essentials of Anatomy and Physiology

THEA 110 Introduction to Acting

THEA 306 Stage Lighting

RECR 384 Special Events Management

(2-3 hours from among)

MUSC 101 Music Fundamentals

THEA 104 Theatre

THEA 107 Intro. to Theatrical Vision

(GEP LAC Group A)

ART 104 Foundational Studies I

Dental Hygiene Preparation

Pre-professional program

Coordinator:

David Morton, 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 and maintain 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.

For Pre-professional Program

Total Hours:

62

Summary of Requirements for Pre-professional Program in Dental Hygiene Preparation

1. Biology

(16 hours)

BIOL 149 General Biology I
BIOL 201 Anatomy & Physiology I
BIOL 202 Anatomy & Physiology II
BIOL 304 Microbiology

2. Chemistry

(13 hours)

CHEM 101 General Chemistry I
CHEM 102 General Chemistry II
CHEM 301 Organic Chemistry I

3. English

(6 hours)

ENGL 101/111 Freshman Composition
ENGL 310 Advanced Composition
or ENGL 338 Technical Writing
or ENGL 339 Scientific Writing

4. Communication Studies

(3 hours)

CMST 102 Intro. to Human Communication

5. Sociology

(3 hours)

SOCI 100/111 Intro. to Sociology

6. Math

(3 hours)

MATH 209 Elements of Applied Probability & Statistics

7. Health

(3 hours)

HEED 200 Nutrition

8. Psychology

(3 hours)

PSYC 150/151 General Psychology

9. Humanities

(6 hours)

Courses must be selected from two different areas: English (literature), philosophy, mathematics, foreign language, history, and music/art (appreciation or history)

Some suggested courses:

MATH 102, 103
PHIL 102, 313
MUSC 110, 117
ENGL 150/250, 260, 261, 290

10. Social Science

(6 hours)

Courses may be selected from the following areas: psychology, sociology, economics, business administration, geography, political science, and computer science.

Earth Science

	For Major	For Environmental Science Concentration	Teaching Cert. Option
Hours Required in Geography:	27-28	37-50	30
Hours Required in Other Fields:	11-17	31-34	59.5
Total Hours Required:	44-45	71-84	89.5

Major

Concentration in: environmental science

Teaching Certification Option

Coordinator:

Thomas Small, Professor
and Chair, Department of
Geography

Participating Faculty:

Professors:

Barry, Yoder (Biology),
Caupp, Precht, Small
(Geography)

Associate Professors:

Doyle (Physics), Pegg
(Biology), Tam (Physics)

Assistant Professors:

Kessler, Prasad

Instructor:

Welsch

- This is a multidisciplinary program jointly administered by the Departments of Geography, Physics, Biology and Chemistry.
- An optional internship is available in Earth Science.
- You may pursue Earth Science middle/secondary teacher certification. Contact the Chair of the Educational Professions Department.
- There is no minor in Earth Science.

Summary of Requirements for Major in Earth Science

1. Introductory Level Courses:

(7 hours)

GEOG 103 *or* 113 Physical Geography (*GEP LAC Group C*)

GEOG 275 Introduction to Spatial Analysis

2. Required Advanced Courses:

(26-27 hours)

GEOG 207 Physical Geology

GEOG 208 Historical Geology

GEOG 310 Fundamentals in the Mapping Sciences

GEOG 335 (or SCIE 335) Oceanography

or GEOG 340 Soil: Genesis, Nature and Classification*

GEOG 380 Research Methods in Geography

GEOG 430 Surface Water Hydrology

or GEOG 431 Glacial and Pleistocene Geomorphology*

MATH 209 Elements of Applied Probability and Statistics (*GEP BR Math*)

PHSC 205 Descriptive Meteorology or GEOG 405 Climatology*

3. Required Supporting Science Sequence:

(8 hours)

Complete one of the supporting Science Sequences:

BIOL 149-150 General Biology (*149-GEP LAC Group C*)

CHEM 101-102 General Chemistry (*101-GEP LAC Group C*)

PHYS 215-216 General Physics I and II (*215-GEP LAC Group C*)

PHYS 261-262 Principles of Physics I and II (*261-GEP LAC Group C*)

4. Elective:

(3-6 hours)

*Select at least one of the following courses (two for teaching certification)***

BIOL 305 Dendrology

BIOL 314 Plant Taxonomy

BIOL 340 Ecology

BIOL 411 Invertebrate Zoology

BIOL 426 Vertebrate Zoology

GEOG 406 Management and Conservation of Natural Resources

GEOG 413 Remote Sensing—Aerial Photo Interpretation

GEOG 432 Groundwater Hydrology

GEOG 441 Soil Analysis

GEOG 445 Biogeography

GEOG 460 Natural Hazards in the Physical Environment

PHSC 210 Descriptive Astronomy

PHSC 220 The Solar System

**Courses not selected to meet requirements, may be used as electives.*

***Some of these courses may require additional prerequisite course work.*

Summary of Requirements for Teaching Certification Option in Earth Science

If you wish to complete a Maryland State approved program in teaching Earth Science, you must:

- Complete the BA/BS in Earth Science (without a concentration).
- Meet the phase admissions requirements summarized in the Educational Professions section.
- Complete the professional education sequence described in Education: Secondary School Programs.
- Select the following courses to complete your major: PHSC 205, PHSC 210 or PHSC 220, GEOG/SCIE 335, and GEOG 406 or GEOG 460.

- The Environmental Science concentration is dedicated to the study of the relationships between humans and their environments.
- You will become sensitive, articulate, and knowledgeable about increasingly complex environmental issues facing contemporary society.
- Course work in this concentration will provide the theoretical and practical background as well as the skills necessary to study environmental science from a wide range of perspectives.
- You must meet certain criteria and deadlines prior to enrollment in either GEOG 488 or GEOG 492.
- You must select 2 other members for your advisory committee in addition to your advisor from the faculty in participating departments. At least 1 member of the committee must be from Geography.

Summary of Requirements for Environmental Science Concentration in Earth Science

1. Introductory Level Courses:

(16 hours)

GEOG 103 *or* GEOG 113 Physical Geography (GEP LAC Group C)

GEOG 104 Human Geography (GEP LAC Group D)

GEOG 275 Introduction to Spatial Analysis

MATH 102 College Algebra (GEP BR Math)

MATH 209 Elements of Probability and Statistics (GEP BR Math)

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 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 LAC Group C)

BIOL 150 General Biology II

CHEM 101 General Chemistry I (GEP LAC Group C)\

CHEM 102 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 in the Mapping Sciences

GEOG 317 Geographic Information Systems

GEOG 413 Remote Sensing - Aerial Photo Interpretation

GEOG 414 Digital Image Processing and Analysis

GEOG 433 Surveying and Field Techniques

GROUP III Advanced Physical Geography

GEOG 335 Oceanography

GEOG 340 Soil: Genesis, Nature and Classification

GEOG 405 Climatology

GEOG 430 Surface Water Hydrology

GEOG 431 Glacial & Pleistocene Geomorphology

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:

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 309 World Environmental History

PHIL 315 Philosophy and the Environment

POSC 450 Environmental Public Policy

***some of these courses may require additional prerequisite course work.*

Economics

Major

- Concentrations in**
- business economics**
- public policy economics**
- quantitative economics**

Minor

Professors:

Dalton, Mizak, Neral

Associate Professors:

Stair (Chair)

Assistant Professors:

Kiriazis, Rossi

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

	No Concentration	For Major Business Conc.	For Major Public Policy Conc.	Quantitative Conc.	For Minor
Hours Required in Economics:	33-36	30-33	39-42	27-36	18
Hours Required in Other Departments:	6	30	6	10-19	6
Total Hours Required:	39-42	60-63	45-48	46	24

Summary of Requirements for Major/Minor in Economics

Major	Minor
-------	-------

1. Required Core Courses in Economics:

(15 hours)

ECON 201/211* Principles of Econ. (Macro)
(GEP LAC Group D)

ECON 202/212* Principles of Econ. (Micro)

ECON 351* Intermediate Macro-Economics

ECON 352* Intermediate Micro-Economics

ECON 491* Seminar in Economics

(12 hours)

ECON 201/211* Principles of Econ. (Macro)
(GEP LAC 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 209/219* Elements of Applied
Probability and Statistics *(GEP BR Math)*

(3 hours)

MATH 209/219* Elements of Applied
Probability and Statistics *(GEP BR Math)*

3. Other Courses:

(21-45 hours)

Majors must choose from among the major in economics without specialized concentration, the business economics concentration, the public policy economics concentration or the quantitative economics concentration.

(9-10 hours)

MATH 236* Calculus I *(GEP BR Math)*
or MATH 220* Calculus for Applications I
or MATH 106* Algebra with Calculus for Business

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

Requirements for Major in Economics

without specialized concentration

1. Core Courses: *(18 hours)*

Required of all Economics majors; listed above.

2. Other Economics Courses: *(18 hours)*

ECON 300 History of Economic Thought

Students must also complete 15 additional elective credit hours in economics (excluding ECON 495) at the 300 or 400 level, of which at least 6 hours must be at the 400 level.

3. Courses in Other Departments: *(3-6 hours)*

MATH 236* Calculus I *(GEP BR Math)*

or MATH 220* Calculus for Applications I

or MATH 106* Algebra with Calculus for Business and ECON 450* Quantitative Economics*

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

+Note: If this option is selected, ECON 450 **may not** be used to satisfy an Economics elective

Requirements for Major in Economics with Concentration in Business Economics

1. Core Courses: (18 hours)

Required of all Economics majors; listed above.

2. Other Economics Courses: (15 hours)

ECON 305 Managerial Economics
 ECON 400 International Trade
or ECON 401 International Finance
 ECON 407 Business Cycles and Forecasting
or ECON 460 Introduction to Econometrics

Select two of the following courses:

ECON 301 Labor Economics
 ECON 306 Money and Banking
 ECON 307 Government, Business, and Public Policy
 ECON 313 Economics of Race and Gender
 ECON 408 Urban and Regional Economics
 ECON 440 Introduction to Game Theory
 ECON 492 Internship Research Paper
 ECON 494 Field Experience in Economics

3. Courses in Other Departments: (27-30 hours)

ACCT 201* Introductory Accounting I
 ACCT 202 Introductory Accounting II
 BUAD 351 Management of Organizations
 BUAD 361 Principles of Marketing
 BUAD 370 Corporate Finance
 COSC 100/110 Introduction to Computer Science
 COSC 220 Introduction to Software Applications
 PHIL 314 Business Ethics
 MATH 236* Calculus I (*GEP BR Math*)
or MATH 220* Calculus for Applications I
or MATH 106* Algebra with Calculus of Business
and ECON 450* Quantitative Economics

Requirements for Major in Economics with Concentration in Quantitative Economics

1. Core Courses: (18 hours)

Required of all Economics majors; listed above.

2. Other Economics Courses: (21 hours)

ECON 300 History of Economic Thought
or ECON 303 American Economic History
 ECON 407 Business Cycles and Forecasting
 ECON 440 Introduction to Game Theory
 ECON 450 Quantitative Economics
 ECON 460 Introduction to Econometrics
or MATH 481 Applied Regression Analysis

Students must complete at least 6 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: (6 hours)

MATH 236* Calculus I (*GEP BR Math*)
 MATH 350 Matrix Algebra

Requirements for Major in Economics with Concentration in Public Policy Economics

1. Core Courses: (18 hours)

Required of all Economics majors; listed above.

2. Other Economics Courses: (24 hours)

ECON 307 Government, Business, and Public Policy
 ECON 404 Public Sector Economics
 ECON 300 History of Economic Thought
or ECON 303 American Economic History
 ECON 309 Comparative Economic Systems
or ECON 405 Economics of Developing Countries

Select four of the following courses:

ECON 301 Labor Economics
 ECON 306 Money and Banking
 ECON 313 Economics of Race and Gender
 ECON 400 International Trade
 ECON 401 International Finance
 ECON 407 Business Cycles and Forecasting
 ECON 408 Urban and Regional Economics
 ECON 410 Resource and Environmental Economics
 ECON 460 Introduction to Econometrics
 ECON 440 Introduction to Game Theory
 ECON 492 Internship Research Paper
 ECON 494 Field Experience in Economics

3. Courses in Other Departments: (3-6 hours)

MATH 236* Calculus I (*GEP BR Math*)
or MATH 220* Calculus for Applications I
or MATH 106* Algebra with Calculus of Business
and ECON 450* Quantitative Economics

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

Educational Professions

Professors:

Alexander, Arisman, Azzi,
Bingman, Dow, Fell,
T. Palardy

Associate Professors:

Biermann, Crawford,
Cushall, Fetter, Finan,
B. Ornstein, Snyder,
Wakefield (Associate Chair),
Wheaton, Witmer (Chair)

Assistant Professors:

Childs, Diehl, Golden,
Holmes, Rotruck,
Schweiker-Marra,
O. Simmons, Stephenson

Instructors:

Boayue, M. Palardy,
S. Pack

- You may elect to major in one of two areas: Early Childhood/Elementary Education or Elementary Education.
- All elementary majors are required to have an area of specialization.
- Professional education sequences for secondary and K-12 programs are provided in cooperation with other departments (see separate sections of this catalog).
- You cannot minor in education.
- An internship is required.
- You must complete application for each phase of the program. The requirements for entry in phases are described in this section.
- Further information is available in the Undergraduate Teacher Education Handbook available in Framptom Hall 220.

Teacher Education Programs

The Educational Professions Department offers an Early Childhood/Elementary major leading to eligibility for certification in nursery school through grade 6 and middle school, an Elementary Education major leading to eligibility for certification in grades 1-6 and middle school, and a Business Education major leading to certification in grades 7-12 (*see separate catalog listing for Business Education information*).

The Educational Professions Department also offers approved teacher education programs leading to eligibility for certification in Secondary Education (biology, business education, chemistry, English, foreign languages - French and Spanish, earth science, mathematics, physics, social studies), for grades 7-12 as well as middle school depending on subject area, and K-12 Education (art, music, health and physical education) for grades kindergarten-12. Requirements for these majors and programs are listed in the catalog under Education: Early Childhood/Elementary Program, Elementary Program, Secondary School Programs, K-12 Programs 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. Educational Professions' graduates are expected to be dedicated professionals, instructional leaders, continuous assessors, educational advocates, collaborative bridge-builders and reflective decision-makers.

Eligibility for Teacher Certification in Maryland

For eligibility for certification in the Early Childhood/Elementary program or the Elementary program, 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, represents one qualification for completing the degree in teacher education or gaining teacher certification. Accordingly, candidates must pass Praxis II to become program completers and to graduate in an approved teacher education program. Completion of K-12 teacher education programs and the secondary professional sequence requires passing Praxis II to be eligible and endorsed for certification.

Candidates may apply for a certificate of eligibility directly to the Maryland State Department of Education or may apply for a Standard Professional Certificate I through 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 and Elementary Education, the Professional Education Sequences for Secondary Programs, and K-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 areas associations which offer national recognition for being compliant with national standards. The University will continue to update education pro-

grams 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.

Pre-Phase Requirement

1. EDUC 100 students are required to be certified free of TB prior to fieldwork.

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 grade on PRAXIS I as established by the state of Maryland.
4. C or above in ENGL 101/111.
5. Twenty (20) documented hours of working with diverse populations.*
6. Declaration of a major. Transfer students must indicate intended major at transfer institutions.
7. Successful completion of technology inventory.*
8. Certified free of TB.
9. Completion of consent and release form. **

Additional Phase I Requirements for Early Childhood/Elementary and Elementary Education Majors

1. C or above in MATH 206.
2. Grade of C or above in EDUC 100.
3. Declaration of specialization.

Additional Phase I Requirements for Secondary and K-12 Majors

1. C or above in the basic math requirement.
2. Grade of C or above in EDUC 100 (Secondary only).

Phase II Admission Requirements

1. Completion of at least 60 credit hours (Junior standing).
2. Cumulative GPA of at least 2.5 (including final grade point averages from transfer institutions).
3. C or better in each of the Phase I courses designated by program.
4. Cumulative GPA of 2.5 in each of the Phase I courses designated by program.
5. GPA of 2.5 in major (K-12/secondary only).
6. Grade of P in EDUC 200.
7. Grade of C or better in ENGL 308 or equivalent.
8. Completion of at least one course in each of groups A,B,C and D of the Liberal Arts Component of the GEP.
9. Positive recommendation of advisor.
10. Seventy-five percent or 18 credits of content major or specialization completed with study plan submitted to the Office of Unit Assessment.
11. Grade of C or better in MATH 207 (ECE/ELEM and ELEM majors).

Admission Requirements for Professional Development Schools

1. Successful completion of EDUC 307 (field work). (ECE/ELEM and ELEM majors)
2. Cumulative GPA of at least 2.5.
3. GPA of 2.5 in major with no grade less than C in Block I courses.
4. Successful completion of a collaborative entrance interview into a PDS.

* According to departmental format.

**Confirming that candidate is free of convictions that would disqualify him/her from obtaining certification in Maryland.

Education: Early Childhood/ Elementary Program

Major

Professors:

Alexander, Azzi, Bingman,
Dow, Fell, T. Palardy

Associate Professors:

Cushall, Finan, Ornstein,
Snyder, Wakefield,
Wheaton, Witmer (chair)

Assistant Professors:

Diehl, Holmes, Rotruck,
Schweiker-Marra,
O. Simmons, Stephenson

Instructors:

Boayue, M. Palardy, S. Pack

- The requirements in numbers 1-4 list specific hours required in other departments. These requirements include but go beyond the University GEP.
- You must complete the 24 hour early childhood specialization.
- You must complete application for each phase of the program.
- The requirements for entry into phases are listed in the Educational Professions section of this catalog.
- Consider a double major in Liberal Studies (see the major description in this catalog).

Phase III Admission Requirements

1. Completion of at least 90 credit hours (senior standing).
2. Cumulative GPA of at least 2.60.
3. GPA of at least 2.75 in all required education courses.
4. GPA of at least 2.75 in content major or area of specialization.
5. Grade of C or better in each Phase II course.
6. Successful completion of Phase II field work.
7. Approval of Program Coordinator.

Program Exit Requirements

1. Successful presentation of a portfolio that meets standards.
2. Passing score on PRAXIS II as established by the state of Maryland.

	For Major
Hours Required in Education:	72
Hours Required in Other Departments:	59
Total Hours Required:	131

Summary of Requirements for Major in Early Childhood/Elementary Education

Directed academic course requirements within and beyond the University GEP

Major

1. Completion of Basic Requirements: (11 hours)

2. Specific Hours for Early Childhood/Elementary Education Majors: (27 hours)

Fine Arts Component (3 hours; satisfies GEP)

ART 110 Visual Imagery

English (Literature) (3 hours; satisfies GEP)

ENGL 150/250 or MDFL 150 Intro. to Literature

History (3 hours; satisfies GEP)

HIST 100/111 The Contemporary World in Historical Perspective

Mathematics (9 hours; 3 satisfy BR)

MATH 206 Problem Solving for Elementary Teachers I
MATH 207 Problem Solving for Elementary Teachers II
MATH 209 Elements of Applied Probability and Statistics
or MATH 102 College Algebra

Natural Science (12 hours; at least 8 satisfy GEP)

- a. BIOL 109 Human Biology and the Environment or BIOL 149 General Biology I
- b. PHYS 203 Physical Science
- c. 4 hour lab science elective - GEP recommended

Social Science (3 hours; satisfies GEP)

GEOG 104 Human Geography

3. Additional GEP Requirements: (9 hours)

- a. Social Science (3 hours minimum – see GEP) (Check specialization for GEP possibilities).
- b. Liberal Arts Component electives (6 hours).
Select a minimum of six additional GEP credits. See GEP. 4 credits can be satisfied by selecting a GEP science course for the third science course required for Early Childhood/Elementary and Elementary majors. In that event, one 3-credit GEP course will still be required. (Check specialization for GEP possibilities).

4. Professional Education Courses Required Prior to Entrance to Phase III: (6 hours)

MUSC 350 Music and Creative Interaction for the Elementary Classroom (3)
PHEC 309 Health and Physical Education for the Elementary Classroom (3)

- 5. Specialization** (24 hours; 2 courses satisfy GEP)
- ART 110 Visual Imagery (3 hours satisfy GEP)
 - SOCI 100/111 Intro to Sociology or PSYC 150/151 General Psychology (3 hours satisfy GEP)
 - One course from the following:
 - PSYC 210 Child Development
 - SOCI 200 Social Problems
 - SOWK 370 Intro to Social Welfare
 - Diversity Course — One course from the following:
 - Spanish or French course (100-level or above)
 - ENGL 418 Second Language Acquisition: Theory and Application
 - ENGL 290 Topics in Language and Literature (requires advisor approval)
 - HIST 301 Traditional Africa
 - HIST 341 Modern and Contemporary Middle East
 - HIST 450 History of Mexico
 - HIST 459 History of Japan
 - HIST 460 Modern and Contemporary Asia
 - SOCI/SOWK 305 Racial and Cultural Minorities
 - SOCI/SOWK 306 The Sociology of African Americans
 - SOCI 224 Cultural Anthropology
 - ART 301 Artistic Traditions: Asia
 - ART 302 Artistic Tradition: Africa and the Americas
 - All of the following (12 hours)
 - ECED 150 Early Childhood Foundations (taken Pre-Phase I or during Phase I)
 - ECED 293 Early Childhood Learning Environment (taken during Phase I)
 - ECED 431 Early Childhood Education I: Curriculum Development & Implementation (taken during Block I)
 - ECED 443 Early Childhood Education II: Adults in the Child's World (taken during Block II)
- 6. Professional Education Courses Required Prior to or Concurrent with Phase I:** (4 hrs.)
See course descriptions.
EDUC 100 Career Analysis in Education (1)
EDUC 201 Students, Teachers, and Learning Environments (3)
- 7. Professional Education Sequence:** (56 hours)
- PHASE I** (11 hours)
EDUC 202 Foundations of Learning and Instruction (3)
EDUC 200 Phase I Teaching and Professional Assessment Laboratory (1)
REED 323 Process and Acquisition of Reading (3)
EDUC 346 Educational Technology Laboratory I (1)
EDUC 376 Special and Multicultural Education (3)
- PHASE II, Block 1** (14 hours)
ELED 471 Mathematics Curriculum & Methods: Integrated Block (2)
ELED 472 Language Arts Curriculum & Methods: Integrated Block (2)
ELED 474 Science Curriculum & Methods: Integrated Block (2)
ELED 475 Social Studies Curriculum & Methods: Integrated Block (2)
REED 473 Reading Instruction (3)
EDUC 447 Educational Technology Laboratory II (1)
ELED 307 Block 1 Clinical and Professional Assessment Component (2)
- PHASE II, Block 2** (14 hours)
EDUC 403 Assessment and Management of Learning (4)
EDUC 448 Educational Technology Laboratory III (1)
REED 425 Materials and Motivations for Reading (3)
ELED 494 Teaching Internship I: N-8 (6)
- PHASE III** (17 hours)
EDUC 405 Leadership (2)
REED 420 Assessment for Reading Instruction (3)
ELED 495 Teaching Internship II: N-8 (12)
- 8. Other Graduation/Program Exit Requirements**
- Successful presentation of a portfolio that meets standards.
 - Passing score on Praxis II as established by the state of Maryland.

Education: Elementary Program

	For Major
Hours Required in Education:	60
Hours Required in Other Departments:	71
Total Hours Required:	131

Major

Professors:

Alexander, Azzi, Bingman,
Dow, Fell, T. Palardy

Associate Professors:

Cushall, Finan, Ornstein,
Snyder, Wakefield
(Associate Chair), Wheaton,
Witmer (Chair)

Assistant Professors:

Diehl, Holmes, Rotruck,
Schweiker-Marra,
O. Simmons, Stephenson

Instructors:

Boayue, M. Palardy, S. Pack

- The requirements in numbers 1-3 at right list specific hours required in other departments. These requirements include but go beyond the University GEP.
- You must complete an approved 24 hour specialization.
- You must complete application for each phase of the program.
- The requirements for entry into phases are described in the Educational Professions section of this catalog.
- Consider a double major in Liberal Studies (see the major description in this catalog).

Summary of Requirements for Major in Elementary Education

Directed academic course requirements within and beyond the University GEP

Major

1. Completion of Basic Requirements: (11 hours)

2. Specific Hours for Elementary Education Majors: (27 hours)

Fine Arts Component (3 hours; satisfies GEP)

ART 110 Visual Imagery

English (Literature) (3 hours; satisfies GEP)

ENGL 150/250 or MDFL 150 Intro. to Literature

History (3 hours; satisfies GEP)

HIST 100/111 The Contemporary World in Historical Perspective

Mathematics (9 hours; 3 satisfy BR)

MATH 206 Problem Solving for Elementary Teachers I

MATH 207 Problem Solving for Elementary Teachers II

MATH 209 Elements of Applied Probability and Statistics

or MATH 102 College Algebra

Natural Science (12 hours; at least 8 satisfy GEP)

a. BIOL 109 Human Biology and the Environment or BIOL 149 General Biology I

b. PHYS 203 Physical Science

c. 4 hour lab science elective - *GEP recommended*

Social Science (3 hours; satisfies GEP)

GEOG 104 Human Geography

3. Additional GEP Requirements: (9 hours)

a. Social Science (3 hours minimum — see GEP)

b. Liberal Arts Component electives (6 hours). *Select a minimum of six additional GEP credits. See GEP. 4 credits can be satisfied by selecting a GEP science course for the third science course required for Early Childhood/elementary and Elementary majors. In that event, one 3-credit GEP course will still be required. (Check specialization for GEP possibilities)*

4. Professional Education Courses Required Prior to Entrance to Phase III: (6 hours)

MUSC 350 Music and Creative Interaction for the Elementary Classroom (3)

PHEC 309 Health and Physical Education for the Elementary Classroom (3)

5. Specializations (24 hours, 2 courses count for GEP)

A 24 hour specialization must be completed in one of the following areas: Mathematics, General Science, Social Studies, Language Arts, Science/Mathematics, or an Approved Individualized Specialization. Requirements for each specialization are available in the Department of Educational Professions.

6. Professional Education Courses Required Prior to or Concurrent with Phase I: (4 hours)

See course descriptions.

EDUC 100 Career Analysis in Education (1)

EDUC 201 Students, Teachers, and Learning Environments (3)

7. Professional Education Sequence (56 hours)

PHASE I (11 hours)

EDUC 202 Foundations of Learning and Instruction (3)

EDUC 200 Phase I Teaching and Professional Assessment Laboratory (1)

REED 323 Process and Acquisition of Reading (3)

EDUC 346 Educational Technology Laboratory I (1)

EDUC 376 Special and Multicultural Education (3)

PHASE II, Block 1 (14 hours)

ELED 471 Mathematics Curriculum & Methods: Integrated Block (2)
 ELED 472 Language Arts Curriculum & Methods: Integrated Block (2)
 ELED 474 Science Curriculum & Methods: Integrated Block (2)
 ELED 475 Social Studies Curriculum & Methods: Integrated Block (2)
 REED 473 Reading Instruction (3)
 EDUC 447 Educational Technology Laboratory II (1)
 ELED 307 Block 1 Clinical and Professional Assessment Component (2)

PHASE II, Block 2 (14 hours)

EDUC 403 Assessment and Management of Learning (4)
 EDUC 448 Educational Technology Laboratory III (1)
 REED 425 Materials and Motivations for Reading (3)
 ELED 494 Teaching Internship I: N-8 (6)

PHASE III (17 hours)

EDUC 405 Leadership (2)
 REED 420 Assessment for Reading Instruction (3)
 ELED 495 Teaching Internship II: N-8 (12)

8. Other Internship Requirements

Students wishing to have an internship placement in a middle school must take EDUC 445 Middle School Curriculum Methods (3 hours) during the semester in which they are enrolled in Phase II Block I.

9. Other Graduation/Program Exit Requirements

- Successful presentation of a portfolio that meets standards.
- Passing score on PRAXIS II as established by the state of Maryland.

Education: K-12 Programs

Teaching Certification

Contact:

David J. Fell, Professor,
 Department of Educational
 Professions

Professors:

Alexander, Fell, C. Hircock

Associate Professors:

Cushall, B. Hircock,
 Soderberg, Wakefield,
 Wheaton, Witmer (chair)

Assistant Professors:

Childs, Mills

- 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 K-12 education.

Professional Education Sequence for K-12 Programs

ART

Pre-Phase I EDUC 201 Students, Teachers, and Learning Environments
 (3 hours)

Phase I EDUC 202 Foundations of Learning & Instruction
 (7 hours) EDUC 200 Phase I Teaching and Professional Assessment Laboratory
 REED 317 Content Area Reading

Phase II EDUC 309 Art Education Methods for the Elementary Teacher
 (14.5 hours) EDUC 308 Art Education Methods for the Secondary Teacher
 EDUC 392 K-12 Field Experience
 EDUC 300 Phase II Teaching and Professional Assessment Laboratory
 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

Program Exit Requirements

- Successful presentation of a portfolio that meets standards.
- Passing score on Praxis II as established by the state of Maryland.

MUSIC

Pre-Phase I EDUC 201 Students, Teachers, and Learning Environments
 (3 hours)

Phase I EDUC 202 Foundations of Learning & Instruction
 (7 hours) EDUC 200 Phase I Teaching and Professional Assessment Laboratory
 REED 317 Content Area Reading

Phase II MUSC 352 Choral Music Methods
 (16.5 hours) or MUSC 353 Instrumental Music Methods
 EDUC 354 General Music Methods in Elementary School
 EDUC 355 General Music Methods in Secondary School
 EDUC 392 K-12 Field Experience
 EDUC 300 Phase II Teaching and Professional Assessment Laboratory

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

Program Exit Requirements

- Successful presentation of a portfolio that meets standards.
- Passing score on Praxis II as established by the state of Maryland.

HEALTH & PHYSICAL EDUCATION

Pre-Phase I EDUC 100 Career Analysis in Education
(4 hours) EDUC 201 Students, Teachers, and Learning Environments

Phase I EDUC 202 Foundations of Learning & Instruction
(7 hours) REED 317 Content Area Reading
 EDUC 346 Educational Technology Lab I

Phase II HEED 404 Health Instruction
(14 hours) PHEC 418 Physical Education in the Secondary School
 EDUC 392 K-12 Field Experience
 REED 418 Reading and Writing Connections
 SPED 451 Adapting Instruction in Diverse Classrooms
 EDUC 447 Educational Technology Lab II

Phase III EDUC 406 Leadership Seminar
(15 hours) EDUC 497 Teaching Internship, K-12 Program
 EDUC 448 Educational Technology Lab III

Program Exit Requirements

- Successful presentation of a portfolio that meets standards.
- Passing score on Praxis II as established by the state of Maryland.

**Education:
 Secondary Programs**

Teaching Certification

Contact:

David J. Fell, Professor,
 Department of Educational
 Professions

Professors:

Alexander, Azzi, Fell,
 K. Parks

Associate Professors:

Cushall, Wheaton, Witmer
 (chair)

Assistant Professor:

Childs

The courses of study to be followed in academic content areas are established by individual departments. You may select the secondary school teaching certification option in addition to completing the major in the following fields:

- biology
- chemistry
- English
- foreign languages & literature (certification in concentration, French or Spanish)
- earth science
- mathematics
- physics
- social science

If you are majoring in economics, geography, history, political science, social science, or sociology, you are strongly advised to meet Maryland State certification requirements in social studies or have a second major in which you can be assigned for student teaching.

The major in Business Education includes secondary certification requirements as part of the major requirements for all students.

Professional Education Sequence for Secondary Programs

Pre-Phase I EDUC 100 Career Analysis in Education
(4 hours) EDUC 201 Students, Teachers, and Learning Environments

Phase I EDUC 202 Foundations of Learning & Instruction
(8 hours) EDUC 200 Phase I Teaching and Professional Assessment Laboratory
 REED 317 Content Area Reading
 EDUC 346 Educational Technology Lab I

Phase II EDUC 300 Phase II Teaching and Professional Assessment Laboratory
(15.5 hours) EDUC 391 Teaching Internship I: Secondary Education

- 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.
- You cannot major or minor in Education: Secondary Programs

SCED 410 Secondary Methods and Curriculum
 REED 418 Reading and Writing Connections
One course from among the following:
 SCED 411, 414, 415, 419, or 420 (*content-specific methods courses*).
 SPED 451 Adapting Instruction in Diverse Classrooms
 EDUC 447 Educational Technology Lab II

Phase III EDUC 406 Leadership Seminar
 (15 hours) SCED 496 Teaching Internship II: Secondary Education
 EDUC 448 Educational Technology Lab III

Program Exit Requirements

- a. Successful presentation of a portfolio that meets standards.
- b. Passing score on Praxis II as established by the state of Maryland.

**Education:
Secondary/Adult
Generic Special
Education**

Hours Required in Education	30
Hours Required in Other Departments	3
Total Hours Required	33

Teaching Certification

You are eligible to complete the upper-division certificate in Secondary/Adult Generic Special Education if you are a currently enrolled undergraduate student earning secondary or K-12 teaching certification along with a major in your content discipline.

Certificate

Coordinator:

Oma Gail Simmons, Assistant Professor, Department of Educational Professions

- You must meet all phase admission requirements as listed in the Educational Professions section of this catalog.
- If you have officially declared your intent to complete this certificate, you may count the nine graduate credits required towards your undergraduate degree.
- If you have dual certification in a content area and in special education, you will be sought after as a master teacher.
- If you already have a bachelor's degree and hold secondary or K-12 certification, you may attain dual certification through the M.Ed. in Special Education (see the FSU Graduate Catalog).

Summary of Requirements for Certificate in Secondary/Adult Generic Special Education

(33 hours)

EDUC 202 Foundations of Learning and Instruction*
 PSYC 210 Child Development
 or PSYC 212 Adolescence and Adulthood
 REED 317 Content Area Reading*
 REED 418 Reading and Writing Connections*
 SPED 451 Adapting Instruction in Diverse Classrooms*
 SPED 462 Introduction to the Education of Exceptional Children
 SPED 601 Assessment, Diagnosis, and Evaluation of Exceptional Children
 SPED 602 Instructional Content and Practices for Exceptional Children
 SPED 605 Communication and Collaborative Partnerships in Special Education Programs
 SCED 496 Teaching Internship II: Secondary Education
 or EDUC 497/PHEC 497 Teaching Internship: K-12 Programs**

** Also required for secondary and K-12 teaching certification.*

***Six of the 12 credits required for secondary K-12 teaching certification must involve working with students with special needs.*

Subject to change pending approval from the Maryland State Department of Education

Engineering

Dual-degree Program

Coordinator:

Oguz Soysal, Chair,
Department of Physics and
Engineering

- A dual degree program of Frostburg State University and the University of Maryland, College Park's College of Engineering is available to the student who seeks a career in one of several engineering fields and who also wants a general undergraduate education.
- This program allows you to earn undergraduate degrees from both institutions over a five-year period.
- In this program you attend FSU for approximately three academic years and the University of Maryland, College Park's College of Engineering for approximately two academic years. After completing the academic requirements of FSU — usually at the end of the fourth year (the first year at the University of Maryland, College Park) — you will receive a bachelor's degree from Frostburg State University. Upon meeting all requirements in the Clark School of Engineering, you earn one of several baccalaureate engineering degrees from the University of Maryland, College Park, majoring in any of the following areas:
Aerospace Engineering
Biological Resources Engineering
Chemical Engineering
Civil Engineering
Computer Engineering
Electrical Engineering
Engineering Materials
Fire Protection
Materials Engineering
Mechanical Engineering
Nuclear Engineering

For Pre-professional Program

Total Hours Required at Frostburg State University:

72-82

Summary of Requirements at FSU for Dual Degree in Engineering

1. Chemistry:

(8-18 hours)

CHEM 101 & 102 General Chemistry I & II (101 - GEP LAC Group C)

*CHEM 301 & 302 Organic Chemistry I & II

*Organic chemistry courses required for students in chemical engineering.

2. Computer Science:

(4 hours)

COSC 240 Computer Science I

or ENEE 114 Programming Concepts for Engineers

3. Mathematics:

(18 hours)

MATH 236, 237, 238 Calculus I, II & III (236 - GEP BR Math)

MATH 420 Advanced Calculus, or MATH 436 Mathematical Physics

MATH 432 Differential Equations

4. Engineering:

(3 hours)

ENES 100 Intro to Engineering Design

5. Physics:

(39 hours)

PHYS 261 Principles of Physics I (GEP LAC Group C)

PHYS 262 Principles of Physics II

PHYS 263 Principles of Physics III

PHYS 264 Principles of Physics IV

PHYS 310 Classical Mechanics

PHYS 312 Electricity & Magnetism

PHYS 320 Experimental Physics

PHYS 491 Seminar

PHYS 492 Senior Research & Seminar

Choose one track:

(9 hours)

a. Traditional Physics

PHYS 311 Thermodynamics

PHYS 417 Quantum Physics

plus one 300-400 level physics elective

b. Engineering Physics

With permission of the Department Chair, as many as 6 credits of mechanical or electrical engineering courses at the 200 level or above may be applied.

Courses listed in the study program not to be applied toward the student's major field of study may be applied toward satisfaction of the General Education Program requirements where appropriate.

Dual Degree Requirements at FSU

1. Completion of required courses in the dual degree study program (listed above), 71-82 semester hours depending on field of engineering.
2. Completion of a minimum of 90 semester hours.
3. Completion of FSU's Basic University Requirements and a modified FSU Liberal Arts Component of the General Education Program (a waiver of Group 5 courses, requiring a total of at least 23 credit hours in the Liberal Arts Component). Students must complete at least six of the additional nine credits of General Education course work required by the University of Maryland, College Park (Advance Studies CORE requirement) to satisfy the General Education requirements at Frostburg State University.
4. Completion of a major program as approved by the respective Frostburg State Department Chair.
5. Recommendation from the designated official at Frostburg State University (Coordinator of the Dual Degree Program in Engineering).

Requirements for Admission to University of Maryland, College Park

To become a Dual Degree candidate at the University of Maryland, College Park, a student must have satisfied all specified requirements at Frostburg State University. Additionally, the student must have the following:

1. A minimum cumulative 3.0 grade point average at Frostburg;
2. Recommendation from the designated official at Frostburg (Coordinator of the Dual Degree Program in Engineering).

Admission to the College of Engineering of the University of Maryland, College Park is guaranteed to the Frostburg State University Dual Degree student provided the above stated requirements have been satisfied.

Engineering

Collaborative Programs

General Education Program for Electrical & Mechanical Engineering Majors

- The mechanical and electrical engineering programs at FSU are offered in collaboration with the Clark School of Engineering, University of Maryland, College Park. The degree awarded to students completing the program is a B.S. from UM,CP. Therefore, students enrolled in the engineering programs must complete UM,CP's general education program requirements.
- UM,CP requires completion of one Human Cultural Diversity course, focusing on one or more of the following: a) the history, status, treatment, or accomplishment of women or minority groups and subcultures; b) non-Western culture; c) concepts and implications of diversity. If you complete either MUSC 110 or DANC 110 under Distributive Studies, both courses would also fulfill your diversity requirement. In addition, there are a number of 300-400 level courses that can be taken to fulfill both the Advanced Studies and Diversity requirement. Please consult with your advisor for a listing of approved courses.
- To be granted advanced placement credit for a course, you must meet UM,CP's minimum requirements. These differ from FSU's standards, with a higher score required by UM,CP in a number of areas. Please consult the Engineering Coordinator to verify AP scores required to receive credit.
- Advanced Studies courses should be taken only after completing 56 credits/entering junior standing.

For all engineering majors

Minimum GEP Hours Required

43

Summary of Fundamental Studies Requirements

1. English

(6 hours)

ENGL 101/111 Freshman Composition - *must be attempted within first 30 credits & passed within first 60*

ENGL 338 Technical Writing *or* ENGL 339 Scientific Writing - *must be taken after you have completed 56 credits/junior standing*

2. Mathematics

(3-4 hours)

Any MATH 100 or 200 level course except MATH 206, MATH 207, MATH 103 and MATH 104. *Must be attempted by 30 credits, completed by 60-credit level.*

MATH 236 Calculus I, *required under the engineering major, fulfills this requirement.*

Summary of Distributive Studies Requirements

1. Arts and Humanities

(9 hours)

ENGL 150/250 *or* MDFL 150 Introduction to Literature *and one History/Theory of the Arts course from the following:*

ART 100/111 Art Appreciation *or* ART 110 Visual Imagery

MUSIC 110 Intro. to World Music

THEA 106 Intro. to Theatre

DANC 110 Dance Appreciation

One additional Arts and Humanities course from the above History/Theory of the Arts list or any philosophy course.

2. Mathematics and Natural Sciences

(10 hours)

The mathematics and sciences requirements are fulfilled by courses completed for the engineering program.

3. Social Sciences

(9 hours)

HIST 100/111 The Contemporary World in Historical Perspective *and two behavioral and social science courses from the following:*

POSC 110/112 Introduction to American Politics

POSC 113/114 Introduction to World Politics

ECON 200 Basic Economics *or* ECON 201/211 Princ. of Econ.

GEOG 104/114 Human Geography

PSYC 150/151 General Psychology

SOCI 100/111 Introduction to Sociology

Summary of Advanced Studies Requirements

Two courses (6 credits) required:

Must be 300-400 level courses taken after 56 credits. Students may substitute an approved senior capstone course in their major taken after 86 credits for one of the two required Advanced Studies courses. The other course **must** be outside the major. The following may not be used to fulfill Advanced Studies requirements:

- Professional Writing courses
- Courses used to meet Distributive Studies requirements
- Internships or other experiential learning types of courses
- Courses taken on a pass/fail basis

One independent studies course (*minimum of three credits, outside the major*) may be used toward Advanced Studies requirements as long as it is consistent with the rules above and approved by the Engineering Coordinator.

Electrical Engineering

Collaborative Program

Major

Coordinator:

Oguz Soysal, Chair,
Department of Physics and
Engineering

- A collaborative program between FSU 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 electrical engineering from UM,CP.
- 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.
- You must complete UM,CP's general education program requirements, as outlined under the GEP for Engineering Majors section in this catalog.
- 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 re-apply for financial aid and scholarships through UM,CP.
- 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.

	For Major
Hours Required in Engineering:	52
Hours Required in Other Departments:	56
Total Hours Required:	108

Mission

The mission of the Collaborative Program in Electrical Engineering is to provide a quality electrical engineering degree program, to establish close partnerships with and facilitate technology transfers to industry and government, to contribute to economic development within the State of Maryland, specifically in the Western Maryland region, and to provide related service to the campus community and the community at large.

Program Objectives

1. Provide all students with basic education and training in electrical engineering, to prepare them for employment in a variety of positions in government and industry and/or study in graduate schools;
2. Provide students with a strong foundation in mathematics, sciences and engineering, and the ability to apply said knowledge to solving engineering problems;
3. Provide students with an ability to identify engineering problems and propose appropriate solutions, including step-by-step design of a system, component or process;
4. Provide students with an ability to design and conduct experiments, interpret empirical observations and analyze data;
5. Maintain technological relevance by introducing students to current applications in the field, as well as to state-of-the-art laboratory equipment and computer simulation tools;
6. Provide students with an ability to communicate effectively and the teamwork skills necessary for successful participation in interdisciplinary projects;
7. Provide students with an understanding of the social context of the electrical engineering profession and an understanding of the ethical responsibilities of practicing engineers, as stipulated in the IEEE Code of Ethics;
8. Provide students with a motivation to seek further specialization in the field of electrical engineering and to continue learning, whether in a formal academic setting or through self-instruction;
9. Provide a high quality undergraduate electrical engineering education in Western Maryland culminating in a degree from a nationally recognized program and become a nationally recognized model for undergraduate collaborative engineering education;
10. Attract a wide variety of excellent students, particularly from the Appalachian region, and facilitate the recruitment and retention of a diverse student body with particular emphasis on historically underrepresented groups;
11. Facilitate and contribute to the economic development of the region.

Summary of Pre-Engineering Requirements

1. Introductory Level Courses

(18 hours)

ENES 100 Introduction to Engineering Design
 ENEE 114 Programming Concepts for Engineers
 ENEE 204 Basic Circuit Theory
 ENEE 206 Fundamental Electric and Digital Circuit Laboratory
 ENEE 241 Numerical Techniques in Engineering
 ENEE 244 Digital Logic Design

2. Required Courses in Other Departments

(40 hours)

CHEM 101 General Chemistry I (*Meets GEP requirement*)
 CHEM 133 General Chemistry for Engineers (*preferred*)
 or CHEM 102 General Chemistry II
 ENGL 101 Freshman Composition (*Meets GEP requirement*)

ENGL 338 Technical Writing *or* ENGL 339 Scientific 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*)

PHYS 262 Principles of Physics II: Electricity and Magnetism

PHYS 263 Principles of Physics III: Sound and Light

Summary of Engineering Requirements

1. Advanced Engineering Courses:

(23 hours)

ENEE 302 Digital Electronics

ENEE 306 Electronic Circuits Design Lab

ENEE 312 Semiconductor Devices and Analog Electronics

ENEE 322 Signal and System Theory

ENEE 324 Engineering Probability

ENEE 350 Computer Organization

ENEE 381 Electromagnetic Wave Propagation

ENEE 408 Capstone Design Project

2. Required Physics Course:

(4 hours)

PHYS 312 Electricity and Magnetism (*substituting for ENEE 380*)

3. Elective Courses in Electrical Engineering:

(11 hours)

Must include two credits of advanced laboratory courses.

4. Elective Courses in Other Departments:

(12 hours)

At least three credits of the required 12 must be a 400-level Math course. The remaining credits may be selected from an approved list of math, physics, or mechanical engineering courses.

Mechanical Engineering

Collaborative Program

Major

Coordinator:

Chandra Thamire, Assistant Professor, 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 UM,CP.
- 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.
- You must complete UMCP's general education program requirements, as outlined under the GEP for Engineering Majors section in this catalog.
- After completing 45 credits of designated course work, you must apply for admission to College Park's Clark School of Engineering. After meeting UM,CP'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 UM,CP.
- 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.

	For Major
Hours Required in Engineering:	66
Hours Required in Other Departments:	40
Total Hours Required:	106

Program Objectives

1. The program will prepare students for successful engineering careers.
2. Students will learn the fundamentals of mathematics and the physical sciences.
3. Students will learn engineering sciences and demonstrate the application of this knowledge to mechanical engineering problems through course sequences focused on specific, relevant mechanical engineering careers.
4. The program will provide students with practical design experiences through partnerships with industry.
5. The program will challenge the students and the faculty to improve the learning process.
6. The program will continue to raise the expectations of all constituencies, to attract a wide variety of excellent students particularly from the Appalachian region, and to be a nationally recognized model for undergraduate collaborative engineering education.
7. The program will provide a high quality undergraduate engineering education within a small-university environment culminating in a degree in mechanical engineering from a nationally recognized engineering program.
8. The program will facilitate and contribute to the economic development of the region.

Learning Outcomes

1. A knowledge of mathematics, physical science, and engineering science.
2. The specialized knowledge relevant to specific mechanical engineering careers.
3. The ability to apply mathematics, science, and engineering knowledge to solve mechanical engineering problems.
4. The ability to use state-of-the-art engineering software, computers, and instrumentation as tools to solve engineering problems.
5. The ability to work in teams effectively to address practical engineering problems.
6. The ability to use the product development process to design a product that meets customer needs and addresses contemporary social issues.
7. The ability to communicate effectively in presentations and in writing.
8. The ability to design and conduct experiments and to interpret and generalize from the results.
9. A recognition of the contemporary social issues that motivate engineering activities and the societal impact of engineering practice.
10. The recognition that engineers must maintain ethical and professional standards and an appreciation of these standards.
11. For interested and qualified students, the ability to conduct scholarly research.
12. The ability to engage in life-long learning and the ability to conduct research using external sources.

Summary of Pre-Engineering Requirements

1. Engineering Science Courses

(12 hours)

ENES 100 Introduction to Engineering Design

ENES 102 Statics

ENES 220 Mechanics of Materials

ENES 221 Dynamics

2. Required Courses in Other Departments*(40 hours)*CHEM 101 General Chemistry I *(Meets GEP requirement)*CHEM 133 General Chemistry for Engineers *(preferred)*

or CHEM 102 General Chemistry II

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)

PHYS 262 Principles of Physics II: Electricity and Magnetism

PHYS 263 Principles of Physics III: Sound and Light

Summary of Engineering Requirements

1. Required Engineering Courses*(36 hours)*

ENME 232 Thermodynamics

ENME 350 Electronics and Instrumentation I

ENME 271 Numerical Methods in Mechanical Engineering

ENME 331 Fluid Mechanics

ENME 332 Transfer Processes

ENME 351 Electronics and Instrumentation II

ENME 361 Vibration, Controls and Optimization I

ENME 462 Vibration, Controls and Optimization II

ENME 382 Engineering Materials and Manufacturing Processes

ENME 392 Statistical Methods for Product and Process Development

ENME 371 Product Engineering and Manufacturing

ENME 472 Integrated Product and Process Development

2. Elective Hours in Department*(18 hours)*

English

	For Major	For Minor	For Teaching Certification Option
Hours Required in English:	40	24	40
Hours Required in Other Departments:	0	0	42.5
Total Hours Required:	40	24	82.5

Major

Minor

Concentrations in:
literature
creative writing
professional writing

Teaching Certification Option

- Professors:**
 Dolly, D. Gartner, Hurd,
 LaChance, A. F. Parks, Pula,
 K. Schlegel (Chair), Snelson
- Associate Professors:**
 Barkley, R. Brewer, Coward,
 Lutz, McShane, Smith
- Assistant Professors:**
 Kehrwald, Tannacito
- Instructors:**
 Burritt, Ewers
- Lecturer:**
 Chapman

- If you wish to obtain secondary school teaching certification, you must complete the Teaching Certification Option.
- An internship is required for the Teaching Certification Option, but in other English concentrations, an internship is optional.
- The department also offers a minor in writing and participates in the public relations and environmental humanities minors (see separate sections of this catalog).
- ENGL 101, 111, 150, 221, 250, 308, 309, 310, and 312 do not count toward major or minor.

Summary of Requirements for Major/Minor in English

Major	Minor
<p>1. Core Curriculum <i>(15 hours)</i> ENGL 260 British Literature: Beowulf to Present* ENGL 261 American Literature: Colonial to Present* ENGL 270 European and Neo-European Literature* <i>or</i> ENGL 271 Asian and African Literature* ENGL 300 Critical Writing about Literature* ENGL 306 Introduction to English Linguistics* ** <i>or</i> ENGL 416 History of the English Language* **</p> <p><i>* Must have a C or better to count toward major.</i> <i>** Students in the Teaching Certification track must take ENGL 416 to fulfill their Major Core Curriculum.</i></p>	<p>1. Core Curriculum <i>(15 hours-Same as major)</i></p>
<p>2. Concentrations <i>(25 hours)</i> <i>Majors must choose one of the following concentrations:</i></p> <ul style="list-style-type: none"> ● Literature ● Creative Writing ● Professional Writing <p><i>or</i></p> <ul style="list-style-type: none"> ● Teaching Certification Option <p>(Requirements for each are specified below.)</p>	<p>2. Minor Core Requirement <i>(3 hours)</i> ENGL 340 Shakespeare</p>
	<p>3. Electives <i>(6 hours)</i> <i>Criteria for electives: Students must take 6 hrs. of literature at the 300/400 level.</i></p>

Requirements for Literature Concentration

- 1. Major Core Curriculum:**
(15 hours - listed above)
- 2. Concentration Core Requirements:**
(4 hours)
 ENGL 340 Shakespeare
 ENGL 489 English Capstone
- 3. Electives:**
(21 hours)
Criteria for electives: Students must take a minimum of 18 hours at the 300/400 level. Students may count a maximum of 6 hours of writing courses beyond ENGL 300 Critical Writing about Literature.

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 408 Modern and Post-Modern American Fiction
or ENGL 426 Modern American Poetry
 ENGL 460 Form and Theory of Fiction and Poetry
 ENGL 470 Senior Workshop
 ENGL 489 English Capstone

Six hours from the following:
 ENGL 360 Creative Nonfiction
 ENGL 434 Advanced Fiction Writing
 ENGL 435 Advanced Poetry Writing

- 3. Elective:**
(3 hours)
English course (300/400 level)

Requirements for Professional Writing Concentration

- 1. Major Core Curriculum**
(15 hours - listed above)
- 2. Concentration Requirements:**
(19 hours)
 ENGL 330 Business Writing
or ENGL 338 Technical Writing
 ENGL 336 Journalistic Writing
 ENGL 360 Creative Nonfiction
 ENGL 402 Editing and Production
 ENGL 430 The Composing Processes
 ENGL 436 Advanced News and Feature Writing
 ENGL 489 English Capstone
- 3. Electives:**
(6 hours)
Literature courses (300-400 level)

Requirements for Teaching Certification Option

- 1. Major Core Curriculum:**
(15 hours - listed above)
- 2. Teaching Certification Core Requirements:**
(16 hours)
 ENGL 276 Adolescent Literature
 ENGL 306 Introduction to English Linguistics
 ENGL 330 Business Writing
or ENGL 334 Creative Writing: Fiction
or ENGL 335 Creative Writing: Poetry
or ENGL 336 Journalistic Writing
 ENGL 340 Shakespeare
 ENGL 430 The Composing Processes
 ENGL 489 English Capstone
- 3. Electives**
(9 hours)
Literature courses.

Summary of Requirements for Teaching Certification Option in English

If you wish to complete a Maryland State approved program in teaching English, you must:

- Complete the BA/BS in English (Teaching Certification Option)
- Meet the phase admissions requirements summarized in the Educational Professions section.
- Complete the professional education sequence described in Education: Secondary Programs.

Environmental Analysis & Planning

	For Major
Hours Required in Geography:	46-47
Hours Required in Biology:	21-23
Hours Required in Other Departments:	17-18
Total Hours Required:	84-88

Summary of Requirements for Major in Environmental Analysis and Planning

Major

Major

Coordinator:

Thomas Small, Professor and
Chair, Department of
Geography

Participating Faculty:

Professors:

Barry, Riley, Yoder
(Biology), Caupp, Precht,
Small (Geography)

Associate Professors:

Pegg, Raesley (Biology),
Shumway (Biology)

Assistant Professors:

Kessler, Prasad (Geography)

Instructor:

Welsch

- 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.

1. Courses in Biology:

(21-23 hours)

BIOL 149 General Biology I (*GEP LAC Group C*)

BIOL 150 General Biology II

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 Physical Geography (*GEP LAC Group C*)

or GEOG 113 Honors Physical Geography

GEOG 207 Physical Geology

GEOG 275 Introduction to Spatial Analysis

GEOG 310 Fundamentals in the Mapping Sciences

GEOG 340 Soil: Genesis, Nature and Characterization

GEOG 413 Remote Sensing -Aerial Photo Interpretation

GEOG 430 Surface Water Hydrology

GEOG 470 Soil & Water Engineering

GEOG 472 Environmental Planning

GEOG 473 Environmental Law

Take four of six courses:

GEOG 208 Historical Geology

GEOG 317 Geographic Information Systems

GEOG 432 Groundwater Hydrology

GEOG 433 Surveying and Field Techniques

GEOG 441 Soil Analysis

GEOG 471 Engineering for Land Development

3. Required Courses in Other Departments:

(17-18 hours)

CHEM 101 General Chemistry I (*GEP LAC Group C*)

CHEM 102 General Chemistry II

ENGL 338 Technical Writing (*GEP BR Adv. Comp.*)

MATH 209 Elements of Applied Probability and Statistics (*GEP BR Math*)

MATH 220 Calculus for Applications

or MATH 236 Calculus I (*GEP BR Math*)

Environmental Humanities

Minor

Coordinator:

James R. Hagen, Associate Professor of History

Participating Faculty:

Professors:

Caupp (Geography), Davis (Visual Arts), Hurd (English), Larivee (Chemistry), Precht (Geography)

Associate Professors:

Pegg, Raesley (Biology), Kroeger-Mappes (Philosophy)

- The Environmental Humanities Minor offers a multicultural and multidisciplinary approach designed to help students experience and understand cultural inter-relationships with the natural environment. Students learn to integrate an appreciation of the global development of environmental ideas and values with direct experience and participation in visual and verbal landscapes. Students focus on the natural region of the Potomac Watershed and/or selected Third World countries.
- This minor is open to and appropriate for students majoring in any field who wish to contribute a humanistic understanding to contemporary preoccupations with environmental issues.
- You cannot major in Environmental Humanities.

For Minor

Total Hours Required:

18-19

Summary of Requirements for Minor in Environmental Humanities

Minor

1. Required Core Courses:

(9 credits)

HIST 309 World Environmental History
ENGL 440 Literature of the Environment
PHIL 315 Philosophy and the Environment

2. Applications:

(6-7 credits)

Choose either a, b, or c:

a. Arts and Cultures:

Take 2 of the following courses from 2 different disciplines

LING 301 Introduction to Language
ART 301 Artistic Traditions: Asia
ART 302 Artistic Traditions: Africa and the Americas
ART 380 19th-Century Art History
ENGL 303 American Romantic Lit.
ENGL 313 English Romantic Lit.

b. Society and Cultures:

Take 2 of the following courses from 2 different disciplines

SOCI 224 Cultural Anthropology
ECON 410 Resource and Environmental Economics
POSC 450 Environmental Public Policy
GEOG 472 Environmental Planning
GEOG 473 Environmental Law

c. Science and Cultures:

Take 2 of the following courses from 2 different disciplines

BIOL 109 Human Biology and the Environment (GEP LAC Group C)
BIOL 340 General Ecology
GEOG 405 Climatology
GEOG 445 Biogeography
CHEM 100/113 Chemistry and Society (GEP LAC Group C)

3. Required Final Project:

(3-9 credits)

HUMA 495 Project in Environmental Humanities

Environmental Policy

Minor

Coordinator:

Stephen Hartlaub, Associate Professor, Department of Political Science

Participating Faculty:

Professor:

Caupp (Geography), Dalton (Economics)

Associate Professor:

Hartlaub (Political Science)

- For advising, see Coordinator.
- See the Coordinator for a listing of Special Topics courses offered for the minor in future semesters.
- A background in the natural sciences is strongly recommended.
- You cannot major in Environmental Policy.

Exercise & Sport Science

Major

Concentrations in:

- health fitness
- health promotion

Professor:

Surgent

Associate Professor:

A. Siemann

Assistant Professors:

Gray, Strieby, Wright

Instructor:

Racchini

Head Athletic Trainer:

Zaloga

Lecturer:

Villereal

- You must complete one concentration.

For Minor

Total Hours Required

21-22

Summary of Requirements for Minor in Environmental Policy

Minor

1. Required Core Courses

(12 hours)

ECON 410 Resource and Environmental Economics

GEOG 473 Environmental Law

POSC 450 Environmental Public Policy

EPOL 491 Seminar in Environmental Policy

2. Elective Courses - no more than 6 cr. from any one department

(9-10 hours)

ECON 408 Urban and Regional Economics

GEOG 450 Urban Planning

GEOG 472 Environmental Planning

POSC 351 Public Administration

POSC 352 Interest Groups and Public Policy

One Upper Division course in the Natural Sciences

Special Topics courses ECON 490, GEOG 490, or POSC 491 when approved by the Minor

Coordinator.

Independent Studies courses ECON 499, GEOG 499, or POSC 498 (maximum of 3 cr.) when approved by the Minor Coordinator.

	Health Fitness	Health Promotion
Hours Required in HPE:	47	42
Hours Required in Other Departments:	24	27
Total Hours Required:	71	69

Summary of Requirements for Major in Exercise and Sport Science

1. Discipline Core Courses

(21 hours)

HEED 101 Community Health Promotion

HEED 103 Foundations of Exercise and Sport Science

HEED 200 Nutrition

HEED 306 Organization and Administration of Exercise and Sport Science

PHEC 163 Strength Training and Conditioning

PHEC 401 Physiology of Exercise

PHEC 411 Evaluation and Prescription

PHEC 435 Lifespan Health and Fitness

2. Courses Required in Other Departments

(18 hours)

BIOL 149 General Biology

BIOL 201 Anatomy and Physiology I

BIOL 202 Anatomy and Physiology II

MATH 209 Elements of Applied Probability and Statistics

PSYC 150 General Psychology

- Upon completion of degree requirements you will be eligible to take the ACSM certification exam for Health Fitness Instructor.
- You must complete a 9-credit internship during your senior year.

3. Concentrations

Complete one of the following concentrations:

a. Health Fitness

(26 hours)

HEED 305 Care and Prevention of Athletic Injuries
 PHEC 109 Aerobic Fitness
 PHEC 303 Biomechanics for Exercise and Sport Science
 PHEC 350 Lifeguarding
 PHEC 351 Water Safety Instructor
 PHEC 410 Advanced Strength Training
 PHEC 482 Field Experience in Health Fitness
 PHEC 495 Internship in Health Fitness

Courses in Other Departments

(6 hours)

ACCT 100 Financial Accounting
 BUAD 100 Introduction to Business

- You must complete a 9-credit internship during your senior year.
- If you have a GPA of 2.75 or higher you can be accepted into the Master's Degree Program in Community Health Promotion at West Virginia University.

b. Health Promotion

(21 hours)

HEED 202 Coordinated School Health Program
 HEED 404 Health Instruction
 HEED 405 Sexuality
 HEED 409 Consumer and Environmental Health
 HEED 495 Internship in Health Promotion

Courses in Other Departments

(9 hours)

CMST 132 Introduction to Interpersonal and Small Group Communication
 PSYC 212 Adolescence and Adulthood
 PSYC 430 Health Psychology

Fine Arts

For Minor

Hours Required in Art:	24
Hours Required in Other Departments:	0
Total Hours Required:	24

Minor

Professors:

Brown, Davis (chair), Dieruf,
Llewellyn

Associate Professor:

Rhodes

Assistant Professors:

Erdman, Hodges

- 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.
- You cannot major in Fine Arts.

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:

(6 hours)

ART 415 Art Criticism

and choose 3 hours from:

ART 301 Artistic Traditions: Asia or ART 302 Artistic Traditions: Africa and the Americas

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 6 hours from:

ART 207 Graphic Design

ART 212 Drawing

ART 221 Painting

ART 232 Printmaking

ART 235 Photography

and choose 3 hours from:

ART 202 Ceramics

ART 209 Crafts Workshop

ART 236 Digital Imaging

ART 240 Sculpture

4. Advanced Studio Art:

choose 3 hours from:

ART 307 Computer Graphics

ART 402 Advanced Ceramics

ART 407 Advanced Graphic Design: Print and Video Media

ART 421 Advanced Painting

ART 432 Advanced Printmaking

ART 435 Advanced Photography

ART 440 Advanced Sculpture

Foreign Languages & Literature

Major

Minor

Teaching Certification Option

Professor:

O'Brien (Chair)

Assistant Professors:

Cardinale, Sanchez

- At least half of the credit hours required in your major language (French or Spanish) must be taken at FSU.
- Foreign language majors who have courses transferred from a foreign institution at the 300 or 400 level must take at least one 300 or 400 level course at FSU after they return and prior to graduation.
- Only courses in which a grade of C or better is earned will count towards satisfaction of major or minor requirements.
- The department also offers course work in intercultural studies, literature in translation, and linguistics.
- Courses in Italian, Chinese, Japanese, German and Portuguese are offered as MDFL courses on an irregular basis..

	For Major	For Minor	For Teaching Cert. Option
Hours Required in Foreign Languages & Literature:	30	18	30
Hours Required in Other Departments:	variable	0	variable
Total Hours Required:	30-variable	18	72.5-variable

Accelerated Placement

The department reviews all first time students' records, and other students' records by request, to determine if they are eligible for accelerated placement in language courses. If you are eligible for accelerated placement and 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 Major in Foreign Languages & Literature

The requirements for a major in foreign languages and literature with a concentration in French or Spanish consist of a minimum of 27 semester hours of credit beyond the 250 course. Courses in the particular concentration (French or Spanish) include five 300-level and four 400-level courses. All majors must also take Linguistics 301: Introduction to Language. In addition, one of the following options must be completed:

Group I Language Orientation: completion of a second foreign language through the 250 level.

Group II Second Major: Completion of a second major in another department.

Summary of Requirements for Minor in Foreign Languages & Literature

The minor in French or Spanish consists of at least three 300- or 400-level courses (9 credit hours beyond the 250 course). Students minoring in a language who begin course work at the 300-level are required, through accelerated placement, to pay the fee of \$10.00 per credit hour for the 211, 212, and 250 courses. A minor in a foreign language meets Group B, GEP LAC. Extra courses may be used to fulfill Group E.

Summary of Requirements for Teaching Certification Option in Foreign Languages & Literature

If you wish to complete a Maryland State approved program in teaching French or Spanish, you must:

- Complete the BA in Foreign Languages & Literature (French or Spanish).
- Meet the phase admissions requirements summarized in the Educational Professions section.
- Complete the professional education sequence described in Education: Secondary School Programs.

Forestry

For Minor

Total Hours Required:

23

Minor

Summary of Requirements for Minor in Forestry

Minor

Coordinator:

Durland Shumway,
Associate Professor,
Department of Biology

1. Required Courses:

(17 hours)

BIOL 149 General Biology I
BIOL 150 General Biology II
BIOL 305 Dendrology
BIOL 425 Forest Science
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 Geographic Information Systems
GEOG 340 Soils: Genesis, Nature and Characterization
GEOG 406 Management and Conservation of Natural Resources
GEOG 413 Remote Sensing - Aerial Photo 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 & Environmental Economics

* Independent studies courses **MUST** address a **Forestry** topic.

Geography

	For Major	For Minor	For Mapping Sciences Concentration	For Global Systems Analysis Concentration
Hours Required in Geography:	40-43	22	43-44	37
Hours Required in Other Departments:	3	0	6-7	9
Total Hours Required:	43-46	22	49-51	46

Major

Minor

Concentrations in: mapping sciences global systems analysis

Professors:

Bullamore, Caupp, Precht,
Small (Chair)

Associate Professor:

Saku, G. White

Assistant Professors:

Kessler, Prasad

Instructor:

Welsch

- You may elect a concentration in Mapping Sciences or Global Systems Analysis.
- The department also coordinates majors in Earth Science, Environmental Analysis and Planning, and Urban and Regional Planning.
- An internship is optional.

Summary of Requirements for Major/Minor in Geography

(without specialized concentration)

Major

Minor

1. Required Core Courses:

(19 hours)

GEOG 103 Physical Geo. (GEP LAC Group C)

GEOG 104 Human Geo. (GEP LAC Group D)

GEOG 275 Spatial Analysis

GEOG 310 Fundamentals in the Mapping Sciences

GEOG 380 Research Methods in Geography

GEOG 480 The Geographic Perspective

(7 hours)

GEOG 103 Physical Geo. (GEP LAC Group C)

GEOG 104 Human Geo. (GEP LAC Group D)

2. Advanced Physical Geography:

(3-4 hours)

GEOG 335 Oceanography

GEOG 340 Soils: Genesis, Nature and Characterization

GEOG 405 Climatology

GEOG 430 Surface Water Hydrology

GEOG 431 Glacial & Pleistocene Geomorphology

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 425 Geography of Transportation

GEOG 427 Geography of Languages & Religions

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 401 Geography of Europe

GEOG 402 Geography of Russia and the Former Republics

GEOG 403 Geography of Sub-Sahara Africa

5. Geographic Techniques:

(3 hours)

Select from:

GEOG 315 Applied Design in the Mapping Sciences

GEOG 317 Geographic Information Systems

GEOG 412 Geographic Visualization

GEOG 413 Remote Sensing - Aerial Photo Interpretation

GEOG 433 Surveying and Field Techniques

6. Human Earth Relationships:

(3 hours)

Select from:

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

7. Electives*(6-8 hours)**Any two additional geography courses except GEOG 495***(15 hours)**Select any from GEOG courses except GEOG 495***8. Required Courses in Other Departments:***(3 hours)*MATH 209 Elements of Applied Probability & Statistics *(GEP BR Math)***Three or more credits earned in GEOG 499, Research in Geography, may count as one course.***Requirements for Mapping Sciences Concentration****Requirements for Global Systems Analysis Concentration****1. Required Core Courses:***(19 hours)*GEOG 103 Physical Geography *(GEP LAC Group C)*GEOG 104 Human Geography *(GEP LAC Group D)*

GEOG 275 Spatial Analysis

GEOG 310 Fundamentals in the Mapping Sciences

GEOG 380 Research Methods in Geography

GEOG 480 The Geographic Perspective

1. Required Core Courses:*(19 hours)*GEOG 103 Physical Geography *(GEP LAC Group C)*GEOG 104 Human Geography *(GEP LAC Group D)*

GEOG 275 Spatial Analysis

GEOG 310 Fundamentals in the Mapping Sciences

GEOG 380 Research Methods in Geography

GEOG 480 The Geographic Perspective

2. Advanced Physical Geography:*(3-4 hours)**Select one course:*

GEOG 335 Oceanography

GEOG 340 Soils: Genesis, Nature and Characterization

GEOG 405 Climatology

GEOG 430 Surface Water Hydrology

GEOG 431 Glacial & Pleistocene Geomorphology

GEOG 445 Biogeography

2. Advanced 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 425 Geography of Transportation

GEOG 427 Geography of Languages and Religions

3. Advanced Human Geography:*(3 hours)**Select one course:*

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 425 Geography of Transportation

GEOG 427 Geography of Languages and Religions

GEOG 454 Geography of Tourism

3. Advanced Regional:*(6 hours)**Select two from:*

GEOG 320 Geography of Latin America

GEOG 401 Geography of Europe

GEOG 402 Geography of Russia and the Former Republics

GEOG 403 Geography of Sub-Saharan Africa

4. Geographic Techniques:*(15 hours)*

GEOG 317 Geographic Information Systems

GEOG 413 Remote Sensing - Aerial Photo Interpretation

Select three courses from among:

GEOG 315 Applied Design in the Mapping Sciences

GEOG 412 Geographic Visualization

GEOG 414 Digital Image Processing and Analysis

GEOG 417 Advanced Geographic Information Systems

GEOG 418 Cartometrics

GEOG 433 Surveying and Field Techniques

4. Human-Earth Relationships:*(3 hours)**Select one from:*

GEOG 335 Oceanography

GEOG 405 Climatology

GEOG 406 Management and Conservation of Natural Resources

GEOG 460 Natural Hazards in the Physical Environment

5. Required Courses in Other Departments:**(9 hours)*

MATH 209 Elements of Applied Probability and Statistics

*(GEP BR Math)**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 309 World Environmental History

HIST 341 Modern & Contemporary Middle East

HIST 344 Modern Western Europe

HIST 346 History of Modern Ireland

HIST 404 Revolutionary and Soviet Russia

HIST 408 The British Empire

**some courses may have prerequisites*

Requirements for Mapping Sciences Concentration continued

GEOG 402 Geography of Russia and the Former Republics
 GEOG 403 Geography of Sub-Sahara Africa

6. Required Courses in Other Departments:

(6-7 hours)

MATH 209 Elements of Applied Probability & Statistics
 (GEP BR Math)

Select one course:

MATH 102 College Algebra (GEP BR Math)

MATH 103 Trigonometry

MATH 120 Pre-Calculus Mathematics (GEP BR Math)

MATH 220 Calculus for Applications I

MATH 221 Calculus for Applications II

MATH 236 Calculus I (GEP BR Math)

MATH 237 Calculus II

7. Recommendations:

Students are encouraged to select additional course work:

MATH 103 Trigonometry - especially for Mapping Sciences

MATH 220 & 221 Calculus I and II - especially for remote sensing

Computer Programming - complete a two-course sequence

Requirements for Global Systems Analysis Concentration continued

HIST 422 Diplomatic History of Europe

HIST 446 Hapsburg/Ottoman Empires & Eastern Europe

HIST 450 History of Mexico

HIST 453 Contemporary Africa

HIST 455 Latin American Revolutions

HIST 457 India

HIST 458 History of China and Korea

HIST 459 History of Japan

PHIL 311 Asian and African Philosophy

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 Western Europe

POSC 334 Politics of Eastern 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.

Graphic Design

Minor**Professors:**

Brown, Davis (chair),
 Dieruf, Llewellyn

Associate Professor:

Rhodes

Assistant Professors:

Erdman, Hodges

- 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.
- You cannot major in Graphic Design.

	For Minor
Hours Required in Art:	24
Hours Required in Other Departments:	0
Total Hours Required:	24

Summary of Requirements for Minor in Graphic Design

Minor

1. Basic Courses:

(9 hours)

ART 104 Two-Dimensional Design

ART 105 Three-Dimensional Design

ART 207 Graphic Design

2. Art History and Critical Studies:

(6 hours)

ART 415 Art Criticism

and choose 3 hours from:

ART 360 Western Art History

ART 408 20th Century Art History

3. Introductory Studio:

(3 hours)

Choose from:

ART 202 Ceramics

ART 221 Painting

ART 232 Printmaking

ART 235 Photography

ART 240 Sculpture

4. Advanced Studio Focus:

(6 hours)

ART 307 Computer Graphics

ART 407 Advanced Graphic Design (Print & Video)

Health & Physical Education

Major with Teaching Certification

Professors:

C. Hircock, R. Lewis,
Surgent

Associate Professors:

B. Hircock (chair), A.
Siemann

Assistant Professors:

Gray (associate chair),
Irwin, Strieby, Wright

Instructor:

Perkins

Lecturer:

Villarreal

- Upon successful completion of the program, you will be eligible to apply for 7-12 health certification and K-12 physical education certification.
- The Department of HPER also offers majors in Athletic Training, Recreation, 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.

For Major and
Teaching Certification

Hours Required in HPE:	75
Hours Required in Other Departments:	33
Total Hours Required:	108

Summary of Requirements for Major in Health & Physical Education

Major

1. Discipline Core:

(57 hours)

Health Education (26 hours)

HEED 100 Personal Wellness
HEED 104 Foundations of Health Education
HEED 202 Coordinated School Health Program
HEED 216 Content in the School Health Program Part I
HEED 311 Assessment & Evaluation Methodology
HEED 316 Content in School Health Program Part II
HEED 317 Content in School Health Program Part III
HEED 416 Curriculum Design in Health Education
HEED 418 Current Issues in Health

Physical Education (31 hours)

PHEC 103 Foundations of Physical Education
PHEC 164 Teaching of Physical Education Through Outdoor Adventure Education
PHEC 165 Teaching of Physical Education Through Cooperative Team Challenges
PHEC 166 Teaching of Physical Education Through Game and Activity Skills
PHEC 167 Teaching of Physical Education Through Educational Gymnastics
PHEC 168 Teaching of Physical Education Through Dance Forms
PHEC 169 Teaching of Physical Education Through Weight Training
PHEC 301 Biomechanics for Teacher Education
PHEC 310 Organization & Administration of Health and Physical Education
PHEC 402 Adapted Physical Activities
PHEC 406 Applied Physiology
PHEC 407 Motor Learning and Performance
PHEC 408 Movement Experiences for Children
PHEC 416 Curriculum Design in Physical Education

Transfer Students

PHEC 170 Physical Education Teaching Lab

2. Required Courses in Other Departments:

(11 hours)

BIOL 149 General Biology I (*GEP LAC Group C*)
BIOL 211 Essentials of Anatomy and Physiology
GEOG 104 Human Geography (*GEP LAC Group D*)

3. Other requirements

(0 hours)

- All majors are required to pass/document/take swimming skills at the intermediate level as a graduation requirement. Non-swimmers must take PHEC 250 as a prerequisite to PHEC 251.
- All majors are required to take or document first-aid certification as a graduation requirement.

4. Education Courses

(40 hours)

Pre-Phase EDUC 100 Career Analysis in Education
(4 hours) EDUC 201 Students, Teachers, and Learning Environments

Phase I EDUC 202 Foundations of Learning & Instruction
(7 hours) EDUC 346 Educational Technology Lab I
REED 317 Content Area Reading

Phase II EDUC 392 K-12 Field Experience
(14 hours) EDUC 447 Educational Technology Lab II
HEED 404 Health Instruction
PHEC 418 Physical Education in the Secondary School
REED 318 Reading and Writing Connections
SPED 451 Adapting Instruction in a Diverse Classroom

Phase III EDUC 406 Leadership Seminar
(15 hours) EDUC 448 Educational Technology Lab III
PHEC 497 Teaching Internship, K-12 Program

6. Other graduation/program exit requirements

- Successful presentation of a developmental portfolio according to department format.
- Passing score on PRAXIS II as established by the state of Maryland.

Summary of Requirements for Teaching Certification in Health and Physical Education

If you wish to complete a Maryland State approved program in teaching health and physical education, you must:

- Complete the BA/BS in Health and Physical Education.
- Meet the phase admissions requirements summarized in the Educational Professions section.
- Complete the professional education sequence described in Education: K-12 Programs.

Health Science Administration

Collaborative Program

Major

Coordinator:

M. Shakil Rahman,
Professor, Department of
Business Management

- If you complete the major in health science administration, you will earn the Bachelor of Technical and Professional Studies (BTPS) degree.
- Since health science administration is an interdisciplinary program, grades in all program courses completed at FSU count in the major grade point average.
- A three-credit field experience is required.

	For Major
Hours Required at Allegany College of Maryland	65-70
Hours Required at Frostburg State University	58-70
Total Hours Required	127-140

The Bachelor of Technical and Professional Studies degree in health science administration is a collaborative program between Frostburg State University and Allegany College of Maryland designed to provide advanced career opportunities for students who hold an Associate of Applied Science degree in a health professions area (currently respiratory therapist, occupational therapy assistant, physical therapy assistant, radiologic technology, dental hygiene, medical laboratory technology, nursing, and therapeutic massage). If you hold a similar degree in another program, you may be considered for admission based on an articulation agreement between FSU and the other undergraduate institution.

The program is designed to build on the scientific and clinical knowledge and experience gained in the associate degree program and through clinical experience in the field. You will increase your knowledge of core issues in health care and develop supervisory, management, and administrative skills required to move into a management position in health care administration. The program does not offer professional certification or licensure. If you are interested in continuing your education in your specialized licensure area, you should enroll in one of the baccalaureate programs offered by another University System of Maryland institution (see pre-professional program listings).

Degree candidates must meet the transfer admission requirements of Frostburg State University, and have successfully completed one of the Allegany College of Maryland health programs referenced. Course work for the baccalaureate degree may be completed on a full or part time basis. All core courses are scheduled in the evening, on a rotating basis, to meet the needs of working adults. You will receive a pre-planned course schedule, and will need to complete the courses when scheduled in order to complete the degree program in a reasonable period of time.

Summary of Requirements for a Major in Health Science Administration

1. An Associate of Applied Science degree in a health profession field from Allegany College of Maryland. A maximum of 70 credits will transfer from all community colleges you have attended.

2. General Education Requirements:

You must complete a minimum of 40 credits in general education as part of the baccalaureate program. The particular general education courses that will be required in addition to those completed for the A.A.S. degree depend on which health professions program you have completed.

The following courses, required to meet general education requirements at FSU, or as prerequisites for advanced course work at FSU, are recommended as selections for general education and general electives at Allegany College if they are not already required in the A.A.S. program:

- Social Science: Introduction to Psychology **and** Introduction to Sociology
- Humanities: Introduction to Philosophy **or** Contemporary Ethical Problems
- Health Education: Personal Wellness
- General Elective: Introduction to Computer Science

In addition, all students will complete an **Advanced Writing** course at FSU (see listing of options in the section on the Academic Program).

3. Program Core Courses:

- (18 hours)
- SOCI 367 Sociology of Medicine
- PHIL 313 Biomedical Ethics
- SOWK 375 Human Behavior and the Social Environment I
- COSC 220 Introduction to Software Applications
- BUAD 356 Leadership and Interpersonal Skills
- _____ (Legal Issues in Health — transfer course, to be specified)

4. Administration Courses:*(30 hours)*

COSC 100 Introduction to Computer Science
 ACCT 100 Financial Accounting
 ECON 200 Basic Economics
 MATH 209 Elements of Applied Probability and Statistics
 BUAD 351 Management of Organizations
 BUAD 361 Principles of Marketing
 BUAD 303 Principles of Finance
 BUAD 357 Human Resource Management
 BUAD 359 Total Quality Management
 BUAD 494 Field Experience in Business Administration

5. Program Elective Course:*(3 hours)**Select one course from among:*

BUAD 355 Operations Management
 BUAD 380 Social Responsibility in Business
 PSYC 430 Health Psychology
 SOCI 468 Sociology of Later Life

History

Major**Minor**

**Concentrations in:
 international history
 history of the Americas
 public history**

Professors:

Clulee (Chair), Dean,
 McGovern, Wiseman

Associate Professors:

Boniece, Charney, Hagen

- An internship is optional.

	For Major	For Minor
Hours Required in History:	39	24
Hours Required in Other Departments:	6	0
Total Hours Required:	45	24

Summary of Requirements for Major/Minor in History

Major	Minor
1. Core Introductory Level Courses: <i>(12 hours)</i>	<i>(12 hours)</i>
HIST 103 History of the United States	HIST 103 History of the United States
HIST 104 History of the United States	HIST 104 History of the United States
HIST 113 World History	HIST 113 World History
HIST 114 World History	HIST 114 World History
2. Research Core: <i>(6 hours)</i>	
HIST 299 Writing and Research in History <i>(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).</i>	
HIST 485 Seminar in History <i>(must be completed during the senior year with a grade of C or better)</i>	
3. Concentrations: <i>(27 hours)</i> <i>Majors must choose one of the following concentrations:</i>	
International History	
History of the Americas	
Public History	
4. Electives <i>(0 hours)</i>	Minor <i>(12 hours)</i> <i>Select from any courses at the 300 or 400 level.</i>

Requirements for International History Concentration

1. Select five courses from the following areas:

Europe

HIST 305 Gender and Society in Modern Europe
 HIST 306 Medieval Europe
 HIST 307 Renaissance and Reformation Europe
 HIST 308 Europe, 1600-1815
 HIST 309 World Environmental History
 HIST 310 Ancient Greece and Rome
 HIST 319 A History of Terrorism
 HIST 325 History of Modern Science
 HIST 344 Modern Western Europe
 HIST 346 History of Modern Ireland
 HIST 403 Imperial Russia
 HIST 404 Revolutionary and Soviet Russia
 HIST 408 The British Empire
 HIST 409 The Scientific Revolution
 HIST 422 Diplomatic History of Europe
 HIST 446 Hapsburg/Ottoman Empires & Eastern Europe

Africa and Middle East

HIST 301 Traditional Africa
 HIST 309 World Environmental History
 HIST 319 A History of Terrorism
 HIST 341 Modern & Contemporary Middle East
 HIST 408 The British Empire
 HIST 453 Contemporary Africa

Asia

HIST 309 World Environmental History
 HIST 319 A History of Terrorism
 HIST 357 India
 HIST 408 The British Empire
 HIST 458 History of China and Korea
 HIST 459 History of Japan
 HIST 460 Modern and Contemporary Asia

Latin America

HIST 303 History of Latin America
 HIST 304 History of Latin America
 HIST 309 World Environmental History
 HIST 318 Native Peoples of the Americas
 HIST 319 A History of Terrorism
 HIST 450 History of Mexico
 HIST 455 Latin American Revolutions

2. Select two history courses from any other history concentration (*History of the Americas and/or Public History*).

3. Select two complementary courses from the following areas (*some of these courses may require additional pre-requisite course work*):

Africa and Middle East

ART 301 Artistic Traditions: Asia
 ART 302 Artistic Traditions: Africa and the Americas
 ECON 405 Economic Growth and Development
 ENGL 271 Asian and African Literature
 GEOG 403 Geography of Africa
 POSC 330 Politics of Africa
 POSC 332 Politics of the Middle East

Asia

ART 301 Artistic Traditions: Asia
 ECON 405 Economic Growth and Development
 ENGL 271 Asian and African Literature

Latin America

ART 302 Artistic Traditions: Africa and the Americas
 ECON 405 Economic Growth and Development
 GEOG 320 Geography of Latin America
 POSC 331 Politics of Latin America

Europe

ART 360 Western Art History
 ECON 309 Comparative Economic Systems
 ENGL 270 European and Non-European Literature
 ENGL 307 16th and 17th Century English Literature
 ENGL 313 English Romantic Literature
 ENGL 322 The Restoration and Augustan Age
 ENGL 323 Victorian Literature
 ENGL 332 The Age of Johnson
 ENGL 340 Shakespeare
 ENGL 404 Modern British Fiction
 ENGL 411 Chaucer and His Times
 GEOG 401 Geography of Europe
 GEOG 402 Geography of Russia and the Former Republics
 POSC 333 Politics of Western Europe
 POSC 334 Politics of Eastern Europe
 POSC 431 Russian Politics

Requirements for History of the Americas Concentration

1. Select five courses from the following areas:

United States

HIST 309 World Environmental History
 HIST 318 Native Peoples of the Americas
 HIST 345 History of Maryland
 HIST 380 The American West
 HIST 406 20th-Century African-American Leadership in the U.S.
 HIST 415 History of American Women
 HIST 428 Diplomatic History of the U.S.
 HIST 430 World Perspectives on America
 HIST 431 History of the American Family
 HIST 432 U.S. Immigration History
 HIST 461 Colonial America, 1607-1763
 HIST 462 Revolutionary America, 1763-89
 HIST 463 The Age of Jefferson and Jackson, 1789-1848
 HIST 464 The Civil War and Reconstruction, 1849-77
 HIST 465 Gilded Age America, 1877-1913
 HIST 466 The U.S. in the 20th Century, 1914-45
 HIST 467 The U.S. in the 20th Century, 1945-Present
 HIST 470 America and the Vietnam War

Latin America

HIST 301 Traditional Africa
 HIST 303 History of Latin America
 HIST 304 History of Latin America
 HIST 309 World Environmental History
 HIST 318 Native Peoples of the Americas
 HIST 430 World Perspectives on America
 HIST 450 History of Mexico
 HIST 455 Latin American Revolutions

2. Select either HIST 433 (Public History) plus one history course from the International History concentration, or 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):

United States

ECON 303 American Economic Development
 ENGL 261 American Literature: Colonial to Present
 ENGL 303 American Romantic Literature
 ENGL 352 American Colonial Literature
 ENGL 407 American Fiction: 1865-1922
 ENGL 408 Modern and Post-Modern American Fiction
 GEOG 301 Geography of North America
 GEOG 324 Urban Geography: Internal City Patterns
 SOCI 305 Racial and Cultural Minorities
 POSC 321 American State and Local Politics
 POSC 363 Media and Politics
 POSC 421 American Legislative Politics
 POSC 427 The American Presidency
 POSC 471 American Political Thought

Latin America

ART 302 Artistic Traditions: Africa and the Americas
 ECON 405 Economic Growth and Development
 GEOG 320 Geography of Latin America
 POSC 331 Politics of Latin America

Requirements for Public History Concentration

1. Public History Core

HIST 433 Public History
 HIST 484 Practicum in History *or*
 HIST 492 Internship Seminar *and* HIST 495 Internship in History

2. Select three of the following courses:

HIST 309 World Environmental History
 HIST 318 Native Peoples of the Americas
 HIST 345 History of Maryland
 HIST 380 The American West
 HIST 406 20th-Century African-American Leadership in the U.S.
 HIST 415 History of American Women
 HIST 428 Diplomatic History of the U.S.
 HIST 430 World Perspectives on America
 HIST 431 History of the American Family
 HIST 432 U.S. Immigration History
 HIST 461 Colonial America, 1607-1763
 HIST 462 Revolutionary America, 1763-89
 HIST 463 The Age of Jefferson and Jackson, 1789-1848
 HIST 464 The Civil War and Reconstruction, 1849-77
 HIST 465 Gilded Age America, 1877-1913
 HIST 466 The U.S. in the 20th Century, 1914-45
 HIST 467 The U.S. in the 20th Century, 1945-Present
 HIST 470 America and the Vietnam War

3. Select two history courses from the International History Concentration.

4. Select two complementary courses from the following areas (some of these courses may require additional pre-requisite course work):

ECON 303 American Economic Development
 GEOG 301 Geography of North America
 GEOG 324 Urban Geography: Internal City Patterns
 GEOG 325 Urban Geography: Metropolitan Systems
 GEOG 410 Locational Analysis
 GEOG 454 Geography of Tourism
 GEOG 455 Tourism Planning
 GEOG 472 Environmental Planning
 GEOG 473 Environmental Law
 POSC 323 Public Administration
 POSC 352 Interest Groups and Public Policy
 POSC 358 American Public Policy
 POSC 456 Urban Politics and Policies
 SOCI 325 Community Analysis
 SOCI 436 Sociological Aspects of Mass Communication

Honors Program

Director:

Maureen Connelly,
Professor, Departments of
Sociology and Social Work

- Students who have demonstrated a high degree of academic skill, creative talent, and motivation have the opportunity to participate in the University's Honors Program.
- Interested students who think they may qualify for the Honors Program should contact the Director at 301/687-4998.

Hours Required in English:	3
Hours Required in variants of the GEP program:	15-17
Hours Required in Seminars/Thesis	6
Total Hours Required:	24-26

The Honors Program offers a variety of courses specially designed for Honors students. These courses feature content and instructional methods that are challenging, provide a more active role for the student in the learning process, and emphasize understanding more than factual information, and quality of work rather than quantity. These courses seek to magnify problem-solving abilities, effective communications, an awareness of multiple perspectives, and a capacity for independent learning.

Many of the Honors courses are variants of courses included in the University's General Education Program. These variant courses are primarily intended to be taken during a student's first and second years. For juniors and seniors participating in the program, the Honors Seminars and Thesis provide unique environments and opportunities for learning.

In addition to the academic courses, the Honors Program offers a host of co-curricular activities, including the opportunity to reside in Honors/International Housing in Cambridge and Westminster Halls.

Ultimately the program seeks to foster within students dignity, self-esteem, and a knowledge of their own potential as human beings.

Admission Requirements

Prospective Honors students are invited to join the program on the basis of their high school records and SAT scores. All entering students are invited to participate in the Honors Program if they have an SAT score of at least 1180 (ordinarily with neither the math score below 520 nor the verbal score below 580), graduate in the upper 10% of their high school classes, or have a high school grade point average of 3.50 or above.

Students who have completed at least one semester of work at Frostburg State or at another institution are eligible to be admitted to the Honors Program if they have a grade point average of 3.5 or above.

Students demonstrating considerable creative ability, as evidenced by papers, projects, creative writing, musical composition, art work, or musical performance are also admitted on an individual basis.

Summary of Requirements for the Honors Program

Most students participating in the Honors Program are pursuing the distinction of graduating with "Honors in General Education." This distinction is awarded to students who complete the following Honors Program requirements:

- a) ENGL 111 or ENGL 312
- b) 15-17 credit hours of Honors variants of General Education Program courses from an approved list
- c) 6 credit hours of interdisciplinary Honors Seminar(s) or 6 credit hours of Honors Seminar/Thesis
 1. Honors students must earn a 3.0 average in all courses applied to meet Honors requirements and have at least a 3.0 cumulative grade point average upon graduation.
 2. ENGL 111 is required of all students entering the Honors Program as first semester students. Students electing to join this program after their first semester are required to take ENGL 312.
 3. Students entering the program as first semester students are required to participate in an Honors section of ORIE 101 Introduction to Higher Education.
 4. Thesis hours may, with departmental approval, count towards requirements in the major. Seminar credit hours may, with approval of the Honors Program Subcommittee, substitute for portions of the Liberal Arts Component of the General Education Program.

Information Technology Management

Collaborative Program

Major

Coordinator:

Mohsen Chitsaz,
Professor, Department of
Computer Science

- If you complete the major in information technology management, you will earn the Bachelor of Technical and Professional Studies (BTPS) degree.
- Since information technology management is an interdisciplinary program, grades in all program courses completed at FSU count in the major grade point average.
- A three-credit field experience is required.

	For Major
Hours required at Allegany College of Maryland	61-62
Hours required at Frostburg State University	61
Total Hours Required:	122-123

The Bachelor of Technical and Professional Studies degree in information technology management is a collaborative program between Frostburg State University and Allegany College of Maryland designed to provide advanced career opportunities for students who hold an Associate of Applied Science degree in computer science and technology (with options in programming, personal computers, or networking). If you hold a similar degree from another program, you may be considered for admission based on an articulation agreement between FSU and the other undergraduate institution.

The program is designed to prepare students for administrative positions in the management of information technology resources. All students will complete core advanced courses in computer science and business. Beyond the core, students may choose to further develop their knowledge in computer science or business administration through the selection of an in-depth track in one of these disciplines.

Summary of Requirements for Major in Information Technology Management

Major

1. An Associate of Applied Science degree in Computer Science and Technology from Allegany College of Maryland. A maximum of 70 credits will transfer from all two-year colleges you have attended.

2. General Education Requirements:

You must complete a minimum of 40 credits in general education as part of the baccalaureate program. General education courses typically completed as part of the A.A.S. degree include:

General Education: (23-24 hours)

English 101 Freshman English
Office Technology 108 Keyboarding for the Computer
Math 102 College Algebra
or Math 105 Elements of Mathematics
or *Math 221 Elements of Statistics
or Math 119 Pre-Calculus I
Social Science Elective (*Econ 202)
English 112 Business and Technical Communications
Lab Science Elective
Humanities Elective
Physical Activity

**required for Business Administration Track*

You may transfer additional general education courses from Allegany College of Maryland up to the maximum of 70 total transferable credits, or complete the remainder of your general education requirements at FSU. You will need to complete the following additional courses:

General Education: (18 hours)

Fine Arts	(FSU Group A)
Humanities	(FSU Group B)
Natural Science	(FSU Group C—with lab)
Social Science	(FSU Group D)
Heed 100 Personal Wellness	
Advanced Writing (300/400-level - must be completed at FSU)	

3. Required courses in the major completed at Allegany College of Maryland

Computer: (20 hours)

13-101 Introduction to Computer Science
13-103 Computer Logic
13-218 C++ Programming
13-221 Microcomputer Applications I
13-222 Microcomputer Applications II
13-225 Introduction to Networking

Business: (6 hours)

09-201 Principles of Accounting I
09-202 Principles of Accounting II

And one of the following options:**Programming Option:** (12 hours)

13-207 COBOL Programming
13-233 Visual Basic Programming
13-229 Database Programming with 4GLs
13-XXX Language Elective

Personal Computer Option: (12 hours)

13-180 PC Architecture
13-219 PC Operating Systems
13-XXX Electives: Two courses

Network Option: (12 hours)

13-180 PC Architecture
13-219 PC Operating Systems
13-227 Network Design & Administration
13-XXX Language Elective

4. Required courses in the major completed at Frostburg State University:**Computer Science:** (19 hours)

COSC 241 Computer Science II
COSC 300 Structured Systems Anal. & Design
COSC 330 Web Design & Development
COSC 380 Computer-Based Information Systems
COSC 440 Database Management Systems
COSC 494 Field Exp. COSC/Info Science

Business: (9 hours)

BUAD 351 Management of Organizations
BUAD 356 Leadership & Interpersonal Skills
BUAD 291 Legal Environment of Business

And one of the following tracks:**Computer Science Track:** (15 hours)

COSC 325 Software Engineering
COSC 335 Network Architecture Design
COSC 480 Knowledge-Based Systems
COSC Elective (300 or 400 level)
COSC Elective (300 or 400 level)

Business Administration Track: (15 hours)

BUAD 303 Principles of Finance
BUAD 361 Principles of Marketing
BUAD 480 Business and Society
BUAD 355 Operations Management
BUAD 455 Management Information Systems

International Studies

	For Major	For Minor	For Int'l. Politics Concentration	For Int'l Business Conc.	For Int'l Econ Conc.	For Int'l Development Conc.
Total Hours Required:	57-63	21	63-69	63-69	63-70	63-69

Summary of Requirements for Major/Minor in International Studies

	Major	Minor
1. Required Core Courses: <i>(24 hours)</i>	INST 100 Intro. to International Studies INST 491 Seminar in International Studies BUAD 330 International Business ECON 201 Principles of Economics (Macro) <i>(GEP LAC Group D)</i> ECON 202 Principles of Economics (Micro) GEOG 104 Human Geography <i>(GEP LAC Group D)</i> HIST 100 The Contemporary World in Historical Perspective <i>(GEP LAC Group B)</i> <i>or</i> HIST 114 World History POSC 113 Introduction to World Politics <i>(GEP LAC Group D)</i> <i>or</i> POSC 131 Introduction to Comparative Politics <i>(GEP LAC Group D)</i>	<i>(3 hours)</i> INST 100 Intro. to International Studies
2. Foreign Language: <i>(12 - 18 hours)</i>	<i>Students must complete the 200-level sequence 211-212-250 (or receive credit through advanced placement) and a 300-level course in a modern foreign language. Students are advised that an additional 6 credits in the language result in a minor. (Minor: GEP LAC Group B). A second option is to take 18 credit hours in any foreign language course offered or approved for credit by the foreign language department.</i>	<i>(0 hours)</i>
3. Additional Courses: <i>[For those completing a concentration, go to the concentration requirements]</i> <i>(21 hours)</i>	A. Required Courses (15 hours): ECON 309 Comparative Economic Systems GEOG 407 Political Geography INST 150 Introduction to World Religions MDFL 111 Intercultural Understanding POSC 341 International Organization B. Electives (6 hours) <i>Two from among the following:</i> BUAD 450 International Management BUAD 460 International Marketing BUAD 470 International Financial Mgmt. ECON 400 International Trade ECON 401 International Finance ECON 405 Economic Growth & Development: The Developing Economies GEOG 300 Economic Geography GEOG 406 Mgmt. & Conserv. of Natural Res. GEOG 427 Geog. of Languages and Religions HIST 309 World Environmental History HIST 319 A History of Terrorism INST 492 Internship Seminar (up to 6 hours) LING 301 Introduction to Language PHIL 308 Political Philosophy POSC 342 Foreign Policy of the United States POSC 370 Introduction to Political Thought POSC 434 Comparative Legal Systems POSC 441 Int'l. Relations: Theory & Practice	3. Elective Courses: <i>(18 hours)</i> <i>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.</i> Group I <i>(9 hours)</i> BUAD 330 International Business ECON 201 Principles of Economics (Macro) <i>(GEP LAC Group D)</i> ECON 202 Principles of Economics (Micro) GEOG 104 Human Geography <i>(GEP LAC Group D)</i> HIST 100 The Contemporary World in Historical Perspective <i>(GEP LAC Group B)</i> <i>or</i> HIST 114 World History INST 150 Introduction to World Religions MDFL 111 Intercultural Understanding POSC 113 Introduction to World Politics <i>(GEP LAC Group D)</i> <i>or</i> POSC 131 Intro. to Comparative Politics <i>(GEP LAC Group D)</i> Group II <i>(9 hours)</i> BUAD 450 International Management BUAD 460 International Marketing BUAD 470 International Financial Management ECON 309 Comparative Economic Systems ECON 400 International Trade <i>or</i> ECON 401 International Finance

Major

Minor

Concentrations in international politics international business international economics international development

Coordinator:

George White, Associate Professor, Department of Geography

Associate Coordinator:

Sally Boneice, Associate Professor, Department of History

Departmental Contacts:

Professors:

Neral (Economics), O'Brien (Foreign Languages and Literature)

Associate Professors:

Boneice (History), Shah (Business Management), Twing (Political Science), G. White (Geography)

Assistant Professor:

Makang (Philosophy)

- The International Studies major is interdisciplinary in nature and allows you to choose among four concentrations: International Business, International Politics, International Development and International Economics. The required core courses emphasize the interconnections among these four specializations and provide the solid foundation in history, politics, economics, and geography necessary both for the concentration and future employment.
- You are strongly encouraged to combine this major with a second major, particularly in foreign languages. You may also wish to complete a minor

in a foreign language to fulfill the Humanities (Group B) component of the General Education Program.

- 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.
- The International Studies program also offers the International Area Studies certificate, which is open to majors and non-majors.

Major

Minor

GEOG 300 Economic Geography
 ECON 405 Economic Growth and Development
 GEOG 406 Mgmt. & Conserv. of Natural Res.
 GEOG 407 Political Geography
 GEOG 427 Geography of Languages & Religions
 HIST 309 World Environmental History
 HIST 319 A History of Terrorism
 INST 491 Seminar in International Studies
 LING 301 Introduction to Language
 PHIL 308 Political Philosophy
 POSC 341 International Organization
 POSC 342 Foreign Policy of the United States
 POSC 370 Introduction to Political Thought
 POSC 432 Comparative Legal Systems
 POSC 441 Int'l. Relations: Theory and Practice

Requirements for International Politics Concentration

1. Required Core Courses:

(24 hours – listed above)

2. Foreign Language:

(12-18 hours – listed above)

3. Additional Courses:

(27 hours)

A. Required Courses (18 hours):

ECON 309 Comparative Economic Systems
 GEOG 407 Political Geography
 POSC 311 Research Methods
 POSC 341 International Organization
 POSC 342 Foreign Policy of the United States
 POSC 441 International Relations: Theory and Practice

B. Electives (9 hours)

Three from among the following:

ECON 400 International Trade
 HIST 309 World Environmental History
 HIST 319 A History of Terrorism
 HIST 422 Diplomatic History of Europe, 1789-The Present
 HIST 428 Diplomatic History of the United States
 INST 492 Internship Seminar (*if internship is relevant to International Politics*)
 POSC 330 Politics of Africa
 POSC 331 Politics of Latin America
 POSC 332 Politics of Middle East
 POSC 333 Politics of Western Europe
 POSC 334 Politics of Eastern Europe
 POSC 370 Introduction to Political Thought
 POSC 431 Russian Politics
 POSC 434 Comparative Legal Systems
 POSC 435 Model Organization of American States
 POSC 442 National Security Policy

Requirements for International Business Concentration

1. Required Core Courses:

(24 hours – listed above)

2. Foreign Language:

(12-18 hours – listed above)

3. Additional Courses:

(27 hours)

A. Required Courses (15 hours)

ACCT 100 Financial Accounting
or ACCT 201 Introductory Accounting I
 BUAD 291 Legal Environment of Business
 BUAD 351 Management of Organizations
 BUAD 361 Principles of Marketing
 BUAD 303 Principles of Finance
or BUAD 370 Corporate Finance

B. Elective Courses (12 hours)

Group I (9 hours)

Three from among the following

BUAD 450 International Management
 BUAD 460 International Marketing
 BUAD 470 International Financial Management
 ECON 400 International Trade
or ECON 401 International Finance

Group II (3 hours)

One from among the following:

ECON 309 Comparative Economic Systems
 GEOG 300 Economic Geography
 GEOG 407 Political Geography
 INST 492 Internship Seminar (*if internship is relevant to International Business*)
 POSC 432 Comparative Legal Systems
 POSC 341 International Organization

Requirements for International Economics Concentration**1. Required Core Courses:***(24 hours – listed above)***2. Foreign Language:***(12-18 hours – listed above)***3. Additional Courses:***(27-28 hours)***A. Required Courses (21-22 hours)**

ECON 400 International Trade

ECON 401 International Finance

ECON 405 Economic Growth & Develop.: Developing Economies

ECON 407 Business Cycles and Forecasting

or ECON 450 Quantitative Economics*or* ECON 460 Econometrics

GEOG 300 Economic Geography

MATH 209/219 Elements of Applied Probability & Statistics

(GEP BR Math)

MATH 106 Algebra with Calculus for Business

or MATH 220 Calculus for Applications I*or* MATH 236 Calculus I (GEP BR Math)**B. Electives (6 hours)***Two from among the following:*

ECON 309 Comparative Economic Systems

ECON 410 Resource and Environmental Economics

GEOG 407 Political Geography

INST 492 Internship Seminar *(if internship is relevant to International Economics)*

POSC 341 International Organization

Requirements for International Development Concentration**1. Required Core Courses:***(24 hours – listed above)***2. Foreign Language:***(12-18 hours – listed above)***3. Additional Courses: (27 hours)****A. Required Courses (15 hours)**

ECON 309 Comparative Economic Systems

ECON 405 Economic Growth & Develop: Developing Economies

GEOG 300 Economic Geography

INST 150 Introduction to World Religions

POSC 341 International Organization

B. Electives (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 403 The Geography of Sub-Saharan Africa

GEOG 407 Political Geography

HIST 301 Traditional Africa

HIST 304 History of Latin America

HIST 453 Contemporary Africa

HIST 455 Latin American Revolutions

HIST 457 India

INST 492 Internship Seminar *(if internship is relevant to International Development)*

PHIL 311 Asian and African Philosophy

POSC 330 Politics of Africa

POSC 331 Politics of Latin America

POSC 332 Politics of the Middle East

International Area Studies

Certificate

Coordinator:

George White, Associate
Professor, Department of
Geography

- Students participating in a study abroad program may apply courses to this certificate if the courses transfer for upper division credit and are appropriate for the areas of the world identified below. Students must conform to FSU rules in using transfer credits for this certificate. These rules may include obtaining prior approval before taking courses and a limit on the number of transferred credits that may be applied to the certificate.

Summary of Requirements for Certificate in International Area Studies

Choose Option 1, 2, 3, or 4:

(12 hours)

1. Europe:

(choose from at least 3 disciplines)

ART 360 Western Art History
GEOG 401 Geography of Europe
GEOG 402 Geography of Russia and the Former Republics
HIST 305 Women and Society in Modern Europe
HIST 344 Modern Western Europe
HIST 404 Revolutionary and Soviet Russia
HIST 408 The British Empire
HIST 422 Diplomatic History of Europe, 1789-The Present
HIST 446 Hapsburg/Ottoman Empires and Eastern Europe
POSC 333 Politics of Western Europe
POSC 334 Politics of Eastern Europe
POSC 431 Russian Politics
FREN 250 or above
SPAN 250 or above

2. Latin America:

(choose from at least 3 disciplines)

ART 302 Artistic Traditions: Africa and the Americas
GEOG 320 Geography of Latin America
HIST 304 History of Latin America
HIST 318 Native Peoples of the Americas
HIST 450 The History of Mexico
HIST 455 Latin American Revolutions
POSC 331 Politics of Latin America
POSC 435 Model Organization of American States
SPAN 250 or above

3. Africa and the Middle East:

(choose from at least 3 disciplines)

ART 302 Artistic Traditions: Africa and the Americas
GEOG 403 The Geography of Sub-Saharan Africa
HIST 341 Modern and Contemporary Middle East
HIST 408 The British Empire
HIST 453 Contemporary Africa
PHIL 311 Asian and African Philosophy
POSC 330 Politics of Africa
POSC 332 Politics of the Middle East
FREN 250 or above

4. Asia:

(choose from at least 2 disciplines)

ART 301 Artistic Traditions: Asia
PHIL 311 Asian and African Philosophy
HIST 357 India
HIST 408 The British Empire
HIST 458 History of China and Korea
HIST 459 History of Japan
HIST 460 Modern and Contemporary Asia

Interpretive Biology and Natural History

Major

Coordinator:

Ronald Barry, Professor,
Department of Biology

- The Department of Biology offers this program. The department also offers undergraduate degree programs in Biology (including a pre-health option and concentrations in biotechnology and environmental science) and in Wildlife and Fisheries, and collaborates with Geography to offer a degree in Environmental Analysis and Planning. Minors are available in Biology and Forestry. Pre-health professions advising is offered.

	For Major
Hours Required in Biology:	44-55
Hours Required in Other Departments:	23-30
Total Hours Required:	74-78

Summary of Requirements for Major in Interpretive Biology and Natural History

Major

1. Introductory Level Courses:

(8 hours)

BIOL 149 General Biology I (*GEP LAC Group C*)
BIOL 150 General Biology II

2. Advanced Level Courses

(32-35 hours)

BIOL 230 Wildlife Techniques
BIOL 309 General Entomology
BIOL 314 Plant Taxonomy
BIOL 334 General Animal Behavior
BIOL 340 General Ecology
BIOL 406 Ornithology
BIOL 411 Invertebrate Zoology
BIOL 426 Vertebrate Zoology
BIOL 494 Field Experiences in Biological Sciences (*minimum 3 credits*)

3. Electives:

Select 11-12 hours from among the following.

BIOL 305 Dendrology
BIOL 311 Morphology of Thallophytes
BIOL 312 Morphology of Embryophytes
BIOL 402 Evolution
BIOL 417 Ichthyology
BIOL 422 Herpetology
BIOL 425 Forest Science
BIOL 423 Mammalogy
BIOL 430 Introductory Limnology
GEOG 208 Historical Geology
GEOG 445 Biogeography

4. Required Courses in Other Departments

(23 hours)

CHEM 101 General Chemistry I (*GEP LAC Group C*)
CMST 102/112 Introduction to Human Communication
COSC 100/110 Introduction to Computer Science
GEOG 103/113 Physical Geography (*GEP LAC Group C*)
MATH 209/219 Elements of Applied Probability and Statistics (*GEP BR Math*)
RECR 330 Outdoor Education
RECR 342 Park and Facility Design

5. Suggested (Optional) Courses in Other Departments

ART 235 Photography
CMST 322 Presentational Communication
ENGL 336 Journalistic Writing
PHSC 210 Descriptive Astronomy
PHSC 211 Descriptive Astronomy Laboratory
RECR 201 Introduction to Recreation and Parks

Law

Bachelors/Juris Doctor Program

Dual-degree program

Coordinator:

Scott Johnson, Assistant Professor, Department of Political Science

- Frostburg State University students may earn the last 29 of the 120 credit hours required by Frostburg State University for graduation at the University of Baltimore School of Law. The result of this Bachelors/Juris Doctor Program is that students may attain an undergraduate and a law degree in six years instead of the normal seven years.

Hours Required at Frostburg State University	91
Hours Required at University of Baltimore School of Law	29
Total Hours Required:	120

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

Coordinators:

David Lewis, Associate Professor, Department of Political Science
Scott Johnson, Assistant Professor, Department of Political Science

Coordinating Committee: Professor:

T. Mappes (Philosophy)

Associate Professors:

Lewis (Political Science)
Olson (Sociology)

Assistant Professors:

Johnson (Political Science),
McMullen (Sociology)

	For Major	For Criminal Justice Concentration	For Legal Studies Concentration
Total Hours Required:	45-48	48	45

Summary of Requirements for Major in Law and Society

Major

1. Required Core Courses:

(18 hours)

POSC 110 Intro. to American Politics (*GEP LAC Group D*)

or POSC 112 Honors Intro. to American Politics (*GEP LAC Group D*)

SOCI 100 Intro. to Sociology (*GEP LAC Group D*)

or SOCI 111 Honors Intro. to Sociology (*GEP LAC Group D*)

PHIL 102 Contemporary Ethical Problems (*GEP LAC Group B*)

or PHIL 201 Ethics

POSC 311 Research Methods

or SOCI 311 Basic Research Methods

POSC 422 American Constitutional Law I

POSC 423 American Constitutional Law II

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:

- Law and Society is an interdisciplinary major that offers concentrations in criminal justice and legal studies.
- An internship is optional but strongly encouraged.
- The criminal justice concentration may also be completed at the Frederick and Hagerstown Centers.
- Only courses in which a grade of C or better is earned will satisfy major requirements.
- You cannot minor in Law and Society.

Group 1

GEOG 473 Environmental Law
 MCOM 347 Telecommunications Law
 BUAD 291 Legal Environment of Business
 BUAD 352 Employment Law
 BUAD 457 Labor Relations
 POSC 324 Criminal Justice Systems in Action
 POSC 434 Comparative Legal Systems

Group 2

SOCI 340 Criminology
 SOCI 442 Juvenile Delinquency
 SOCI 443 The American Correctional System
 PHIL 205 Logic
 PHIL 304 Social Philosophy
 POSC 321 State and Local Politics
 POSC 323 Public Administration
 POSC 358 American Public Policy
 CMST 302 Argumentation and Advocacy

Concentration in Criminal Justice

(30 hours)

A. Required Courses *(27 hours)*

CMST 102 Introduction to Human Communication
or CMST 122 Introduction to Public Speaking
 SOCI 200 Social Problems
or SOCI 203 Deviant Behavior
 SOCI 340 Criminology
 PHIL 304 Social Philosophy
or PHIL 410 Philosophy of Law
 POSC 321 State and Local Politics
 POSC 323 Public Administration
 POSC 324 Criminal Justice Systems in Action
 SOCI 442 Juvenile Delinquency
 SOCI 443 The American Correctional System

B. Elective Courses *(3 hours)*

Select one course from among:

PSYC 386 Drugs and Human Behavior
 SOCI 305 Racial and Cultural Minorities
 POSC 358 American Public Policy

3. Internship:

(optional; 9 or 15 hours)

POSC 492 Internship Seminar
 POSC 495 Internship in Political Science

Law School Preparation

Pre-professional program

Pre-law Advisor:

Scott Johnson, Assistant Professor, Department of Political Science

- While you cannot major or minor in law school preparation, there are law-related courses offered at Frostburg State University.
- Prospective law students should carefully examine the catalog of the law school they wish to attend in order to determine the test requirements for that school.

The traditional preparatory majors for entering law schools have been political science, history, English, philosophy, or sociology. Most law schools prefer that undergraduates interested in admission to law school *not* follow a prescribed “*pre-law*” curriculum. Rather, they prefer that students pursue a broad, *liberal* education.

Almost all professional law schools require applicants to take the Law School Aptitude Test. In some cases, the Graduate Record Exam may also be required. Information regarding the L.S.A.T. may be obtained from this university’s pre-law advisor. Information regarding the G.R.E. may be obtained from University Counseling and Psychological Services.

Prospective law students should strive to acquire exceptional ability in communication; gain critical understanding of human values and institutions; and develop understanding in the use of various types of reasoning: deductive, inductive, and analogous. Students should develop the ability to think creatively and to analyze critically. They should also learn how to recognize, differentiate, and organize facts according to their relevance to particular issues.

Suggested Elective Courses for Law School Preparation

The following courses may be especially helpful in achieving the qualities stated above. Students are advised to choose elective courses from this list:

BUAD 291	Legal Environment of Business	ENGL 338	Technical Writing
CMST 122	Intro. to Public Speaking	GEOG 450	Urban Planning
CMST 225	Interviewing	GEOG 473	Environmental Law
CMST 302	Argumentation & Advocacy	HIST 103,104	History of U.S. I, II
CMST 322	Presentational Communication	PHIL 102	Contemporary Ethical Problems
CMST 451	Seminar in Communication Theory	PHIL 205	Logic
ECON 307	Govt. and Business	PHIL 410	Philosophy of Law
ECON 404	Public Finance	POSC 324	Criminal Justice Systems in Action
ENGL 330	Business Writing	POSC 422,423	American Constitutional Law I, II
ENGL 334	Creative Writing	SOCI 200	Social Problems
ENGL 336	Journalistic Writing	SOCI 443	The Amer. Correctional System

Leadership Studies

Minor

Coordinator:

Ruth Wallinger, Lecturer,
Department of
Communication Studies

Participating Faculty:

Professor:

Connelly (Sociology and
Social Work)

Associate Professor:

Powell (Social Work)

Lecturers:

Bowling (Student and
Educational Services,
Mandicott (Student and
Educational Services),
Wallinger (Communication
Studies)

- The Leadership Minor is open to any student seeking theoretical and experiential knowledge regarding leadership. It is not necessary to be in leadership roles on or off campus.
- Course work in the minor is best begun in the sophomore year, though it is accessible to juniors as well.
- This minor entails a substantial number of experiential learning activities.
- Only courses in which a grade of C or better is earned will count towards satisfaction of the minor requirements.
- You cannot major in Leadership Studies.

Total Hours Required:

For Minor

19

Summary of Requirements for Minor in Leadership Studies

Minor

1. Required Core Courses:

(13 credits)

CMST 102 Introduction to Human Communication
LEAD 201 Leadership Studies: Theory and Practice
LEAD 250 The Citizen Leader
LEAD 494 Practicum in Leadership Studies

2. Leadership Values and Skills

(3 credits)

Select one of the following courses:

BUAD 356 Leadership and Interpersonal Skills
CMST 215 Small Group Communication
CMST 300 Interpersonal Communication
CMST 302 Presentational Communication
CMST 335 Organizational Communication
PHIL 201 Ethics
PHIL 304 Social Philosophy
PHIL 314 Business Ethics
POSC 462 Personality and Politics
PSYC 360 Industrial/Organizational Psychology
PSYC 414 Theories of Personality
PSYC 418 Social Psychology
SOWK 375 Human Behavior and the Social Environment I
SOWK/PSYC 385 Generalist Practice with Groups/Group Processes

3. Leadership Environments

(3 credits)

Select one of the following courses:

BUAD 351 Management of Organizations
BUAD 359 Total Quality Management
EDUC 405 Leadership
HIST 406 20th Century African-American Leadership in the U.S.
POSC 321 State and Local Politics
POSC 323 Public Administration
POSC 352 Interest Groups and Public Policy
POSC 358 American Public Policy
POSC 427 The American Presidency
RECR 380 Recreational Leadership
RECR 382 Program Planning
SOCI 325 Community Analysis
SOWK 370 Introduction to Social Welfare

Liberal Studies

Major

Coordinator:

Philip Allen, Assistant to the Dean of the College of Liberal Arts and Sciences

- 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.
- Early Childhood/Elementary Education and Elementary Education majors should consult with their advisors about the advantages of a double major in Liberal Studies.
- Only courses in which a C or better is earned will count toward satisfaction of major requirements.

For Major

Total Hours Required:

48

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:

1. 3 hours in communication arts, chosen from CMST 102/112 or a second 300-level English writing course.
2. 18 hours in arts and sciences courses, including a minimum of 3 hours each in arts, humanities, natural sciences, and social sciences.

NOTE: Students seeking Maryland State teaching certification in Early Childhood and/or Elementary Education must complete specific courses within these categories; they should consult an advisor in the Department of Educational Professions.

II. Focus Area Requirements (approval of LBST Coordinator required):

(27 hours)

- A. A minimum of 24 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 Liberal Studies capstone course (seminar, individual research, practicum, or internship).

Mass Communication

Major

Professor:

Phipps

Associate Professor:

Pack

Assistant Professors:

Lombardi, Scott (chair)

- Only courses in which you earn a grade of C or better may count towards satisfaction of major requirements.
- All grades earned in courses completed for the major in Mass Communication count in determining whether you meet the graduation requirement of a 2.0 cumulative grade point average in the major.
- All courses completed for the Mass Communication major count in determining whether one-half of the major is completed at FSU.

	For Major
Hours Required in Mass Communication	33 - 39
Hours Required in Other Departments:	15 - 21
Total Hours Required:	54

Summary of Requirements for Major In Mass Communication

Major

1. Introductory/Prerequisite Courses:

(9 hours)

CMST 102 Introduction to Human Communication

MCOM 105 Introduction to Mass Communication

COSC 100 Introduction to Computer Science

2. Mass Communication Practice Courses:

(15 hours)

ART 207 Graphic Design

ENGL 336 Journalistic Writing

MCOM 212 Video Production Industry

MCOM 316 Telecommunications Management

MCOM 326 Writing for Electronic Media

3. Advanced Mass Communication Courses:

(15 hours)

MCOM 336 Broadcast-Cable Programming

MCOM 346 Mass Communication Theory

MCOM 347 Telecommunications Law

MCOM 485 Electronic Media Aesthetics & Criticism

MCOM 486 Current Issues and New Technology in Mass Communication

4. Practicum:

(3 hours)

You are required to participate in a three-credit Practicum. This requirement may be met by completing three credits of MCOM 494 Mass Communication Practicum, or by completing the graded academic portion of the internship course MCOM 492 Internship Project. If you design a Professional Focus emphasizing writing, you may also elect ENGL 494 Mass Communication Practicum.

5. Professional Focus:

(12 hours)

You will select an additional four courses to create a definable professional focus. *The Professional Focus you create requires the written approval of your advisor.*

You may select courses from a list of approved offerings in visual arts, business administration, computer science, English, political science, sociology, mass communication and theatre.

Examples of Professional Focus groupings you might create include emphases in advertising, management, performance, and audio or video production. Sample Focus programs are available through the MCOM Department office.

Mathematics

Major

Minor

Teaching Certification Option

Professors:

Lemmert, K. Parks,
Revenaugh (Chair),
Weimer, E. White

Associate Professors:

Elder, Hegde, M. Hughes

Assistant Professors:

Barnet, Wojnar

Instructor:

Michael

- You may major or minor in Mathematics
- You may elect the teaching certification option with required internship.
- 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.

	For Major	For Minor	For Teaching Cert. Option
Hours Required in Mathematics:	39	21	39
Hours Required in Other Departments:	0	0	42.5
Total Hours Required:	39	21	81.5

Summary of Requirements for Major/Minor in Mathematics

Major	Minor
<p>1. Basic Courses (21 hours)</p> <p>MATH 236 Calculus I (<i>GEP BR Math</i>) MATH 237 Calculus II MATH 238 Calculus III MATH 350 Matrix Algebra MATH 470 Mathematical Models MATH 491 Seminar in Mathematics</p>	<p>(12 hours)</p> <p>MATH 236 Calculus I (<i>GEP BR Math</i>) MATH 237 Calculus II MATH 238 Calculus III</p>
<p>2. Electives (18 hours)</p> <p>Select from courses at the 300 or 400 level, except MATH 340 Fundamental Concepts of Geometry, MATH 483 Theory of Interest, MATH 485 Actuarial Mathematics II, or MATH 495 Internship in Mathematics</p>	<p>(9 hours)</p> <p>Select from courses at the 300 or 400 level, except MATH 340 Fundamental Concepts of Geometry, MATH 483 Theory of Interest, MATH 485 Actuarial Mathematics II, or MATH 495 Internship in Mathematics</p>

Summary of Requirements for Major in Mathematics -Teaching Certification Option

- 1. Basic Core Curriculum**
(21 hours)
 - MATH 236 Calculus I (*GEP BR Math*)
 - MATH 237 Calculus II
 - MATH 238 Calculus III
 - MATH 350 Matrix Algebra
 - MATH 470 Mathematical Models and Applications
 - MATH 491 Seminar in Mathematics
- 2. Mathematics Teaching Certification Option Requirements**
(18 hours)
 - MATH 380 Introduction to Probability and Statistics
 - MATH 437 Combinatorics and Graph Theory
 - MATH 440 Modern College Geometry
 - MATH 461 History of Mathematics
 - MATH 465 Theory of Numbers
 - MATH 415 Foundations of Mathematics
or MATH 451 Modern Higher Algebra
- 3. Professional Education Sequence**
(42.5 hours)

Summary of Requirements for Teaching Certification

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

- Complete the BA/BS in Mathematics - Teaching Certification Option.
- Meet the phase admissions requirements summarized in the Educational Professions section.
- Complete the professional education sequence described in Education: Secondary School Programs

Mathematical Sciences

For Focus

Hours Required in Mathematics:	12
Hours Required in Other Departments:	10-12
Total Hours Required:	22-24

Focus

Coordinator:

Lance Revenaugh, Chair,
Department of Mathematics

- You may elect to focus in Mathematical Sciences.
- The Mathematical Sciences Focus is designed for Mathematics, Chemistry, and Physics majors.
- You cannot major or minor in Mathematical Sciences.

Summary of Requirements for Focus in Mathematical Sciences

Focus

1. Core Mathematics Courses:

(3 hours)

From among:

MATH 415 Foundations of Mathematics
 MATH 425 Introduction to Real Analysis
 MATH 440 Modern College Geometry
 MATH 451 Modern Higher Algebra
 MATH 452 Linear Algebra
 MATH 460 Introductory Topology
 MATH 465 Theory of Numbers

2. Applied Mathematics:

(9 hours)

From among:

MATH 380 Introduction to Probability & Statistics
 MATH 420 Advanced Calculus
 MATH 426 Introduction to Complex Analysis
 MATH 432 Differential Equations
 MATH 435 Numerical Analysis
 MATH 436 Mathematical Physics
 MATH 437 Combinatorics & Graph Theory
 MATH 470 Mathematical Models and Applications
 MATH 480 Probability and Statistics
 MATH 481 Applied Regression Analysis
 MATH 492 Internship Seminar

3. Required Courses in Other Departments:

Computer Science

(7-8 hours)

From among:

COSC 240 Computer Science I
 COSC 241 Computer Science II
 COSC 350 Computer Organization & Assembly Language
 COSC 450 Programming Language Structures

Science

(3-4 hours)

PHYS 261 Principles of Physics I *or*
 CHEM 441 Physical Chemistry

Medical Technology Preparation

Pre-professional program

Coordinator:

Don Weser, Professor,
Department of Chemistry

- You must complete at least 60 hours of academic preparation, exclusive of Health & Physical Education, before beginning the professional segment of this program.
- The Summary of Requirements will assist you in planning your first two years of study which fulfill the requirements of the University of Maryland, Baltimore and the National Accrediting Agency for Clinical Laboratory Science. Students interested in attending other institutions should consult their catalogs for specific entrance requirements.
- The Pre-Medical Technology Program is competitive and high-quality academic performance is expected.
- You cannot major or minor in Medical Technology Preparation.

For Pre-professional Program

Total Hours:

61

Summary of Requirements for Pre-professional Program in Medical Technology

1. Biology:

(15 hours)

BIOL 149 General Biology I

BIOL 304 Microbiology

BIOL 350 Genetics

Biology Elective - choose from the following:

BIOL 150 General Biology II

BIOL 201 Anatomy and Physiology I

BIOL 202 Anatomy and Physiology II

BIOL 310 Cell Biology

2. Chemistry

(13 hours)

CHEM 101, 102 General Chemistry I, II

CHEM 301 Organic Chemistry I

3. English

(6 hours)

ENGL 101/111 Freshman Composition *or* ENGL 310 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 102 College Algebra

MATH 209 Elements of Applied Probability and Statistics

6. Computer Science

(3 hours)

COSC 100 Intro. to Computer Science *or* an Advanced Computer Science Course

7. Social Sciences

(6 hours)

Select courses from economics, geography, history, political science, psychology, sociology, African American studies.

8. Electives

(9 hours)

Strongly recommended:

CHEM 302 Organic Chemistry II

PHYS 215 General Physics I *or* PHYS 261 Principles of Physics I

Medicine Dentistry Optometry Veterinary Medicine Preparation

Pre-professional programs

Coordinator:

Mary Mumper, Chair,
Health Professions Advisory
Committee and Chair,
Department of Chemistry

- Students applying for professional school should stay in contact with the Health Professions Advisory Committee. The committee interviews candidates for professional school and supplies a committee letter of recommendation to the applicants' prospective school. This procedure enhances the students' application prospects.

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. 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.

BIOL 149 <i>and</i> 150	General Biology I and II	8 cr.
CHEM 101 <i>and</i> 102	General Chemistry I and II	8 cr.
CHEM 301 <i>and</i> 302	Organic Chemistry I and II	10 cr.
PHYS 215, 216 <i>or</i> 261, 262	General Physics I, II <i>or</i> Principles of Physics I, II	8 cr.
MATH — 2 courses	*See options in #6	6 cr.

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.

BIOL 304	Microbiology	4 cr.
BIOL 302	Animal Physiology	4 cr.
BIOL 310	Cell Biology	4 cr.
BIOL 327	Comparative Anatomy	5 cr.
BIOL 350	Genetics	4 cr.
BIOL 404	Histology	4 cr.
BIOL 435	Molecular Biology	4 cr.
CHEM 320	Quantitative Analytical Chemistry	4 cr.
CHEM 441, 442	Physical Chemistry Lec. I & II	6 cr.
CHEM 455, 457	Biochemistry Lec. I & II	6 cr.
ENGL 338	Technical Writing	3 cr.
MATH 120	Pre-Calculus	3 cr.
MATH 236, 237, 238	Calculus I, II, III	12 cr.
MATH 209 or 380	Probability & Statistics	3 cr.
PHIL 313	Biomedical Ethics	3 cr.

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.

Music

Major and minor

Concentrations in: vocal performance music management

Tracks in Performance: piano instrumental

Teaching Certification Option

Professor:

Grolman Schlegel (Chair)

Associate Professors:

Dixon, Soderberg Sarnaker

Assistant Professor:

Mills

- If you are an entering first-year or transfer student, you are required to pass an audition in your chosen performance area before being accepted as a Music major.
- At the end of the fourth semester, a review of progress will be made by the entire Music faculty before you are permitted to continue (sophomore evaluation).
- You must pass the piano proficiency exam by the end of your fourth semester.
- You must choose a concentration, a track or the teaching certification option.

	For Teaching Cert. Option Instru Voc/Chor	For Major Concentrations Vocal Perform	Music Mgmt	For Major Tracks Piano Perform	Instru Perform	For Minor
Hours Required in Music:	63	63	67	68	66	23
Hours Required in Other Depts:	36.5	36.5	18-24	21	0	0
Total Hours Required:	99.5	99.5	85-91	89	66	23

Summary of Requirements for Major/Minor in Music

Major	Minor
<p>1. Core Requirements: <i>(47-48 hours)</i></p> <p>Music Theory: <i>(16 hours)</i> MUSC 102 Theory I MUSC 103 Theory II MUSC 104 Aural Skills I MUSC 105 Aural Skills II MUSC 204 Theory III MUSC 205 Theory IV MUSC 206 Aural Skills III MUSC 207 Aural Skills IV</p> <p>Music History & Literature: <i>(9 hours)</i> MUSC 110 World Music (<i>GEP LAC A</i>) MUSC 308 Music History I MUSC 309 Music History II</p> <p>Ensemble: <i>(7-8 hours)</i> <i>Select from:</i> MUSC 319 University Chorale MUSC 329 Marching Band: Concert Band MUSC 330 Concert Band: Wind Ensemble MUSC 335 String Ensemble MUSC 336 Chamber Guitar Ensemble</p> <p>Piano Proficiency: <i>(0 hours)</i> MUSA 415 Piano Proficiency Exam</p> <p>Basic Conducting: <i>(3 hours)</i> MUSC 303 Conducting I</p> <p>Private Instruction: <i>(12 hours)</i> MUSA 116-123 Private Instruction <i>and/or</i> MUSA 356-363 Private Instruction</p> <p>Student Recital: MUSA 100 Student Recital <i>Required of all majors; no course credit.</i></p> <p>Senior Recital or Project: MUSA 490 Senior Recital <i>Required of all majors; no course credit.</i></p>	<p><i>(23 hours)</i></p> <p><i>(8 hours)</i> MUSC 102 Theory I MUSC 103 Theory II MUSC 104 Aural Skills I MUSC 105 Aural Skills II</p> <p><i>(6 hours)</i> MUSC 308 Music History I MUSC 309 Music History II</p> <p><i>(3 hours)</i> <i>Select from:</i> MUSC 319 University Chorale MUSC 329 Marching Band: Concert Band MUSC 330 Concert Band: Wind Ensemble MUSC 335 String Ensemble MUSC 336 Chamber Guitar Ensemble</p> <p><i>(6 hours)</i> MUSA 116-123 Private Instruction <i>and/or</i> MUSA 356-363 Private Instruction</p> <p>MUSA 100 Student Recital <i>Required of all minors; no course credit.</i></p>
<p>2. Supplementary Requirements: <i>(5 hours for performance specializations, 4 hours for music management and teacher certification)</i> <i>Select from:</i> MUSA 116-123 Private Instruction MUSA 356-363 Private Instruction MUSC 319, 329, 330, 333 Ensembles MUSA 104, 105, 203, 414 Class Piano MUSA 106-112, 208-311 Class Instruments, Class Voice</p>	

Summary of Requirements for the Teaching Certification Option in Music

1. Core Courses:

(47 hours)

Required for all music majors; listed above.

2. Supplementary Requirements:

(4 hours)

Required for all music majors; listed above.

3. Other Required Courses for K-12 Teaching Certification:

(48.5 hours)

If you wish to complete a Maryland State approved program in teaching Music, you must:

- Complete the following additional courses in Music:
 - MUSC 404 Conducting II
 - MUSA 108 Class Instruments I: Strings
 - MUSA 208 Class Instruments II: Woodwinds
 - MUSA 209 Class Instruments III: Brass
 - MUSA 311 Class Instruments IV: Percussion
- If your performing area is instrumental, you must complete 2 credit hours from among the following:
 - MUSA 106, 107 Class Voice
 - MUSC 319 University Chorale
- If your performing area is vocal, you must complete MUSA 210 Diction
- Meet the phase admissions requirements summarized in the Educational Professions section.
- Complete the professional education sequence described in the Education: K-12 Programs.

Summary of Requirements for the Vocal Performance Concentration

1. Core Courses:

(48 hours)

Required for all music majors; listed above

2. Supplementary Requirements:

(5 hours)

Required for all music majors; listed above.

3. Other Requirements for Vocal Performance Majors:

(14 hours)

Select from:

- MUSC 210 Diction
- MUSC 346 Opera
- MUSC 356 Computer Music Technology
- MUSC 360 Special Topics in Music *(up to 4 credits)*
- MUSA 391 Performance Seminar
- MUSC 401 Form and Analysis
- MUSC 407 Counterpoint
- MUSC 413 Vocal Pedagogy

4. Recital Requirement:

MUSA 390 Junior Recital

5. Minor in Foreign Languages & Literature:

(18-24 hours)

Summary of Requirements for Minor in Foreign Languages & Literature

The minor in French or Spanish consists of at least three 300- or 400-level courses (9 credit hours beyond the 250 course). Students minoring in a language who begin course work at the 300-level are required, through accelerated placement, to pay a fee of \$10.00 per credit hour for the 211, 212, and 250 courses. A minor in a foreign language meets Group B, GEP LAC. Extra courses may be used to fulfill Group E.

Summary of Requirements for the Music Management Concentration

1. Core Courses:

(47 hours)

Required for all music majors; listed above.

2. Supplementary Requirements:

(4 hours)

Required for all music majors; listed above.

3. Advanced Courses:

(17 hours)

MUSC 358 The Business of Music and Arts Management

MUSC 356 Computer Music Technology

MUSC 492 Senior Project Paper

MUSC 495 Internship in Music Management

4. Required Courses in Other Departments (Business Administration Minor)

(21 hours)

BUAD 100 Introduction to Business

BUAD 303 Principles of Finance

BUAD 351 Management of Organizations

BUAD 356 Leadership and Interpersonal Skills

BUAD 361 Principles of Marketing

ACCT 100 Financial Accounting

ECON 200 Basic Economics (*GEP LAC Group D*)

Summary of Requirements for the Instrumental and Piano Performance Tracks

1. Core Courses:

(48 hours)

Required for all music majors; listed above

2. Supplementary Requirements:

(5 hours)

Required for all music majors; listed above.

3. Other Requirements:

(13 hours)

Select from:

MUSC 305 Orchestration

MUSC 356 Computer Music Technology

MUSC 358 Business of Music and Arts Management

MUSC 360 Special Topics in Music (*up to 4 credits*)

MUSC 401 Form and Analysis

MUSC 407 Counterpoint

MUSA 391 Performance Seminar

Piano Performance

May also select:

MUSA 213 Piano Pedagogy

4. Recital Requirement:

MUSA 390 Junior Recital

Nursing Preparation

Pre-professional program

Coordinator:

Wayne Yoder, Professor,
Department of Biology

- A liberal arts program is recommended as preparation for professional study in the field of Nursing, particularly if the student is interested in the additional career opportunities available to those earning a B.S. degree in Nursing.
- Prospective nurses interested in a B.S. degree from a school of nursing may take a two-year program at Frostburg. It is expected that each student enrolled in the pre-nursing program will earn and maintain a *minimum 3.2* cumulative grade point average.
- You cannot major or minor in Nursing Preparation.

For Pre-professional Program

Total Hours Required:

63

The following pre-professional courses are required for students interested in the University of Maryland, Baltimore School of Nursing and could also be taken, together with additional requirements, by students interested in attending other schools of nursing.

Summary of Requirements for Pre-professional Program in Nursing

1. Biology:

(16 hours)

BIOL 149 General Biology I
BIOL 201 Anatomy & Physiology I
BIOL 202 Anatomy & Physiology II
BIOL 304 Microbiology

2. Chemistry:

(4 or 8 hours*)

CHEM 101 General Chemistry I
CHEM 102 General Chemistry II (**The University of Maryland, Baltimore only requires CHEM 101.*)

3. English:

(6 hours)

ENGL 101 Freshman Composition
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)

5. Social Sciences

(12 hours)

PSYC 150 General Psychology
PSYC 210 Child Development
PSYC 212 Adolescence and Adulthood
SOC 100 Introduction to Sociology

6. Other Required Courses:

(12 hours)

CMST 102 Introduction to Human Communication
HEED 200 Nutrition (*to be taken in Spring of 2nd year*)
MATH 209 Elements of Probability and Statistics
MATH 102 College Algebra
or MATH 103 Trigonometry

Occupational Therapy Preparation

Pre-professional program

Coordinator:

David Morton, Professor,
Department of Biology

- All candidates are expected to earn and maintain *at least a 3.0* cumulative grade point average in order to be considered competitive for the program.
- Only the top 36 candidates, from all institutions offering prerequisite courses, will be considered for admission to the Occupational Therapy Program at Towson University. You can apply anytime you meet the application requirements.
- If you currently hold a baccalaureate degree, you don't have to meet Towson's GenEd requirements. See the current Towson University catalog for more details.
- You cannot major or minor in Occupational Therapy Preparation.

Total Hours:

The following courses are prerequisites for students interested in the Occupational Therapy Program at Towson University. These courses may also be taken, together with additional requirements, by students interested in completing a professional occupational therapy program at other institutions.

- Candidates for the Occupational Therapy Program at Towson University must complete three prerequisite courses (biology and two out of three other courses: English, psychology or sociology) with grades of B or better and a minimum of 14 total credits by the end of the fall semester prior to the year for which application is made.
- In addition, 30 hours of voluntary/work experience in human services activities are required prior to application, by March 1.
- By May 30, applicants must have completed PHYS 215 with a grade of C or better, and all remaining prerequisite courses with a grade of B or better.
- A minimum of 23 credits that meet Towson's GenEd requirements must have been completed prior to the beginning of the first semester of the Occupational Therapy Program. BIOL 149, ENGL 101/111, MATH 209/219, PHYS 215/261 and SOCI 100/111 all meet Towson's GenEd requirements.

Summary of Requirements for Pre-professional Program in Occupational Therapy

1. Prerequisite Courses:

(17 hours)

BIOL 149 General Biology I
ENGL 101/111 Freshman Composition
PSYC 150/151 General Psychology
SOCI 100/111 Intro. to Sociology
PHYS 215 General Physics *or* PHYS 261 Principles of Physics I: Mechanics

2. Other courses that meet Towson's GenEd requirements:

Select one course per group. Take no more than three courses from the same discipline. Courses with asterisks are also FSU GEP courses.

- a. ART 110 Visual Imagery*
or THEA 107 Introduction to Theatrical Vision*
THEA 110 Introduction to Acting
COSC 330 Web Design and Development
DANC 342 Modern III
ENGL 334 *or* ENGL 335 Creative Writing Fiction/Poetry
- b. ENGL 261 American Literature: Colonial to Present
HIST 100/111 The Contemporary World in Historical Perspective*
HIST 103, 104 History of the United States
MUSC 110 Intro. to World Music*
MUSC 311 History of Jazz
DANC 110 Dance Appreciation*
- c. *Select a course from a different discipline than the one chosen in section b. above*
ART 100/111** Art Appreciation*
ENGL 313 English Romantic Literature
PHIL 101/111 Intro. to Philosophy*
FREN 101, 102 Basic Elements of French I, II
HIST 306 Medieval Europe
HIST 310 Ancient Greece and Rome
SPAN 101, 102 Basic Elements of Spanish I, II
- d. AAST 200 Introduction to African American Studies
ENGL 231 African American Literature
FREN 211, 212 French Grammar, Composition & Conversation I, II
SPAN 211, 212 Spanish Grammar, Composition & Conversation I, II
WMST 201 Introduction to Women's Studies

3. Other transferable program requirements:

(up to 20 hours)

BIOL 201, 202 Anatomy & Phys. I, II
MATH 209/219 Elem. Applied Prob. & Stat.
PSYC 210 and 212 Child, Adolescent & Adulthood
PSYC 417 Psychology of Abnormal Behavior

*FSU GEP courses

Pharmacy Preparation

Pre-professional program

Coordinator:

Don Weser, Professor,
Department of Chemistry

- The following 2-to-3 year pre-professional course pattern is suggested for students particularly interested in the University of Maryland, Baltimore School of Pharmacy. Students interested in attending other schools of pharmacy should consult their catalogs for specific entrance requirements.
- Each student enrolled in the pre-pharmacy program must earn and maintain a *minimum 3.00* cumulative grade point average.
- The Pharmacy College Admissions Test (PCAT) is also required and should be taken in the fall semester of the student's last year of study at FSU.
- For students who want to earn a baccalaureate degree at FSU before applying to a school of pharmacy, a major in chemistry or biology is appropriate.

Philosophy

Major

Minor

Professors:

Bucchino, Mappes
(Coordinator)

Associate Professor:

Kroeger-Mappes

Assistant Professors:

Brill, Makang

For Pre-professional Program

Total Hours: 65

Summary of Requirements for Pre-professional Program in Pharmacy

- 1. Biology**
(8 hours)
BIOL 149 General Biology I
BIOL 304 Microbiology
- 2. Chemistry**
(18 hours)
CHEM 101, 102 General Chemistry I, II
CHEM 301, 302 Organic Chemistry I, II
- 3. English**
(6 hours)
ENGL 101 Freshman Composition
ENGL 310 Advanced Composition
or ENGL 338 Technical Writing *or* ENGL 339 Scientific Writing
- 4. Mathematics**
(7 hours)
MATH 209 Elements of Applied Probability and Statistics
or MATH 380 Introduction to Probability and Statistics
and MATH 236 Calculus I
- 5. Physics**
(8 hours)
PHYS 215, 216 General Physics I, II
or PHYS 261, 262 Principles of Physics I, II
- 6. Humanities**
(6 hours)
- 7. Social Sciences**
(6 hours)
- 8. Humanities/Social Science Electives**
(6 hours)

	For Major	For Minor
Hours Required in Philosophy:	30	18
Hours Required in Other Departments:	0	0
Total Hours Required:	30	18

Summary of Requirements for Major/Minor in Philosophy

Major	Minor
1. Introductory Level Courses: (6 hours) <i>Select two from:</i> PHIL 101 Introduction to Philosophy (GEP LAC Group B) <i>or</i> PHIL 111 Honors: Introduction to Philosophy (GEP LAC Group B) PHIL 102 Contemporary Ethical Problems (GEP LAC Group B) PHIL 201 Ethics PHIL 205 Logic	(6 hours) <i>Select two from:</i> PHIL 101 Introduction to Philosophy (GEP LAC Group B) <i>or</i> PHIL 111 Honors: Introduction to Philosophy (GEP LAC Group B) PHIL 102 Contemporary Ethical Problems (GEP LAC Group B) PHIL 201 Ethics PHIL 205 Logic

Physical Therapy Preparation

Pre-professional program

Coordinator:

Wayne Yoder, Professor,
Department of Biology

- Professional schools *differ substantially* in their requirements for admission and it is the responsibility of the student to ensure the completion of the necessary pre-physical therapy courses for the professional schools of interest.
- You are expected to earn and maintain at least a 3.00 cumulative grade point average.
- Physical Therapy experience as volunteer or aide is required (100-200 hours) as is a current CPR certificate.
- You cannot major or minor in pre-physical therapy.
- Application requirements for the University of Maryland Baltimore include:
 - Bachelor's degree (any major)
 - Successful completion (C or better) of the 55 specified credit hours or prerequisite course work
 - Submission of GRE scores.

2. History of Philosophy:

(6 hours)

PHIL 202 History of Philosophy: Ancient & Medieval

PHIL 203 History of Modern Philosophy

3. Distribution within Department:

(15 hours)

Select from courses at the 300 or 400 level.

(9 hours)

Select from courses at the 300 or 400 level.

4. Elective Hours in Department:

(3 hours)

(3 hours)

The following pre-professional courses are required of students interested in the University of Maryland Baltimore's Physical Therapy Program. Students interested in attending other professional schools should work closely with the coordinator of the Physical Therapy Preparation program to plan an appropriate program.

Summary of Requirements for Pre-professional Program in Physical Therapy

1. Arts, History and Humanities

(3 hours)

CMST 102 Introduction to Human Communication

2. Biology

(12 hours)

BIOL 149 General Biology I

BIOL 201 Anatomy and Physiology I

any 300- or 400-level biology course with lab

3. Chemistry

(8 hours)

CHEM 101 General Chemistry I

CHEM 102 General Chemistry II

4. English

(3 hours)

ENGL 101 Freshman Composition

5. Mathematics

(9-10 hours)

MATH 209 Elements of Applied Probability & Statistics

MATH 220 Calculus for Applications I

or MATH 236 Calculus I

or MATH 120 Precalculus

SOCI 310 Statistics for Social Science

6. Physics

(8 hours)

PHYS 215 General Physics I

PHYS 216 General Physics II

7. Psychology

(9 hours)

PSYC 150 General Psychology

PSYC 210 Child Development

PSYC 212 Adolescence & Adulthood

8. Electives

(3 hours)

Choose one of the following:

ENES 102 Statics

ENES 221 Dynamics

PHEC 301 Biomechanics for Teacher Education

PHEC 303 Biomechanics for Exercise and Sport Science

PHEC 407 Motor Learning & Performance

Physics

Major

Minor

Tracks in:

traditional physics
engineering physics

Teaching Certification Option

Professor:

Hoffman, Latta, Luzader,
Plitnik

Associate Professors:

Deng-Luzader, Doyle,
Soysal (Chair), Tam

Assistant Professor:

Thamire

- You may not use courses listed under the heading Physical Science to satisfy the requirements of a major or minor in Physics.
- FSU and the University of Maryland Baltimore County offer a BS/MS program in Applied Physics. (See the next page of this catalog for more details).
- 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.

	For Major	For Minor	For Teaching Cert. Option
Hours Required in Physics:	39	21	39
Hours Required in Other Departments:	22	8	63.5-64.5
Total Hours Required:	61	29	102.5-103.5

Summary of Requirements for Major/Minor in Physics

Major	Minor
1. Introductory Level Courses: <i>(8 hours)</i> PHYS 261 Principles of Physics I: Mechanics <i>(GEP LAC Group C)</i> PHYS 262 Principles of Physics II: Electricity & Magnetism	
2. Advanced Courses: <i>(22 hours)</i> PHYS 263 Principles of Phys. III: Sound/Light PHYS 264 Principles of Physics IV: Thermodynamics & Modern Physics PHYS 310 Classical Mechanics PHYS 312 Electricity & Magnetism PHYS 320 Experimental Physics PHYS 491 Seminar PHYS 492 Senior Research & Seminar	
3. Required Courses in Other Departments: <i>(22 hours)</i> <i>One of the following:</i> COSC 240 Computer Science I <i>or</i> ENEE 114 Programming Concepts for Engineers <i>All of the following:</i> ENES 100 Intro. to Engineering Design MATH 236 Calculus I <i>(GEP BR Math)</i> MATH 237 Calculus II MATH 238 Calculus III MATH 432 Differential Equations	
4. Choice of Track: <i>(9 hours)</i> <i>Majors must choose a track in:</i> Traditional Physics or Engineering Physics <i>(requirements listed below)</i>	

Summary of Requirements for Traditional Physics Track

- Courses required for all majors:**
(51-52 hours)
Listed above.
- Advanced Courses in the Department:**
(9 hours)
PHYS 311 Thermodynamics
PHYS 417 Quantum Physics
One additional physics elective at the 300 level or above

Summary of Requirements for Engineering Physics Track

1. Courses required for all majors:

(51-52 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.

Summary of Requirements for Teaching Certification Option in Physics

If you wish to complete a Maryland State approved program in teaching Physics, you must:

- Complete the BA/BS in Physics - Traditional Physics Track.
- Meet the phase admissions requirements summarized in the Educational Professions section.
- Complete the professional education sequence described in Education: Secondary School Programs.

Applied Physics

Bachelor's/Master's Collaborative Program

Dual-degree Program

Coordinator:

Oguz Soysal, Chair
Department of Physics and
Engineering

- Frostburg State University students may apply three FSU physics courses (nine credit hours) towards an undergraduate degree in Physics from FSU and towards a master's degree in Applied Physics from the University of Maryland, Baltimore County. The three courses which have UMBC equivalents are:
PHYS 312
PHYS 313
PHYS 417
- Since the Applied Physics program at UMBC normally requires 30 credit hours of graduate work, a student in the BS/MS program will be required to complete a minimum of only 141 hours to earn both the BS and MS degrees.

Hours Required at FSU	120
Hours Required at UMBC	21
Total Hours Required	141

Summary of Program Requirements at FSU:

1. Completion of all requirements for the physics major at Frostburg State University.
2. Completion of the following FSU courses as physics electives: PHYS 313 and PHYS 417.
3. Completion of all Frostburg State University general education and basic baccalaureate requirements.
4. Completion of a total of at least 120 semester hours at FSU.

Requirements for Formal Admission to the Program through UMBC:

1. An application submitted to the FSU Physics Department Chair at the beginning of the junior year. This will include an application form, undergraduate transcripts and three letters of recommendation.
2. A minimum cumulative grade point average of 3.0.
3. Formal application to the UMBC Graduate School for admission to the Applied Physics MS program by December of the senior year. Application procedures are described in the UMBC Graduate Catalog.

Political Science

Major

Minor

Professors:

Bowman, Serafin, Simpson

Associate Professors:

Bambacus, Hartlaub
(Chair), D. Lewis, O'Rorke,
Twing

Assistant Professor:

S. Johnson

Instructor:

Spiker

- Only courses in which you earn a grade of C or better will count towards satisfaction of major or minor requirements.
- Required exit examination administered by department every semester.
- An internship is optional. POSC 492 counts as elective credit toward POSC major; POSC 495 counts as general elective credit.

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

	For Major	For Minor
Hours Required in Political Science:	39	21
Hours Required in Other Departments:	0	0
Total Hours Required:	39	21

Summary of Requirements for Major/Minor in Political Science

Major	Minor
<p>1. Introductory Level Courses: (6 hours) POSC 110/112 Introduction to American Politics (GEP LAC Group D) <i>and one of the following:</i> POSC 113/114 Introduction to World Politics (GEP LAC Group D) or POSC 131 Introduction to Comparative Politics (GEP LAC Group D)</p> <p>2. Research Methods: (3 hours) POSC 311 Research Methods</p> <p>3. Distribution within Department: (24 hours) <i>Select three courses in one of the following 6 groups, and one course in each of the remaining 5 groups.*</i></p> <p>GROUP I American Political Institutions POSC 321 American State & Local Politics POSC 323 Public Administration POSC 324 Criminal Justice Systems in Action POSC 421 American Legislative Politics POSC 422 American Constitutional Law I POSC 423 American Constitutional Law II POSC 427 The American Presidency</p> <p>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 Western Europe POSC 334 Politics of Eastern Europe POSC 431 Russian Politics POSC 434 Comparative Legal Systems POSC 435 Model Organization of American States</p> <p>GROUP III International Politics and Foreign Policy POSC 341 International Organization POSC 342 Foreign Policy of the United States POSC 441 International Relations: Theory and Practice POSC 442 National Security Policy</p> <p>Group IV Policy Studies POSC 352 Interest Groups and Public Policy POSC 358 American Public Policy POSC 450 Environmental Public Policy POSC 456 Urban Politics and Policies</p> <p>GROUP V Political Behavior POSC 361 Public Opinion and Political Behavior POSC 362 Political Parties and Elections POSC 363 Media and Politics POSC 365 Women and Politics POSC 462 Personality and Politics</p> <p>GROUP VI Political Theory POSC 370 Introduction to Political Thought POSC 470 Seminar in Political Thought POSC 471 American Political Thought</p> <p>4. Free Elective Hours in Department: (6 hours)</p>	<p>(6 hours) POSC 110/112 Introduction to American Politics (GEP LAC Group D) <i>and one of the following:</i> POSC 113/114 Introduction to World Politics (GEP LAC Group D) or POSC 131 Introduction to Comparative Politics (GEP LAC Group D)</p> <p>(15 hours)</p>

Psychology

Major

Minor

Certificate in Child and Family Psychology

Professors:

Baxter, Bristow, Herzog (Chair), Ross, Santoro, Southerly

Associate Professors:

Bensley, Edwards, Peterson

Assistant Professors:

Bradley, Buckner, Redmond

- Majors may elect a pre-professional option, an internship option and/or a child and family certificate.
- Majors must earn a grade of C or better in ENGL 101, Advanced Composition, and MATH 209, Probability and Statistics 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 297 to satisfy major requirements.
- Psychology faculty also coordinate the Addictions Counseling Certificate and the Addictions Counseling Preparation program (see separate section of this catalog).

	For Major	For Minor
Hours Required in Psychology:	33-34	18-21
Hours Required in Other Departments:	16	0
Total Hours Required:	49-50	18-21

Summary of Requirements for Major/Minor in Psychology

Major	Minor
1. Introductory Course: <i>(3 hours)</i> PSYC 150 General Psychology <i>or</i> PSYC 151 Honors: General Psychology <i>(GEP LAC Group D)</i>	
2. Research Methods: <i>(8 hours)</i> PSYC 300 Research Methods I PSYC 301 Research Methods II	
3. Distribution within Department: <i>(12-13 hours)</i> <i>Select one course in each of four groups.</i> GROUP I Developmental PSYC 210 Child Development PSYC 212 Adolescence and Adulthood GROUP II Physiological Basis of Behavior PSYC 306 Sensation and Perception PSYC 386 Drugs and Human Behavior PSYC 420 Physiological Psychology PSYC 430 Health Psychology GROUP III Learning PSYC 307 Experimental Analysis of Behavior PSYC 409 Human Learning and Cognition PSYC 485 Behavioral Approaches to Human Problems GROUP IV Personality/Social PSYC 414 Theories of Personality PSYC 417 Psychology of Abnormal Behavior PSYC 418 Social Psychology PSYC 489 Child and Adolescent Disorders	
4. Elective Hours in Department: <i>(6 hours)</i> <i>2 additional courses, at least one of which must be at the 300 or 400 level</i>	
5. Introduction to the Profession of Psychology: <i>(1 hour)</i> PSYC 297 Introduction to the Profession of Psychology	
6. Senior Integrative Experience: <i>(3 hours minimum)</i> <i>Select one of the following:</i> PSYC 497 Senior Seminar PSYC 481 History and Systems of Psychology Preprofessional Option Internship Option	
7. Required Courses in Other Departments <i>(16 hours)</i> CMST 102/112* Introduction to Human Communication <i>or</i> CMST 122 Introduction to Public Speaking COSC 100/110* Introduction to Computer Science	

* Honors equivalent

MATH 209/219* Elements of Applied Probability and Statistics (*GEP BR Math*)
 BIOL 109 Human Biology and the Environment *or* BIOL 149 General Biology I (*GEP LAC Group C*)
 ENGL 308 Social Sciences Advanced Composition *or* ENGL 310/312* Advanced Composition
or ENGL 338 Technical Writing (*GEP BR Adv. Comp.*)

Requirements for Preprofessional Option

1. **Complete Psychology major** - described above.
 You must have a minimum 3.0 grade point average in the major.
2. **Required Course Work in Psychology:**
 PSYC 420 Physiological Psychology (*may be used to satisfy Group requirements for the major above.*)
The following may be used to satisfy elective requirements for the major above:
 PSYC 470 Advanced Experimental Psychology
 PSYC 481 History and Systems of Psychology
 PSYC 499 Psychology Projects (*with senior thesis and oral presentation*).
3. **Attendance at a Preprofessional Orientation Meeting.**

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.**

Requirements for Child and Family Psychology Certificate

1. **Complete Psychology major** - described above.
2. **Required Course work in Psychology that must be taken in sequence (12 hours minimum):**
(May be used to satisfy group and elective requirements for the major above)
 - A) PSYC 150/151 General Psychology
 - B) PSYC 210 Child Development *or* PSYC 212 Adolescence and Adulthood
 - C) PSYC 489 Child and Adolescent Disorders
 - D) **One of the following 400 level learning experiences:**
 PSYC 404 Psychology of the Exceptional Child
 PSYC 490 Special Topics in Psychology involving children and/or adolescents
 PSYC 492/495 Internship in Psychology involving children and/or adolescents
 PSYC 498 Readings in Psychology involving children and/or adolescents
 PSYC 499 Psychology Projects involving research concerning children and/or adolescents
3. **Attendance at a Child and Family Psychology Certificate 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 Additional Courses:**
 - A) PSYC 303 Psychology of Marriage
 - B) PSYC 485 Behavioral Approaches to Human Problems
5. **A certificate of completion of the Child and Family Psychology program will be awarded to Psychology majors who complete the above requirements.**

Public Relations

For Minor

Total Hours Required:

24

Summary of Requirements for Minor in Public Relations

Minor

Minor

Coordinator:

A. Franklin Parks,
Professor, Department of
English

Participating Faculty:

Professors:

A.F. Parks (English),
Routhier (Communication
Studies)

Associate Professor:

LaFief (Business
Management)

Assistant Professors:

Erdman, Hodges (Visual
Arts), Lombardi (Mass
Communication)

- You cannot major in Public Relations.

1. Courses in Communication Studies:

(6 hours)

CMST 300 Interpersonal Communication
or CMST 322 Presentational Communication
CMST 312 Language Behavior and Communication

2. Courses in English:

(6 hours)

ENGL 336 Journalistic Writing
ENGL 436 Advanced News and Feature Writing

3. Courses in Other Departments:

(12 hours)

ART 207 Graphic Design
ART 235 Photography
BUAD 361 Principles of Marketing
MCOM 212 Video Production Industry

Recommended Additional Courses:

The following courses are recommended but not required for the minor in Public Relations. These courses provide valuable background for the course work in the minor:

- ART 104 Two-dimensional Design
- BUAD 100 Introduction to Business
- CMST 122 Introduction to Public Speaking
- ECON 200 Basic Economics (*GEP LAC Group D*)

Recreation and Parks Management

Concentrations:	Community Program Delivery	Adventure Sports	Hospitality & Tourism	Therapeutic Recreation
Hours Required in RECR:	45	39	39	45
Hours Required in Other Departments:	21	12-13	9	29
Additional Hours Required:	0	13	18	0
Total Hours Required:	66	64-65	68	74

Summary of Requirements for Major in Recreation and Parks Management

Major

Major

Concentrations in:

- adventure sports**
- community program delivery**
- hospitality management & tourism**
- therapeutic recreation**

Director:

Robert B. Kauffman,
Associate Professor,
Department of HPER

Associate Professor:

Kauffman

Assistant Professors:

Blankenship, Streiby

1. Discipline Core:

(36 hours)

RECR 201 Introduction to Recreation and Parks
RECR 221 Introduction to Therapeutic Recreation
RECR 342 Park and Facilities 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 Legal Liability in Recreation and Parks
RECR 492 Internship Project
RECR 495 Internship in Recreation
RECR 497 Out-of-class Requirements (*see bullet at left*)

2. Courses Outside Department:

(3 hours)

COSC 220 Introduction to Software Applications
or EDUC 454 Microcomputer Application in Education
or approved computer application course

Instructor:

Dougherty

Affiliated Faculty:

Debra Frank, Allegany
College of Maryland;
Wilma Brooks, Stephanie
Younkins, Community
College of Baltimore
County, Catonsville Campus;
Mike Logsdon, Steve Storck,
Mike Swiderski, Garrett
College

- Program accredited by NRPA/AALR (National Recreation and Park Association/American Association for Leisure and Recreation).
- You are required to complete RECR 497 which includes 120 hours of practical experience (not including internships) and to attend one state, regional or national conference during your junior or senior year.
- Current certification in CPR and first aid is required.
- This program may also be completed at the Community College of Baltimore County - Catonsville. Interested students may contact Maureen Dougherty, coordinator of the CCBC Recreation and Parks program, 410/869-1103.

Adventure Sports Concentration

- The adventure sports concentration is a collaborative program between Garrett College and Frostburg State University.
- You may enroll in this program at Frostburg State University and take adventure sports courses at Garrett College, or you may complete your first two years at Garrett College and then transfer to FSU.

3. Complete one of the following:

- a. a second major
- b. a minor
- c. an associate's degree
- d. a bachelor's degree from another institution
- e. a concentration within the major as follows:

I. Community Program Delivery

(27 hours)

A. HPE/RECR (9 hours):

RECR 100 Leisure and Diverse Culture
RECR 480 Field Experience in Recreation and Parks (3 cr.)

Select one of the following:

RECR 330 Outdoor Education
RECR 384 Special Event Management
RECR 421 Program Design and Evaluation in Therapeutic Recreation
HEED 101 Community Health Promotion
AVS 138 Backcountry & Outdoor Living Skills*
AVS 260 Advanced Level First Aid and CPR*

B. Psychology (6 hours):

PSYC 150 General Psychology (GEP LAC Group D)
PSYC 210 Child Development
or PSYC 212 Adolescence and Adulthood

C. Sociology (6 hours):

SOCI 100 Intro. to Sociology (GEP LAC Group D)

And one of the following:

SOCI 200 Social Problems
SOCI 203 Sociology of Deviant Behavior
SOCI 322 Social Demography
SOCI 325 Community Analysis
SOCI 326 Sociology of Rural Life
SOCI 328 Sociology of Urban Life
SOCI 366 Social Inequality

D. Communications Studies (6 hours)

Select one of the following:

CMST 102 Introduction of Human Communications
CMST 122 Introduction to Public Speaking
CMST 132 Introduction to Interpersonal and Small Group Communication

Select one of the following:

CMST 215 Small Group Communication
CMST 300 Interpersonal Communication
CMST 322 Presentational Communication

II. Adventure Sports

(25-26 hours)

A. Two Introductory Level Courses*

(2 hours)

Examples include but are not limited to:

- * AVS 111 Beginning Orienteering
- * AVS 121 Intro. to Rock Climbing
- * AVS 131 Beginning Alpine Skiing
- * AVS 133 Cross Country Skiing
- * AVS 136 Intro to Mountain Biking
- * AVS 148 Introduction to Whitewater Kayaking
- * AVS 150 Beginning Snowboarding
- * AVS 165 Raft/River Guiding

B. Three Developmental Level Courses *

(3 hours)

Examples include but are not limited to:

- * AVS 122 Anchor Building and Rock Climbing Techniques

* courses offered only at Garrett College

- Legal residents of Delaware, South Carolina and Virginia may complete a recreation management degree (adventure sports concentration) at Maryland resident tuition rates through the SREB Academic Common Market (see Admissions section of this catalog).

- * AVS 132 Alpine Skiing Techniques I
- * AVS 149 Whitewater Kayaking Techniques I
- * AVS 151 Snowboarding Techniques I
- * AVS 156 Sea Kayaking Techniques I
- * AVS 183 Intermediate Cross Country Mountain Biking
- * AVS 186 Mountain Bike Mechanics II

C. One Instructor/Guide Level Course*

(1 hour)

Examples include but not limited to:

- * AVS 225 Rock Climbing Instructor Development
- * AVS 228 Mtn. Bike Guide/Instructor Development
- * AVS 231 Ski School Instructor
- * AVS 247 Whitewater Canoe Instructor
- * AVS 249 Whitewater Kayak Instructor

D. One Rescue Level Course

(1 hour)

Examples include but not limited to:

- * AVS 232 National Ski Patrol Training
- * AVS 250 Fundamentals of Search and Rescue
- * AVS 251 Advanced Search and Rescue
- * AVS 280 Swift Water Rescue
- * AVS 282 Vertical Rock Rescue

E. Take all of the following:

(9 hours)

- *AVS 101 Backcountry Living Skills*
- *AVS 260 Advanced Level First Aid and CPR*
- RECR 330 Outdoor Education

F. Select three of the following:

(9-10 credits)

- ACCT 100 Financial Accounting
- BIO 110 Natural History*
- BUAD 303 Principles of Finance
- BUAD 351 Management of Organizations
- HUM 210 Society & the Environment* (GEP LAC Group B)
- PSYC 150 General Psychology (GEP LAC Group D)
- PSYC 210 Child Development
- PSYC 212 Adolescence and Adulthood
- PSYC 385 Group Processes
- PSYC 386 Drugs and Behavior
- PSYC 410 Introduction to Counseling
- PSYC 417 Psychology of Abnormal Behavior
- RECR 421 Program Design and Evaluation in TR

Hospitality Management & Tourism Concentration

- The hospitality 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.

III. Hospitality Management and Tourism

(27 hours)

A. Recreation course:

(3 hours)

- RECR 384 Special Events Management

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:

(18 hours)

- **30-119 Food Service Sanitation
- **30-160 Quantity Food Production
- **30-203 Food Purchasing
- **30-204 Menu Planning and Food Merchandising
- **30-209 Hotel/Motel Front Office Management

*Garrett College courses

**Allegany College of Maryland courses

**30-215 Hotel/Motel Property Management

**30-216 Food and Beverage Cost Control

D. Business courses:

(3 hours)

ACCT 100 Financial Accounting

or ACCT 201 Introductory Accounting I

or **61-109 Practical Accounting/Bookkeeping

Therapeutic Recreation Concentration

- The therapeutic recreation concentration prepares you to sit for the National Council for Therapeutic Recreation Certification Exam.
- You may complete the B.S. in Recreation and Parks Management with a therapeutic recreation concentration at the main campus or at the CCBC Catonsville campus.
- You may complete a minor in either Psychology or Sociology by taking several additional courses.

IV. Therapeutic Recreation

(35 credits)

A. Complete a 480 hour consecutive internship under an NCTRC certified supervisor.

B. Recreation Courses:

(9 hours)

RECR 321 Theories and Concepts of Therapeutic Recreation

RECR 421 Program Design and Evaluation in Therapeutic Recreation

RECR 422 Principles and Practices in Therapeutic Recreation

C. Anatomy and Physiology:

(4 hours)

BIOL 211 Essentials of Anatomy and Physiology

or BIOL 201 Anatomy and Physiology I

or BIOL 201 Human Anatomy and Physiology I***

D. Abnormal Psychology:

(3 hours)

PSYC 417 Psychology of Abnormal Behavior

or PSYC 201 Abnormal Psychology***

E. Human Growth and Development through the Life Span:

(3-6 hours)

PSYC 210 Child Psychology

and PSYC 212 Adolescence and Adulthood

or PSYC 103 Principles of Human Growth/Development***

F. Human Services and Related Biological and Physical Sciences:

(Frostburg: 13 hours. CCBC: 16 hours)

Select 4-5 courses:

Required for students on Frostburg campus:

BIOL 149 General Biology I (GEP LAC Group C)

PSYC 150/151 General Psychology (GEP LAC Group D)

BIOL 202 Anatomy and Physiology II

PSYC 213 Psychology of Adjustment

PSYC 250 Death and Dying

PSYC 404 Psychology of Exceptional Children

PSYC 409 Human Learning and Cognition

PSYC 418 Social Psychology

PSYC 489 Child and Adolescent Disorders

PSYC 410 Introduction to Counseling

SOCI 100 Introduction to Sociology (GEP LAC Group D)

SOCI 200 Social Problems

SOCI 203 Sociology of Deviant Behavior

SOCI 340 Criminology

SOCI 442 Juvenile Delinquency

SOCI 468 Sociology of Later Life

PHEC 303 Biomechanics for Exercise Science

BIOL 101 General Biology***

BIOL 202 Human Anatomy & Physiology II***

PSYC 101 Introduction to Psychology***

SOCL 101 Introduction to Sociology***

** courses offered at Allegany College of Maryland

***courses offered at the CCBC Catonsville

Social Science

	For Major	For Teaching Cert. Option
Hours required in Social Sciences:	60-61	63-64
Hours required in other fields:	6	45.5
Total Hours Required:	66-67	108.5-109.5

Summary of Requirements for Major in Social Science

Major

Major

Teaching Certification Option

Coordinator:

David J. Fell, Professor,
Department of Educational
Professions

Department Contacts:

Anthony G. Stair, Chair,
Dept. of Economics
Tom Small, Chair, Dept. of
Geography
Nicholas Clulee, Chair,
Dept. of History
Stephen Hartlaub, Chair,
Dept. of Political Science
Cindy E. Herzog, Chair,
Dept. of Psychology
Anthony E. Crosby, Jr.,
Chair, Dept. of Sociology

- A major in Social Science requires a minimum of 66 hours; you cannot minor in Social Science.
- Completion of the Social Science major (Teaching Certification Option) is required for approved program teacher certification in secondary social studies.
- Only courses in which you earn a grade of C or better will count towards satisfaction of major requirements in the Social Science (Teaching Certification Option).
- + indicates a variation in requirements for the Teaching Certification Option.

1. Introductory Level Courses:

(36 hours)

Economics (6 hours)

ECON 201 Principles of Economics (Macro) (GEP LAC Group D)

ECON 202 Principles of Economics (Micro)

Geography (6 hours)

GEOG 104 Human Geography (GEP LAC Group D)

or GEOG 114 Honors Human Geography (GEP LAC Group D)

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

Political Science (6 hours)

POSC 110 Introduction to American Politics (GEP LAC Group D)

or POSC 112 Honors Introduction to American Politics (GEP LAC Group D)

POSC 113 Introduction to World Politics (GEP LAC Group D)

or POSC 114 Honors Introduction to World Politics (GEP LAC Group D)

or POSC 131 Introduction to Comparative Politics (GEP LAC Group D)

Psychology (6 hours)

PSYC 150 General Psychology (GEP LAC Group D)

or PSYC 151 Honors General Psychology (GEP LAC Group D)

and 1 from among:

PSYC 210 Child Development

PSYC 212 Adolescence and Adulthood

PSYC 220 Psychology of Women

Sociology (6 hours)

SOCI 100 Introduction to Sociology (GEP LAC Group D)

or SOCI 111 Honors Introduction to Sociology (GEP LAC Group D)

SOCI 200 Social Problems+

2. Tracks: (18 hours)

Select 2 of the following departmental patterns.

Economics (9 hours)

Select from:

ECON 300 History of Economic Thought

ECON 303 American Economic History

ECON 306 Money and Banking

ECON 307 Government, Business and Public Policy

ECON 308 Urban and Regional Economics

ECON 309 Comparative Economic Systems

ECON 351 Intermediate Macroeconomics

ECON 352 Intermediate Microeconomics

ECON 407 Business Cycles and Forecasting

ECON 490 Special Topics in Economics

Geography (9 hours)

Select one course from each group:

a. GEOG 300 Economic Geography

or GEOG 407 Political Geography

or GEOG 410 Locational Analysis

b. GEOG 401 Geography of Europe

or GEOG 402 Geography of Russia & the Former Republics

- or GEOG 403 Geography of Sub-Saharan Africa
 c. GEOG 324 Urban Geography: Internal City Patterns
 or GEOG 325 Urban Geography: Metropolitan Systems

History (9 hours)+

Select from 300- or 400-level history courses.

Political Science (9 hours)

Select one course from each of the three groups:

- a. POSC 352 Interest Groups and Public Policy
 POSC 361 Public Opinion and Political Behavior
 POSC 362 Political Parties and Elections
 POSC 363 Media and Politics
 POSC 365 Women and Politics
 POSC 456 Urban Policies and Politics
 POSC 462 Personality and Politics
- b. POSC 330 Politics of Africa
 POSC 331 Politics of Latin America
 POSC 332 Politics of Middle East
 POSC 333 Politics of Western Europe
 POSC 334 Politics of Eastern Europe
 POSC 341 International Organization
 POSC 342 Foreign Policy of the United States
 POSC 431 Russian Politics
- c. POSC 321 American State and Local Politics
 POSC 323 Public Administration
 POSC 324 Criminal Justice Systems in Action
 POSC 421 American Legislative Politics
 POSC 422 American Constitutional Law I
 POSC 423 American Constitutional Law II
 POSC 427 The American Presidency

Psychology (9-10 hours)

Select one course 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 II
 or PSYC 303 Psychology of Marriage
- c. PSYC 418 Social Psychology
- d. PSYC 414 Theories of Personality
 or PSYC 417 Psychology of Abnormal Behavior

Sociology (9 hours) +

SOCI 305 Racial and Cultural Minorities
 or SOCI 224 Cultural Anthropology
and select two additional courses, one each from two of the following groups. Selections may not duplicate choices made to meet other major requirements.

a. Social Institutions and Structures

SOCI 305 Racial and Cultural Minorities
 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
 SOCI 340 Criminology
 SOCI 442 Juvenile Delinquency
 SOCI 468 Sociology of Later Life

c. Community and Society

SOCI 224 Cultural Anthropology
 SOCI 322 Social Demography
 SOCI 325 Community Analysis
 SOCI 326 Sociology of Rural Life
 SOCI 328 Sociology of Urban 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 311 Research Methods
 PSYC 300 Research Methods I
 SOCI 311 Basic Research Methods

4. Social Science Seminar (3 hours)

SOSC 490 Topics in Social Science

5. Other required courses (6 hours)

CMST 102 Introduction to Human Communication*
 COSC 100 Introduction to Computer Science*+

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

+ indicates a variation in requirements for the Teaching Certification Option.

Summary of Requirements for Major in Social Science – Teaching Certification Option+

If you want to earn teaching certification in social studies, you must complete the Social Science major described above with the **following variations** in requirements (footnoted with a + in the major description):

1. Introductory Level Courses:

(42 hours)

As above, except:

History (12 hours)

Both of the following sequences:

HIST 103, 104 History of the United States

HIST 113, 114 World History

Sociology (6 hours)

SOCI 100 Introduction to Sociology (*GEP LAC Group D*)

or SOCI 111 Honors Intro. to Sociology (*GEP LAC Group D*)

and one from among:

SOCI 305 Racial and Cultural Minorities

SOCI 224 Cultural Anthropology

SOCI 306 Sociology of African Americans

2. Tracks and 3. Research Methods: (18-19 hours)

Select 2 of the departmental patterns. Include a research methods course as a substitute for any one course in one selected track. See the list of research methods courses in 3. Research Methods in the description of the major above.

History (9 hours)

Three 300- or 400-level history courses. At least one of the courses must be non-western (e.g., Asian, African, Middle Eastern).

Sociology (9 hours)

Select three courses, one each from groups a., b., and c. listed above. Selections may not duplicate courses selected to meet other major requirements.

3. Other required courses:

COSC 100 Introduction to Computer Science *or*

EDUC 346, 447, 448 Education Technology Labs I-III

Summary of Requirements for Teaching Certification Option in Social Studies

If you wish to complete a Maryland State approved program in teaching Social Studies, you must:

- Complete the BA/BS in Social Science - Teaching Certification Option.
- Meet the phase admissions requirements summarized in the Educational Professions section.
- Complete the professional education sequence described in Education: Secondary School Programs *or*
- Complete the M.A.T. - Secondary Education program described in the Graduate Catalog, following the completion of the bachelor's degree.

Social Work

	For Major
Hours Required in Social Work	42-45
Hours Required in Other Departments	19-22
Total Hours	64

Major

Professor:

Connelly, B. Wright

Associate Professors:

Powell, Russell (Chair)

- Since the Social Work curriculum is highly sequential in design, students who begin their course of study after the first semester of their sophomore year will often need more than four years to complete the program
- Only courses in which a grade of C or better is earned will count toward satisfaction of major requirements.
- Academic credit is not given for life or work experiences.
- The Social Work program has a competitive admissions process. Department faculty reserve the right to select those candidates who demonstrate the greatest potential for developing as professional social workers.

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 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:

(42 hours)

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 Social Work Practice
SOWK 470 Generalist Practice I
SOWK 471 Generalist Practice II
SOWK 492 Social Work Seminar
SOWK 495 Internship in Social Work

2. Courses in Other Departments:

(19 hours)

SOCI 100 or 111 Introduction to Sociology (*GEP LAC Group D*)
SOCI 200 Social Problems
COSC 100 Introduction to Computer Science
PSYC 150 or 151 General Psychology (*GEP LAC Group D*)
POSC 110 or 112 Introduction to American Politics (*GEP LAC Group D*)
BIOL 109 Human Biology and the Environment (*GEP LAC Group C*)

3. Diversity Requirement:

(3 hours)

Select one of the following courses:

SOWK 305 Racial and Cultural Minorities
SOWK 306 Sociology of African Americans
SOCI 334 Gender and Social Life
SOCI 366 Social Inequality
SOWK 468 Sociology of Later Life

or

Complete a minor in African American Studies, Women's Studies or Foreign Languages (either French or Spanish)

Sociology

Major

Minor

Tracks in:

**general sociology
applied social research**

Option in data analysis

Professor:

Connelly

Associate Professors:

Crosby (Chair), Moore,
Olson, Russell

Assistant Professors:

McMullen, Selby

- Sociology majors may choose either the General Sociology Track or the Applied Social Research Track.
- Sociology majors may elect an option in Data Analysis
- 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 Center in Hagerstown.

**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.*

	For Major		For Minor
	General Track	Applied Social Research	
Hours Required in Sociology:	33	36	18
Hours Required in Other Departments:	3	6	0
Total Hours Required:	36	42	18

Summary of Requirements for Major/Minor in Sociology

Major	Minor
<p>1. Basic Courses: (6 hours) SOCI 100/111 Intro. to Sociology (GEP LAC Group D) SOCI 200 Social Problems</p>	<p>(6 hours) SOCI 100/111 Intro. to Sociology (GEP LAC Group D) SOCI 200 Social Problems or SOCI 203 Sociology of Deviant Behavior</p>
<p>2. Methods and Theory (12 hours) General Sociology Track: SOCI 310 Statistics for Social Science SOCI 311 Basic Research Methods SOCI 450 Classical Sociological Theory SOCI 451 Contemporary Sociological Theory Applied Social Research Track: SOCI 310 Statistics for Social Science SOCI 311 Basic Research Methods SOCI 312 Applied Social Research SOCI 450 Classical Sociological Theory</p>	<p>(12 hours) 2 additional courses in one subfield, 1 course in each of the others:*</p>
<p>3. Distribution within Department: General Sociology Track: (15 hours) 3 courses in one of the following subfields; 1 course in each of the others:*</p> <p>Applied Social Research Track: (9 hours) One course in each of the following subfields:*</p> <p>Subfield I: Social Institutions and Structures SOCI 305 Racial and Cultural Minorities SOCI 362 Sociology of Religion SOCI 364 Marriage and Family Relationships SOCI 366 Social Inequality SOCI 367 Sociology of Medicine SOCI 436 Sociological Aspects of Mass Communication</p> <p>Subfield II: Social Behavior SOCI 203 Sociology of Deviant Behavior SOCI 306 The Sociology of African Americans SOCI 332 Collective Behavior SOCI 334 Gender and Social Life SOCI 340 Criminology SOCI 442 Juvenile Delinquency SOCI 443 The American Correctional System SOCI 468 Sociology of Later Life</p> <p>Subfield III: Community and Society SOCI 224 Cultural Anthropology SOCI 322 Social Demography SOCI 325 Community Analysis SOCI 326 Sociology of Rural Life SOCI 328 Sociology of Urban Life</p>	<p>(12 hours) 2 additional courses in one subfield, 1 course in each of the others:*</p>
<p>4. Internship Requirement: General Sociology Track: optional Applied Social Research Track: 9-15 hours required: SOCI 492 Internship Seminar SOCI 495 Internship</p>	<p>(0 hours)</p>

5. Required Courses in Other Departments:**General Sociology Track:** (3 hours)

(0 hours)

COSC 100 Intro. to Computer Science

Applied Social Research Track: (6 hours)

COSC 100 Intro. to Computer Science

COSC 220 Intro to Software Applications

Summary of Requirements for Option in Data Analysis**1. Required Courses in Sociology:**

(9 hours)

SOCI 312 Applied Social Research

SOCI 325 Community Analysis

SOCI 499 Individual Problems in Sociology

2. Required Courses in Other Departments:

(9 hours)

COSC 100 Introduction to Computer Science

ENGL 338 Technical Writing (*GEP BR Adv. Comp.*)MATH 209 Elements of Applied Probability and Statistics (*GEP BR Math*)

Theatre

Major**Minor****Tracks in:****acting****directing****production/design****Professor:**

McCulloch

Associate Professor:

Kagey (Chair),

Assistant Professors:

Mattis, Yost-Rushton

- You must have a 2.7 cumulative GPA in all theatre courses to meet graduation requirements.
- Legal residents of Delaware may complete a theatre degree (acting or directing track) at Maryland resident tuition rates through the SREB Academic Common Market (see Admissions section of this catalog).

	For major	For minor
Hours Required in Theatre	45	21
Hours Required in Other Disciplines:	6	3
Total Hours Required:	51	24

Summary of Requirements for Major/Minor In Theatre

Major Concentration	Minor
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1. Core Courses in Theatre:

(33 hours)

THEA 104 Theatre (3 hours; one hour must
be in a production area)THEA 106 Introduction to Theatre
(*GEP LAC Group A*)THEA 107 Introduction to Theatrical Vision
(*GEP LAC Group A*)

THEA 110 Basic Acting

THEA 206 Modern American Drama
(*also offered as ENGL 206*)

THEA 308 Directing

THEA 425 History of Theatre I

THEA 426 History of Theatre II

THEA 427 History of Theatre III

THEA 431 World Drama I (*also offered as ENGL 431*)THEA 432 World Drama II (*also offered as ENGL 432*)

(12 hours)

THEA 106 Introduction to Theatre
(*GEP LAC Group A*)THEA 107 Intro. to Theatrical Vision
(*GEP LAC Group A*)

THEA 110 Basic Acting

THEA 308 Directing

2. Theatre Tracks:

(12 hours)

*You must complete 12 hours in one of the following tracks:***a. Acting**

THEA 208 Acting: Stanislavskian Approaches

THEA 318 Acting: Analysis and Performance

THEA 319 Acting in Pre-Modern Drama

THEA 420 Marketing Yourself as an Actor

b. Directing

THEA 309 Experiences in Scripting and Staging
 THEA 325 Advanced Directing
 THEA 466 Projects in Directing

and select one from:

THEA 204 Stagecraft
 THEA 305 Scene Design
 THEA 306 Stage Lighting
 THEA 307 Costume Design

Or, with department permission, a second THEA 466 Projects in Directing.

c. Production/Design

Choose two of the following:

THEA 305 Scene Design
 THEA 306 Stage Lighting
 THEA 307 Costume Design
 THEA 465 Projects in Theatrical Design

Choose one of the following (must have departmental permission):

THEA 400 Theatre Production
 THEA 493 Field Work in Theatre Practice
 THEA 499 Directed Study (*production/design focus*)

d. General Theatre

Nine hours of electives in Theatre; six must be at 300-level or higher.

Plus one of the following:

ENGL 290 Topics in Language and Literature
 ENGL 340 Shakespeare

3. Additional Theatre Electives:

(0 hours)

(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.

4. Required Courses in Other Disciplines:*

(6 hours)

CMST 102 Intro. to Human Communication
 COSC 100 Introduction to Computer Science

(3 hours)

CMST 102 Intro. to Human Communication

Urban and Regional Planning

Major

Coordinator:

Henry Bullamore, AICP,
Professor, Department of
Geography

Participating Faculty

Professors:

Caupp (Geography), Dalton
(Economics), Neral
(Economics), Precht
(Geography), B. Wright
(Social Work)

Associate Professors:

J. Bambacus (Political
Science), Crosby
(Sociology), Hartlaub
(Political Science),
Kauffman (HPER), Moore
(Sociology), O'Rorke
(Political Science), Powell
(Social Work), Stair
(Economics), G. White
(Geography), Saku
(Geography)

Assistant Professor:

Kessler (Geography)

- This is an interdisciplinary program.
- See the Department of Geography for advising.
- You may not minor in Urban and Regional Planning.
- Frostburg State University is a member of the Association of Collegiate Schools of Planning.
- Completion of the major requirements leads to the professional degree of Bachelor of Science in Urban and Regional Planning. In addition to the requirements listed, degree candidates must meet all requirements listed in the current FSU Undergraduate Catalog for the Bachelor of Science.

	For Major
Hours Required in Geography:	31-43
Hours Required in Other Departments:	27-39
Total Hours Required:	70

Summary of Requirements for Major in Urban and Regional Planning

Major

1. Introductory Level Courses:

(25 hours)

CMST 102 Introduction to Human Communication *or* CMST 122 Introduction to Public Speaking
ECON 202 Principles of Economics (Micro)
GEOG 103 Physical Geography (*GEP LAC Group C*)
GEOG 104 Human Geography (*GEP LAC Group D*)
GEOG 275 Introduction to Spatial Analysis
MATH 209 Elements of Applied Probability and Statistics (*GEP BR Math*)
POSC 110 Introduction to American Politics (*GEP LAC Group D*)
SOC 100 Introduction to Sociology (*GEP LAC Group D*)

2. Professional Core Courses:

(33 hours)

ECON 404 Public Finance
ENGL 338 Technical Writing *or* ENGL 308 Social Sciences Advanced Composition *or* ENGL 310
General Advanced Composition (*GEP BR Adv. Comp.*)
GEOG 310 Fundamentals in the Mapping Sciences
GEOG 317 Geographic Information Systems
GEOG 324 Urban Geography: Internal City Patterns
GEOG 325 Urban Geography: Metropolitan Systems
GEOG 380, SOCI 311 *or* POSC 311 Research Methods
GEOG 421 Regional Planning
GEOG 450 Urban Planning
POSC 323 Public Administration
SOC 328 Sociology of Urban Life

3. Electives:*

(6 hours from courses listed below or courses for another focus in 4.)

ECON 408 Urban and Regional Economics
ECON 410 Resource and Environmental Economics
ENES 100 Introduction to Engineering Design
GEOG 406 Management and Conservation of Natural Resources
GEOG 410 Locational Analysis
GEOG 425 Geography of Transportation
GEOG 471 Engineering for Land Development
POSC 358 American Public Policy
POSC 456 Urban Politics and Policies
RECR 201 Introduction to Recreation and Parks
RECR 342 Park and Facility Design
RECR 443 Current Issues & Legal Liability in Recreations and Parks
SOC 200 Social Problems
SOC 305 Racial and Cultural Minorities
SOC 322 Demography
SOWK 370 Social Policy

4. Advanced Planning Focus:*

(6 hours, select one focus)

Community Planning

SOCI 326 Sociology of Rural Life *or* SOWK 370 Introduction to Social Welfare
SOC 325 Community Analysis

Wildlife & Fisheries

Major

Coordinator:

Ronald Barry, Professor,
Department of Biology

Professors:

Barry, Harman, Morton,
Riley, Yoder

Associate Professors:

Pegg, Raesly, Seddon
(Chair), Serfassi, Shumway

Assistant Professors:

Fritz, Li

Instructor:

Lyon

- The Department of Biology offers this program. The department also offers undergraduate degree programs in Biology (including a pre-health option and concentrations in biotechnology and environmental science) and in Interpretive Biology and Natural History, and collaborates with Geography to offer a degree in Environmental Analysis and Planning. Minors are available in Biology and Forestry.

Tourism Development

GEOG 454 Geography of Tourism
GEOG 455 Tourism Planning

Mapping Science

Select two from:

GEOG 412 Geographic Visualization
GEOG 413 Remote Sensing—Aerial Photo Interpretation
GEOG 414 Digital Image Processing and Analysis
GEOG 417 Advanced Geographic Information Systems

Environmental Planning

GEOG 472 Environmental Planning
GEOG 473 Environmental Law *or* GEOG 460 Natural Hazards in the Physical Environment

* *Completion of Introductory Level and Professional Core courses will fulfill prerequisites for most of these courses. Additional prerequisites may apply for POSC 456, SOWK 371, and GEOG 471.*

	For Major
Hours Required in Wildlife/Fisheries:	50-60
Hours Required in Other Departments:	30-31
Total Hours Required:	80-91

Students completing the program as listed meet all educational requirements for their certification by The Wildlife Society or American Fisheries Society (depending upon the option chosen) and will meet educational requirements for scientific-research positions in Wildlife Biology or Fisheries Biology for federal agencies.

Summary of Requirements for Major in Wildlife & Fisheries

Major

1. Common Courses in Biology:

(33 hours)

BIOL 149 General Biology I (*GEP LAC Group C*)
BIOL 150 General Biology II
BIOL 200 Scientific Investigation and Communication
BIOL 302 Animal Physiology
BIOL 327 Comparative Anatomy
BIOL 340 General Ecology
BIOL 350 Genetics
BIOL 414 Quantitative Analysis of Vertebrate Populations
BIOL 425 Forest Science

2. Required Courses in Other Departments:

(30-31 hours)

CHEM 101, 102 General Chemistry I and II (*101-GEP LAC Group C*)
CMST 102 Introduction to Human Communication
ENGL 338 Technical Writing (*GEP BR Adv. Comp*)
or ENGL 339 Scientific Writing
GEOG 103 Physical Geography (*GEP LAC Group C*)
GEOG 472 Environmental Planning
GEOG 473 Environmental Law
MATH 209 Elements of Applied Probability and Statistics (*GEP BR Math*)
MATH 220 Calculus for Applications I
or MATH 236 Calculus I (*GEP BR Math*)

- A Wildlife/Fisheries major must complete courses listed from Sections 1 and 2, and choose courses from either Section 3 or Section 4 (or both).
- There is no minor in Wildlife/Fisheries.
- Students intending to further their education in graduate school are also encouraged to take one semester of Organic Chemistry.
- Legal residents of Virginia may complete a wildlife and fisheries degree at Maryland resident tuition rates through the SREB Academic Common Market (see Admissions section of this catalog).

3. Additional Courses for Wildlife Option:

(26-27 hours)

BIOL 230 Wildlife Techniques
 BIOL 303 Plant Physiology
 BIOL 305 Dendrology
 BIOL 314 Plant Taxonomy
 BIOL 421 Sample Design and Analysis of Plant Communities
 BIOL 450 Ecology & Management of Wildlife Populations

plus two courses from:

BIOL 406 Ornithology
 BIOL 422 Herpetology
 BIOL 423 Mammalogy

4. Additional courses for Fisheries Option:

(17 hours)

BIOL 417 Ichthyology
 BIOL 420 Fish Management and Culture
 BIOL 430 Introductory Limnology
 CHEM 420 Environmental Chemical Analysis
 GEOG 430 Surface Water Hydrology

For Minor

Total Hours Required:

18

Women's Studies

Minor

Coordinators:

Linda G. McCulloch, Professor,
 Department of Theatre

Randall Rhodes, Associate
 Professor, Department of Visual
 Arts

Participating Faculty:

Professors:

Bristow (Psychology),
 McCulloch (Theatre),
 McGovern (History), Santoro
 (Psychology)

Associate Professors:

Boniece (History), Kroeger-
 Mappes (Philosophy), Lutz
 (English), Moore (Sociology),
 O'Rorke (Political Science),
 Rhodes (Visual Arts)

Assistant Professors:

Mattis (Theatre), Sanchez
 (Foreign Languages),
 Redmond (Psychology), Rossi
 (Economics)

- Women's Studies is a multicultural and multidisciplinary minor.
- You cannot major in Women's Studies.

Summary of Requirements for Minor in Women's Studies

Minor

1. Required Courses:

(6 hours)

WMST 201 Introduction to Women's Studies
 WMST 491 Seminar in Women's Studies

2. Elective Courses:

(12 hours)

Select from among:

ART 370 Women/Gender and the Visual Arts
 THEA 428 Women Through Theatre
 ECON 313 The Economics of Race and Gender
 ENGL 290 Topics in Language & Literature (*when content is appropriate*)
 ENGL 450 Women and Literature
 HIST 305 Women and Society in Modern Europe
 HIST 415 History of American Women
 HIST 431 History of the American Family
 MUSC 250 Women in Music
 PHIL 409 Philosophy and Women
 POSC 365 Women and Politics
 PSYC 220 Psychology of Women
 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
 WMST 301 Latin American Women's Issues
 WMST 486 Women, Science and Society
 WMST 494 Practicum in Women's Studies (*a maximum of 3 credits may be applied to the minor*)
 WMST 499 Independent Study

Writing

Minor

Coordinators:

Judy Pula, Professor,
Department of English

Zita McShane, Associate
Professor, Department of
English

- The writing minor may be combined with any major except the Creative Writing and Professional Writing concentrations in the English major.
- You cannot major in writing.

	For Minor
Hours Required in English:	21
Hours Required in Other Departments:	0
Total Hours Required:	21

Summary of Requirements for Minor in Writing

Minor

1. Core Curriculum:

(9 hours)

ENGL 336 Journalistic Writing

ENGL 430 The Composing Processes *(senior year only)*

ENGL 498 Field Experience in Writing *(junior or senior year)*
or Internship in English (ENGL 492 and ENGL 495)

2. Distribution:

(6 hours)

Select one course from each group:

a. ENGL 330 Business Writing or ENGL 338 Technical Writing

b. ENGL 334 Creative Writing: Fiction I or ENGL 335 Creative Writing: Poetry

3. Electives:

(6 hours)

Students will choose 6 hours of upper level English writing courses.

Course Descriptions

Listed alphabetically by academic department

Accounting

ACCT 100 Financial Accounting 3 cr.
A basic survey course emphasizing financial statements (Balance Sheet, Income Statement and Statement of Cash Flows) which are the output of the accounting process. Standard setting, financial analysis and auditing also explored. Spring. *NOT OPEN TO ACCOUNTING MAJORS/MINORS OR BUSINESS ADMINISTRATION MAJORS.*

ACCT 201 Introductory Accounting I 3 cr.
Fundamentals of accounting theory and practice. Accounting for basic transactions, adjustments, closing entries, preparation of classified financial statements, merchandising systems, current assets, other topics. Every semester.

ACCT 202 Introductory Accounting II 3 cr.
Fundamentals of accounting theory and practice, sequel to ACCT 201. Preparation of financial statements for partnerships and corporations, corporate owners' equity, bonds, investments, Cash Flow Statement, financial statement analysis, other topics. Every semester. *Prerequisite: C grade or better in ACCT 201.*

ACCT 301 Intermediate Accounting I 3 cr.
Application of accounting theory and techniques to the accounting process, financial statement preparation, time value of money, current assets, plant assets and intangible assets. Every semester on the main campus and fall on the Hagerstown campus. *Prerequisite: C grade or better in ACCT 202.*

ACCT 302 Intermediate Accounting II 3 cr.
Application of accounting theory and techniques, sequel to ACCT 301. Liabilities, investments, stockholders' equity, pensions, leases, Cash Flow Statement, other current topics. Every semester on the main campus and spring on the Hagerstown campus. *Prerequisite: C grade or better in ACCT 301.*

ACCT 305 Accounting Systems 3 cr.
Modern accounting systems, computer applications in accounting problems and systems design. Lab/Lecture. Fall. *Prerequisites: C grades or better in ACCT 202 and COSC 100.*

ACCT 310 Managerial Accounting for Business 3 cr.
Accounting as a tool for decision making, control and evaluation. Volume-cost-profit analysis, budgeting, standard costing, variance analysis and product costing. Fall. *NOT OPEN TO ACCOUNTING MAJORS.* Every semester. *Prerequisite: ACCT 202.*

ACCT 315 Cost Accounting 3 cr.
A functional approach to managerial decision making with an emphasis on product costing, budgeting and standards, variance analysis, cost behavior, capital budgeting, cost allocation. Spring. *Prerequisite: C grade or better in ACCT 202.*

ACCT 316 Advanced Cost Accounting 3 cr.
A functional approach to managerial decision making, sequel to ACCT 315. Relevance of costs, decision models, managerial performance evaluation and motivation. Cost accumulation for financial reporting purposes. Fall. *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. *Prerequisite: C grade or better in ACCT 301.*

ACCT 326 Advanced Auditing 3 cr.
Advanced topics in auditing theory and practice. Specific methods and procedures used in auditing financial statements. Review of Statements on Auditing Standards. Preparation of audit case. Fall. *Prerequisite: C grade or better in ACCT 325.*

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.*

ACCT 340 Financial Reporting Issues 3 cr.
Investor's use of financial statements, management motives in issuing statements, internal financial versus reporting decisions, economic significance of accounting reports, and the evolution and variety of accounting principles. Dissection of corporate accounting reports required by the financial markets, creditors, and regulatory authorities. Fall. *Prerequisites: 42 credits and C grade or better in ACCT 202.*

ACCT 401 Advanced Financial Accounting I 3 cr.
Business combinations, consolidated financial statements, accounting errors and changes, other current topics. Fall. *Prerequisites: C grades or better in ACCT 302 and ACCT 305.*

ACCT 402 Advanced Financial Accounting II 3 cr.
Note that ACCT 401 is not a prerequisite for this course. It includes the application of accounting theory and techniques to partnerships, nonprofit entities, installment sales, consignments, interim reports, SEC reporting, bankruptcy, multinational entities, estates and trusts. Spring. *Prerequisites: C grades or better in ACCT 302 and ACCT 305.*

ACCT 420 Tax 3 cr.
Federal income taxation of individuals and corporations. Introductory tax research. Fall. *Prerequisites: 60 credits and C grade or better in ACCT 202.*

ACCT 421 Advanced Tax 3 cr.
Partnerships, S corporations, advanced topics in individual taxation, other topics such as computer tax preparation packages and Maryland taxes at the discretion of the instructor. Spring. *Prerequisites: C grade or better in ACCT 305 and ACCT 420.*

ACCT 425 Volunteer Income Tax Assistance 2 cr.
Guided work experience in tax preparation of federal and state returns provided as a community service. Requires a minimum of 50 hours of experience and completion of IRS and campus training program. Spring. Repeatable up to 4 credits. Does not fulfill ACCT major electives requirement. *Prerequisites: ACCT 420 or permission of instructor.*

ACCT 491 Seminar in Accounting 3 cr.
Advanced topics in accounting chosen under supervision of instructor. Research paper submitted for seminar analysis. Discussion leadership expected. Variable. *Prerequisites: senior standing and a C grade in ACCT 305.*

ACCT 494 Field Experience in Accounting 3 or 6 cr.
Guided work experience in public accounting, industry, government or nonprofit 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 field experience. Credit hours determined by departmental Field Experience Committee. Previous experience not acceptable for credit. Repeatable up to 6 credits. Spring and Summer. *Prerequisites: Junior or Senior standing, 12 cr. in accounting, departmental approval.*

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.

- 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.
- AAST 494 AAST Practicum** 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 required. Every semester. *Prerequisite: permission of the instructor.*
- Art**
- ART 100 Art Appreciation** 3 cr.
Introduction to the appreciation and understanding of the visual arts. GEP LAC Group A. Every semester.
- 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. GEP LAC Group A. Every semester.
- 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. GEP LAC Group A. Fall. *Prerequisite: acceptance into the Honors Program or permission of instructor.*
- 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. *Prerequisites: ART 105 or permission of instructor.*
- ART 207 Graphic Design** 3 cr.
Fundamentals of applied design. Graphics problems in advertising and commercial art; class problems in communication arts; commercial processes and techniques; use of professional materials. Two hr. lecture, 2 hr. lab. Every semester. *Prerequisites: ART 104 and ART 212, or permission of instructor.*
- 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.
Drawing as a creative process. Study and representation of objects and natural forms, visualization and composition; graphic images, both figurative and non-figurative, in various media. Two hr. lecture, 2 hr. lab. Every semester.
- 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. *Prerequisites: ART 104 and ART 212, or permission of instructor.*
- ART 232 Printmaking** 3 cr.
Introduction to relief, intaglio, planographic, and serigraphic processes. Two hr. lecture, 2 hr. lab. Every semester. *Prerequisites: ART 104 and ART 212, or permission of instructor.*
- 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 236 Digital Imaging** 3 cr.
Introduction to photography and image manipulation using digital processes. Students will study the basics of traditional still photography, but enhance the learning experience through digital production on the Macintosh computer. An introduction to the computer as a tool in fine arts: camera use, scanning, digital manipulation and output. Two hr. lecture, 2 hr. lab. Variable. *Prerequisites: ART 104 or permission of instructor.*
- 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. *Prerequisites: ART 105 or permission of instructor.*
- ART 291 Studio Focus Review** 0 cr.
Registration concurrent with second advanced studio in focus area. May be taken 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.
- 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.
- 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 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, even-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. May be taken no more than 4 times for credit. Two hr. lecture, 2 hr. lab. Every semester. *Prerequisites: ART 202 and ART 412, or permission of instructor; concurrent enrollment in ART 291 and second advanced course.*
- ART 407 Advanced Graphic Design: Print & Video Media** 3 cr.
Continued study of print media and an introduction to video media. Stu-

dents will solve a variety of design problems using Macintosh computers combined with traditional layout and illustration techniques. Lectures, demonstrations and class critiques demonstrate historical and functional use of a professional quality portfolio, culminating in a final senior exhibition or an internship. May be taken no more than 2 times for credit. Two hr. lecture, 2 hr. lab. Every semester. *Prerequisites: ART 207, ART 307 and ART 412, 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.*

ART 412 Advanced Drawing 3 cr.
Continued study of drawing media. Students will be involved in research and development of concepts. Two hr. lecture, 2 hr. lab. Every semester. *Prerequisite: ART 212.*

ART 414 Advanced Graphic Design: Multimedia Design 3 cr.
Continued advanced study of graphic design with emphasis on interactive design. Processes include digital imaging, digital video and audio production, animation, and interface design and scripting. Lectures, demonstrations, and critiques will focus on the formal, historical, and sociological aspects of interactive design. At the advanced level, departmental majors will be involved in research and development of concepts culminating in a professional quality portfolio, a final senior exhibition or an internship. May be taken no more than 2 times for credit. Two hr. lecture, 2 hr. lab. Every semester. *Prerequisites: ART 407 (twice).*

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 Illustration 3 cr.
Exploration of illustrative techniques and media, both 2- and 3-D, and their application to graphic design, science, fashion, technology and industry. Problem-solving and topics in rendering, creative conception, media exploration, style, pre-production and printing methods, and career-oriented portfolio pieces. Two hrs. lecture, 2 hrs. lab. Variable. *Prerequisites: ART 212 and ART 412.*

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. May be taken no more than 4 times for credit. Two hr. lecture, 2 hrs. lab. Every semester. *Prerequisites: ART 221 and ART 412, or permission of instructor; 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. May be taken no more than 4 times for credit. Two hr. lecture, 2 hrs. lab. Every semester. *Prerequisites: ART 232 and ART 412, or permission of instructor; 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 in-

involved in research and development of concepts culminating in a final senior exhibition or internship. May be taken no more than 4 times for credit. Two hr. lecture, 2 hrs. lab. Every semester. *Prerequisite: 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. May be taken no more than 4 times for credit. Two hr. lecture, 2 hrs. lab. Every semester. *Prerequisites: ART 240 and ART 412, or permission of instructor; 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.

ART 490 Special Topics in Art 1-6 cr.
Concepts or media not regularly presented, using special resources. Lecture and studio or lecture only. Variable. *Prerequisite: permission of instructor.*

ART 491 Senior Review 0 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 1-3 cr.
Intensive individual study, staff-directed, in an area of special interest. *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.*

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. GEP LAC Group C. Every semester.

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. GEP LAC Group C. Every semester.

BIOL 150 General Biology II 4 cr.
Plant and animal groups and the ecosystem. Emphasis on physiology and morphology. Three hrs. lecture, 2 hrs. lab. Required for majors. 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. *Prerequisite: BIOL 149, MATH 209, and sophomore standing or permission of instructor.*

- BIOL 201 Anatomy and Physiology I** 4 cr.
The 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. Not for majors. Fall. *Prerequisite: BIOL 149.*
- BIOL 202 Anatomy and Physiology II** 4 cr.
The 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. Not for majors. Spring. *Prerequisite: BIOL 201 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 150.*
- BIOL 302 Animal Physiology** 4 cr.
Mammalian physiology, with emphasis on basic physiology. Two hrs. lecture, two 2-hr. labs. Every semester. *Prerequisite: BIOL 149, CHEM 102.*
- BIOL 303 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. Spring. Prerequisites: BIOL 150 and CHEM 102. CHEM 301 recommended.
- 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, CHEM 102.*
- BIOL 305 Dendrology** 3 cr.
Collection, identification, and study of native and introduced woody plants in summer and winter conditions. One hr. lecture, two 2-hr. labs. Fall. *Prerequisite: BIOL 149.*
- BIOL 306 Vertebrate Embryology** 4 cr.
Development of the vertebrate from gametogenesis to the establishment of organ systems. Two hrs. lecture and two 2-hr. labs. Spring, odd-numbered years. *Prerequisites: BIOL 150, BIOL 327.*
- 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.*
- 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 150, CHEM 102. Corequisite: CHEM 301 or permission of instructor.*
- BIOL 311 Morphology of the Thallophytes** 4 cr.
Morphology, taxonomy, evolution, and life histories of algae and fungi; photosynthetic bacteria, mycorrhizae, and lichens. Emphasis on organisms important to the human race; plant and animal pathogens, and organisms of economic and ecological importance. Two hrs. lecture, two 2-hr. labs. Fall. *Prerequisite: BIOL 150.*
- BIOL 312 Morphology of the Embryophytes** 4 cr.
Morphology, taxonomy, evolution, and life histories of bryophytes and vascular plants. Comparative study of the major organs of each group. Two hrs. lecture, two 2-hr. labs. Spring. *Prerequisite: BIOL 150.*
- BIOL 314 Plant Taxonomy** 3 cr.
Classification of flowering plants, gymnosperms, and ferns. Emphasis on collection, identification, and preparation of herbarium specimens. One hr. lecture, two 2-hr. labs. Spring. *Prerequisite: BIOL 149.*
- BIOL 327 Comparative Anatomy** 5 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 3-hr. labs. Every semester. *Prerequisite: BIOL 150.*
- BIOL 334 General Animal Behavior** 3 cr.
Behavior of animals from an evolutionary approach. Research project required. Three hrs. lecture. Spring, odd-numbered years. *Prerequisite: BIOL 150 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. Fall and summer. Not open to students who have credit for former BIOL 405. *Prerequisite: BIOL 150, CHEM 102 (or CHEM 101 and permission of the instructor), MATH 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. *Prerequisite: BIOL 150; CHEM 102; MATH 209. Recommended: BIOL 304 and 310; CHEM 301.*
- BIOL 401 Genetics Laboratory** 1 cr.
Techniques of collection and analysis of genetic data, including molecular, chromosomal, Mendelian, and population genetics. One 2-hr. lab. Spring. *Prerequisite or corequisite: BIOL 350.*
- BIOL 402 Evolution** 3 cr.
Theories, evidences, and mechanisms of evolution. Three hrs. lecture. Variable. *Prerequisite: BIOL 150.*
- 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; CHEM 101.*
- 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.*
- 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 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.*
- 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. *Prerequisite: BIOL 150.*
- BIOL 412 General Parasitology** 4 cr.
Principles of parasite structure, function, life cycles and host-parasite relationships. Two hrs. lecture, two 2-hr. labs. Fall, even-numbered years. *Prerequisites: BIOL 150; CHEM 102.*
- BIOL 414 Quantitative Analysis of Vertebrate Populations** 3 cr.
A survey of quantitative techniques used to describe, analyze, and model

wildlife population phenomena and interactions between populations. Three hrs. lecture. Spring. *Prerequisites: MATH 120 or a course in calculus, MATH 209, BIOL 150.*

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. *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. *Prerequisite: senior or graduate standing; MATH 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.*

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 425 Forest Science 3 cr.
Forest resources, soils, and ecology. Silviculture: cutting methods, stand improvement, reforestation, genetic tree improvement. Forest protection, utilization; measuring, harvesting, and developing forest products. Forest management and administration. Forests of Maryland. Forest research; world resources. Two hrs. lecture, one 2-hr. lab. Fall. *Prerequisite: upperclass or graduate standing.*

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. *Prerequisite: BIOL 150.*

BIOL 430 Introductory Limnology 4 cr.
Inland waters; physical, chemical, and biological aspects. An overview of hydrobiology. Laboratory emphasis on basic analysis of data from aquatic environments. Two hrs. lecture, two 2-hr. labs. Fall. *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 304.*

BIOL 436 Electron Microscopy for Biologists 4 cr.
Principles and techniques of electron microscopy; thin and thick sectioning, positive staining. Use of the transmission and the scanning electron microscopes for animal and plant tissues, micro-organisms, and particulates. One hr. lecture, two 3-hr. labs. Spring, odd-numbered years. Enrollment limited to 6, preference to students with an active research project. *Prerequisites: BIOL 310, PHYS 216, CHEM 302; cumulative G.P.A. 3.0; permission of instructor.*

BIOL 437 Molecular Biology Seminar 1 cr.
Current topics in molecular biology presented by students, faculty, and invited speakers coupled with in-depth analysis and discussion. One hour. Required for biology majors in biotechnology concentration. Fall. *Prerequisite: junior or senior standing; BIOL 435.*

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 1-hour lecture and 2 two-hour labs a week. Variable. *Prerequisites: junior or senior standing; BIOL 435.*

BIOL 439 Environmental Toxicology 3 cr.
Interdisciplinary study of the major classes and properties of pollutants, ecotoxicology testing methods and their effects on living organisms and the ecosystem. Two hrs. lecture, two hrs. lab. Variable. *Prerequisites: BIOL 149 and BIOL 150.*

BIOL 440 Developmental Biology 4 cr.
Classical and modern study of processes producing structural and functional changes during the development of plants and animals. Three hrs. lecture, two hrs. lab. Variable. *Prerequisites: BIOL 149 and BIOL 150.*

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.*

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 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 I. 1 cr. lecture, 2 cr. lab. *Prerequisites: BIOL 305, BIOL 425.*

BIOL 465 Environmental Health 3 cr.
Investigation of the relationship between human exposure to environmental pollutants and resultant adverse health effects. Consideration of epidemiology, exposure assessment, risk assessment and risk management. Variable. Also offered as GEOG 465. *Prerequisite: completion of two laboratory science courses.*

BIOL 490 Special Topics in Biology 2 to 4 cr.
A "one time only" course on a special topic selected by the instructor. Variable. Repeatable on a different topic. *Prerequisite: permission of instructor.*

BIOL 492 Wildlife-Fisheries Seminar 1 cr.
Integration of biological, social, political, economic, and philosophic fish-and-wildlife problems. For majors in wildlife-fisheries management. One hr. Variable. *Prerequisite: senior or graduate standing in biology or wildlife/fisheries management.*

BIOL 494 Field Experiences in Biological Sciences 2 to 6 cr.
Work experience with a federal, state or private organization, or industry, with job-related activities directly related to the student's major. Faculty sponsor, project approval, and final report by the student required. Variable. *Prerequisites: biology and wildlife/fisheries majors only; junior or senior standing.*

BIOL 497 Readings in Biology 1 cr.
Discussion of readings on selected topics. One period per week. Repeatable to 2 credits. Variable. *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. *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. *Prerequisites:* 20 credits in biology, junior or senior standing, permission of instructor, approval of the Department Chair, completion of request form before registering.

Business Administration

BUAD 100 Introduction to Business 3 cr.
Introduction to the internal and external environment of contemporary business and a survey of basic concepts, principles, and practices of business organizations. Basic business terminology and concepts for beginning students seeking an introduction to the business world or assistance in making career decisions. Does not count for business or accounting majors. Every semester.

BUAD 291 Legal Environment of Business 3 cr.
The workings, importance, and origins of legal institutions; the law as a system of social thought and social action. Private property and contract in free enterprise; the evolution of legal attitudes toward business. Every semester. *Prerequisite:* 30 credits.

BUAD 301 Intro. 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.

BUAD 303 Principles of Finance 3 cr.
Introduction to basic principles of the three traditional divisions of finance: financial markets and institutions, investment and portfolio analysis, and corporate finance. Does not count for accounting majors. Spring. *Prerequisites:* ECON 200 or ECON 202 and ACCT 100 or ACCT 202.

BUAD 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, and managerial data base applications using commercial programs. Every semester. *Prerequisite:* COSC 220 or COSC major.

BUAD 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. Fall. *Prerequisite:* 42 credits.

BUAD 351 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. Every semester. *Prerequisite:* 42 credits.

BUAD 352 Employment Law 3 cr.
The law as it pertains to the process of Human Resource Management, with special emphasis on equal employment law. Fall. *Prerequisite:* BUAD 291.

BUAD 355 Operations Management 3 cr.
Introduction to the operations function of a business; the actual provision of services and /or production of goods. A range of analytical tools and techniques are introduced which are useful in planning, organizing, scheduling, and controlling operations. Every semester. *Prerequisites:* BUAD 351 and MATH 209.

BUAD 356 Leadership and Interpersonal Skills 3 cr.
Utilization of behavioral approaches in the process of self-development as a leader, understanding leadership as a mind set and as a tool. Emphasis is placed on applications of leadership qualities and interpersonal skills required for managerial success and organizational effectiveness. Every semester. *Prerequisite:* BUAD 351.

BUAD 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:* BUAD 351.

BUAD 359 Total Quality Management 3 cr.
The Total Quality Management concept; relationship between quality and competitiveness; developing a quality culture through establishing a customer focus, total employee involvement and empowerment, team building, education and training; total quality tools; implementing total quality management. Every semester. *Prerequisite:* BUAD 351 and MATH 209.

BUAD 361 Principles of Marketing 3 cr.
Introduction to marketing and the fundamentals involved in the marketing process. Functions, institutions, and channels of distribution of goods and services from producer to consumer; the components of marketing strategy and their interrelationships. Every semester. *Prerequisite:* 42 credits.

BUAD 363 Advertising 3 cr.
Overview of advertising and sales promotion; their relation to social and economic systems. Processes for developing and implementing effective advertising programs, including promotional planning, media selection, and layout. Every semester. *Prerequisite:* BUAD 361.

BUAD 364 Retail Management 3 cr.
Management of the retail function viewed as a separate business operation and as a part of the marketing strategy. Developing a retail strategy: organization, layout, merchandise planning and management, customer service, and pricing. Fall. *Prerequisite:* BUAD 361.

BUAD 365 Principles of Selling 3 cr.
Introducing students to the fundamentals of selling which include the selling process from preapproach to post-sale service. Every semester. *Prerequisite:* BUAD 361.

BUAD 366 Consumer Behavior 3 cr.
Concepts and theories of consumer behavior; psychological and sociological influences on consumers. The relation of these theories to marketing strategies; consumer behavior in the segmentation of markets. Every semester. *Prerequisite:* BUAD 361.

BUAD 370 Corporate Finance 3 cr.
Principles of financial management within business enterprises. Basics of stocks and bonds valuation, financial analysis, capital budgeting, dividend policy, and both short-term financing and long-term capital structure decisions. Every semester. *Prerequisites:* MATH 106 or MATH 220, ACCT 202, ECON 201 and ECON 202.

BUAD 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.

BUAD 373 Commercial Bank Management 3 cr.
Operation and management of our commercial banks. Techniques and principles followed by commercial banks; managerial practices common to banking operations. Spring. *Prerequisite:* BUAD 370.

BUAD 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:* BUAD 370.

BUAD 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 302 or BUAD 301 or 303 or 370.

BUAD 380 Social Responsibility in Business 3 cr.
The relationship of business with society; stakeholder relationships; social, ethical and public issues affecting business and managerial approaches for dealing with these issues. Emphasis on the social responsibilities of business. Not open to students who have credit for former BUAD 480. Every semester.

- BUAD 381 Principles of Real Estate** 3 cr.
Industry principles and factors influencing the real estate business. Contracts, deeds, valuation, financing, and government regulation. Meets requirements of Regulation 19, Maryland Real Estate Commission, Department of Licensing and Regulation, for real estate salespersons. Fall.
- BUAD 415 New Business Ventures** 3 cr.
Development of new ideas and opportunities into new businesses, potential problems and requirements for success, sources of venture capital, development of business plans. Course will use a case study approach requiring both oral and written presentations. Spring. *Prerequisites: BUAD 351, 361, and 303 or 370.*
- BUAD 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 transnational organizations, and contemporary issues facing global managers. Spring. *Prerequisite: BUAD 330.*
- BUAD 452 Staffing and Development** 3 cr.
The role of human resource professionals at every stage of the employment process from pre-hiring to post-firing, staffing policies, internal and external recruitment, HR development strategies and training program development, career management, outplacement programs. Spring. *Prerequisite: BUAD 357.*
- BUAD 455 Management Information Systems** 3 cr.
Relation of MIS to the management functions of planning, control, and decision making. Concepts that underlie a MIS: systems management, data bases, computers, telecommunications, and general systems design and implementation. Fall. *Prerequisites: BUAD 351 and COSC 220 or BUAD 320.*
- BUAD 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: BUAD 357.*
- BUAD 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. Spring. *Prerequisite: BUAD 357 or major in Law and Society.*
- BUAD 460 International Marketing** 3 cr.
Study of the marketing function from an international perspective. Discussion of the cultural, legal, political and economic aspects of international marketing, in addition to international marketing policies and strategies. Comparison of markets and marketing techniques in the U.S. and foreign markets. Problems and techniques of export marketing are highlighted. Every semester. *Prerequisite: BUAD 361.*
- BUAD 462 Marketing Research** 3 cr.
Design, collection, and analysis of marketing data relating to consumer, product, and market demands. Statistical designs, sampling techniques, Bayesian decision theory, and development of market information systems. Every semester. *Prerequisite: 6 cr. in marketing, including BUAD 361, MATH 209; and 75 credits.*
- BUAD 465 Marketing Strategies** 3 cr.
Market analysis, product planning, channels of distribution, pricing, and promotional decision making; analysis of environmental constraints and market opportunities. Every semester. *Prerequisites: 9 cr. in marketing and 75 credits.*
- BUAD 466 Services Marketing** 3 cr.
Discussion of marketing theory and methods in the management of services. Elements of the service marketing mix are emphasized. Spring. *Prerequisite: BUAD 361.*
- BUAD 467 Internet Marketing** 3 cr.
Use of the Internet for business primarily from a marketing perspective. Examination of Internet structure, function and terminology; investigation marketing strategies and business practices necessary for success in e-commerce; and study of the phenomena, issues and processes that make conducting business on the Internet unique. Spring. *Prerequisite: BUAD 361.*
- BUAD 469 Marketing Plans Development** 3 cr.
Development of complete and formal marketing plans for existing or new consumer products. Structure encompasses all aspects of a contemporary marketing plan from situational analysis through implementation and control. Every semester. *Prerequisites: Senior standing and BUAD 363, 366, 462, 465.*
- BUAD 470 International Financial Management** 3 cr.
Analysis of financial management in a multinational enterprise. Management of foreign exchange risks, translation and transaction exposure, participation in global financial markets, foreign asset management, political risks. Fall. *Prerequisite: BUAD 370.*
- BUAD 475 Securities Investment** 3 cr.
Investment opportunities in financial instruments. Valuation of fixed income, equity, and derivative securities. Evaluation of mutual funds. Investment strategies for portfolio management: portfolio selection, diversification, and performance analysis. Spring. *Prerequisite: BUAD 370.*
- BUAD 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: BUAD 370 or both ACCT 302 and 315.*
- BUAD 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: BUAD 370 and BUAD 375 or BUAD 475 or BUAD 476.*
- BUAD 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 BUAD 351, 361, and 370.*
- BUAD 490 Special Topics in Business Administration** 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.*
- BUAD 491 Seminar in Business Administration** 3 cr.
Advanced topics in business administration. Under the selected theme of the seminar, each student presents research papers for critical analysis by seminar participants. Spring. *Prerequisite: 90 credits and 18 hrs. of business administration course work.*
- BUAD 492 Internship Research Paper** 3 cr.
The separately graded academic component of the internship, required in conjunction with 495. Graded A through F. The entire internship (495 and 492) is for a total of 15 credits for full-time interns and 9 credits for part-time interns. Every semester. *Corequisite: BUAD 495.*
- BUAD 494 Field Experience in Business Administration** 3 cr.
Supervised field experience for majors, relating to operations in commercial or government organizations. Detailed report on the experience required. No more than one field experience may be applied toward graduation. Every semester. *Prerequisites: 60 credits; minimum of 12 hrs. in business administration; approval of the department chair.*
- BUAD 495 Internship in Business Administration** 6 or 12 cr.
Guided work experience with an academic component. Work must be directly related to academic program. Full-time interns register for 12 credits and may not enroll in any other courses (except 492, required). Part-time interns register for 6 credits. The experiential component is graded P/F. Every semester. *Prerequisites: 60 credits, in good academic standing; submission of a completed Internship Agreement form to the department chair prior to registering. Corequisite: BUAD 492.*

BUAD 499 Independent Study in Business Administration 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. Every semester. Course may be repeated for a maximum of 4 credits. *Prerequisites: 18 credits of BUAD course work, 90 credits and permission of department chair.*

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. GEP LAC Group C. Every semester.

CHEM 101 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. Three hrs. lecture, one 3-hr. lab. GEP LAC Group C. Every semester. *Prerequisite: Algebra competence as demonstrated by a placement test administered by the University, successful completion of a college level algebra-based math course, or permission of instructor.*

CHEM 102 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. *Prerequisite: CHEM 101.*

CHEM 103 Foundations of Chemistry 3 cr.
Introduction to fundamental concepts, methodology and nomenclature of chemistry, including data analysis, atomic structure, inorganic and organic compounds, chemical equations and reactions, stoichiometry, states of matter, solutions, reaction rates and equilibrium. No laboratory. Web delivered. Variable.

CHEM 110 Modern Chemistry and Society 3 cr.
Non-mathematical approach to chemical principles, modes of chemical research, current applications, effects on the environment, and impact on society. For non-science majors. Three hrs. lecture. Variable.

CHEM 111 Modern Chemistry and Society Laboratory 1 cr.
Non-mathematical laboratory experiments applicable to modern chemistry. For non-science majors. One 2-hr. lab. Variable. *Prerequisite or corequisite: CHEM 110.*

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. Three hrs. lecture, 2 hrs. lab and 1 hr. recitation. GEP LAC Group C. Spring. *Prerequisite: Admission to Honors Program or permission of instructor.*

CHEM 133 General Chemistry for Engineers 3 cr.
A math-intensive lecture-only general chemistry course designed for engineering students. Topics include intermolecular forces, thermodynamics, chemical kinetics, catalysis, chemical equilibria, acid-base equilibria, electrochemistry and nuclear chemistry. Fall. *Prerequisites: CHEM 101 or permission of instructor.*

CHEM 300 Computational Techniques in Chemistry 2 cr.
Introduction to and application of the fundamental methods, tools and techniques essential to solve chemical problems. Regular topics include statistical, mathematical and computational tools; data analysis, and use of chemical sources. Additional topics explored will augment student needs and supplement area of current interest in chemistry. One 2-hr lab. Fall. *Prerequisites: 12 cr. in Chemistry, MATH 226 or equivalent, or permission of the instructor.*

CHEM 301 Organic Chemistry I 5 cr.
Chemistry of the compounds of carbon. Classes and nomenclature of compounds, structure, reactions, mechanisms, spectroscopy, and stereochemis-

try. Three hrs. lecture, one 4-hr lab. Fall. *Prerequisites: CHEM 101 and 102 or equivalent.*

CHEM 302 Organic Chemistry II 5 cr.
Continued study of compounds of carbon. Three hrs. lecture, one 4-hr lab. Spring. *Prerequisite: CHEM 301 or equivalent.*

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 101 and 102; MATH 120 or equivalent. Corequisite: PHYS 215 or equivalent, or permission of instructor.*

CHEM 411 Advanced Inorganic Chemistry 4 cr.
Covers the application of symmetry operations and group theory in order 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, even-numbered years. *Prerequisite or corequisite: CHEM 441 or permission of instructor.*

CHEM 420 Environmental Chemical Analysis 4 cr.
Explores applications of wet chemical, electroanalytical (potentiometric and amperometric), spectroscopic (UV-Vis, spectrofluorimetry 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 101 and CHEM 102.*

CHEM 421 Instrumental Analysis 4 cr.
Theory and applications of modern instruments for chemical analysis. Electronics, spectroscopic, electrochemical, and chromatographic techniques. Laboratory use of NMR, IR, UV, AA, and GC instruments. Three hrs. lecture, one 3-hr. lab. Spring. *Prerequisite: 16 cr. in chemistry including CHEM 320, 441, and 445, or permission of instructor.*

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. Spring, odd-numbered years. *Prerequisites: CHEM 301 and 302.*

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: 16 cr. in Chemistry from the following: CHEM 101, 102, 301, 302, 320; 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. *Prerequisites: CHEM 301 and 302; BIOL 149 or permission of the instructor.*

CHEM 456 Biochemistry Laboratory 1 cr.
Qualitative and quantitative laboratory experiments on the nature and properties of biological materials. One three-hr. lab. Spring. *Prerequisite or corequisite: CHEM 455.*

CHEM 457 Biochemistry II 3 cr.
A continuation of Biochemistry I. Metabolic processes and their conservation among widely divergent organisms. Cell processes, their interrelation and regulation. Biochemical techniques and their applications to a variety of

current biological problems. Three hrs. lecture. Spring. *Prerequisite: CHEM 455 or equivalent.*

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 101, 102, 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 on a different topic. Variable. *Prerequisite: 24 credits in chemistry or permission of instructor.*

CHEM 491 Seminar in Chemistry I 1 cr.
Current topics in chemistry presented by students, faculty, and invited guests. One period weekly. Required for majors. Fall. *Prerequisite: junior or senior standing.*

CHEM 492 Seminar in Chemistry II 1 cr.
Sequel to CHEM 491. One period weekly. Required for majors. Spring. *Prerequisite: junior or senior standing.*

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 credit. *Prerequisite: CHEM 441, junior standing in chemistry, and permission of department chair.*

CHEM 499 Special Problems in Chemistry 1 to 6 cr.
Methods and techniques of basic research. Repeatable to 6 credits. Every semester. *Prerequisite: permission of department chair.*

Communication Studies

You may not receive credit for both a CMST course and the same course formerly labelled CMAT.

CMST 100 Communication Practicum ½ to 1 cr.
Entry level work experience in applying communication theory. Opportunities announced in Undergraduate Schedule Booklet every semester. Repeatable to 4 credits; may not be applied to fulfillment of major requirements. Variable. *Prerequisite: permission of instructor.*

CMST 102 Introduction to Human Communication 3 cr.
Fundamental theory and practice of human communication in dyadic, small-group, and public situations. Not open to students who have credit for former CMAT 102. 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. Not open to students who have credit for former CMAT 112. 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 132 Introduction to Interpersonal & Small Group Communication 3 cr.
Development of critical thinking, problem-solving, and relational skills in one-on-one and small group settings. Fall, even-numbered years.

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, and persuasive interviews. Selecting and structuring questions to achieve specific objectives. 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. Not open to students who have credit for former CMAT 300. Every semester, except fall of odd-numbered years. *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. Fall, odd-numbered years. *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. Every semester, except fall of even-numbered years. *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. Not open to students who have credit for former CMAT 322. Fall, even-numbered years. *Prerequisites: CMST 102/112 or CMST 122, or permission of instructor.*

CMST 335 Organizational Communication 3 cr.
Theory, practices and analysis of communication in the context of complex organizations. Agendas, briefings, meetings, conferences, presentations. Assessment and intervention techniques. Spring, even-numbered years. *Prerequisite: Permission of instructor.*

CMST 422 Seminar in Communication Analysis 3 cr.
Criteria and methods of analysis of significant public discourse. Application to traditional and contemporary modes of public communication. Not open to students who have credit for former CMAT 422. Spring, odd-numbered years. *Prerequisite: 9 hrs of Communication Studies Core Courses, 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. Not open to students who have credit for former CMAT 451. Fall, odd-numbered years. *Prerequisite: 9 hrs of Communication Studies Core Courses, or permission of instructor.*

CMST 485 Issues and Responsibilities of Communication 3 cr.
Study of ethical perspectives and legal constraints on communication as practiced in interpersonal, public, mass media, and artistic situations. Fall.

CMST 490 Special Topics in Communication Studies 3 cr.
Study, research or applied experience related to an announced selected topic. 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.*

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 but only 3 credits may be applied for the completion of the major. Every semester. *Prerequisite: Junior/Senior standing, a minimum of 12 credits in Communication Studies courses, and permission of the instructor.*

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

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.

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.

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. Fall. *Prerequisite: acceptance into the Honors Program or permission of instructor.*

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 visual object-oriented computer programming; development of software stages, using Universal Modeling Language (UML); object-oriented concepts including object representation, and modularization. Every semester.

COSC 200 Computer Science I 3 cr.

For students in 2002 and prior catalogs only. An introduction to problem solving on digital computers, algorithm development and design. Fundamental computer programming concepts and constructs including sequence, selection, iteration, subprograms, data types and arrays. A thorough study and programming experience with a high-level structured programming language. Every semester. Last offering Spring 2004. *Prerequisite: COSC 130 or prior programming experience.*

COSC 201 Computer Science II 3 cr.

For students in 2002 and prior catalogs only. Design and implementation of data structures used in programming such as linked lists, stacks and queues. Internal sorting, searching, and merging algorithms. Recursion. Performance analysis of algorithms. Every semester. Last offering Spring 2005. *Prerequisite: COSC 200.*

COSC 220 Introduction to Software Applications 3 cr.

Survey of hardware, introduction to software used in business applications, microcomputer operating system, graphics, word processing, spreadsheet,

database management systems, and network communication software for microcomputers. Every semester. *Prerequisite: COSC 100 or COSC 110.*

COSC 240 Computer Science I 4 cr.

Required for students in 2003 and later catalogs. 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. *Prerequisite: COSC 101 and test at level III or above on mathematics placement test or has passed MATH 102 with a C or better.*

COSC 241 Computer Science II 4 cr.

Required for students in 2003 and later catalogs. 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: COSC 240.*

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: COSC 241.*

COSC 305 Computer Ethics 3 cr.

Ethical issues related to computing. Includes topics such as responsibility of the computing 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: COSC 240.*

COSC 310 Data Structures and File Organization 3 cr.

Design and implementation of advanced data structures for computer applications. Topics include trees, graphs, external sorting, hash table and file organization management. Fall. *Prerequisite: COSC 241 and MATH 236.*

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: 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: 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 lab 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: COSC 120 or permission of the instructor.*

COSC 335 Network Architecture Design 3 cr.

An introduction to the design of networks. Topics include network architectures, protocols, Ethernet LANS, token ring LANS, established networks, network relays, repeaters, bridges, routers, network administration, inter-network design, and advanced network architectures. Fall. *Prerequisite: COSC 241.*

COSC 345 The Internet and Multimedia Communications 3 cr.

An introduction to protocols and applications of multimedia communications. Topics include multimedia networks, compression methods, network protocols, end to end multicast, and multimedia application. Variable. *Prerequisite: COSC 365.*

- COSC 350 Computer Organization and Assembly Language** 3 cr.
An introduction to the logical architecture of the computer and to machine organization fundamentals such as bus structures and microcode - as viewed by the assembly language programmer. Every semester. *Prerequisite: COSC 240.*
- COSC 365 Digital Logic and Computer Design** 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: 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: 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: COSC 241.*
- 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: COSC 240, PHYS 216 or PHYS 262 and PHSC 315 or PHYS 332 or permission of the instructor. Also offered as PHYS 415.*
- COSC 420 Robotics and Computer Control** 3 cr.
Introduction to the field of robotics: applications, safety, sensors, Robotics Languages Model for Computer Aided Design (CAD), speech recognition and generation. Integration of robots with artificial intelligence. Variable. *Prerequisite: PHYS 215 or PHYS 261, COSC core classes and permission of the instructor.*
- COSC 430 Computer Education** 3 cr.
An investigation of topics relating to the use and teaching of computing technology for students with a computing background. Variable. *Prerequisite: COSC 240.*
- COSC 435 Network Implementation and Testing** 3 cr.
An introduction to the implementation and testing of networks. Topics include OSI layers, structured cabling, network operating systems, network devices, network connections, and the network file system. Variable. *Prerequisite: 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. Variable. *Prerequisite: COSC 241.*
- COSC 445 Network and Distributed System Management** 3 cr.
An introduction to the management of Network and Distributed Systems. Topics include network technologies, monitoring distributed systems, OSI management model, network management protocols, network planning, security for management, and user administration and accounting. Variable. *Prerequisite: COSC 365.*
- COSC 450 Programming Language Structures** 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: 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: COSC 241.*
- COSC 460 Operating Systems Concepts** 3 cr.
Detailed study of operating systems concepts. Process management, scheduling, time slicing, concurrency, mutual exclusion, semaphores, resource management, memory mapping, virtual systems, mass storage, file systems. Case studies of operating systems. Every semester. *Prerequisite: 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: COSC 365.*
- COSC 470 Compiler Designs and Constructions** 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: COSC 310 and COSC 365.*
- 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: 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. Variable. *Prerequisite: COSC 241.*
- COSC 485 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. Variable. *Prerequisites: COSC 310 and COSC 365.*
- 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 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. Variable. *Prerequisites: 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; (3) A project paper on a topic related to the work experience. Previous work experience may not be substituted for this course. More than one field experience may be completed, but the number of credits applied toward a Computer Science major is limited to 3. Every semester. *Prerequisite: junior or senior standing and completion of the core courses in Computer Science. 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. Every semester. *Prerequisites: core courses and written permission of faculty and supervisor. DEPARTMENTAL APPROVAL REQUIRED PRIOR TO REGISTERING.*

Dance

You may not receive credit for both a DANC course and the same course formerly labelled PHEC.

DANC 110 Dance Appreciation 3 cr.
Dance forms, dance personalities, contemporary trends in dance. Not open to students who have credit for former PHEC 135. Every semester. GEP LAC Group A.

DANC 105 Improvisation 2 cr.
Exploration of spontaneous movement in response to various stimuli in solo and group settings. Two labs/week. Alternate years.

DANC 131 Ballet I 1 cr.
Basic ballet techniques and style. Not open to students who have credit for former PHEC 111. Fall.

DANC 142 Modern I 2 cr.
Fundamental skills in modern dance. Not open to students who have credit for former PHEC 211. Fall.

DANC 154 Jazz I 1 cr.
Movement techniques in jazz dance; dance composition and improvisation. Not open to students who have credit for former PHEC 112. Spring.

DANC 209 Dance Composition I 2 cr.
Exploration of movement materials through short problems dealing with rhythm, space, and dynamics. Two labs/week. *Prerequisite: DANC 105.* Alternate years.

DANC 231 Ballet II 2 cr.
Intermediate ballet techniques and terminology. Not open to students who have credit for former PHEC 113. *Prerequisite: DANC 131 or permission of instructor.* Alternate years.

DANC 242 Modern II 2 cr.
Skills in intermediate modern dance. Not open to students who have credit for former PHEC 213. *Prerequisite: DANC 142.* Alternate years.

DANC 254 Jazz II 2 cr.
Movement techniques, composition and improvisation in the jazz dance style. Not open to students who have credit for former PHEC 114. *Prerequisite: DANC 154 or permission of instructor.* Alternate years.

DANC 309 Dance Composition II 2 cr.
The second of two courses in dance composition focusing on developing skill in the creative process. Exploration of more formal elements of composition with an emphasis on form and structure. Two labs/week. *Prerequisite: DANC 209.* Alternate years.

DANC 332 Ballet III 2 cr.
Study of advanced ballet technique, vocabulary, and style. Two labs/week. May be repeated for credit. *Prerequisite: DANC 231.* Alternate years.

DANC 342 Modern III 3 cr.
Advanced modern dance techniques; modern dance styles and personalities. Three labs/week. Not open to students who have credit for former PHEC 236. *Prerequisite: DANC 242.* Alternate years.

DANC 360 Dance Repertory 2 cr.
A dance repertory workshop for the intermediate/advanced. Lecture/lab. *Prerequisite: DANC 242 or DANC 231.* Alternate years. May be repeated for credit up to six credits.

DANC 382 Dance History 3 cr.
History of theatrical dance in Western Culture and the role of dance in humankind, a thematic approach. *Prerequisite: DANC 110.* Alternate years.

DANC 408 Choreography and Production 3 cr.
Procedures for choreographing, producing, and directing dance productions. Not open to students who have credit for former PHEC 431. Alternate years. *Prerequisite: Two credits in dance or permission of instructor.*

DANC 429 Special Topics in Dance 1 to 3 cr.
Advanced analysis and practice in dance movement; varying topics. A maximum of six credits combined can be earned in DANC 429 and the former PHEC 429. Repeatable to 6 credits. Yearly. *Prerequisite: 2 credits in dance technique or permission of instructor.*

DANC 442 Modern IV 3 cr.
An advanced/professional dance technique level in modern dance based on an eclectic fusion of movement vocabulary which has evolved from the early modern dance heritage with the inclusion of the instructor's own personal aesthetic. Three labs/week. *Prerequisite: DANC 342 or permission of instructor.* Yearly. May be repeated for credit.

DANC 471 Principles of Teaching Dance 3 cr.
Theory and practice of dance instruction including methods and materials. Two lectures and one lab/week. *Prerequisite: DANC 231 or DANC 242.* Alternate years.

DANC 479 Teaching Practicum 1 cr.
Application of theory and skills acquired in DANC 471. The student, under supervision, will teach dance in an authentic setting. *Prerequisite: DANC 471.* Alternate years.

DANC 498 Senior Project 1 cr.
Individual project performed under the supervision of a faculty member; the culminating experience for the dance major. Offered as needed.

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. Every semester. GEP LAC 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 LAC Group D.

ECON 202 Principles of Economics (Micro) 3 cr.
An introduction to Principles of Economics focusing primarily upon individual consumer and producer decision making behavior in various organized market structures; the price system, market performance, efficiency and government policy. Every semester. *Prerequisite: ECON 201.*

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. Fall. GEP LAC Group D. *Prerequisite: acceptance into the Honors program or permission of the instructor.*

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 and ECON 202.*

ECON 301 Labor Economics 3 cr.
The theory of labor supply and demand, labor force participation, invest-

ment in human capital, compensating wage differentials, government regulation, employment, unemployment, unionism, discrimination, wage-related income transfers and pensions. Spring. *Prerequisites: ECON 201 and ECON 202.*

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 201 and ECON 202.*

ECON 305 Managerial Economics 3 cr.
Applications of microeconomic theory to management practices. Topics include production, pricing, market structures and special topics in firm decision making. Students participate in management simulation. Every semester. *Prerequisites: ECON 201 and 202.*

ECON 306 Money and Banking 3 cr.
The nature and functions of money, credit, banking, and the Federal Reserve System. Institutions generating the money supply; the influence of monetary and fiscal policies on economic stability and growth. Every fall. *Prerequisites: ECON 201 and ECON 202.*

ECON 307 Government, Business, and Public Policy 3 cr.
Economic aspects of the relation of government and business in the United States; antitrust, economic, and social regulation of business. Spring, even-numbered years. *Prerequisite: ECON 201 and ECON 202.*

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 un-planned economics; free market pricing and direct controls; private enterprise and nationalized industry. Spring, even-numbered years. *Prerequisites: ECON 201 and ECON 202.*

ECON 313 Economics of Race and Gender 3 cr.
Uses both micro- and macro-economic models to study race and gender issues such as discrimination and affirmative action. Both U.S. and international issues are discussed. Topics include occupational segregation, slavery, poverty. Fall, even-numbered years. *Prerequisites: ECON 200 or ECON 201 or ECON 202 or permission of instructor.*

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 macro-economic issues. Every semester. *Prerequisites: ECON 201 and ECON 202.*

ECON 352 Intermediate Micro-Economics 3 cr.
Theory of consumer behavior and demand. Production and cost theory and firm behavior under varying circumstances. Distribution theory. Every semester. *Prerequisites: ECON 201 and ECON 202.*

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. Every fall. *Prerequisites: ECON 201 and ECON 202. May not receive credit if taken as ECON 402.*

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 and ECON 202. May not receive credit if taken as ECON 402.*

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 and ECON 202.*

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, odd-numbered years. *Prerequisites: ECON 201 and ECON 202.*

ECON 407 Business Cycles and Forecasting 3 cr.
Analysis of business conditions and measurement including theories of cycles; problems of data selection, modeling, and estimation; and forecasting. Fall, even-numbered years. *Prerequisites: ECON 351 or permission of the instructor.*

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. Every fall. *Prerequisites: ECON 201 and ECON 202.*

ECON 410 Resource and Environmental Economics 3 cr.
Economic analysis of problems and policies affecting natural resource industries and the environment. Economic framework, mineral, forest, energy industries and environmental use and misuse are analyzed. Fall, even-numbered years. *Prerequisite: ECON 202 or permission of the instructor.*

ECON 440 Introduction to Game Theory 3 cr.
An introduction to the theory of games and its application to the analysis of strategic behavior in various decision-making environments. Spring, odd-numbered years. *Prerequisites: ECON 201 and ECON 202.*

ECON 450 Quantitative Economics 3 cr.
Introduction to quantitative methods used in economic empirical research. Model-building, estimation of economic parameters, and the testing of hypotheses. Spring. *Prerequisites: ECON 201 and ECON 202.*

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, odd-numbered years. *Prerequisites: ECON 201, ECON 202, and MATH 209.*

ECON 490 Special Topics in Economics 1-3 cr.
Applications of economic principles to a variety of specialized topics. May be repeated for a maximum of 6 credits. Variable. *Prerequisites: ECON 201 and 202 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 201, ECON 202, ECON 351, and ECON 352, or senior standing.*

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. Variable. May be counted in the major/minor as an elective. *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.*

ECED 150 Early Childhood Foundations

3 cr.

Introduction to profession of early childhood education. Includes growth and development of young children. Examines historic, theoretical and philosophical underpinnings of current early childhood programs. Explores play, learning environments and curriculum. Looks at the context of families and communities. Requires a reflective journal, field observations, and portfolio development. Every semester. *Taken prephase I or during Phase I of ECE/ELEM major's professional sequence as part of ECE specialization.*

EDUC 200 Phase I Teaching and 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 ten 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. May be taken concurrently with EDUC 200/202. *Prerequisite: completion of 30 hours.*

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. Concurrent enrollment required in EDUC 200. May be taken concurrently with EDUC 201. *Prerequisite: Admission to Phase I.*

EDUC 210 Educational Psychology

3 cr.

General principles of the psychology of learning and teaching; emphasis on laws of learning, conditions of learning, efficient learning, improving study habits, diagnosis and evaluation of the learner. Variable.

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 to 6 credits. Graded P/F. Every semester. *Prerequisite: permission of department chair, with written proposal for a field problem approved prior to registering.*

ECED 293 Early Childhood Learning Environment

3 cr.

Examination and assessment of developmentally appropriate environments for young children birth to age eight. Includes planning of physically and psychologically safe and healthy learning environments. Taken during Phase I of ECE/ELEM major's professional sequence as part of ECE specialization. Every semester. *Prerequisite: Admission to Phase I or permission of department chair.*

EDUC 300 Phase II Teaching & 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.

ELED 307 Block 1 Clinical and Professional Assessment Component

2 cr.

Supervised assisting at the early childhood, elementary, and middle school levels. Joint supervision by school system and university personnel. Daily, full day clinical experience. Graded P/F. Every semester. *Prerequisite: Admission to Phase II.*

EDUC 308 Art Education Methods for the Secondary Teacher

3 cr.

Examination of curriculum goals, content, and organization of secondary art education. Theories of visual development and artistic behavior in the adolescent and young adult; materials, resources, and processes for teaching art; classroom management, computer-assisted instruction and integrated technology. Two hr. lecture, 2 hr. lab. Fall. *Prerequisite: admission to Phase II or permission of Department Chair; EDUC 308 and EDUC 392 recommended concurrently.*

EDUC 309 Art Education Methods for the Elementary Teacher

3 cr.

Examination of curriculum goals, content, and organization of elementary art education. Theories of visual development and artistic behavior of the child; materials, resources, and processes for teaching art; classroom management, computer-assisted instruction and integrated technology. Two hr. lecture, 2 hr. lab. Fall. *Prerequisite: admission to Phase II or permission of Department Chair; EDUC 309 and EDUC 392 recommended concurrently.*

SCED 316 Business Education in the Secondary School

3 cr.

Methods of teaching shorthand, transcription, typing, accounting, business machines, and data processing. Curricular planning, instructional strategies, program organization, work experiences, careers and job requirements. Business career opportunities, job requirements, student organizations, and business surveys. Proficiency in the skill areas required. Fall. *Prerequisites: Phase II admission or permission of Department Chair; EDUC 391 recommended concurrently.*

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. Every semester. *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.*

EDUC 346 Educational Technology Lab I

1 cr.

Experiences and practice in using technology to support any curriculum. Experiences are assimilated into professional practice. Emphasis on use of technology within the context of accomplishing authentic tasks. Every semester. May be satisfied by portfolio and performance assessment examination. *Prerequisite: Phase I admission or permission of department.*

EDUC 354 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.*

EDUC 355 General Music Methods in the Secondary School

3 cr.

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 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 391 Teaching Internship I: Secondary Education 2 cr.
Initial internship practicum at secondary school level. Joint supervision by school system and university personnel. Some assignments and responsibilities coordinated with concurrent secondary block courses. Minimum length of practicum equal to 30 half-days (120 clock hours). Graded P/F. Fall. *Prerequisites: Successful completion of first semester of Phase II courses and concurrent enrollment in remaining Phase II course requirements.*

EDUC 392 K-12 Field Experience 1 to 2 cr.
Teacher assistantship in elementary and secondary settings. Requires 60 hours of in-school aide experience at each level. Assignments coordinated with other Phase II courses. Repeatable. Graded P/F. *Prerequisite: Phase II admission.*

EDUC 401 Nursery-Eighth Grade Field Experiences I 1½ cr.
Teacher assistantship in N-8 school setting. Requires 90 hours of in-school experience. Assignments coordinated with Block I methods courses. Graded P/F. Every semester. *Prerequisites: Phase II admission and concurrent enrollment in Block I.*

EDUC 402 Nursery-Eighth Grade Field Experiences II 1½ cr.
Teacher assistantship in N-8 school setting. Requires 90 hours of in-school experience. Assignments coordinated with Block II methods courses. Graded P/F. Every semester. *Prerequisites: Phase II admission and concurrent enrollment in Block II.*

EDUC 403 Assessment and Management of Learning 4 cr.
Design, implementation, and use of various assessment instruments. Qualitative analysis of student performance. Assessment of students, instructional activities, and environments. Communication of assessment data. Elements of developmentally appropriate classroom management. Management strategies for student behavior, curriculum, materials, and resources. Every semester. *Prerequisite: successful completion of Block I.*

ELED 403 Assessment and Management of Learning 4 cr.
Component course of the 13 credit integrated Block II, Phase II of the elementary teacher education program. Block II courses center on the extension and refinement of basic concepts, skills, and information related to the teaching of mathematics, science, language arts, and social studies. The major program themes of technology, integration, teaming, performance-based instruction, professionalism, diversity, service learning, and career awareness are modeled and utilized as integrating threads. Focuses on the evaluation of students and instructional activities. Every semester. *Prerequisite: Admission to Phase II of the Teacher Education Program and recommendation of Phase I, Block I faculty team.*

EDUC 405 Leadership 2 cr.
Educational leadership in schools, communities, and professional organizations. Professionalism emphasized. Every semester. *Prerequisite: Phase III admission.*

EDUC 406 Leadership Seminar 2 cr.
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.*

GUCO 406 Introduction to Guidance 3 cr.
History and philosophy of Guidance programs; the role, organization, and methods of guidance. Variable.

EDUC 410 Teacher Intern Seminar: N-8 3 cr.
A study of the research and materials for various models of teaching with the intent of securing objective feedback for making a sophisticated analysis

of curriculum impact, teaching methods, and teacher/student interaction. Graded P/F. Every semester. *Prerequisite: Phase III admission.*

SCED 410 Secondary Methods and Curriculum 3 cr.
Evolution of the philosophy of secondary education. Current curricula, planning, issues, and instructional methodologies in all secondary teaching areas. Required for secondary education majors. Not open to students with credit for former SCED 310. Spring. *Prerequisite: Phase II admission.*

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.*

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. Taken with Secondary Block. Not open to students with credit for former REED 318. Spring. *Prerequisite: Phase II admission.*

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.*

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: Phase III admission or permission of the department.*

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.*

REED 422 Practicum in Reading Instruction 3 cr.
Laboratory experience in correcting reading problems. Diagnosis and program planning. Tailoring of materials and techniques to the particular child. Variable. *Prerequisite: REED 420.*

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 to be used in classes when reading for literary experience, reading to perform a task, and reading for information. Apply strategies for selecting materials, for retrieving materials, and for 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.*

- EDUC 429 The School and Community** 3 cr.
Role and participation of the community in public education today. Cooperation between public school and nonschool educative agencies in the community. Participation in a field research project required. Variable.
- EDUC 430 Desktop Publishing for Educators** 3 cr.
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 curricula. Variable.
- ECED 431 Early Childhood Education I Curriculum Development & Implementation** 3 cr.
Philosophy and function of early childhood education curriculum. Analysis of children's needs; planning and implementing a balanced program. Taken Phase II Block I of ECE/ELEM major's professional sequence as part of ECE specialization. Every semester. *Prerequisite: Phase II admission or permission of the department.*
- EDUC 432 Hypermedia & Multimedia: Educational Applications** 3 cr.
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 & Instructional Techniques** 3 cr.
Learn about Logo as a language for learning about computers, computer programming, and thinking. Emphasis will be on learner-controlled and learner-directed explorations of intellectual problems of interest. Variable.
- ECED 438 Early Childhood Classroom Management** 3 cr.
For the early-childhood teacher: advanced teaching skills in nurturing the young child's social experiences, self-discipline, independence, and creativity; arranging play experiences, organizing physical space, communicating with children, child study. Variable.
- 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.
- EDUC 441 Classroom Discipline Strategies** 3 cr.
For undergraduates who have had aiding or teaching internship and for practicing teachers. Emphasis on understanding child behavior in school. Democratic classroom setting. Variable. *Prerequisite: Phase II completion.*
- ECED 442 Administration & Supervision of Early Childhood Programs** 3 cr.
Administrative and supervisory responsibilities for the early-childhood educator in providing quality programs for young children. Variable. *Prerequisite: permission of instructor.*
- ECED 443 Early Childhood Education II: Adults in the Child's World** 3 cr.
The early-childhood educator's influence on and collaboration with the child's caregivers; the use of local, state, and national resources to meet child, family, and community educational needs. Taken Phase II Block II of ECE/ELEM major's professional sequence as part of ECE specialization. Every semester. *Prerequisite: Successful completion of ECED 431 or permission of department.*
- EDUC 444 Cooperative Learning Workshop: Level I** 3 cr.
A study of cooperative learning through an analysis of the underlying theory and observation; planning, and implementation of cooperative learning activities. Summer.
- EDUC 445 Middle School Curriculum and Methods** 3 cr.
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 Department Chair.*
- EDUC 446 Using Databases for Critical Thinking** 1 cr.
Use databases in learning to organize, access, manipulate, and evaluate information. Learn to find and interpret information, find patterns, and make inferences based on established patterns. Develop techniques for using databases in elementary and secondary curricula. Variable.
- EDUC 447 Educational Technology Lab II** 1 cr.
Experiences and practice in using technology to support any curriculum. Experiences are assimilated into professional practice. Emphasis on use of technology within the context of accomplishing authentic tasks. Extension and refinement of Lab I experiences. Every semester. *Prerequisite: Phase II admission.*
- EDUC 448 Educational Technology Lab III** 1 cr.
Experiences and practice in using technology to support any curriculum. Experiences are assimilated into professional practice. Emphasis on use of technology within the context of accomplishing authentic tasks. Extension and refinement of Lab II experiences. Every semester. *Prerequisite: appropriate phase admission and successful completion of Educational Technology Lab II.*
- REED 450 Classroom Techniques in Diagnosis & Correction of Reading Difficulties** 3 cr.
Lecture and laboratory to diagnose reading difficulties and plan corrective programs using a variety of materials and techniques in tutoring. Summer. *Prerequisite: REED 420 and 422.*
- 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. Every semester. *Prerequisite: Phase II admission.*
- EDUC 454 Microcomputer Application in Education** 3 cr.
Introductory course to familiarize educators with microcomputers. Microcomputers as a teaching tool; innovations, systems of instruction, model programs, matching software to school children's needs. Every semester. *Prerequisite: Phase II admission or permission of instructor.*
- SPED 461 Characteristics of Exceptional Children** 3 cr.
Etiology, diagnosis, physical, emotional, and social characteristics of exceptional children, including the gifted, retarded, and physically handicapped. 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.*
- ELED 470 General Curriculum** 3 cr.
Planning, constructing, and organizing the school curriculum; types of curricula and current applications. Every semester. *Prerequisite: Phase II admission or permission of Department Chair.*
- ELED 471 Mathematics Curriculum and Methods: Integrated Block** 2 cr.
Planning, constructing, and organizing curriculum; types of curricula. Methods, materials, and content for teaching Mathematics. Every semester. *Prerequisite: admission to Phase II.*
- ELED 472 Language Arts Curriculum and Methods: Integrated Block** 2 cr.
Planning, constructing, and organizing curriculum; types of curricula. Methods, materials, and content for teaching Language Arts. Every semester. *Prerequisite: admission to Phase II.*
- REED 473 Reading Instruction** 3 cr.
Knowledge of best practices and instructional strategies which focus on the purposes for reading. How to use a balanced program of phonics, semantics, and syntactics in teaching reading. Methods, materials, and content for teach-

ing reading in grades N-8. Knowledge of early identification and intervention strategies for low achieving readers. Every semester. *Prerequisite: Phase II admission.*

ELED 474 Science Curriculum and Methods: Integrated Block 2 cr.
Planning, constructing, and organizing curriculum; types of curricula. Methods, materials, and content for teaching Science. Every semester. *Prerequisite: admission to Phase II.*

ELED 475 Social Studies Curriculum & Methods: Integrated Block 2 cr.
Planning, constructing, and organizing curriculum; types of curricula. Methods, materials, and content for teaching Social Studies. Every semester. *Prerequisite: admission to Phase II.*

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.*

EDUC 490 Special Topics in Education 1/2 to 6 cr.
Special workshop on a current topic, as arranged.

ELED 494 Teaching Internship I: N-8 6 cr.
Supervised practicum in teaching 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 fall semester, includes a one-week beginning of the school year experience. Graded P/F. Every semester. *Prerequisite: successful completion of Block I.*

ELED 495 Teaching Internship II: N-8 Programs 12 cr.
Supervised practicum in teaching 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 fall semester, includes a one-week beginning of the school year experience. Graded P/F. Every semester. *Prerequisite: successful completion of Internship I and Phase III admission.*

SCED 496 Teaching Internship II: Secondary Education 12 cr.
Supervised practicum in teaching at secondary school level. Joint supervision by school system and university personnel. Daily, full day for one semester. Graded P/F. Every semester. *Prerequisite: Phase III admission or permission of Department Chair.*

EDUC 497 or 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.*

EDUC 499 Individual Problems in Education 1 to 3 cr.
Independent study under supervision. Research paper on special topic. Requires proposal approval through Dept. of Educational Professions prior to registering. Repeatable to 6 credits. Every semester, summer.

Engineering Engineering Sciences

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.

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.*

Electrical Engineering

** For course descriptions of elective courses available in electrical engineering, please refer to the Clark School of Engineering catalog of the University of Maryland, College Park.

ENEE 114 Programming Concepts for Engineers 4 cr.
FSU Course. Principles of software development, high level languages, compiling and linking, pseudo-code, input/output, data types and variables, operators and expressions, conditionals and loops, functions, arrays, pointers, structure data types, memory allocation, introduction to algorithms, software projects, debugging, documentation. Programs will use the C language. Three hrs. lecture and two hrs. recitation per week. Spring. *Corequisite: ENES 100.*

ENEE 204 Basic Circuit Theory 3 cr.
FSU Course. Basic circuit elements: resistors, capacitors, inductors, sources, mutual inductance and transformers; their I-V relationships. Kirchoff's Laws. DC and AC steady state analysis. Phasors, node and mesh analysis, superposition, theorems of Thevenin and Norton. Transient analysis for first- and second-order circuits. Three hrs. lecture and one hr. discussion/recitation per week. *Prerequisite: PHYS 262. Corequisite: MATH 432.*

ENEE 206 Fundamental Electric & Digital Circuit Laboratory 2 cr.
FSU Course. Introduction to basic measurement techniques and electrical laboratory equipment (power supplies, oscilloscopes, voltmeters, etc.). Design, construction, and characterization of circuits containing passive elements, operational amplifiers, and digital integrated circuits. Transient and steady-state response. This course is prerequisite to all upper level ENEE laboratories. One hour lecture and three hrs. lab per week. Spring. *Prerequisite: ENEE 244. Corequisite: ENEE 204.*

ENEE 241 Numerical Techniques in Engineering 3 cr.
FSU Course. Introduction to error analysis, conditioning and stability of algorithms. Numerical solution of nonlinear equations. Vector spaces and linear transformations. Matrix algebra. Gaussian elimination. LU factorization, matrix inversion. Similarity transformations and diagonalization. Iterative computation of eigenvalues. Interpolation; splines; data fitting. Numerical integration. Three hrs. lecture and one hr. discussion/recitation per week. Fall. *Prerequisite: ENEE 114, MATH 237.*

ENEE 244 Digital Logic Design 3 cr.
FSU Course. Gates, flip-flops, registers and counters. Karnaugh map simplification of gate networks. Switching algebra. Synchronous sequential systems. PLA's. Elements of binary arithmetic units. Three hrs. lecture and one hr. discussion/recitation per week. Fall. *Prerequisite: ENEE 114.*

ENEE 302 Digital Electronics 3 cr.
UMCP Course. Large signal terminal characteristics of PN junction diodes, bipolar and MOSFET transistors. Digital electronics at transistor level: inverter, NAND, NOR AND, OR gates. CMOS and TTL logic. Combinatorial and sequential digital circuits, memory design. Circuit simulation with SPICE. Fall. *Prerequisite: ENEE 204 and completion of all lower-division courses in the EE curriculum.*

- ENEE 306 Electronic Circuits Design** 2 cr.
FSU Course. Students will design, construct and test analog and digital circuits at the transistor level. Bipolar and field effect transistors will be covered. Circuits designed will include common emitter and differential amplifiers, active filter, TTL and CMOS logic gates. Students should gain much of the background required for the design of modern microelectronic circuits. One lecture and three lab hours per week. Spring. *Prerequisite: ENEE 206 and ENEE 302.*
- ENEE 312 Semiconductor Devices and Analog Electronics** 3 cr.
UMCP course. The basic physical operation of P-N junction diodes, MOSFET's and bipolar transistors. Basic transistor circuit configurations (CE, CC, CB, CS, CD, CG). DC bias; small signal analysis. Simple multi-transistor circuits: diff-amp; current mirror. Frequency response. Spring. *Prerequisite: ENEE 302 and completion of all lower-division technical courses in the EE curriculum.*
- ENEE 322 Signal and System Theory** 3 cr.
UMCP Course. 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 and completion of all lower division technical courses in the EE curriculum.*
- ENEE 324 Engineering Probability** 3 cr.
UMCP Course. 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 and completion of all lower division technical courses in the EE curriculum.*
- ENEE 350 Computer Organization** 3 cr.
UMCP Course. 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. Fall. *Prerequisite: ENEE 244 and completion of all lower division technical courses in the EE curriculum.*
- ENEE 381 Electromagnetic Wave Propagation** 3 cr.
UMCP course. 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 and completion of all lower-division technical courses in the EE curriculum.*
- ENEE 408 Capstone Design Project** 3 cr.
Culmination of prior course work in 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. Areas in which projects are offered include analog and digital electronic circuits, electromechanical systems and devices, control systems, signal processing, and instrumentation. 1.5 hrs. lecture and 3 hrs. lab. Spring. *Prerequisite: permission of department. Repeatable to 6 credits maximum if content differs.*
- ENEE 417 Microelectronics Design Laboratory** 2 cr.
FSU Course. Senior class capstone project laboratory. Students design and build fairly sophisticated circuits, mainly composed of discrete transistors and integrated circuits. Students may become involved in various projects designed to require that they synthesize from what they have learned in many of the disciplines in electrical engineering. Students gain hands-on practical experience while learning how to use their knowledge and skills to design and build a device or system. One lecture and three hours of lab per week. Variable. *Prerequisites: ENEE 306 and ENEE 312 and completion of all lower division EE technical courses.*
- ENEE 439 Topics in Signal Processing** 1-3 cr.
FSU Course. Selected topics of current importance in signal processing. For electrical engineering majors only. Variable. Repeatable to up to 6 credits maximum if content differs. *Prerequisite: permission of department and completion of all lower division technical courses in the EE curriculum.*
- ENEE 461 Control Systems Lab** 2 cr.
FSU Course. Design criteria, characteristics and limitations of modern control systems. Sensors, feedback, PID Control. Servomechanisms, control of various physical quantities such as temperature, pressure, liquid level, etc. Computer-based process control. Errors in digital control systems. Students will gain hands-on experience through a design project to build and test a feedback control system for a real world application. One lecture and three hours of lab per week. Variable. *Prerequisites: ENEE 206 and ENEE 322 and completion of all lower-division technical courses in the EE curriculum.*
- ENEE 475 Power Electronics** 3 cr.
FSU Course. Basic principles of power electronics and its applications. Analytical methods, canonical circuit topologies, fundamentals of power semiconductors, snubbing circuits, drive circuits, and control methods. Variable. *Prerequisite: ENEE 302 and completion of all lower division courses in the EE curriculum.*
- Mechanical Engineering**
** For course descriptions of elective courses available in mechanical engineering, please refer to the Clark School of Engineering catalog of the University of Maryland, College Park.
- ENME 232 Thermodynamics** 3 cr.
FSU Course. Introduction to thermodynamics. Thermodynamic properties of matter. First and second law of thermodynamics, cycles, reactions, mixtures. Variable. *Prerequisites: PHYS 261 and 262.*
- ENME 271 Numerical Methods in Mechanical Engineering** 3 cr.
FSU Course. Develop the skills to generate readable, compact and verifiably correct MATLAB scripts and functions to obtain numerical solutions to a wide range of engineering models and to display the results with fully annotated graphics. Learn structured programming. Two lectures and two hrs. lab per week. Spring. *Prerequisite: ENES 221.*
- ENME 320 Thermodynamics** 3 cr.
UMCP Course. Properties, characteristics and fundamental equations of gases and vapors. Application of the first and second laws of thermodynamics in the analysis of basic heat engines, air compression vapor cycles. Flow and non-flow processes for gases and vapors. Spring. *Prerequisites: PHYS 261 and PHYS 262.*
- ENME 331 Fluid Mechanics** 3 cr.
FSU Course. Principles of fluid mechanics. Mass, momentum and energy conservation. Hydrostatics. Control volume analysis. Internal and external flow. Boundary layers. Modern measurement techniques. Computer analysis. Laboratory experiments. Two hrs. lecture and two hrs. lab per week. Fall. *Prerequisites: ENES 221, ENME 232 or 320.*
- ENME 332 Transfer Processes** 3 cr.
FSU Course. The principles of heat transfer. Conduction in solids. Convection. Radiation. Modern measurement techniques. Computer analysis. Two hrs. lecture and two hrs. lab per week. Spring. *Prerequisite: ENME 331.*
- ENME 350 Electronics and Instrumentation I** 3 cr.
FSU Course. Modern instrumentation. Basic circuit design, standard microelectronic circuits. Digital data acquisition and control. Signal conditioning. Instrumentation interfacing. Designing and testing of analog circuits. Laboratory experiments. Two hrs. lecture and two hrs. lab per week. Not open to students who have credit for former ENME 252. Fall. *Prerequisite: PHYS 263.*
- ENME 351 Electronics and Instrumentation II** 3 cr.
FSU Course. Continuation of ENME 350. Modern instrumentation. Basic circuit design, standard microelectronic circuits. Digital data acquisition and control. Signal conditioning. Instrumentation interfacing. Designing and testing analog circuits. Laboratory experiments. Two hours lecture and two hours lab per week. Spring. *Prerequisites: ENME 252 and PHYS 263.*
- ENME 361 Vibration, Controls and Optimization I** 3 cr.
UMCP Course. Fundamentals of vibration, controls, and optimization. Analysis and design in time, Laplace and frequency domains. Mathematical description of system response, system stability, control and optimization. Optimal design of mechanical systems. Spring. *Prerequisites: ENES 220, ENES 221, and MATH 432.*

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. *Prerequisite: ENES 221.*

ENME 382 Engineering Materials & Manufacturing Processes 3 cr.
FSU Course. Basic material structures and properties. Mechanical behavior of materials. Manufacturing processes theory. Materials processing. Quality assurance. Laboratory experiments. Two hours lecture and two hours lab per week. Spring. *Prerequisite: ENES 220.*

ENME 392 Statistical Methods for Product & Process Develop. 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 228.*

ENME 462 Vibration, Controls and Optimization II 3 cr.
UMCP Course. Continuation of ENME 361. Fundamentals of vibration, controls, and optimization. Analysis and design in time, Laplace and frequency domains. Mathematical descriptions of system response, system stability, control and optimization. Optimal design of mechanical systems. Fall. *Prerequisites: ENME 351 and ENME 361.*

ENME 472 Integrated Product and Process Development 3 cr.
FSU Course. Integration of product development with the development process. Design strategies. Product architecture. Design for manufacturing. Selection of materials. Design for assembly. Two hours lecture and two hours lab per week. Spring. *Prerequisite: ENME 371.*

ENME 488 Special Problems in Mechanical Engineering 3 cr.
Advanced problems in mechanical engineering with special emphasis on mathematical and experimental methods. Variable. *Prerequisite: permission of department.*

English

Writing

ENGL 100 Publication Practicum 1-2 cr.
Writing for and editing the campus student newspaper or literary magazine. Open to all students. (1-2 credits per semester; repeatable to 4 credits). Newspaper section, fall and spring; Literary magazine section, spring. Graded P/F. *Prerequisite: previous journalism experience or course work or concurrent registration in a journalism course or submission of writing samples.*

ENGL 101 Freshman Composition 3 cr.
Development of intermediate skills in argumentative writing based on reading for general audiences. Preparation of essay exams and short papers. Every semester. *Basic University Requirement. Students may not withdraw unless withdrawing from the University.*

ENGL 111 Honors: Freshman Composition 3 cr.
Development of intermediate skills in writing based on readings for general audiences. Preparation for honors-level courses. Every semester. *Basic University Requirement. Prerequisite: enrollment in the Honors Program.*

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. Prior literature at 200-level required. Readings involve literary analysis and criticism. Every semester. *Prerequisite: C or better in ENGL 101 or 111. May substitute for Advanced Composition (ENGL 308, 309, 310) as Basic University Requirement.*

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 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. Basic University Requirement.*

ENGL 309 Advanced Composition: Humanities 3 cr.
A special advanced composition course which fulfills all of the reading and writing requirements of English 308 and 310, but centers research on topics appropriate to the humanities. Development of advanced writing skills. Extensive and research-based papers; attention to research tools and documentation. Students may receive credit for only one of the following: 308, 309, 310, or 312. Fall. *Prerequisites: C or better in English 101 or 111; and at least 42 credits or permission of instructor. Basic University Requirement.*

ENGL 310 General Advanced Composition 3 cr.
Development of advanced skills in writing. 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. Basic University Requirement.*

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). Variable. *Basic University Requirement. Prerequisites: C or better in ENGL 101 or ENGL 111, at least 42 credits, and enrollment in Honors Program.*

ENGL 330 Business Writing 3 cr.
Basic writing for business and para-professional occupations. Writing resumés, job applications, memos and reports, and other kinds of business writing. Every semester. *Prerequisites: C or better in ENGL 101 or 111; and at least 42 credits or permission of Chair. May substitute for Advanced Composition (ENGL 308, 309, 310) Requirement.*

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 newspaper industry, effective newsgathering, and the specialized formats and style of straight news and feature stories. Communication and promotional activities of the journalist-turned-public-relations professional. 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. May substitute for Advanced Composition (ENGL 308, 309, 310) as Basic University Requirement.*

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. May substitute for Advanced Composition (ENGL 308, 309, 310) as Basic University Requirement.*

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 401 Writing for Television 3 cr.
Introduction to the principles and techniques of script writing for video production. Team and individual writing of scripts, both documentary and fiction. Variable. *Prerequisites: C or better in ENGL 101/111 and a 300-level writing course, or permission of instructor.*

ENGL 402 Editing and Production 3 cr.
Design, layout, and editing techniques for professional publications. Rein-

forcement of copy editing and proofreading skills. Spring, even-numbered years. *Prerequisite: ENGL 308, 309, 310, 330 or 338.*

ENGL 430 The Composing Processes 3 cr.
A survey of theory and research on the composing processes. Every semester. *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. 3 hrs. lecture/workshop. Fall. *Prerequisite: ENGL 334 or permission of instructor. Not repeatable for credit.*

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 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 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 Mass Communication Practicum 1-3 cr.
Supervised field experience for Mass Communication majors. Participation in the communication operations of a commercial, governmental, or educational organization. Repeatable but only 3 credits may be applied for the completion of the professional focus. Variable. *Prerequisite: Junior/senior standing, a minimum of 12 credits in Mass Communication courses, and permission of the instructor.*

ENGL 495 Internship in English 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 1 credit in 492. Part-time interns register for 6 credits in 495 and 1 credit in 492. English 495 is graded P/F. Every semester. *Prerequisites: junior or senior status, in good academic standing; submission of Internship Agreement form to internship director prior to registering; major or minor in English, or minor in Public Relations.*

ENGL 498 Field Experience in Writing 3 cr.
Requires nine work-hours per week of practical writing experience in an approved, supervised, professional setting. Every semester. *Prerequisites: junior or senior standing. Permission of the department chair and a faculty coordinator.*

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 LAC Group B. Also offered as MDFL 150.*

ENGL 206 Modern American Drama 3 cr.
An introductory survey of representative American plays and playwrights of the 20th century with attention to the evolution of Modern American Theatre and analysis of the efforts of the playwright and theatrical profes-

sionals. Fall, even-numbered years. *Prerequisite: ENGL 101 or 111 or equivalent. Also offered as THEA 206.*

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 4 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 general education, humanities distribution requirement for ENGL 150; separate waiver of ENGL 101 for students meeting competencies required for freshman composition (the credits for 101 may not, however, be purchased). Students in 221 may thus fulfill both the basic requirement of ENGL 101 and the liberal arts humanities distribution requirement of ENGL 150, or they may fulfill only one, or neither. Spring. *Open only to students never enrolled in ENGL 101. Students may not withdraw unless withdrawing from the University.*

ENGL 231 African American Literature 3 cr.
Historical survey and critical examination of major African American writings from colonial times to the present, emphasizing oral and literary traditions and cultural contexts. Variable. *Prerequisite: C or better in ENGL 101 or 111 or equivalent.*

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. Variable. *Prerequisite: acceptance into the Honors Program or permission of instructor. May substitute for ENGL 150 as GEP LAC Group B.*

ENGL 260 British Literature: Beowulf to Present 3 cr.
A survey of British literature from Beowulf to the present. Includes major works from each period to provide historical perspective. Designed for English majors and minors. 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 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. Variable. *English 101 or 111 must be taken concurrently with or prior to ENGL 290.*

ENGL 303 American Romantic Literature 3 cr.
Writings of Emerson, Thoreau, Hawthorne, Poe, Melville, and Whitman. Reference to literary, social, and intellectual backgrounds. Fall, odd-numbered years. *Prerequisite: C or better in ENGL 101 or 111 or equivalent.*

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 307 16th- and 17th-Century English Literature 3 cr.
Poetry and prose from the Elizabethan age to 1660, excluding Milton. Narrative and lyric poetry (emphasizing the Metaphysicals), drama, and prose. Fall, even-numbered years. *Prerequisite: C or better in ENGL 101 or 111 or equivalent.*

ENGL 313 English Romantic Literature 3 cr.
Poetry and prose of English Romantic movement in the earlier 19th century. Attention to major poets, essayists, and novelists. Spring, odd-numbered years. *Prerequisite: C or better in ENGL 101 or 111 or equivalent.*

ENGL 322 The Restoration and Augustan Age 3 cr.
English literature from Dryden through Pope. Major poets, dramatists, essayists, and fiction writers. Spring, odd-numbered years. *Prerequisite: C or better in ENGL 101 or 111 or equivalent.*

ENGL 323 Victorian Literature 3 cr.
Poetry and prose of the later 19th century; attention to major poets, essayists, and novelists. Spring, even-numbered years. *Prerequisite: C or better in ENGL 101 or 111 or equivalent.*

ENGL 332 The Age of Johnson 3 cr.
Poetry and prose of the later 18th century. Attention to Johnson and Boswell, and some major novels. Fall, odd-numbered years. *Prerequisite: C or better in ENGL 101 or 111 or equivalent.*

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 352 American Colonial Literature 3 cr.
American literature of the 17th and 18th centuries. Attention to social, intellectual, and literary history as reflected in colonial writings. Fall, even-numbered years. *Prerequisite: C or better in ENGL 101 or 111 or equivalent.*

ENGL 404 Modern British Fiction 3 cr.
British novels representative of major developments in literature from 1900 to the end of World War II. Fall, odd-numbered years. *Prerequisite: C or better in ENGL 101 or 111 or equivalent.*

ENGL 407 American Fiction: 1865-1922 3 cr.
American novels and short stories of the period, with special attention to literary history and the development of realism and naturalism. Spring, even-numbered years. *Prerequisite: C or better in ENGL 101 or 111 or equivalent.*

ENGL 408 Modern and Post-Modern American Fiction 3 cr.
American novels and short stories from the 1920's to the present from a variety of cultural and gender perspectives. Spring, odd-numbered years. *Prerequisite: C or better in ENGL 101 or 111 or equivalent.*

ENGL 411 Chaucer and His Times 3 cr.
The world of The Canterbury Tales and other English masterpieces of the high Middle Ages. Spring, even-numbered years. *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 & Application 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 424 20th-Century British Poetry 3 cr.
British poetry from Housman to the present, with emphasis on Yeats. Fall, even-numbered years. *Prerequisite: C or better in ENGL 101 or 111 or equivalent.*

ENGL 426 Modern American Poetry 3 cr.
From its antecedents in Whitman and Dickinson to contemporary poets, with emphasis on Frost and Eliot. Spring, even-numbered years. *Prerequisite: C or better in ENGL 101 or 111 or equivalent.*

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: ENGL 150, 250/MDFL 150 or THEA 106 or permission of instructor. Also offered as THEA 431.*

ENGL 432 World Drama II: Twentieth Century 3 cr.
World drama during the 20th century. Representative dramatists and forms from both the West and the East. Multicultural emphasis on the variety of dramatic forms. Spring, odd-numbered years. *Prerequisite: ENGL 150, 250/MDFL 150 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. Fall, odd-numbered years.

ENGL 450 Women and Literature 3 cr.
A cross-cultural study of womanhood as portrayed by male and female writers over the centuries. Spring, even-numbered years.

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.

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. Variable. Seniors only.

ENGL 499 Independent Study 1-3 cr.
Guided reading and/or writing projects. 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.*

Environmental Humanities

HUMA 495 Project in Environmental Humanities 3-9 crs.
Guided field experience supplemented by appropriate readings and written reports leading to a substantial research paper or to a creative project. Both experiential and academic components are graded P/F. *Prerequisite: Completion of all other courses in the minor and permission of the Environmental Humanities Committee.*

Environmental Policy

EPOL 491 Seminar in Environmental Policy 3 cr.
Designed to synthesize course work in Environmental Policy. Required of students completing a minor in Environmental Policy. Students will select topics, make presentations, and participate in discussions. Variable. *Prerequisite: permission of coordinator.*

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.

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, Portuguese or Chinese. Specific title listed in course schedule. May be repeated for credit if topics are substantially different. Variable.

MDFL 290 Selected Topics in Foreign Language & Literature 1-4 cr.
A variable topic in a foreign language, literature, or culture other than French or Spanish such as Italian, Japanese, German, Portuguese, or Chinese more advanced than MDFL 190. Specific title listed in course schedule. May be repeated for credit if topics are substantially different. Variable.

MDFL 390 Selected Topics in Foreign Language & Literature 1-4 cr.
A variable topic on language, literature or culture. Specific title listed on course schedule. May be repeated for credit if topics are substantially different. Variable. *Prerequisite: permission of department.*

Literature in Translation

MDFL 150 Introduction to Literature 3 cr.
A thematic study of literature, looking across genres and cultures at contemporary topics. Continued development of writing skills. Variable. *GEP LAC Group B. Also offered as ENGL 150.*

MDFL 211 Introduction to World Literature I 3 cr.
Literary masterpieces in translation, illustrating spiritual, social, and esthetic life from ancient times through the Renaissance. Guest lectures in various literatures. Variable. *Prerequisite: ENGL 101 or 111.*

MDFL 212 Introduction to World Literature II 3 cr.
Literary masterpieces in translation from the 17th century to the present. Guest lectures in various literatures. Variable. *Prerequisite: ENGL 101 or 111.*

MDFL 407 Latin American and Spanish Film 3 cr.
A study principally of the most recent films from Latin America and Spain. Taught in English (may not be taken to satisfy the Spanish major). Not open to students with credit for SPAN 407. Two hrs. lecture and two hrs. lab. Variable.

Linguistics

LING 301 Introduction to Language 3 cr.
Introduction to the study of language. The nature of language; language families; techniques of linguistic analysis; linguistic change. Conducted in English. Variable.

French

FREN 101 Basic Elements of French I 3 cr.
Fundamental skills: listening, speaking, reading, writing. Emphasis on active performance. Language laboratory. Not for students with high school or college French except by special placement. Variable.

FREN 102 Basic Elements of French II 3 cr.
Continued development of basic skills. Emphasis on active performance. Language laboratory. Variable. *Prerequisite: FREN 101.*

FREN 211 French Grammar, Composition, and Conversation I 3 cr.
Intensive grammar, oral command of the language, introduction to exposi-

tory writing. Language laboratory. For students with two or more years of high school French, or FREN 102. Variable.

FREN 212 French Grammar, Composition & Conversation II 3 cr.
Sequel to FREN 211. Variable.

FREN 250 Overview of French 3 cr.
An overview of French. May be taken concurrently with a 300-level course. *Prerequisite: FREN 212 or equivalent.*

FREN 330 French 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 FREN 311. Variable. *Prerequisite: FREN 250 or equivalent.*

FREN 331 French for Practical Communication II 3 cr.
Emphasis on advanced grammar and reading and writing skills. Reading of authentic newspaper and magazine articles and current and relevant materials in the social sciences and other content areas. Not open to students who have received credit for former FREN 312. Variable. *Prerequisite: FREN 250 or equivalent.*

FREN 332 French for Practical Communication III 3 cr.
Continuation of French 331. Further development of reading and writing skills and advanced grammar. *Prerequisite or corequisite: FREN 250. FREN 330 and 331 recommended.*

FREN 333 France Until 1789 3 cr.
Political, economic, philosophical, scientific, social, artistic life in France from the Middle Ages to the Revolution of 1789, i.e., the period known as the "Ancien Regime" with a special emphasis on Classicism (17th century) and the Enlightenment (18th century). Not open to students who have received credit for former FREN 313. Variable. *Prerequisite or corequisite: FREN 330, FREN 331, or FREN 332 (or equivalent).*

FREN 334 France From 1789 to Contemporary Times 3 cr.
Political, economic, philosophical, scientific, social, artistic, and literary life in France from the Revolution (1789) to the present. This course will cover major literary movements such as Romanticism, Realism, and Symbolism. Not open to students who have received credit for former FREN 314. Variable. *Prerequisite or corequisite: FREN 330, FREN 331, FREN 332, or FREN 333 (or equivalent).*

FREN 335 Intro. to French Literary Texts 3 cr.
Introduction to the current methodologies of literary analysis through the chronological study of selected 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 330, FREN 331, or FREN 332.*

FREN 401 French Poetry 3 cr.
Poetry as a genre in France. Study of structures, techniques, themes, imagery, etc. Textual analyses. Variable. *Prerequisite: FREN 335 or permission of instructor.*

FREN 402 The French Theater 3 cr.
French theater from 17th century. Major schools and playwrights from Corneille to the antitheater of the mid-twentieth century. Variable. *Prerequisite: FREN 335 or permission of instructor.*

FREN 403 French Nonfiction 3 cr.
Works of philosophers, moralists, memorialists, essayists, and critics from the Renaissance to the present. Variable. *Prerequisite: FREN 335 or permission of instructor.*

FREN 404 French Fiction 3 cr.
Great novels, novellas, and short stories from the 17th century to the present. Variable. *Prerequisite: FREN 335 or permission of instructor.*

FREN 490 Special Topics in French Language and Literature 3 cr.
A selected topic such as an author or work, a genre or theme, translation or interpreting. Variable. *Prerequisites: two 300-level French courses and permission of instructor.*

- FREN 495 Internship in French** 6-12 cr.
Guided work experience in a French speaking organization either in the US or abroad. Graded P/F. The credit is not applicable toward the major. Every semester and summer. *Prerequisites: junior or senior status, major or minor in French, and permission of department.*
- FREN 498 Readings in French** 1 to 4 cr.
Intensive readings and a term paper. Variable. *Prerequisites: three 300-level French courses and permission of instructor.*
- 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. Variable. *Prerequisites: three 300-level French courses and permission of instructor.*
- 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. Variable.
- SPAN 102 Basic Elements of Spanish II** 3 cr.
Continued development of basic skills. Emphasis on active performance. Language laboratory. Variable. *Prerequisite: SPAN 101.*
- 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. Variable.
- SPAN 212 Spanish Grammar, Composition, & Conversation II** 3 cr.
Sequel to SPAN 211. Variable.
- SPAN 250 Overview of Spanish** 3 cr.
An overview of Spanish. May be taken concurrently with a 300-level course. *Prerequisite: SPAN 212 or equivalent.*
- SPAN 330 Spanish for Practical Communication I** 3 cr.
Emphasis on development and strengthening of oral-aural skills. Listening and speaking activities, simulation and role playing, phonetics and pronunciation practice. Extensive use of authentic audio and video materials, both recorded and live. Not open to students who have received credit for former SPAN 311. Variable. *Prerequisite: SPAN 250 or equivalent.*
- SPAN 331 Spanish for Practical Communication II** 3 cr.
Emphasis on advanced grammar and reading and writing skills. Reading of authentic newspaper and magazine articles and current and relevant materials in the social sciences and other content areas. Not open to students who have received credit for former SPAN 312. Variable. *Prerequisite: SPAN 250 or equivalent.*
- SPAN 332 Spanish for Practical Communication III** 3 cr.
Continuation of Spanish 331. Further development of reading and writing skills and advanced grammar. *Prerequisite or corequisite: SPAN 250. SPAN 330 and 331 recommended.*
- SPAN 333 Introduction to Culture and Civilization of Spain** 3 cr.
Spanish culture: political, literary, economic, social, and artistic life in Spain. Not open to students who have received credit for former SPAN 313. Variable. *Prerequisite: 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: 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: SPAN 250 or equivalent.*
- SPAN 401 Spanish Poetry and Drama I** 3 cr.
Drama and poetry from the Middle Ages through the Golden Age. Variable. *Prerequisite: SPAN 335 or equivalent.*
- SPAN 402 Spanish Fiction** 3 cr.
Novels and short stories from Cervantes to the present. Variable. *Prerequisite: SPAN 335 or equivalent.*
- SPAN 403 Spanish Poetry and Drama II** 3 cr.
Drama and poetry from the Romantics to the present. Variable. *Prerequisite: SPAN 335 or equivalent.*
- SPAN 404 Spanish Nonfiction Prose** 3 cr.
The essay as Literature. Principal Spanish and Latin American essayists. Variable. *Prerequisite: SPAN 335 or equivalent.*
- SPAN 405 Business Spanish** 3 cr.
The study of specialized vocabulary and language and of business practices of both Latin America and Spain. Variable. *Prerequisites: two 300-level Spanish courses.*
- SPAN 406 Literature and Culture of the Andean Region** 3 cr.
The study of literature (poetry, novel, short story, essay) principally of Ecuador, Bolivia, and Peru in its cultural context. Offered only in Ecuador session. Variable.
- 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.
Spanish to English and English to Spanish translation. Also, a comparison of English and Spanish grammar and lexicon. Variable. *Prerequisites: Three 300-level Spanish courses or permission of instructor.*
- SPAN 490 Special Topics in Hispanic Language & Literature** 3 cr.
A selected topic such as an author or work, a genre or theme, translation or interpreting. 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. Variable. *Prerequisites: three 400-level Spanish courses and permission of instructor.*
- SPAN 499 Individual Problems in Spanish Language** 1 to 4 cr.
Individual research or activity requiring submission of a final paper or completed project. Variable. *Prerequisite: three 300-level Spanish courses and permission of instructor.*
- Geography**
- GEOG 103 Physical Geography** 4 cr.
Earth-sun relations, map reading and interpretations, landforms, elements of weather and climate, and climate regions. Three hrs. lecture and 2 hrs. lab. Every semester. GEP LAC Group C.
- GEOG 104 Human Geography** 3 cr.
Distribution of human beings in relation to population dynamics, economic development, and cultural diversity. Every semester. GEP LAC Group D.
- GEOG 113 Honors: Physical Geography** 4 cr.
Earth-sun relations, map reading interpretation, landforms, elements of weather and climate, and climate regions. Three hrs. lecture, 2 hrs. lab, and four Saturday field trips. Variable. GEP LAC Group C. *Prerequisite: acceptance into the Honors Program or permission of instructor.*
- GEOG 114 Honors: Human Geography** 3 cr.
Distribution of human beings in relation to population dynamics, economic development, and cultural diversity. Spring. GEP LAC Group D. *Prerequisite: acceptance into the Honors Program or permission of instructor.*

- GEOG 207 Physical Geology** 4 cr.
Recognition and interpretation of landscape features. Structure and epigenetic processes. Rock and mineral identification, interpretation of topographic and geologic maps, geologic cross-sections, and aerial photographs. One field trip may be required. Three hrs. lecture and 2 hrs. lab. Not open to students who have credit for former GEOG 307. Spring. *Prerequisite: GEOG 103 (or 113) or permission of instructor.*
- GEOG 208 Historical Geology** 4 cr.
Chronology of the earth's history from hypothesized origins through the Holocene. Paleogeography, paleotectonics, 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 (or 113) or permission of instructor.*
- GEOG 275 Introduction to Spatial Analysis** 3 cr.
Basic concepts of spatial analysis and applications of analytical techniques to geographically referenced information. Discussion of spatial data types, methods of data collection and presentation, and basic techniques for analyzing and mapping spatial distributions, including Geographic Information Systems (GIS). Two hours lecture and 2 hours lab. Every semester. *Prerequisites or co-requisites: GEOG 103 (or 113) and MATH 209, or permission of instructor.*
- GEOG 300 Economic Geography** 3 cr.
The distribution of world economic activities. Agriculture, mining, the manufacturing industries, trade, and transportation. Every third semester beginning Fall 2004. *Prerequisite: GEOG 104 (or 114) or permission of instructor.*
- 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. *Prerequisites: GEOG 103 (or 113) and GEOG 104 (or 114) or permission of instructor.*
- GEOG 302 Geography of Maryland** 3 cr.
A geographic analysis of the State. Spring. *Prerequisites: GEOG 103 (or 113) and GEOG 104 (or 114) or permission of instructor.*
- GEOG 310 Fundamentals in the Mapping Sciences** 3 cr.
Map design principles, map symbolization, data handling, map projections and exploring the maps' relation to geographical information systems, remote sensing, geographic visualization and the WWW. Two hrs. lecture, 2 hrs. lab. Every semester. *Prerequisite: GEOG 103 (or 113) or permission of instructor.*
- GEOG 315 Applied Design in the Mapping Sciences** 3 cr.
Examines maps as means of visual communication, map use (and misuse), cognition, design theory, visual variables, and color theory. Computer based exercises and a final project. Every third semester beginning Fall 2002. Two hr. lecture, 2 hr. lab. *Prerequisites: GEOG 275 and GEOG 310.*
- GEOG 317 Geographic Information Systems** 3 cr.
An examination of the fundamental concepts, operations and applications of geographic information systems (GIS). GIS are introduced as configurations of computer hardware and software specifically designed for the preparation, presentation, interpretation and analysis of geographically referenced data. Lectures are supplemented by microcomputer-based laboratory exercises. Two hrs. lecture and 2 hrs. lab. Each semester. *Prerequisite: GEOG 275 and completion of two college mathematics courses. GEOG 310 is strongly 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 (or 113) and GEOG 104 (or 114) or permission of instructor.*
- GEOG 324 Urban Geography: Internal City Patterns** 3 cr.
Introduction to urban North American land use and social activities. Theories of internal urban patterns, present patterns, and implications for the future. Housing patterns, commercial and industrial activities, urban transportation, political fragmentation, and the potential role of urban planners. Spring. *Prerequisite: GEOG 104 (or 114) or permission of instructor.*
- GEOG 325 Urban Geography: Metropolitan Systems** 3 cr.
Introduction to urban areas and their distribution. Locational characteristics of cities as centers of manufacturing, distribution, and services. Historic growth patterns and planning strategies for future development. Fall. *Prerequisite: GEOG 104 (or 114) or permission of instructor.*
- GEOG 335 Oceanography** 3 cr.
Basic principles of oceanographic science and discussion of the role of oceans in global environmental systems. Variable. Also offered as SCIE 335. *Prerequisites: GEOG 103 (or 113), BIOL 149, and completion of a college level mathematics course.*
- GEOG 340 Soil: Genesis, Nature and Classification** 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. GEOG 207 completion or coregistration strongly recommended. Two hrs. lecture and 2 hrs. lab./field session. Not open to students who have credit for former GEOG 440. Spring. *Prerequisite: GEOG 103 (or 113) 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, and presentation of findings. Spring. *Prerequisites: GEOG 275 and 9 hrs. of geography or permission of instructor.*
- 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 (or 113) and GEOG 104 (or 114) or permission of instructor.*
- GEOG 402 Geography of Russia and the Former Republics** 3 cr.
Population, agriculture, mining, manufacturing, trade, and transportation of Russia and adjacent states. Human adjustment to the physical environment of the various regions. Fall, odd-numbered years. *Prerequisites: GEOG 103 (or 113) and GEOG 104 (or 114) or permission of instructor.*
- GEOG 403 The Geography of Sub-Sahara Africa** 3 cr.
Cultural, economic, physical and political potentials of Sub-Sahara Africa. Complex spatial patterns that define the Sub-Sahara African landscape. Fall, even-numbered years. *Prerequisite: GEOG 103 (or 113) and 104/114 or permission of instructor.*
- GEOG 405 Climatology** 3 cr.
Controls, classifications, selected regions, and world patterns of climates. Fall, odd-numbered years. *Prerequisite: GEOG 103 (or 113) or permission of instructor.*
- GEOG 406 Management and Conservation of Natural Resources** 3 cr.
Current problems associated with the use and misuse of natural resources. Fall, even-numbered years. *Prerequisites: GEOG 103 (or 113) and GEOG 104 (or 114) or permission of instructor.*
- GEOG 407 Political Geography** 3 cr.
The world patterns of nations; geographic factors affecting the background and present development of countries. Fall. *Prerequisite: GEOG 104 (or 114) or permission of instructor.*
- 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. Every third semester beginning Fall 2003. *Prerequisite: GEOG 104 (or 114) or permission of instructor.*
- GEOG 412 Geographic Visualization** 3 cr.
Explores cartographic applications of computer animation, multimedia presentations and interface design for research, data exploration, and visual communication of geo-spatial ideas. Every third semester beginning Spring 2003. Two hrs. lecture and 2 hrs. lab. *Prerequisites: GEOG 275 and GEOG 310 or permission of instructor.*
- GEOG 413 Remote Sensing — Aerial Photo Interpretation** 3 cr.
Remote sensing principles; fundamentals of aerial photographs and images

(multispectral, thermal, and radar), photo measurements, principles of image identification and photo interpretation, introductory digital image processing and analysis of earth's surface features. Exposure to digital image processing software techniques. Two hrs. lecture and 2 hrs. lab. Fall. *Prerequisite: GEOG 275 or permission of instructor.*

GEOG 414 Digital Image Processing and Analysis 3 cr.
Digital image processing and analysis related to environmental and natural resource management. Satellite data acquisition, data formats and packaging techniques, image processing and analytical techniques, image classification and interpretation, integration of digital image processing applications and modeling with GIS. Two hrs. lecture and 2 hrs. lab. Spring. *Prerequisites: GEOG 275, GEOG 380 (GEOG 380 may be taken concurrently), and GEOG 413 or permission of instructor.*

GEOG 417 Advanced Geographic Information Systems 3 cr.
Further exploration of GIS theory and formulation of real world applications of GIS to perform spatial analysis and modeling. Includes modeling languages and techniques, incorporation of remote sensing data and student-led discussions in class. Two hrs. lecture, 2 hrs. computer lab exercises. Spring. *Prerequisite: GEOG 317 (Geographic Information Systems) or permission of instructor.*

GEOG 418 Cartometrics 3 cr.
Examines the map's role as a tool for measuring geo-referenced data including spatial transformations, interpolation and generalization. Computer based projects, selected readings and group discussion. Every third semester beginning Spring 2002. Two hrs. lecture and 2 hrs. lab. *Prerequisites: GEOG 103, GEOG 317, and GEOG 380.*

GEOG 421 Regional Planning 3 cr.
Contemporary topics in regional planning and development. Group and individual projects and research. Every third semester beginning Fall 2002. *Prerequisite: GEOG 325 or permission of instructor.*

GEOG 425 Geography of Transportation 3 cr.
The linkages and flows of goods, services, and people from area to area. The influence of various transportation modes in the historical development of regions; the role of transportation planning in shaping future metropolitan and regional settlements. Every third semester beginning Spring 2004. *Prerequisites: GEOG 104 or permission of instructor.*

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 (or 114) or permission of instructor.*

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 (or 113) or permission of instructor.*

GEOG 431 Glacial and Pleistocene Geomorphology 3 cr.
Glacial phenomena associated with the recent Ice Age and the Holocene. Techniques to reconstruct glacial environments; erosional and depositional micro- and macro-landforms; and glacial stratigraphy. One two-day field trip required. Spring, even-numbered years. *Prerequisite: GEOG 103 (or 113) 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. Fall. *Prerequisites: GEOG 103 (or 113), GEOG 207, GEOG 430, MATH 220 or 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: MATH 103 and GEOG 275.*

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. Fall. *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. Every third semester beginning Spring 2003. *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. *Prerequisite: Completion of six credits of geography or senior 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. Variable. *Prerequisite: GEOG 103 and senior standing, or permission of instructor.*

GEOG 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 BIOL 465. *Prerequisite: completion of two laboratory science courses.*

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 the instructor.*

GEOG 471 Engineering for Land Development 3 cr.
Basic engineering techniques used in designing landforms, drainage systems, and roadways for land development projects. An overview of project development, equipment and management strategies. Spring. *Prerequisites: Completion GEOG 103 and GEOG 275, or permission of the instructor.*

GEOG 472 Environmental Planning 3 cr.
Principles and methods used in environmental assessments and site analysis. Students will prepare an environmental impact statement, site development plan, or mine reclamation plan. Spring. *Prerequisite: GEOG 103 (or 113) or permission of the instructor.*

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 (or 113) or permission of the instructor.*

GEOG 480 The Geographic Perspective 3 cr.
The historical development of geographic thought with an emphasis on how geographers structure research questions. Spring. *Prerequisite: senior standing and 18 hours of geography completed.*

- 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. May be repeated for credit 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 coregistration 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. Coregistration 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 to 6 credits. *Prerequisites: minimum of 15 hrs. of geography completed, GEOG 380, and permission of Department Chair.*
- HEED 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. Fall. *Prerequisite: HEED 103.*
- HEED 210 Athletic Taping and Bracing Techniques** 1 cr.
The art and science of applying athletic tape and braces in the prevention and treatment of athletic injuries. Fall.
- HEED 216 Content in the School Health Program I** 3 cr.
Application of theory and content knowledge and skills in selected school health curriculum topics: tobacco, alcohol & other drugs; mental & emotional health; safety & injury prevention. Fall. *Prerequisite: HEED 104.*
- HEED 222 Clinical Experiences in Athletic Training: I** 1 cr.
An introduction to the daily management of the athletic training clinical environment. Fall.
- HEED 223 Clinical Experiences in Athletic Training: II** 1 cr.
An introduction to the daily management of the athletic training clinical environment. Spring.
- HEED 305 Care and Prevention of Athletic Injuries** 3 cr.
Introduction to athletic injury management. Emphasis on prevention and care of muscular skeletal injuries. Spring. *Prerequisite: BIOL 201 and BIOL 202.*
- HEED 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. Fall.
- 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.
- HEED 316 Content in the School Health Program II** 3 cr.
Application of theory and content knowledge and skills in relation to school health curriculum topics: nutrition, family life and human sexuality; physical health and fitness; and prevention of disease. Spring. *Prerequisite: HEED 104.*
- HEED 317 Content in the School Health Program III** 3 cr.
Application of theory and content knowledge and skills in relation to community health, consumer education and environmental health. Fall. *Prerequisite: HEED 216 or HEED 316.*
- HEED 318 Orthopedic Assessment I: Upper Extremity** 4 cr.
General and specific athletic injury assessment procedures. Emphasis is placed on the upper extremity, head, abdomen, throat, and thorax assessment. 4 credit lecture and lab. Spring. *Prerequisite: HEED 206.*
- HEED 319 Orthopedic Assessment II: Lower Extremity** 4 cr.
General and specific athletic injury assessment procedures Emphasis is placed on the spine, pelvis, and lower extremity including gait and postural analysis. 4 credit lecture and lab. Fall. *Prerequisite: HEED 318.*
- HEED 320 Pharmacology and General Medical Conditions** 3 cr.
Pathology and clinical information about various general medical conditions commonly seen in the physically active. Spring
- HEED 322 Clinical Experiences in Athletic Training: III** 1 cr.
The in-depth study of both the theoretical and practical clinical aspects of athletic training. Fall.
- HEED 323 Clinical Experiences in Athletic Training: IV** 1 cr.
The continued in-depth study of both the theoretical and practical clinical aspects of athletic training. Spring.
- HEED 404 Health Instruction** 3 cr.
Basic concepts of health education. Implementing a health education pro-

Health, Physical Education & Recreation

Health Courses

- HEED 100 Personal Wellness** 2 cr.
Students will be assisted in developing an understanding of and appreciation for the importance of including lifelong wellness practices and physical activities in their daily lives. Students plan, implement and evaluate own wellness plan. GEP BR Health. Every semester.
- HEED 101 Community Health Promotion** 3 cr.
Explores all purposeful activities designed to improve personal and public health through a combination of strategies, including the implementation of behavioral change, health education, health protection, risk factors, health enhancement and health maintenance. Spring.
- HEED 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. Fall.
- HEED 104 Foundations of Health Education** 3 cr.
Introduction to theories and practices guiding professional health educator responsibilities and competencies. Spring. *Prerequisite: PHEC 103 or PHEC 170.*
- HEED 200 Nutrition** 3 cr.
Principles of nutrition. The effect of food habits on family health. Nutritional requirements for different stages of human development. Application to various economic levels and social backgrounds. Fall.
- HEED 202 Coordinated School Health Program** 3 cr.
The concept and implementation of a coordinated school health program from social, economic, health, and education perspectives. Fall.

gram for grades K-12. Every semester. *Required in BLOCK semester prior to PHEC 497 for Teacher Education.*

HEED 405 Sexuality 3 cr.
Family relationships and human sexuality. Physical and mental health, and sociological considerations of sex education. Every semester. *Prerequisite: junior standing.*

HEED 408 Therapeutic Modalities in Sports Medicine 3 cr.
The study of both the theoretical basis and practical usage of various therapeutic modalities. Designed for individuals who routinely treat sports-related injuries. Spring. *Prerequisite: HEED 318.*

HEED 409 Consumer and Environmental Health 3 cr.
An examination of the larger social context of health behaviors and decision-making related to personal and community health. Spring, odd-numbered years.

HEED 416 Curriculum Design in Health Education 3 cr.
Health Education curriculum development, implementation, and evaluation; implementation of program strategies from evaluation results. Fall.

HEED 418 Current Issues in Health 3 cr.
Identification and investigation of problems and solutions relevant to existing or emergent health topics. Spring.

HEED 422 Clinical Experiences in Athletic Training: V 1 cr.
The continued in-depth study of both the theoretical and practical clinical aspects of athletic training. Clinical decision making skills are emphasized. Fall.

HEED 423 Clinical Experiences in Athletic Training: VI 1 cr.
The continued in-depth study of both the theoretical and practical clinical aspects of athletic training. Clinical managerial skills are emphasized. Spring.

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.*

Physical Education

One credit activity courses meet twice a week for a semester or four periods per week for a quarter.

PHEC 103 Foundations of Physical Education 3 cr.
History and philosophies of physical education. Career opportunities. Foundations for TOPE program. For teacher education only. Fall.

PHEC 109 Aerobic Fitness 2 cr.
Leadership and technical skills for safe and effective group exercise programs. Fall.

PHEC 110 Aerobic Movement 1 cr.
Increasing personal fitness through structured aerobic movement. 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 163 Strength Training and Conditioning 1 cr.
Weight training skills and general fitness activities. Every semester.

PHEC 164 The 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: PHEC 103 or PHEC 170.*

PHEC 165 The Teaching of Physical Education Through Cooperative Team Challenges 1 cr.
Fundamental skills of cooperative and initiative activities. Every semester. *Prerequisite: PHEC 103 or PHEC 170.*

PHEC 166 The Teaching of Physical Education Through Game and Activity Skills 1 cr.
Fundamental skills of game and activity, team play, and strategy. Every semester. *Prerequisite: PHEC 103 or PHEC 170.*

PHEC 167 The Teaching of Physical Education Through Educational Gymnastics 1 cr.
Fundamental skills of educational gymnastics. Every semester. *Prerequisite: PHEC 103 or PHEC 170.*

PHEC 168 The Teaching of Physical Education Through Dance Forms 1 cr.
Fundamental skills of dance. Every semester. *Prerequisite: PHEC 103 or PHEC 170.*

PHEC 169 The Teaching of Physical Education Through Weight Training 1 cr.
Fundamental skills of weight training and fitness. Every semester. *Prerequisite: PHEC 103 or PHEC 170.*

PHEC 170 Physical Education Teaching Lab 1 cr.
Methodologies of Muska Mosston, George Graham, John Rink, et. al. (The Teaching of Games for Understanding), and Problem Solving/Creative Thinking Initiative Activities will be the focus of this teaching lab. *Transfer students only or permission of instructor.* Fall.

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. Every semester.

PHEC 251 Intermediate Swimming 1 cr.
Swimming strokes and aquatic skills required for qualification as a good swimmer. Every semester.

PHEC 301 Biomechanics for Teacher Education 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. Spring. *Prerequisite: BIOL 211.*

PHEC 303 Biomechanics for Exercise 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 PHEC 301. Fall. *Prerequisite: BIOL 202.*

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.*

PHEC 310 Organization & Administration of Health and Physical Education 3 cr.
Non-instructional aspects of the physical education program. Classroom management and discipline, budgets and equipment inventory, legal considerations, program advocacy and the role of physical education in society. Spring. Teacher education only.

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 364 Theory of Basketball 3 cr.
Concepts, advanced strategies, and organization and administration of a basketball program. Fall, even-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 Soccer 3 cr.
Concepts, advanced strategies, and organization and administration of a soccer program. Spring, even-numbered years.

PHEC 369 Theory of Softball 3 cr.
Concepts, advanced 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. Spring. *Prerequisite: BIOL 202.*

PHEC 402 Adapted Physical Activities 4 cr.
Adapting physical activities to individual disabilities. Three hrs. lecture, 3 hrs. lab.

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 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. Fall. *Prerequisite: BIOL 211.*

PHEC 407 Motor Learning and Performance 3 cr.
Motor skill acquisition concepts. Nature of the learner, guidance, results, motivation, practice, transfer, retention, and psychological implications. Every semester.

PHEC 408 Movement Experiences for Children 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. *Prerequisite: Admission to Phase II teacher education.*

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. Spring. *Prerequisites: PHEC 163 and PHEC 303.*

PHEC 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: 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 ath-

letic 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 416 Curriculum Design in Physical Education 3 cr.
Physical education curriculum design, selection, and development. Instructional planning based on developmentally appropriate activities, learning styles, safety issues, diversity considerations and societal implications. Teacher education. Spring.

PHEC 418 Physical Education in the Secondary Schools 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 PHEC 497 in Teacher Education. Every semester. *Prerequisite: Admission to Phase II teacher education.*

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. Spring.

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 up to a maximum of six credits.

PHEC 481 Field Experience in Coaching 1 to 6 cr.
Field experience in coaching. Sites of study may vary. Offered as needed. Repeatable up to a maximum of six credits.

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 up to a maximum of six credits.

PHEC 483 Field Experience in Health Promotion 1 to 6 cr.
Field experience in health promotion. Sites of study may vary. Offered as needed. Repeatable up to a maximum of six credits.

PHEC 490 Special Topics in Health & 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 & physical education. It is arranged on a needs basis. Repeatable for credit if topics are substantially different.

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. *Prerequisite: Completion of 90 credit hours or more with a C or better in the health fitness concentration and senior status.*

PHEC 498 Readings in Health & Physical Education 1 to 4 cr.
Intensive reading on selected topic. Every semester. Repeatable for credit if topics are substantially different. *Prerequisite: major or minor in HPE or Exercise and Sport Science and permission of instructor.*

PHEC 499 Individual Problems in Health & Phys. Ed. 1 to 4 cr.
Individual activity requiring submission of a final paper or completed project. Every semester. Repeatable for credit if topics are substantially different. *Prerequisites: major or minor in HPE or Exercise and Sport Science and permission of instructor.*

Recreation and Parks Management

CCBC students contact the coordinator for schedule of offerings.

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. Variable.

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. Not open to students who have received credit for former PHEC 204. 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 disabled populations. Every semester.

RECR 321 Theories & Concepts in Therapeutic Recreation 3 cr.
Introduction to theories and concepts related to leisure, play development, therapeutic recreation service delivery models, organization and management of therapeutic recreation services. Every third semester beginning Fall 2004.

RECR 330 Outdoor Education 3 cr.
Development of outdoor education in the school program. Integration of academic disciplines; conservation of the environment. Every semester.

RECR 342 Park and Facility Design 3 cr.
Study of park and recreation areas including acquisition, design and operating policies. Every semester.

RECR 380 Recreation Leadership 3 cr.
Leadership techniques involved in recreation and park settings including leadership in small and large groups. Every semester.

RECR 381 Facilitation Skills & Techniques in Recreation & Parks 3 cr.
Development of facilitation skills including interpersonal skills and techniques to become an effective leader and manager in recreation and parks. Variable.

RECR 382 Program Planning 3 cr.
Planning principles used in the development of recreation programs and leisure experiences. Every semester.

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.
Methods of inquiry in the empirical study of recreation and parks. Nature of scientific inquiry, research designs, survey research, program evaluation, unobtrusive research and elementary quantitative analysis. Every semester.

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 421 Program Design & Evaluation in Therapeutic Rec. 3 cr.
Introduction to conducting and analyzing leisure counseling assessments, developing program proposals for activities and interventions, facilitating activities and developing evaluation systems for programs. Every third semester beginning Fall 2003.

RECR 422 Principles & Practices in Therapeutic Recreation 3 cr.
Introduction to individual intervention treatment plans which consist of assessment, intervention techniques, protocols for treatment plans, documenting and tracking progress of the treatment plan, leadership techniques, and evaluation of the effectiveness of the treatment plan. Every third semester beginning Spring 2004.

RECR 440 Organization & Administration of Rec. & Parks 3 cr.
Structure and conduct of public, private, and school recreation and parks programs, special state and federal support programs. Every semester.

RECR 443 Current Issues & Legal Liability in Recreation & Parks 3 cr.
Current issues and legal liability in the recreation and parks field. Normally taken prior to Internship in Recreation. Every semester. *Prerequisites: 90 credits or permission of instructor.*

RECR 480 Field Experience in Recreation and Parks 1-6 cr.
Special aspects of recreation and parks management. Sites of study may vary. Offered as needed. Repeatable up to a maximum of 6 credits. Every semester.

RECR 490 Special Topics in Recreation & Parks 1-6 cr.
Unique or distinctive study such as clinics, workshops or course work dealing with a current topic related to recreation and parks management. Arranged as needed. Repeatable for credit if topics are substantially different.

RECR 492 Internship Project 3 cr.
Academic component of internship. Register concurrently with RECR 495. Not open to students who have received credit for former course, PHEC 492. Every semester. *Prerequisites: junior or senior status, completion of core courses in major or permission of the instructor.*

RECR 495 Internship in Recreation 9-12 cr.
Guided work experience directly related to student's academic program. Normally, students may not take additional course work and should register concurrently with RECR 492. Graded P/F. Not open to students who have received credit for former course, PHEC 495. Every semester. *Prerequisites: junior or senior status, completion of core courses in major or permission of the instructor.*

RECR 497 Out-of-Class Requirements 0 cr.
Students are required to complete 120 hours of practical experiences (not including internships), to attend one state, regional or national conference during their Junior or Senior year, and to have a current certification in CPR and first aid. Consult the Guide for Completion of Out-of-Class Requirement in Recreation. Graded NR/P. Every semester.

RECR 499 Individual Study in Recreation & Parks 1-6 cr.
Individual research performed under the supervision of a faculty member. Every semester. Repeatable for credit if topics are substantially different. Variable. *Prerequisite: permission of the department chair.*

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 LAC Group B.

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. Spring. GEP LAC Group B. *Prerequisite: enrollment in the Honors Program or permission of the instructor.*

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.
- 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. Every semester. *Prerequisite: completion of HIST 100 and at least one 300-400 level history 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. Not open to students who have credit for former HIST 452. 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 305 Women and Society in Modern Europe** 3 cr.
A survey of women and their roles, both mythical and actual, in European society from 1750 to the present. Women as revolutionaries, social activists and professionals will be considered along with women as significant household members. Variable.
- HIST 306 Medieval Europe** 3 cr.
A topical survey of European history 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 309 World Environmental History** 3 cr.
Historical study of environmental dimensions of change in human history. Historical case examples covering most world regions, and periods such as prehistory, the ancient world, agrarian societies, and the recent industrial world. 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, and socio-economic aspects. Variable.
- HIST 318 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.
- HIST 319 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 325 The History of Modern Science** 3 cr.
The development of the modern understanding of nature and the major sciences from the Renaissance through the twentieth century. 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 344 Modern Western Europe** 3 cr.
The history of Western Europe in the nineteenth and twentieth centuries, with particular attention to political, social, economic and cultural developments in Germany and France. Variable.
- HIST 345 History of Maryland** 3 cr.
Survey of Maryland history from its founding until the present. Variable.
- HIST 346 History of Modern Ireland** 3 cr.
Survey of Irish history and culture from the late 18th century to the present. The relationship between Ireland and England, Irish nationalism and the movement for liberation, the development of separate Protestant and Catholic identities, and the problems of economic development. The Great Famine and its impact; the Northern Ireland problem in its political, constitutional, and historical settings. Fall, odd-numbered years.
- HIST 380 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 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 406 Twentieth Century African-American Leadership in the United States** 3 cr.
An intensive study of how a variety of black leaders responded to the racial predicament of African-Americans in the twentieth century. While the persistent national political debate between integrationists and nationalists will form the core of the course, the achievements and the proposals of black men and women from all walks of life will be explored. Documentary film footage, recorded speeches and music will illuminate the significance of many leaders from W.E.B. DuBois to Jackie Robinson, Martin Luther King, Malcom X and Jesse Jackson. Variable.
- HIST 408 The British Empire** 3 cr.
Survey of the history of Britain, 1600 to 1900, with emphasis and special consideration for its overseas empire, the empire's role in British history and the historical consequences for the people of the empire. Variable.
- HIST 409 The Scientific Revolution** 3 cr.
An examination of the transition from medieval natural philosophy to Newtonian Science from the Renaissance through the seventeenth century. Consideration of major figures and developments, including the Copernican revolution in astronomy, the contributions of Kepler, Galileo, and Newton, and the establishment of the "mechanical philosophy" in relation to its social, philosophical, and religious context. Variable.
- HIST 415 History of American Women** 3 cr.
The experience of all groups of women in America from pre-colonial times to the present. How female roles are shaped by changing socio-economic circumstances. Spring, even-numbered years.
- HIST 422 Diplomatic History of Europe, 1789-The Present** 3 cr.
The relations of the great European powers in world affairs from 1789 to the present, emphasizing the era of Napoleon, the unification of Italy and Germany, the Balkan states, the causes of the World Wars and Cold War relationships. Variable.

- HIST 428 Diplomatic History of the United States** 3 cr.
Foreign relations of the United States from 1815 to the present. The era of the War of 1812, the Civil War, American imperial expansion, the diplomacy of World War I and the Versailles Peace Treaty, the period between the wars, World War II, the Cold War and Nuclear Age, the post Cold War era. Variable.
- HIST 431 History of the American Family** 3 cr.
The history of the family in America from the colonial period to the present, focusing on the changing role of families in American culture and the diversity of family types and experience. Variable.
- HIST 432 United States Immigration History** 3 cr.
The history of American immigration and ethnic relations from the founding of the nation to the present. Variable.
- HIST 433 Public History** 3 cr.
An introduction to the ideas and methods of public history, emphasizing practical application of research, writing and critical thinking skills in the public sector. Variable.
- HIST 443 World Perspectives on America** 3 cr.
The study of European, Asian, and other international perspectives on major events in American history. Topics will include, but not be limited to, the Revolution; the New Republic; relations with Mexico, the Caribbean, and Latin America; the Civil War; industrialization and immigration; Wilson and World War I; American involvement in World War II; the origins of the Cold War; and 21st century interventionism. Variable.
- HIST 446 Hapsburg/Ottoman Empires and Eastern Europe** 3 cr.
The history of Eastern Europe from the reign of Maria Theresa to the present, focusing on the rise of nationalism and its effect on East European politics, economy, society and culture. Variable.
- HIST 450 The History of Mexico** 3 cr.
The development of Mexican society from the pre-Columbian period to the present. The Aztec and Mayan civilizations, the implanting of Spanish control, the origins of the Mexican Revolution and its long-range impact. Variable.
- HIST 453 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 455 Latin American Revolutions** 3 cr.
Twentieth-century revolutions in Latin America. Theories of revolution, the causes, leaders and followers, post-revolutionary developments and the international consequences of Latin American revolutions. Variable.
- HIST 457 India** 3 cr.
The philosophical, political, economic, and diplomatic evolution of India from antiquity until the present. Variable.
- HIST 458 History of China and Korea** 3 cr.
Social, political, economic, and diplomatic aspects from the prehistoric and early dynastic era to the current age. Variable.
- HIST 459 History of Japan** 3 cr.
Social, political, economic, and diplomatic aspects from the prehistoric and early dynastic era to the current age. Variable.
- HIST 460 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 461 Colonial America, 1607-1763** 3 cr.
From the settlement of Jamestown through the French and Indian War. European backgrounds, religious developments, regional differences, Indian relations, and cultural life. Fall, even-numbered years.
- HIST 462 Revolutionary America 1763-1789** 3 cr.
From the conclusion of the French and Indian War to the formation of the United States Constitution: British-American imperial relations; cultural developments in the 18th century; origins, impact, and general nature of the American Revolution; and the formation of the Federal Union. Spring, odd-numbered years.
- HIST 463 The Age of Jefferson and Jackson, 1789-1848** 3 cr.
From Washington's presidency through the administration of James K. Polk. The philosophies of Hamilton and Jefferson, the origins of political parties, politics of the Jackson era, Indian removal, the development of transportation, the frontier, slavery, abolitionism, and emerging sectionalism. Variable.
- HIST 464 The Civil War and Reconstruction, 1849-1877** 3 cr.
From the end of the Mexican War through the period of Southern Reconstruction: growth and sectionalism, and the social, political, military, and economic impact of the War Between the States. 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 1920's, 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 1960's; Black and student movements; Johnson and Vietnam; Nixon and Watergate; and more recent presidencies. 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 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. Every semester.
- 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. Every semester. *Prerequisite: completion of HIST 299 and senior standing.*
- HIST 490 Special Topics in History** 3 cr.
A detailed study of a limited topic, problem, or period. Topics vary from semester to semester. Variable. *Prerequisite: permission of instructor.*
- HIST 492 Internship Seminar** 3 cr.
Academic component of internship. Requires coregistration in 495. Graded A-F. Normally 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.

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.

Humanities

HUMA 309 Zen Practice 1-2 cr.
A "lab" experience supplementing in-class theoretical learning with practical and direct experience of zazen meditation under instructor guidance (1 cr.). Optional second credit earned through workshop attendance at the Rochester Zen Center. Variable. *Requires concurrent enrollment in ENGL 309.*

HUMA 444 Metaphysics and Modern Physics 3 cr.
Interdisciplinary study of 20th-century physics and ancient Asian metaphysics. Concepts of reality proposed by Newton, Einstein, Heisenberg, and other physicists; and by Lao-Tzu, Buddha, Hui Neng, and other ancient philosophers. Also offered as PHSC 444. Spring.

Interdisciplinary Studies

IDIS 191 Freshman Project 3 cr.
Continuation of fall semester learning communities for freshman students. Real-world or laboratory application of theoretical constructs and interdisciplinary perspectives acquired by students enrolled in learning communities 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.*

Honors Program

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. May be repeated. *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 Subcommittee. See Honors Program Handbook for additional information. May be repeated for credit if topics are substantially different. *Prerequisites: Participation in the Honors Program, Junior or Senior standing, and proposal approval.*

International Studies

INST 100 Introduction to International Studies 3 cr.
Introductory study of the political, economic and cultural relations among state and non-state actors and the forces that shape them. Patterns of cooperation and conflict among actors on the world stage and basic concepts and theories in the study of international relations. Fall.

INST 150 Introduction to World Religions 3 cr.
A comparative introduction to spiritual traditions and world religions, as they exist today but with emphasis on their particular historical paths of origin and development. Both natural and social sciences are utilized as well as the various disciplines of the humanities. Spring, even-numbered years.

INST 491 Seminar in International Studies 3 cr.
Examination of complex problems in international affairs through lectures,

discussions, simulations and the preparation of a seminar paper. Special emphasis on management of small policy-making groups, rational decision making, and evaluation of policy. Spring. *Prerequisite: completion of International Studies core courses and six hours in an area of focus, or permission of the instructor.*

INST 492 Internship Seminar 3-6 cr.
Academic component of internship. Requires co-registration in INST 495. Full-time interns register for 6 credits of INST 492 and 9 credits of INST 495, part-time interns register for 3 credits of INST 492 and 6 credits of INST 495. Graded A-F. 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. Summer. *Prerequisites: junior or senior standing, not on probation, Coordinator's approval of internship before registering.*

Leadership Studies

LEAD 201 Leadership Studies: Theory and Practice 3 cr.
Introduction to the study of leadership from both theoretical and practical perspectives. Fall.

LEAD 250 The Citizen Leader 3 cr.
Exploration of the opportunities for and obstacles to becoming engaged in civic life and social change. Discussion of responsibilities to self and others and the multiple benefits that can be derived from being a proactive participant in community affairs. Includes didactic and experiential components. Spring. *Prerequisite: LEAD 201 or permission of instructor.*

LEAD 494 Practicum in Leadership Studies 4 cr.
Experiential practicum in leadership studies. Students devote 115 hours to experiential component and assume a leadership task for an organization or group. Students meet in a seminar, 1 hr. per week, to integrate previous course material and reflect on their practicum experiences. Variable. *Prerequisites: CMST 102, LEAD 150, LEAD 201, and 6 credits from approved list.*

Liberal Studies

LBST 499 Liberal Studies Capstone 3 cr.
Capstone course for Liberal Studies majors: seminar, internship, readings course or independent study. Paper required. P/F. Every semester. *Permission of LBST coordinator required.*

Mass Communication

You may not receive credit for both an MCOM course and the same course formerly labelled CMAT.

MCOM 100 Communication Practicum (Radio) 1 cr.
Entry-level work experience in applying mass communication theories at radio station WFWM. Repeatable to 4 credits; may not be applied to fulfillment of major requirements. *Prerequisite: permission of instructor.*

MCOM 101 Communication Practicum (Television) 1 cr.
Entry-level work experience in applying mass communication theories at Cable Channel 3 producing *News Notes*. Repeatable to 4 credits; may not be applied to fulfillment of major requirements. *Prerequisite: permission of instructor.*

MCOM 105 Introduction to Mass Communication 3 cr.
A study of the field of mass communication in the United States with attention to the historical origins of film, print, and electronic media; the relative effects of these media upon society; the general nature of management organization in the industry; and an overview of the origins and nature of media regulation. 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 200 Fundamentals of Media Production** 3 cr.
Student production of short projects directed to a specific audience; a major student-scripted multi-media presentation to the class. Use of media equipment and techniques. Four hrs. per week. Variable.
- MCOM 211 Introduction to Film Studies** 3 cr.
Development of the movies as an art form; major movements, major figures. One hour lecture, weekly film viewing, and 1 hr. discussion and interpretation. Variable.
- MCOM 212 Video Production Industry** 3 cr.
Survey of professional uses of video in communication, including broadcast television, corporate video, and educational television. Introduction to crewing, procedures, and equipment for multi-camera production systems. Every semester.
- MCOM 213 Audio Production** 3 cr.
Development of skills in multiple aspects of audio production. Through lecture and labs, students learn to script, produce, and record news, commercial, and entertainment programs. Analog and digital processing techniques will be included. Variable.
- MCOM 250 Announcing and Performance** 3 cr.
Training in the physical, intellectual, and technical requirements for talent in the electronic media. Development of basic performance skills in news, entertainment, advertising, and informational programming. Two hrs. lecture, 2 hrs. lab. Variable. *Prerequisites: MCOM 212.*
- MCOM 301 Multi-Media Workshop** 3 cr.
Techniques in aural and visual media; use of specialized photography, sound recording, video, and graphics; production of multimedia programs; current and developing media technology. Variable. *Prerequisite: MCOM 200.*
- MCOM 311 Single Camera Production** 3 cr.
Introduction to the technical and aesthetic aspects of single camera video production as applied to a variety of projects. Students produce various FSU sports and special events to be carried on FSU-TV cable channel 3. Every semester. *Prerequisite: MCOM 212 or permission of instructor.*
- MCOM 316 Telecommunications 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. Every semester.
- MCOM 326 Writing for Electronic Media** 3 cr.
Fundamentals of broadcast writing; vocabulary, syntax, organizing ideas according to broadcast needs. Sound message versus print message: aural style and announcing as message acting. Print versus electronic writing. News formats. Every semester. *Prerequisite: prior journalism study or experience or permission of instructor.*
- MCOM 336 Broadcast-Cable Programming** 3 cr.
Study of the general theoretical principles of scheduling and selecting programming for broadcasting and cable uses. An examination of general programming principles and practices, regulatory constraints upon programming, the nature and interpretation of ratings and their influence upon programming. Every semester.
- MCOM 346 Mass Communication Theory** 3 cr.
Survey and analysis of communication within a mass society, including examination of culture, effects, audience, and industry. Every semester. *Prerequisites: CMST 102/112 and MCOM 105, or permission of instructor.*
- MCOM 347 Telecommunications Law** 3 cr.
Survey of both constitutional and administrative laws, regulations, and public policies which govern the United States' telecommunication systems. Every semester.
- MCOM 456 Creative Strategies in Advertising & 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. Every semester. *Prerequisites: BUAD 361 and MCOM 326 or permission of the instructor.*
- MCOM 485 Electronic Media Aesthetics & Criticism** 3 cr.
The course has two major elements: one, study of the aesthetic principles that guide the development of electronic media products and two, examination of various approaches to analyzing and critiquing the products of the electronic media. Critical viewing and analysis of media texts are emphasized. Students will learn to observe, analyze and critique electronic media texts from the perspective of the media professional working in the industry to create media products. Emphasis is placed on the aural and visual media: radio, television and film. Students will create and perfect materials for inclusion in their Portfolio Project. Every semester. *Prerequisites: MCOM 105, CMST 102 and MCOM 326 or permission of instructor.*
- MCOM 486 Current Issues & New Technologies in Mass Communication** 3 cr.
Examines a variety of new and emerging telecommunications technologies. Considers the historical and future 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. *Prerequisite: MCOM 105.*
- MCOM 487 Advanced Video Production** 3 cr.
Advanced production course designed to enable each student to utilize production skills acquired in other courses to produce regularly scheduled television programming to be broadcast on the University's cable channel three. Two hrs. lecture, 2 hrs. lab. Every semester. *Prerequisite: MCOM 212, 311, or permission of instructor.*
- MCOM 488 Cable Channel Operation and Management** 3 cr.
Student operation and management of the University's cable channel 3. Students are responsible for producing and maintaining the message board, and a program schedule and log. Students also produce programming such as sports and special events, sign-on/sign-off announcements and promotional program spots. 1 hr. lecture, 6 hr. lab. Every semester. *Prerequisite: MCOM 311, MCOM 487, or permission of instructor.*
- MCOM 490 Special Topics in Mass Communication** 3 cr.
Research or applied experience on an announced selected topic. Variable. *Prerequisite: permission of instructor.*
- MCOM 492 Internship Project** 3 cr.
Academic component of internship experience, in conjunction with MCOM 495. Graded A through F. Every summer. *Corequisite: MCOM 495.*
- MCOM 494 Mass Communication Practicum** 1 to 3 crs.
Supervised field experience for Mass Communication majors. Participation in the communication operations of a commercial, governmental, or educational organization. Repeatable but only 3 credits may be applied for the completion of one professional focus. Every semester. *Prerequisite: Junior/senior standing, a minimum of 12 credits in Mass Communication courses, and permission of the instructor.*
- MCOM 495 Internship in Mass Communication** 6 or 12 crs.
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 speech communication or mass communication, minimum 12 cr. in speech communication or mass communication, and 2.5 GPA in major; Internship Agreement Form approved by department internship director before registering.*
- MCOM 499 Directed Study** 1 to 6 crs.
Intensive study through faculty-directed projects or papers. Hours arranged. Variable. *Prerequisite: permission of Department Chair.*

Mathematics

- DVMT 095 Pre-Algebra Mathematics** 3 cr.
Primary focus is to improve students' basic math skills. Concepts of arithmetic, geometry, units of measure, and elementary algebra. *Students may not withdraw unless withdrawing from the university.* Completion of this course will meet the prerequisites for MATH 104, MATH 206, MATH 209 or DVMT 100. Graded P/F. Every semester. Does not fulfill the Basic University Requirement in mathematics, nor may the credits be used to fulfill the 120 hr. minimum toward graduation. **MAY NOT BE USED TO SATISFY THE REQUIREMENTS FOR MAJOR OR MINOR IN MATHEMATICS.** *Note: Students are placed in this course based upon results of Mathematics Placement Test administered by the University. Students who fail this course on their second attempt will be academically dismissed.*
- DVMT 100 Intermediate Algebra** 3 cr.
Introduction to the fundamental aspects of algebra, including properties of the real number system; integer arithmetic; operations with positive and negative exponents; variables and linear equations; graphing; second degree equations; factoring; operations with positive, negative, and fractional exponents; and quadratic equations. Completion of this course will meet the prerequisites for MATH 102, 103, and 106. Graded P/F. Every semester. Does not fulfill the Basic University Requirement in mathematics, nor may the credits be used to fulfill the 120-hr. minimum toward graduation. *Prerequisite: A passing score on the Mathematics Placement Test administered by the University or DVMT 095.*
- MATH 102 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 DVMT 100. MAY NOT BE USED TO SATISFY THE REQUIREMENTS FOR A MAJOR OR MINOR IN MATHEMATICS. MAY BE USED TO FULFILL THE BASIC MATH REQUIREMENT.*
- MATH 103 Trigonometry** 3 cr.
Trigonometric functions; radian measure; polar coordinates; variation and graphs of trigonometric functions; solution of triangles, trigonometric identities and equations; inverse trigonometric functions; complex numbers. Every semester. *Prerequisite: A passing score on the Mathematics Placement Test administered by the University or DVMT 100. MAY NOT BE USED TO SATISFY THE REQUIREMENTS FOR A MAJOR OR MINOR IN MATHEMATICS.*
- MATH 104 Introduction to Mathematical Problem Solving** 3 cr.
Introduction to problem solving with emphasis on strategies applied to algebra, geometry, and data analysis. Every semester. *Prerequisite: A passing score on the Mathematics Placement Test administered by the University or DVMT 095. MAY NOT BE USED TO SATISFY THE REQUIREMENTS FOR A MAJOR OR MINOR IN MATHEMATICS. MAY BE USED TO FULFILL THE BASIC MATH REQUIREMENT.*
- MATH 106 Algebra with Calculus for Business** 3 cr.
Intended for students in Business and Accounting. Topics in basic and intermediate algebra, with an introduction to calculus from a computational and intuitive point of view: linear, quadratic, exponential and logarithmic functions; matrices; derivatives and antiderivatives. Applications to Business emphasized. Every semester. *Prerequisite: A passing score on the Mathematics Placement Test administered by the University or DVMT 100. MAY NOT BE USED TO SATISFY THE REQUIREMENTS FOR A MAJOR OR MINOR IN MATHEMATICS.*
- MATH 120 Pre-Calculus Mathematics** 3 cr.
Topics needed for the study of calculus: functions, analytic geometry, and selected topics from algebra and trigonometry. For students who plan to study the sequence MATH 236, MATH 237, MATH 238. Every semester. *Prerequisite: A passing score on the Mathematics Placement Test administered by the University or a C or better in MATH 102. MAY NOT BE USED TO SATISFY THE REQUIREMENTS FOR A MAJOR OR MINOR IN MATHEMATICS. MAY BE USED TO FULFILL THE BASIC MATH REQUIREMENT.*
- MATH 200 An Introduction to Discrete Mathematics** 3 cr.
An introduction to discrete mathematical methods in computer science. Topics include number systems; sets; functions; relations; logic; boolean algebras; methods of proof; combinations; linear algebra; graphs; trees. Every semester. **MAY NOT BE USED TO SATISFY THE REQUIREMENTS FOR A MAJOR OR MINOR IN MATHEMATICS.**
- MATH 206 Problem Solving for Elementary Teachers I** 3 cr.
Heuristics of problem solving; set theory; functions; estimation; measurement; numeration systems; rational numbers; and elementary number theory. Emphasis on students constructing and expanding their mathematical knowledge using modern technologies and pedagogies to investigate questions and solve problems. Learning activities include collecting and analyzing data from simple experiments, identifying mathematical models for the data, and using these models to make predictions which can then be tested. Admission priority will be given to Early Childhood Education and Elementary Education majors. Every semester. *Prerequisite: a grade of C or better in either MATH 102 or MATH 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. MAY BE USED TO FULFILL THE BASIC MATH REQUIREMENT.*
- MATH 209 Elements of Applied Probability and Statistics** 3 cr.
For the non-math major; less rigorous than MATH 380. Elementary probability theory; collection, organization, and analysis of data; descriptive statistics; the normal and binomial distributions; introduction to inferential statistics; and applications. Every semester. *Prerequisite: a passing score on the Mathematics Placement test administered by the University or DVMT 095. MAY NOT BE USED TO SATISFY THE REQUIREMENTS FOR A MAJOR OR MINOR IN MATHEMATICS. MAY BE USED TO FULFILL THE BASIC MATH REQUIREMENT.*
- MATH 219 Honors: Elements of Appl. Probability & Statistics** 3 cr.
Introduction to statistics, with emphasis on probability theory and inferential statistics. More rigorous and broader than MATH 209. Use of the computer as a tool in statistical analyses. Probability theory; sampling distributions; estimation; hypothesis testing; parametric and nonparametric tests; correlation; regression; and analysis of variance. Written research project required. Credit may not be earned for both MATH 209 and MATH 219. Spring. *Prerequisite: acceptance into the University Honors Program or permission of the instructor. MAY NOT BE USED TO SATISFY THE REQUIREMENTS FOR A MAJOR OR MINOR IN MATHEMATICS. MAY BE USED TO FULFILL THE BASIC MATH REQUIREMENT.*
- 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 or MATH 226. Every semester. *Prerequisite: A passing score on the Mathematics Placement Test administered by the University or a C or better in MATH 102. 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 or MATH 227. **MAY NOT BE USED TO SATISFY THE REQUIREMENTS FOR A MAJOR OR MINOR IN MATHEMATICS.**
- MATH 227 Calculus II** 3 cr.
For students in 2002 and prior catalogs only. Second course of a three-course sequence; topics in the sequence include limits; derivatives and applications; integrals and applications; infinite series; introduction to vector calculus. Last offering Fall 2003. *Prerequisite: A passing score on the Mathematics Placement Test administered by the University or a C or better in MATH 120.*
- MATH 228 Calculus III** 3 cr.
For students in 2002 and prior catalogs only. Continuation of MATH 227. Every semester. Last offering Spring 2004.

- MATH 236 Calculus I** 4 cr.
Required for students in 2003 and later catalogs. Limits and continuity, the derivative, antiderivatives and definite integrals. Credit may not be earned for both MATH 236 and MATH 226. Every semester. *Prerequisite:* A passing score on the Mathematics Placement Test administered by the University or a grade of C or better in MATH 120. **MAY BE USED TO FULFILL THE BASIC MATHEMATICS REQUIREMENT.**
- MATH 237 Calculus II** 4 cr.
Required for students in 2003 and later catalogs. 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.
Required for students in 2003 and later catalogs. Vectors, functions of several variables, vector functions, partial derivatives, multiple integration, line and surface integrals. Every semester. *Prerequisite:* a grade of C or better in MATH 237.
- MATH 320 Multivariable Calculus** 3 cr.
For students in 2002 and prior catalogs only. Solid analytic geometry, partial derivatives, and multiple integrals. Spring. Last offering Spring 2005. *Prerequisite:* MATH 228.
- 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 Matrix Algebra** 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 236 or MATH 220.
- MATH 380 Introduction to Probability and Statistics** 3 cr.
 Discrete probability theory with statistical applications. Counting techniques; random variables; distributions; expectations; hypothesis testing and estimation, with emphasis on discrete models. Spring.
- MATH 415 Foundations of Mathematics** 3 cr.
 Theory of sets; mathematical logic; methods of proof in mathematics; the real number system; selected topics. Variable. See department secretary for up-to-date schedule. *Prerequisite:* MATH 237.
- MATH 420 Advanced Calculus** 3 cr.
 Limits; continuity; differentiation and integration extended to higher dimensional spaces. Topics from vector analysis and Fourier analysis. Variable. See department secretary for up-to-date schedule. *Prerequisite:* MATH 238.
- 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. See department secretary for up-to-date schedule. *Prerequisite:* MATH 238.
- MATH 426 Introduction to Complex Analysis** 3 cr.
 Analytic functions; Cauchy's Theorem; Taylor and Laurent series; meromorphic functions; residue theory; conformal mapping. Variable. See department secretary for up-to-date schedule. *Prerequisite:* MATH 238.
- MATH 432 Differential Equations** 3 cr.
 Solution of ordinary differential equations; Laplace transforms; numerical methods; solution by series. Spring. *Prerequisite:* MATH 237.
- MATH 435 Numerical Analysis** 3 cr.
 Elements of numerical methods frequently used in applied mathematics and the natural sciences; algorithms suitable for use in computers. Variable. See department secretary for up-to-date schedule. *Prerequisite:* MATH 237 and COSC 240 or permission of the instructor.
- 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 437 Combinatorics and Graph Theory** 3 cr.
 General enumeration techniques; elements of graph theory; matrix representations of graphs; and applications of graph theory. Variable. See department secretary for up-to-date schedule. *Prerequisite:* MATH 237.
- MATH 440 Modern College Geometry** 3 cr.
 An introductory synthetic study of geometry: finite, absolute, affine, Euclidean, hyperbolic, elliptic, and projective geometries. Variable. See department secretary for up-to-date schedule. *Prerequisite:* MATH 237.
- MATH 451 Modern Higher Algebra** 3 cr.
 Basic study of the structure of groups and rings; isomorphism theorems; special kinds of rings; additional topics. Variable. See department secretary for up-to-date schedule. *Prerequisite:* MATH 237.
- MATH 452 Linear Algebra** 3 cr.
 Basic study of vector spaces and their relationships to matrix algebra: the algebra of linear transformations; linear functionals and dual spaces; inner product spaces; and decomposition theorems. Variable. See department secretary for up-to-date schedule. *Prerequisite:* MATH 238. MATH 350 strongly recommended.
- MATH 460 Introductory Topology** 3 cr.
 The topology of Euclidean space; homeomorphisms and quotient maps; connectedness; compactness; topological surfaces; simplicial complexes and surfaces; the Euler characteristic. Variable. See department secretary for up-to-date schedule. *Prerequisite:* MATH 238.
- MATH 461 History of Mathematics** 3 cr.
 Historical development of mathematics and its concepts. Contributions of individuals and societies to the development of mathematics. Variable. See department secretary for up-to-date schedule. *Prerequisite:* MATH 237.
- MATH 465 Theory of Numbers** 3 cr.
 Divisibility; Diophantine equations; congruences; sums of squares; additional topics. Variable. See department secretary for up-to-date schedule. *Prerequisite:* MATH 237.
- 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 or permission of instructor.
- MATH 480 Probability and Statistics** 3 cr.
 A deeper study of probability and statistics. Continuous probability distributions and their statistical applications. Variable. See department secretary for up-to-date schedule. *Prerequisite:* MATH 238, MATH 380, or permission of instructor.
- MATH 481 Applied Regression Analysis** 3 cr.
 A matrix approach to linear and multiple regression using the latest statistical packages. Selecting the best regression equation, model building, and linear model approach to ANOVA and ANCOVA. Variable. See department secretary for up-to-date schedule. *Prerequisite:* MATH 380 (or MATH 209).
- MATH 482 Applied Nonparametric Statistics** 3 cr.
 Sign tests; tests based on ranking methods, including correlation and regression; nonparametric confidence intervals and point estimates; chi-square tests; and efficiency estimates. Variable. See department secretary for up-to-date schedule. *Prerequisite:* MATH 209 or MATH 219 or MATH 380.
- MATH 483 Theory of Interest** 3 cr.
 Measurement of interest; solutions to problems in interest; elementary annuities; more general annuities; amortization schedules and sinking funds; bonds and other securities; and other miscellaneous topics. Variable. See department secretary for up-to-date schedule. *Prerequisite:* MATH 237. **MAY NOT BE USED TO SATISFY THE REQUIREMENTS FOR A MAJOR OR MINOR IN MATHEMATICS.**

- MATH 484 Actuarial Mathematics I** 3 cr.
Survival distributions and life tables; life insurance; life annuities; net premiums; and net premium reserves. Variable. See department secretary for up-to-date schedule. *Prerequisite: MATH 483.*
- MATH 485 Actuarial Mathematics II** 3 cr.
Multiple life functions; multiple decrement models; valuation theory for pension plans; nonforfeiture benefits. Variable. See department secretary for up-to-date schedule. *Prerequisite: MATH 484. MAY NOT BE USED TO SATISFY THE REQUIREMENTS FOR A MAJOR OR MINOR IN MATHEMATICS.*
- MATH 490 Selected Topics in Mathematics** 3 cr.
A specialized topic or recent development in mathematics. May be taken more than once if the topics are substantially different. Does not duplicate any other course offered by the Department of Mathematics. Fall, odd-numbered years. *Prerequisite: MATH 238 or permission of instructor.*
- MATH 491 Seminar in Mathematics** 3 cr.
Individual reports and group discussions on mathematical topics and applications; review of important topics in the undergraduate curriculum; assessment exam. Written report and presentation required. Fall. Mathematics majors only. *Prerequisites: senior status or permission of instructor.*
- MATH 492 Internship Seminar** 3 cr.
Academic component of internship. Requires co-registration in MATH 495. Graded A-F.
- MATH 495 Internship in Mathematics** 6 or 12 cr.
Experiential component of internship: guided work experience in conjunction with MATH 492; must directly relate to academic program. Full-time interns register for 12 credits in MATH 495 and 3 credits in MATH 492 and may not enroll in other courses. Part-time interns register for 6 credits in MATH 495 and 3 credits in MATH 492. Graded P/F. *Prerequisites: good academic standing; submission of Internship Agreement form to internship director prior to registering; completion of MATH 236, 237, 238, and four math courses at 300 or 400 level (or enrollment in the fourth 300 or 400 math course) at time of applying; GPA of at least 3.0 in math; and any requirements of the sponsoring agency. MAY NOT BE USED TO SATISFY THE REQUIREMENTS FOR A MAJOR OR MINOR IN MATHEMATICS.*
- MATH 499 Individual Study in Mathematics** 1-3 cr.
Individual research performed under supervision, culminating in a written paper or completed project. Enrollment by permission of the department.
- Music**
- Music Theory**
- MUSC 101 Music Fundamentals** 2 cr.
The rudiments of music designed for the prospective elementary classroom teacher. Every semester.
- MUSC 102 Theory I** 3 cr.
Introduction to the fundamentals of music theory including rhythm, scales, intervals, voice leading, and harmony. Introduction to MIDI notational and sequencing software. Required for music majors and minors. Fall. *Prerequisite: concurrent enrollment in Aural Skills I, MUSC 104 except by permission of instructor.*
- MUSC 103 Theory II** 3 cr.
Continuation of MUSC 102, with further emphasis on the development of analysis and written work. Continued use of MIDI notational and sequencing software. Required for music majors and minors. Spring. *Prerequisites: MUSC 102 and MUSC 104 or permission of instructor. Concurrent enrollment in Aural Skills II, MUSC 105 except by permission of instructor.*
- MUSC 104 Aural Skills I** 1 cr.
Development of aural skills through sight singing and melodic and harmonic dictation. Computer-assisted lab assignments. Required for music majors and minors. Meets two hours per week. Fall. *Prerequisites: Concurrent enrollment in Theory I, MUSC 102 except by permission of instructor.*
- MUSC 105 Aural Skills II** 1 cr.
Continuation of MUSC 104 with further emphasis on aural skills through sight singing and melodic and harmonic dictation. Computer-assisted lab assignments. Required for music majors and minors. Meets two hours per week. Spring. *Prerequisites: MUSC 102 and MUSC 104 or permission of the instructor. Concurrent enrollment in Theory II, MUSC 103 except by permission of the instructor.*
- MUSC 204 Theory III** 3 cr.
A continuation of MUSC 102 and 103, exploring chromatic harmony and modulation. Written and analytical applications. Continued use of MIDI notational and sequencing software. Required for music majors. Fall. *Prerequisites: MUSC 103 and MUSC 105 or permission of instructor. Concurrent enrollment in Aural Skills III, MUSC 206 except by permission of instructor.*
- MUSC 205 Theory IV** 3 cr.
Further application of chromatic materials with an emphasis on 20th century techniques. Written and analytical applications. Continued use of MIDI notational and sequencing software. Required for music majors. Spring. *Prerequisites: MUSC 204 and MUSC 206 or permission of instructor. Concurrent enrollment in Aural Skills IV, MUSC 207 except by permission of instructor.*
- MUSC 206 Aural Skills III** 1 cr.
Continuation of MUSC 103 and MUSC 105 with further emphasis on aural skills through sight singing and melodic and harmonic dictation. Computer-assisted lab assignments. Required for music majors. Meets two hours per week. Fall. *Prerequisite: MUSC 103 and MUSC 105 or permission of the instructor. Concurrent enrollment in MUSC 204, Theory III except by permission of the instructor.*
- MUSC 207 Aural Skills IV** 1 cr.
Continuation of MUSC 206 with further emphasis on aural skills through sight singing and melodic and harmonic dictation. Computer-assisted lab assignments. Required for music majors. Meets two hours per week. Spring. *Prerequisite: MUSC 204 and MUSC 206 or permission of the instructor. Concurrent enrollment in MUSC 205, Theory IV except by permission of the instructor.*
- MUSC 217 Elementary Composition I** 2 cr.
Procedures in the organization of original musical ideas into logical forms. Variable. *Prerequisite: permission of instructor.*
- MUSC 218 Elementary Composition II** 2 cr.
Continuation of MUSC 217, with emphasis on the writing of short instrumental, vocal, and choral pieces. Variable. *Prerequisite: permission of instructor.*
- 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. *Prerequisites: MUSA 108 and MUSC 205.*
- MUSC 312 Arranging** 2 cr.
Emphasis on original and creative treatment of musical materials by arranging and adapting standard literature. Variable. *Prerequisite: MUSC 205.*
- MUSC 317 Intermediate Composition I** 2 cr.
Continuation of musical creation; emphasis on the technique of the past 40 years and further introduction of stylistic characteristics of recent composers. Variable. *Prerequisite: permission of instructor.*
- MUSC 318 Intermediate Composition II** 2 cr.
Composition of multiple-movement works. Variable. *Prerequisite: permission of instructor.*
- MUSC 356 Computer Music Technology** 2 cr.
Practical approach to the use of various music applications on Macintosh computers, Musical Instrument Digital Interface synthesizers and samplers, and associated software (sequencer and notational). Designed to give students in-depth knowledge 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 401 Form and Analysis** 3 cr.
Analysis of musical structure and style in Western civilization. Variable. *Prerequisite: MUSC 205.*
- MUSC 405 Modern Compositional Practices** 2 cr.
Detailed analysis and study of contemporary compositional styles. Variable. *Prerequisite: MUSC 401 or permission of instructor.*
- 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.*
- Music History and Literature**
- MUSC 110 Introduction to World Music** 3 cr.
Introduction to the style periods and genres of Western Classical music through the significant literature of the major male, female, and minority composers; survey of selected non-Western music cultures; folk, gospel, and jazz music. Every semester. GEP LAC 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 LAC Group A.
- MUSC 250 Women in Music** 3 cr.
An examination of popular and art music by and from the perspective of women. Topics include women as performers and composers, the depiction of women in music, musical criticism, and cultural values that have affected women's participation in musical life. (Reading- and writing-intensive). Variable.
- MUSC 308 Music History I: Music of the Medieval, Renaissance, and Baroque Periods** 3 cr.
A survey of musical style from Gregorian chant through the Baroque period. Analysis, listening, discussion set in a cultural context. Fall. *Not recommended for freshmen.*
- MUSC 309 Music History II: Music of the Classical, Romantic, and Modern Periods** 3 cr.
A survey of musical style from the Classical through the Modern periods. Analysis, listening, discussion set in a cultural context. Spring. *Not recommended for freshmen.*
- MUSC 311 History of Jazz** 3 cr.
A survey of the origins, development, and current trends in the American musical art form called jazz. Variable.
- MUSC 346 The Opera** 3 cr.
Representative operas from 1600 to the present. Variable. *Prerequisite: permission of instructor.*
- Music Teaching**
- MUSC 303 Conducting I** 3 cr.
Rudiments of baton technique, score reading and analysis, and rehearsal procedures. Opportunities for conducting with the University Wind Ensemble, Orchestra, and small instrumental and vocal ensembles within the class. Required of all music majors. Fall. *Prerequisite: MUSC 205 or permission of instructor.*
- MUSC 307 Music Experiences for Children** 2 cr.
Classroom use of music for children from preschool through sixth grade. Singing, rhythmic activities, listening, playing instruments, and bodily movement. Every semester. *Prerequisites: MUSC 101; junior standing.*
- 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** 2 cr.
Materials and techniques of choral instruction, computer-assisted instruction and integrated technology, and performance at all levels of public schools. Required of voice and piano majors in teacher education. Fall, alternate years. *Prerequisite: piano proficiency.*
- MUSC 353 Instrumental Music Methods K-12** 2 cr.
Materials and techniques of instrumental instruction, computer-assisted instruction and integrated technology, and performance at all levels of public schools. Required of all instrumental majors in teacher education. Fall, alternate years. *Prerequisite: piano proficiency.*
- 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. Variable. *Prerequisite: permission of instructor.*
- 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. May be repeated up to 4 credits. *Prerequisite: Permission of the department.*
- MUSC 404 Conducting II** 2 cr.
Continuation of Conducting I. Emphasis on choral and combined choral and instrumental scores. Required for K-12 certification in music. Spring. *Prerequisite: MUSC 303.*
- MUSC 411 Marching Band Techniques** 2 cr.
The techniques of show planning, preparation, presentation: precision movement, music selection, and arranging. Fall, alternate years. *Prerequisite: permission of instructor.*
- MUSC 492 Senior Project Paper** 3 cr.
Student will complete a 15-20 page paper on a subject related to the Internship Experience, pre-approved by advisors in both Music and Business and evaluated when complete by the same parties. Graded A-F. Variable. *Prerequisites: senior status, in good academic standing; concurrent enrollment in MUSC 495, Internship in Music Management; completion of Music core courses, passing sophomore evaluation jury, completion of the Business Administration minor, and permission of the department.*
- MUSC 495 Internship in Music Management** 9 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. MUSC 495 will be graded P/F. Variable. *Prerequisites: senior status, in good academic standing; submission of Internship Agreement form to internship director prior to registering; completion of Music Department core courses, passing the sophomore evaluation jury, completion of the Business Administration minor, and permission of Department Chair.*
- 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. Variable. *Prerequisite: permission of the Department Chair.*
- Applied Music**
- MUSA 100 Student Recital** 0 cr.
A performance opportunity and music literature exposure for students in private instruction, required every semester for music majors and minors.
- MUSA 104 Class Piano I** 1 cr.
Basics of keyboard technique for students with little or no piano experience. Keys, scales, and chords leading to simple accompaniments of songs suitable for elementary classroom. Fall. *Prerequisite: permission of instructor.*
- MUSA 105 Class Piano II** 1 cr.
Continuation of MUSA 104, with emphasis on styles of harmonization, trans-

- position, and sight-reading. Spring. *Prerequisite: MUSA 104 or permission of instructor.*
- 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. Fall. *Prerequisite: permission of instructor.*
- MUSA 107 Class Voice II** 1 cr.
Continuation of MUSA 106. Spring. *Prerequisite: MUSA 106.*
- MUSA 108 Class Instruments I: Strings** 1 cr.
Basic instruction on how to play the violin, viola, cello and string bass: bowing, fingering, tone quality, position, and care of these instruments. A systematic approach to organization, implementation and teaching of string classes in the schools. Required of instrumental music majors. Fall.
- MUSA 109 Class Instruments II: Strings** 1 cr.
Continuation of MUSA 108. Variable. *Prerequisite: MUSA 108.*
- 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. Two 50-min. classes or one 100-min. class 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. Spring. *Prerequisite: MUSA 111 or permission of instructor.*
- MUSA 116-123 Private Instruction** 1 cr.
Private study in instrument or voice as a minor performance specialty. For majors or non-majors. May be repeated for credit until program is completed. Special fee \$100 per semester. Performance for a faculty jury at the end of each semester in lieu of a final examination. Every semester. *Prerequisite: permission of the instructor.*
- MUSA 203 Class Piano III** 1 cr.
Continuation of MUSA 105, with further emphasis on improvisation of accompaniments, transposition at sight, sight-reading, playing four-part music, and ensemble playing. Fall. *Prerequisite: MUSA 105 or permission of instructor.*
- MUSA 208 Class Instruments III: Woodwinds** 1 cr.
The basic performance and teaching techniques of the woodwinds. Fall.
- MUSA 209 Class Instruments IV: Brass** 1 cr.
Class instruction in the standard brass instruments, designed to prepare future instrumental teachers at all levels of the public schools. Spring.
- MUSC 210 Diction for Singers** 2 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.
- MUSA 213 Piano Pedagogy** 2 cr.
A methods and materials course for those preparing for piano studio teaching. Limited opportunities for teaching experience are provided in the Preparatory Division of the Music Department. Variable. *Prerequisite: permission of instructor.*
- MUSA 311 Class Instruments V: Percussion** 1 cr.
Class instruction in the standard percussion instruments, designed to prepare future instrumental teachers at all levels of the public schools. Spring.
- MUSC 413 Vocal Pedagogy** 2 cr.
The various schools of vocal technique. Designed to prepare the prospective teacher of private and class voice. Two periods per week. Spring. *Prerequisites: minimum of 2 yrs. of vocal study and the ability to play simple piano accompaniments.*
- MUSA 414 Class Piano IV** 1 cr.
Continuation of MUSA 203, emphasizing further keyboard facility. Successful completion satisfies the piano proficiency required by the Department. Spring. *Prerequisite: MUSA 203 or permission of instructor.*
- 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. Pass/Fail only.
- MUSA 356-363 Private Instruction** 2 cr.
Individual instruction in piano, organ, voice, strings, guitar, woodwinds, brass, and percussion. Minimum of 1 clock-hour per day intensive individual practice. Special fee \$200 per semester. One hour private lesson or two-half hour private lessons per week. At least one student recital and class recital performance each semester. Performance for a faculty jury at the end of each semester in lieu of a final examination. Must be repeated for credit until program is completed. Every semester. *Prerequisite: permission of the instructor.*
- MUSA 390 Junior Recital** 0 cr.
Junior Recital for the Bachelor of Arts or Science Music Degree. Preparation and performance of the junior recital. *Prerequisites: successful completion of the sophomore evaluation, piano proficiency examination and junior recital clearance. Performance majors must be concurrently enrolled in MUSA 300-level private instruction.* Pass/Fail only.
- MUSA 391 Performance Seminar** 2 cr.
Individual practice, individual and group instruction in the literature and performance problems of one's major performance concentration in conjunction with Private Instruction. *Prerequisite: admission to the program at the Sophomore Evaluation Jury and concurrent enrollment in MUSA 390 Junior Recital.*
- MUSA 490 Senior Recital** 0 cr.
Senior Recital for the Bachelor of Arts or Science Music Degree. Preparation and performance of the senior recital. *Prerequisites: successful completion of the sophomore evaluation, piano proficiency examination and senior recital clearance. Performance majors must also have successfully completed their junior recital. Must be concurrently enrolled in MUSA 300-level Private Instruction.* Pass/Fail only.
- Ensemble**
All ensemble courses may be repeated for credit.
- MUSC 319 University Chorale** 1 cr.
A select mixed chorus with repertory from all historical periods. Open to all students by permission of instructor. Every semester.
- MUSC 321 Opera Workshop** 1 cr.
Study of portions or all of an opera to be performed in class or public performance. Every semester. *Prerequisites: keyboard knowledge, voice private instruction, and permission of instructor.*
- MUSC 327 Concert Jazz Ensemble** 1 cr.
Members selected by audition each semester. Three rehearsals per week. Every semester. *Prerequisite: permission of instructor.*
- MUSC 328 Band Auxiliary** 1 cr.
Open, by audition, to students with ability to perform in auxiliary units of the Marching Band, such as dance drill team, flag corps, rifle squad, baton twirling. Extra rehearsals on Friday and Saturday before home football games. Fall. *Prerequisite: permission of the instructor.*
- MUSC 329 Marching Band: Concert Band** 2 cr.
The first half of the semester devoted to marching; the second half to concert music. Extra rehearsals on Friday and Saturday before home football games. Open to all students with ability on needed instruments. Fall. *Prerequisite: permission of instructor.*
- MUSC 330 Concert Band: Wind Ensemble** 1 cr.
Concert literature selected from both contemporary and traditional wind band repertoire. Biannual concert tour. Open to students from all departments by audition. Spring. *Prerequisite: permission of instructor.*

- MUSC 331 Brass Ensemble** 1 cr.
Study, rehearsal, and performance of brass-wind literature. 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 Chamber Guitar Ensemble** 1 cr.
Performance of selected guitar repertoire in an ensemble setting. Public performances and/or recitals may be scheduled. Repeatable each semester for credit. One hour-long meeting each week. *Prerequisite: ability to sight-read in upper positions of the fingerboard. Enrollment limited to majors who list guitar as their primary instrument, or to non-majors by audition.*
- MUSC 337 Woodwind Ensemble** 1 cr.
Study, rehearsal, and performance of woodwind instrument literature — principally clarinet, flute, and saxophone quartets and woodwind quintets. Every semester. *Prerequisite: permission of instructor; audition required.*
- MUSC 339 Percussion Ensemble** 1 cr.
Study, rehearsal, and performance of percussion ensemble literature. Every semester. *Prerequisite: permission of instructor; audition required.*
- MUSC 340 Collegium Musicum** 1 cr.
Madrigals and other works for small vocal ensembles calling for one to four people on a part; occasional use of instruments. Every semester. *Prerequisite: permission of instructor; audition required.*
- PHIL 208 Contemporary Topics** 3 cr.
A philosophical investigation of a selected issue, problem, or topic of contemporary relevance. Repeatable, on a different topic, to 6 credits. Variable.
- 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 Aesthetics** 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. Spring. *Recommended: 3 cr. in philosophy.*
- PHIL 306 Philosophy of Science** 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. Themes such as power, authority, democracy, law, and rights. Variable. *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 Taoism, and African philosophy with an emphasis on the community orientation of ethics and philosophical anthropology. Variable. *Recommended: 3 cr. in philosophy.*
- 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 407 Existentialism** 3 cr.
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 interrelates with other social categories such as race, ethnicity, and class. Variable. *Recommended: 3 cr. in philosophy or WMST 201.*
- ORIE 101 Introduction to Higher Education** 1 cr.
Orientation of incoming students to academic and social contexts of college life. Nature and process of higher education; educational and career planning; learning skills; support services. Required of all entering freshmen with less than 13 semester hours of transfer credit. Students may not withdraw from the course unless they are withdrawing from the University.

Orientation

Philosophy

- 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. Fall. *Recommended: 3 cr. in philosophy.*
- PHIL 412 Contemporary Metaphysics** 3 cr.
Contemporary approaches to problems in both special and general metaphysics. Problems in special metaphysics such as free will, personal identity, mind-body, and immortality. Problems in general metaphysics such as universals, substance, change, and time. Variable. *Recommended: 3 cr. in philosophy.*
- PHIL 490 Special Topics in Philosophy** 3 cr.
In-depth analysis of a topic, selected by instructor, for development thematically or historically. Repeatable, on a different topic, to 6 credits. Variable. *Recommended: 3 cr. in philosophy.*
- PHIL 499 Individual Research in Philosophy** 1 to 6 cr.
Independent study of a philosopher, period, movement, or problem, initiated by student in consultation with instructor. Variable. *Prerequisites: 12 cr. in philosophy and permission of instructor.*

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. *GEP LAC Group C.*
- PHSC 101 Measurement** 1 cr.
A laboratory experience in observation, measurement, graphical analysis, and discovery in Physical Science. Designed for non-science majors. One two-hour laboratory per week. Every semester. *Prerequisite or corequisite: PHSC 100. GEP LAC 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 LAC 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. 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. 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 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.
- PHSC 444 Metaphysics and Modern Physics** 3 cr.
Interdisciplinary study of 20th-century physics and ancient Asian metaphysics. Concepts of reality proposed by Newton, Einstein, Heisenberg, and other physicists; and by Lao-Tzu, Buddha, Hui Neng, and other ancient philosophers. Lecture. Also offered as HUMA 444. Spring.

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 LAC 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/discussion per week. Fall. *Corequisite: MATH 120. GEP LAC Group C.*
- PHYS 262 Principles of Physics II: Electricity and Magnetism** 4 cr.
Calculus-based introduction to the theoretical and experimental foundations of physics focusing on Electricity and Magnetism. Topics to include electrostatics, electrodynamics, magnetostatics, electromagnetic induction and Maxwell's equations. Six hours of integrated lecture/lab/discussion per week. Spring. *Prerequisite: PHYS 261. Corequisite: MATH 236.*
- 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, geometrical optics, physical optics, and special relativity. Six hours of integrated lecture/lab/discussion per week. Fall. *Prerequisite: PHYS 262. Corequisite: MATH 237.*
- PHYS 264 Principles of Physics IV: Thermodynamics & Modern Physics** 4 cr.
Calculus-based introduction to the theoretical and experimental foundations of physics focusing on thermodynamics and modern physics. Topics to in-

clude heat, thermodynamics, kinetic theory, atomic physics, and quantum physics. Six hours of integrated lecture/lab/discussion per week. Spring. *Corequisite: MATH 238. Prerequisite: PHYS 263.*

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 310 Classical Mechanics 4 cr.
Development of particle and rigid body mechanics from Newton's Laws using the notation and methods of vector calculus. Particle motion, central forces, conservation principles, rigid body dynamics, and introduction to Lagrange's equations. Spring. *Prerequisite: PHYS 263 and junior standing. Corequisite: MATH 432.*

PHYS 311 Thermodynamics 3 cr.
Introduction to thermodynamics. Thermodynamic properties of matter. Three laws of thermodynamics, cycles, reactions, mixtures. Fall, odd numbered years. Not open to students who have received credit for former PHYS 282 or ENME 232. *Prerequisites: PHYS 261 and 262.*

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 340 Audio Engineering 3 cr.
Basic principles of audio engineering including acoustics, electroacoustic devices, electronic components for audio-engineering, audio measurements, audio electronic circuits and equipment, and audio recording and playback. Includes elements of both analog and digital audio. Two hrs. lecture, 2 hrs. lab. Fall, even-numbered years. *Prerequisites: PHYS 263 and MATH 237 or permission of the instructor.*

PHYS 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 200, 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, and COSC 240 or permission of instructor.*

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. Also offered as MATH 436. 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. May be repeated for credit. 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. Fall. For *physics majors with junior or senior standing. May be repeated once for credit.*

PHYS 492 Senior Research & Seminar 2 cr.
Capstone course for the major. Under the direction of a faculty member, students engage in independent research. Research culminates in a paper and formal public seminar. Spring. *May be repeated once for credit. Prerequisite: PHYS 491 or permission of instructor.*

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. May be repeated for credit. 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 LAC 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. Variable. GEP LAC Group D. *Prerequisite: acceptance into the Honors Program or permission of the instructor.*
- POSC 113 Introduction to World Politics** 3 cr.
Patterns of decision making, conflict and conflict resolution in the world political community. Forms of governmental and economic organization; disparities in economic development and societal beliefs and values; factors affecting nations' foreign policies; approaches to the study of international and comparative political systems. Students who previously received credit for POSC 211/213 cannot receive credit for this course. Every semester. GEP LAC Group D.
- POSC 114 Honors Introduction to World Politics** 3 cr.
Accelerated study of major issues in world politics; evolution of the international system; political actors in world politics; patterns of conflict and conflict resolution; power; nationalism; international political economy; international organizations. Organized around major themes in the field. Students who previously received credit for POSC 211/213 cannot receive credit for this course. Variable. GEP LAC Group D. *Prerequisite: Acceptance into the Honors Program or permission of the instructor.*
- POSC 131 Introduction to Comparative Politics** 3 cr.
Comparative analysis of various political systems including: methods for comparative research; the effect of domestic legal, institutional and social structures on development; transitions to democracy; interaction of domestic politics and the global system. Students who previously received credit for POSC 231 cannot receive credit for this course. Every semester. GEP LAC Group D.
- POSC 311 Research Methods** 3 cr.
Methods of inquiry in the empirical study of political science. Nature of scientific inquiry; research design; elementary quantitative analysis. Computer-based data analysis; prior computer experience not necessary. Every semester. *Prerequisite: A prior upper division course in political science 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.
Relationship of administrative functions to legislative, executive, and judicial branches of government; types of administrative organization in the United States and elsewhere; the U.S. Civil Service. 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 in Action** 3 cr.
Structure, function, and social impact of criminal legal systems; "law" and "justice." Participants in the legal process: police, prosecuting and defense attorneys, judges, jurors, correctional officials, litigants, the press. State, national, and international comparisons; proposals for reform. Every semester. Not open to students who have credit for former POSC 354. *Prerequisite: POSC 110/112 or permission of instructor.*
- POSC 330 Politics of Africa** 3 cr.
Examination of the economic and political development of modern African states. Topics include the impact of colonization, theories of development, theories of integration into the contemporary global economic system and the process of state building. The focus will be on selected countries as case studies. Variable. *Prerequisite: POSC 113/114 or POSC 131; POSC 131 preferred.*
- POSC 331 Politics of Latin America** 3 cr.
Examination of the development of political and economic systems in Latin America. Topics include the effects of colonization, the application of theories of development, approaches to integration into the contemporary global economic system and patterns of state building. The focus will be on selected countries as case studies. Variable. *Prerequisite: POSC 113/114 or POSC 131; POSC 131 preferred.*
- POSC 332 Politics of Middle East** 3 cr.
Examination of political and economic development of modern Middle Eastern states. Topics include the impact of colonization, approaches to development and modernization, integration into the world economy, regional politics of inclusion and global exclusion. The focus will be on selected countries as case studies. Variable. *Prerequisite: POSC 113/114 or POSC 131; POSC 131 preferred.*
- POSC 333 Politics of Western Europe** 3 cr.
Examination of the structures of governments, ideologies, policies, and contemporary issues and problems facing European states from Ireland to the Baltics and Scandinavia to the Mediterranean. Special attention will be given to the European Community and NATO. Fall. *Prerequisite: POSC 113/114 or POSC 131; POSC 131 preferred.*
- POSC 334 Politics of Eastern Europe** 3 cr.
Analysis of the structures of government, policies, contemporary issues, and problems facing the East European states of Poland, Hungary, the Czech Republic, Slovakia, Romania, Albania, Bulgaria, and the former Yugoslavia. Variable. *Prerequisite: POSC 113/114 or POSC 131; POSC 131 preferred.*
- POSC 341 International Organization** 3 cr.
Structure and activities of international organizations as mechanisms of foreign policy and international and transnational cooperation. Security concerns; economic development and integration; human rights. Spring. *Prerequisite: POSC 113/114 or POSC 131; POSC 131 preferred.*
- POSC 342 Foreign Policy of the United States** 3 cr.
Making and carrying out American foreign policy; decision-making processes. Effect of domestic politics and world political environment on American diplomacy. Fall. *Prerequisite: POSC 113/114 or POSC 131; POSC 131 preferred.*
- POSC 352 Interest Groups and Public Policy** 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 358 American Public Policy** 3 cr.
Major policy areas in the U.S.; influences and constraints of the policy process; current analytical methods of political scientists. Political conflicts regarding policy; cause of gap between stated goals and actual programs. Every year. Not open to students who have credit for former POSC 458. *Prerequisite: POSC 110/112 or permission of instructor.*
- POSC 361 Public Opinion and Political Behavior** 3 cr.
How the ordinary citizen relates to politics, particularly in the U.S. Positions on basic issues; polls and surveys; formation of attitudes; ideology; participation and voting; propaganda and the media; public impact on government policy. Computer-based data analysis; prior computer experience not necessary. Variable. *Prerequisite: POSC 110/112 or permission of instructor.*
- POSC 362 Political Parties and Elections** 3 cr.
Organization and activities of modern political parties. Evolution of party systems in the United States; role in election campaigns; impact on public policy. Comparison to other political systems. Variable. *Prerequisite: POSC 110/112 or permission of instructor.*
- POSC 363 Media and Politics** 3 cr.
Effects of mass media, particularly television, on American politics and society; use of the media by politicians; nature and impact of news reporting; media and the socialization process; freedom of the press. Variable. *Prerequisite: POSC 110/112 or permission of instructor.*

- POSC 365 Women and Politics** 3 cr.
Examination of the changing political role of women, particularly in the United States. Political attitudes and values; voting behavior; recruitment for leadership positions. Comparison across American subcultures and with Europe and developing areas. Variable. *Prerequisite: POSC 110/112 or permission of instructor.*
- POSC 370 Introduction to Political Thought** 3 cr.
Theoretical basis and historical development of the major political perspectives on modern society: Conservatism; Liberalism; Socialism; Fascism; Feminism; Environmentalism. Every year. *Prerequisites: POSC 110/112 and POSC 113/114 or permission of instructor.*
- POSC 421 American Legislative Politics** 3 cr.
Legislative politics in the U.S. and state legislatures; role of legislatures in American politics. Relations between legislatures and constituencies; congressional elections; internal formal and informal structures of Congress; congressional decision-making; comparison to state legislatures. Variable. *Prerequisite: POSC 110/112 or permission of instructor.*
- POSC 422 American Constitutional Law I** 3 cr.
The U.S. Constitution as defined in the principal decisions and opinions of the courts: relationship between federal and state government and among the three branches of federal government. Fall. *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 courts: relationship of the individual to federal and state government. Spring. *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 113/114 or POSC 131 or permission of instructor; POSC 131 preferred.*
- POSC 434 Comparative Legal Systems** 3 cr.
Examination of the structures of judicial systems within the developed and developing world; role of the judiciary within the structure of government and the rule of law; issues relating to the power and legitimacy of the judiciary in various political systems. Spring, odd-numbered years. *Prerequisite: POSC 422 or permission of instructor.*
- 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 International Relations: Theory and Practice** 3 cr.
Current theoretical approaches to the study of international relations; foreign policy analysis; designing approaches for international problem solving; international negotiation. Fall. *Prerequisites: POSC 113/114 or POSC 131 or permission of the instructor.*
- POSC 442 National Security Policy** 3 cr.
Formulation and implementation of American national security policy within the context of international and domestic political systems. Competing goals and values; decision-making institutions and processes; weapons policy; resource issues. Spring. *Prerequisite: POSC 113/114 or POSC 131 or permission of instructor; POSC 131 preferred.*
- POSC 450 Environmental Public Policy** 3 cr.
Analysis of regional, national and international environmental policies. Focus on the changing nature of the public policy process due to new and emerging "public" environmental issues. Issues examined include global warming, acid rain, deforestation, landfills and the Chesapeake Bay. Variable. *Prerequisite: POSC 110/112 or permission of instructor.*
- POSC 456 Urban Politics and Policies** 3 cr.
Institutions and problems of American urban government. Nature of conflicts and competition among groups; decision making in the urban political system; changing relationships among local, state, and national governments. Variable. *Prerequisite: POSC 321 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. Variable. Students may re-enroll with permission of instructor, if topics are substantially different. *Prerequisite: POSC 370 or permission of instructor.*
- POSC 471 American Political Thought** 3 cr.
Evolution of American political ideas and institutions from colonial times to the present: liberalism and conservatism; political reform movements; themes in American foreign policy. Variable. Not open to students who have credit for former POSC 424. *Prerequisite: POSC 110/112 or permission of instructor.*
- POSC 491 Seminar in Political Science** 3 cr.
Lectures, discussions, student reports, research techniques, criticism, interpretation. Individual research (senior thesis) on a common topic, with interim reports and final formal presentation of paper. Variable. May be repeated for credit if topics are substantially different. *Prerequisite: written permission of instructor.*
- POSC 492 Internship Seminar** 3 or 6 cr.
Academic component of internship; requires co-registration in POSC 495. Full-time interns register for 6 credits 492 (and 9 cr. 495), part-time interns 3 credits 492 (and 6 cr. 495). Graded A through F; elective credit in POSC major. Every semester.
- POSC 495 Internship in Political Science** 6 or 9 cr.
Experiential component of internship: guided work experience in conjunction with POSC 492; must directly relate to student's academic program. Full-time interns register for 9 credits 495 and 6 credits 492 and may not enroll in any other courses. Part-time interns must register for 6 credits 495 and 3 credits 492. Graded P/F; general elective credit - does not count toward POSC major. Every semester. *Prerequisites: junior or senior standing, not on probation; departmental approval of internship before registering.*
- POSC 498 Readings in Political Science** 1 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 political science with at least a 3.0 GPA in all political science courses. Repeatable to 6 credits. Every semester. *Prerequisite: written permission of instructor and department chair.*
- ## Psychology
- PSYC 150 General Psychology** 3 cr.
Introduction to the methodology, theories, and applications of the science of animal and human behavior. Every semester. GEP LAC Group D.
- PSYC 151 Honors: General Psychology** 3 cr.
Introduction to the scientific study of human and animal behavior. Basic research findings, methodology, and theoretical, social, and ethical issues. Oral presentations and written reports on outside readings in psychology

required. Fall. GEP LAC Group D. *Prerequisite: acceptance into the University Honors Program or permission of instructor.*

PSYC 210 Child Development 3 cr.
From conception through childhood, for understanding the early formative years. Every semester. *Prerequisite: PSYC 150 or PSYC 151.*

PSYC 212 Adolescence and Adulthood 3 cr.
Introduction to psychological development, adolescence through maturity. Every semester. *Prerequisite: PSYC 150 or PSYC 151.*

PSYC 213 Psychology of Adjustment 3 cr.
Explores the concept of psychological adjustment by relating it to students' everyday lives. Relevant psychological theory and research presented on a variety of topics including self-concept, values, person perception, interpersonal attraction, sexuality, problems in adjustment and psychotherapy. Variable. *Prerequisite: PSYC 150 or PSYC 151.*

PSYC 220 Psychology of Women 3 cr.
Explores women's psychological development and experience. Covers sex roles and how society's attitudes about girls and women affect female self-concept, personality, relationships and work experience. Topics also include women of color, sexual harassment, violence against women and spirituality. Spring. *Prerequisite: PSYC 150 or PSYC 151.*

PSYC 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 or PSYC 151.*

PSYC 270 Psychological Perspectives of Human Sexuality 3 cr.
Describes psychological aspects of human sexual behavior and attitudes. Covers historical and current research techniques used to study sexuality; theories of sexual attraction, love and behavior; sexuality across the lifespan; physical and psychological aspects of sexual response; and variations in sexual attitudes, orientations and practices. Variable. *Prerequisites: PSYC 150 or PSYC 151.*

PSYC 290 Psychological Issues and Practices 1-4 cr.
A special content area or group of issues selected by the Department and announced in the preceding semester. Admission competitive. See the department for the criteria. Three hrs. seminar format. Variable. *Prerequisites: PSYC 150 or PSYC 151.*

PSYC 297 Introduction to the Profession of Psychology 1 cr.
An explanation of the profession of psychology. An examination of both career and graduate school opportunities available to psychology majors. Identification of opportunities available within the department and university. A detailed examination of what it means to be a psychology major at FSU. Participation in pre-major assessment. Graded P/F. Every semester. *Prerequisites: PSYC 150/151 or permission of instructor.*

PSYC 300 Research Methods I 4 cr.
Introduction to the scientific method as applied to behavioral data. Naturalistic observation, surveys, and correlational studies; statistical topics. Normally, 3 hrs. lecture and 2 hrs. lab. Should be taken as soon as possible after completing 150 or 151. Every semester. *Prerequisites: PSYC 150/151 General Psychology with a C or better; ENGL 101 Freshman Composition with a C or better; MATH 209 Intro. to Probability and Statistics with a C or better; prior or concurrent enrollment PSYC 297; declaration of psychology as a major or minor; or permission of the Department Chair.*

PSYC 301 Research Methods II 4 cr.
The nature of scientific method, explanation, and theory. Experimental and quasi-experimental design and statistical analysis. Five hrs. per week for lecture, demonstrations, and lab periods. Should be taken in the semester immediately following PSYC 300. Every semester. *Prerequisites: PSYC 300 with a "C" or better and completion of PSYC 297 with a "P" grade.*

PSYC 303 Psychology of Marriage 3 cr.
The psychological variables of the marriage relationship. Variable. *Prerequisites: PSYC 150/151 and 3 additional credits in Psychology or permission of instructor.*

PSYC 305 Computer Applications in Psychology 3 cr.
Overview of current applications of computers in psychology. Programming skills are neither a prerequisite nor a goal of this course. Two hrs. lab and 2 hrs. lecture. Variable. *Prerequisites: PSYC 150/151 and 3 additional credits in Psychology or permission of instructor.*

PSYC 306 Sensation and Perception 4 cr.
The process of sensations from within or without. How we organize, interpret, and analyze sensory information; the relationship between perception and creativity, learning, motivation, emotion, and states of consciousness; applications of principles to personality, abnormal psychology, music, and the fine arts. Five hrs. lecture, demonstration, and labs. Spring and Intercession. *Prerequisites: PSYC 150/151 and 3 additional credits in Psychology or permission of instructor.*

PSYC 307 Experimental Analysis of Behavior 4 cr.
Research on conditioning with infrahuman subjects. Application of conditioning techniques to the analysis of human behavior. Individual projects and labs required. Fall. *Prerequisites: PSYC 150/151 and 3 additional credits in Psychology or permission of instructor.*

PSYC 311 Survey of Research Methods in Psychology 3 cr.
An overview of non-experimental and experimental research methods used in psychology. Focuses on the appreciation and interpretation of research reported in psychology literature. Normally 3 hrs. lecture. MAY NOT BE USED TO MEET THE RESEARCH METHODS REQUIREMENTS FOR A MAJOR IN PSYCHOLOGY. Spring. *Prerequisites: PSYC 150/151 and 3 additional credits in Psychology or permission of instructor.*

PSYC 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 work place. Considers personnel psychology, organizational psychology and consumer psychology. Variable. *Prerequisite: PSYC 150/151 and 3 additional credits in Psychology or permission of instructor.*

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. Required course for Maryland Addictions Counselor certification. Also offered as SOWK 385. Spring. *Prerequisite: Sophomore standing.*

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. Fall. *Prerequisites: PSYC 150/151 and 3 additional credits in Psychology or permission of instructor.*

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. Required course for Maryland Addictions Counselor certification. Variable. *Prerequisites: PSYC 150/151, one 3 credit helping relationships course recommended, or permission of instructor.*

PSYC 388 Treatment Issues and Theory in Addictions 3 cr.
Practical application of research and theory of addiction counseling. Overview of treatment related issues, including assessment and diagnosis. Variable. *Prerequisites: PSYC 386, one 3 credit helping relationships course recommended, or permission of instructor.*

PSYC 389 Ethics for the Addiction Counselor 1 cr.
Addresses legal and ethical considerations for addiction counselors. Differences and similarities among addiction and other helping professionals discussed. Required course for Maryland Addictions Counselor certification. Variable. *Prerequisites: PSYC 150/151, one 3 credit helping relationships course recommended, or permission of instructor.*

PSYC 404 Psychology of the Exceptional Child 3 cr.
Developmental and behavioral characteristics of exceptional children as they relate to inclusion, classroom management, federal laws and psychological treatment. Topics on exceptional children include: mental retardation, physi-

cal disabilities, giftedness, emotional problems and autism. Fall. *Prerequisites: PSYC 210 or 212, or permission of instructor.*

PSYC 408 Tests and Measurements 3 cr.
Psychological and educational tests, their validity, reliability, scale transformations, norms, and standardization. Administration, uses, and interpretation of various instruments of assessment. Fall. *Prerequisites: PSYC 150/151 and 3 additional credits in Psychology or permission of instructor.*

PSYC 409 Human Learning and Cognition 3 cr.
An examination of human cognitive processes including human learning, memory and recall, attention processes, information processing, problem solving, thinking and reasoning, language acquisition and communication. Every semester. *Prerequisites: PSYC 150/151 and 3 additional credits in Psychology or permission of instructor.*

PSYC 410 Introduction to Counseling 3 cr.
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. *Prerequisites: PSYC 150/151 and 3 additional credits in Psychology or permission of instructor.*

PSYC 414 Theories of Personality 3 cr.
General survey of the principal theories and research concerning the nature and development of personality. Fall. *Prerequisites: PSYC 150/151; PSYC 210 or 212; or permission of instructor.*

PSYC 417 Psychology of Abnormal Behavior 3 cr.
Historical perspectives and causal factors of abnormal behavior. A survey of the classification of symptoms and the theoretical formulations and treatment models developed to address these symptoms. Case studies are utilized extensively to meet course objectives. Spring and Intersession. *Prerequisites: PSYC 150/151; PSYC 210 or 212; or permission of instructor.*

PSYC 418 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. Spring. *Prerequisites: PSYC 150/151 and 3 additional credits in Psychology or permission of instructor.*

PSYC 420 Physiological Psychology 3 cr.
Characteristics of the nervous and endocrine system and their relationship to human and animal behavior. Spring. *Prerequisites: PSYC 150/151 and 3 additional credits in Psychology or permission of instructor.*

PSYC 430 Health Psychology 3 cr.
Psychological principles applied to the promotion and maintenance of health, the prevention and treatment of illness and changing public opinion about health related matters. Behavioral components of health risk factors and improvement of the health care system are addressed. Spring. *Prerequisites: PSYC 150/151 and 3 additional credits in Psychology or permission of instructor.*

PSYC 444 The Male Experience 3 cr.
Examination from a gender-sensitive perspective of factors affecting the development of male behavior in American society. Emphasis on the contributions of psychology to understanding gender-related developments; contributions of other social sciences and biology are also incorporated. Topics include work, sports, male-female relations, friendship, minority experience, sexuality, power. Three hours lecture, discussion. Variable. *Prerequisites: PSYC 150/151 and 3 additional credits in Psychology or permission of instructor.*

PSYC 450 Multicultural Counseling Issues 3 cr.
Introduction to the issues of gender, class, race, culture, sexual orientation, and physical ability, as these variables may influence their ability to be present and counsel individuals who are different from themselves. Students will examine between and within group differences in light of various social, cultural, historical, and political contexts. The goals of this course are to increase student awareness of self and others as cultural beings and gain knowledge about various cultural groups in the United States. Variable. *Prerequisite: PSYC 150.*

PSYC 470 Advanced Experimental Psychology 4 cr.
Development and application of research methods and procedures to current problems in psychology, with emphasis on human subjects. Multivariate statistics. Individual projects and lab required. Fall. *Prerequisites: PSYC 300, PSYC 301, or permission of instructor.*

PSYC 481 History and Systems of Psychology 3 cr.
Historical foundations of the discipline of psychology. Survey of recent and current systems of theoretical ideas in psychology. Attention to the roots of the discipline in philosophy and science; consideration of the work of great psychologists and their associated systems. Spring. *Prerequisites: PSYC 150/151 and 3 additional credits in Psychology or permission of instructor.*

PSYC 485 Behavioral Approaches to Human Problems 3 cr.
Therapeutic application of learning principles to problems in the behavior of children and adults: normal childhood development; education and habit disorders; depression, severely disordered behavior, anxiety; and sexual problems in adults. Behavioral assessment, behavior change programs, and evaluation of such programs. Individual research and projects required. Spring. *Prerequisites: PSYC 150/151 and 3 additional credits in Psychology or permission of instructor.*

PSYC 489 Child and Adolescent Disorders 3 cr.
In-depth examination of child/adolescent emotional and behavioral disorders. Relevant theoretical perspectives, treatment and research are discussed. Fall. *Prerequisites: PSYC 150/151, PSYC 210 or 212; at least 60 credits or permission of instructor. Preference in registration given to Psychology majors.*

PSYC 490 Special Topics in Psychology 1-4 cr.
Either a practicum to develop psychological skill, or a content-oriented course to provide a critical appraisal of a selected topic, as announced. Does not duplicate any other course offered by the Department of Psychology. Four credits when 5 contact hrs. are required (such as 2 hrs. lab and 3 hrs. lecture). May be repeated for credit if the topics are substantially different. Variable. *Prerequisites: PSYC 150/151 and 3 additional credits in Psychology or permission of instructor.*

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 expected. May be repeated for credit if topics are substantially different. Variable. *Prerequisites: PSYC 150/151 and 3 additional credits in Psychology or permission of instructor.*

PSYC 492 Internship Seminar 3 cr.
Academic component of internship; requires co-registration in PSYC 495. Full-time interns register for 3 credits of 492 (and 12 credits 495); part-time interns, 3 credits 492 (and 6-11 credits 495). Graded A-F. Every semester. *Prerequisites: see PSYC 495.*

PSYC 495 Internship in Psychology 6 - 12 cr.
Experiential component of internship. 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 6-11 credits in 495 and 3 credits of 492. Graded P/F. Every semester. *Prerequisites: senior standing; submission of Internship Agreement form to internship director prior to registering; departmental approval.*

PSYC 497 Senior Seminar 3 cr.
An integrated senior-year experience that requires students to use their accumulated skills, knowledge, and ethical sensitivity to critically analyze a new and/or controversial issue in psychology. Integration of previous course material and reflections on one's own experiences in the field of psychology is expected. An integrative research paper is required. Participation in major assessment. Students can repeat this senior seminar more than once if topics are different. First priority given to students who need the course for graduation requirements. Second priority given to seniors. Students may count all senior seminar courses toward the major requirements. Every semester. *Prerequisites: PSYC 150/151 and 3 additional credits in Psychology or permission of instructor.*

PSYC 498 Readings in Psychology 1-6 cr.
Directed reading on a specific topic designed for the individual student. Summaries of readings and conclusions as a formal written report to be filed with the department. Not to duplicate any other course offered by the de-

partment. May be repeated for credit if the topics are substantially different. Departmental approval (granted only under extraordinary circumstances) required to enroll for more than 3 credit hrs. per semester. Every semester. *Prerequisites: PSYC 150/151 and a written proposal approved by the sponsoring faculty member and Department Chair.*

PSYC 499 Psychology Projects 1-6 cr.
Directed research, practicum, or other individualized learning experience on a specific topic. Formal written report to be filed with the department. Projects primarily of readings are not acceptable (see PSYC 498), nor are projects conducted in a group setting (see PSYC 490 or 491); not to duplicate any other course offered by the department. May, on approval, be repeated for credit, if the projects are substantially different. Departmental approval (granted only under extraordinary circumstances) required to enroll for more than 3 credit hrs. per semester. Every semester. *Prerequisites: PSYC 150/151 and a written proposal approved by the sponsoring faculty member and Department Chair.*

Integrated Math/Science

SCIE 320 Integrated Science 4 cr.
Introduction to underlying principles and themes common to all scientific disciplines including biology, physics, chemistry, earth science and astronomy. Appropriate mathematical topics integrated into all aspects of course. Includes laboratory activities, field experiences and computer exercises; exploration of current software, multi-media, instrumentation and telecommunication; application of technology to science emphasized. Three 2 hr. lecture/lab/discussion. Variable. *Prerequisites: BIOL 149, MATH 207 and PHSC 203 or permission of instructor.*

SCIE 321 integrated Science/Mathematics 3 cr.
Continuation of Integrated Science with emphasis on mathematical modeling. Application of technology to science and mathematics emphasized. Collaboration with students at sister institutions using electronic media encouraged. Two 2-hr. lecture/lab/discussion. Variable. *Prerequisite: SCIE 320 or permission of instructor.*

SCIE 335 Oceanography 3 cr.
Basic principles of oceanographic science and discussion of the role of oceans in global environmental systems. Spring, even-numbered years. Also offered as GEOG 335. *Prerequisites: GEOG 103, BIOL 149 and completion of a college-level mathematics course.*

SCIE 400 Issues in Context: From Specialist to Generalist 3 cr.
Interdisciplinary capstone research seminar led by a team of science, mathematics and education faculty. Students work cooperatively on extended project dealing with a complex societal problem of scientific and technological import. Upon conclusion of study, a policy recommendation will be written and delivered in public form. Active engagement in project design, implementation, analysis and reporting. *Prerequisites: two lab science courses including PHSC 203; MATH 207; and junior standing; or permission of instructor.*

Social Science

SOSC 350 Honors Seminar: Values and Social Change 3 cr.
The impact of social change on behavior in various cultures, providing a perspective on social change in the United States. *Prerequisites: acceptance into Honors Program; permission of instructor.*

SOSC 490 Topics in Social Science 3 cr.
Interdisciplinary study of a special topic in the social sciences. Fall. *Prerequisites: completion of introductory courses and progress on concentration plus written permission of social science coordinator.*

Social Work

SOWK 305 Racial and Cultural Minorities 3 cr.
Analysis of minority-majority group situations, their causes and consequences. Minorities in the United States. Also offered as SOCI 305. Fall. Not open to students who have credit for former SOCI/SOWK 220, SOCI 320. *Prerequisite: SOCI 100 or 111.*

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. Spring. 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: SOCI 310 or SOWK 310 and 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, PSYC 150 or PSYC 151, BIOL 109, or permission of the Department.*

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. *Prerequisite: SOWK 375. Prerequisites or corequisites: SOWK 305, SOWK 364, SOWK 371, or permission of the Department.*

SOWK 379 Foundations for Social Work 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 385 Generalist Practice with Groups 3 cr.
Study of group processes including power dynamics, curative factors, patterns of member interaction, leadership and stages of group development. Required course for Maryland Addictions Counselor certification. Also offered as PSYC 385. Variable. *Prerequisites: PSYC 150/151 and 3 additional credits in Psychology or Social Work. Sophomore standing or permission of instructor.*

- 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 I** 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 II** 3 cr.
Advanced theories and techniques of social work intervention within social systems utilizing an eclectic, ecological, problem-solving approach. Every semester. *Prerequisite or corequisite: SOWK 470 or permission of the Department.* Enrollment limited to Social Work majors.
- SOWK 490 Special Topics in Social Work** 1-3 cr.
Either a practicum to develop social work skills, or a content-oriented seminar to explore a topic of relevance to the Social Work profession. Does not duplicate any other course offered by the Department. Topics rotate each time the course is offered. Students may suggest topics and projects to the Department Chair. Variable. May be repeated for credit if topics are substantially different. *Prerequisite: SOWK 370 and permission of the instructor.*
- SOWK 492 Social Work Seminar** 3 cr.
Professional capstone course to integrate classroom and field experience. Required co-registration in SOWK 495. Graded A-F. Every semester. Enrollment limited to Social Work majors. *Prerequisites: SOWK 471, senior standing, and completion of all prerequisite major and GEP course work.*
- SOWK 495 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.*
- SOWK 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. May be repeated for credit if topics are substantially different. *Prerequisite: permission of instructor and Department Chair. Submit the proposal form (endorsed by the instructor) to the Department Chair prior to registering for the course and before the beginning of the semester.*
- SOWK 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. May be repeated for credit if topics are substantially different. *Prerequisite: permission of instructor and Department Chair.*
- 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. GEP LAC Group D. Not open to students who have credit for former SOCI 201.
- 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. Every semester. GEP LAC Group D. Not open to students who have credit for former SOCI 211.
- 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.
- SOCI 305 Racial and Cultural Minorities** 3 cr.
Analysis of minority-majority group situations, their causes and consequences. Minorities in the United States. Fall. Not open to students who have credit for former SOCI 220 or 320. *Prerequisite: SOCI 100 or SOCI 111.* Also offered as SOWK 305.
- 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. Spring. Also offered as SOWK 306. *Prerequisite: SOCI 100 or 111.*
- SOCI 310 Statistics for Social Science** 3 cr.
Study of social scientific applications of univariate, bivariate, and multivariate statistical techniques with emphasis on their logic, interpretation, and application. Three hours lecture, one hour lab. Every semester. *Prerequisite: completion of GEP math requirement.* Also offered as SOWK 310.
- SOCI 311 Basic Research Methods** 3 cr.
Techniques of research design: testing of hypotheses, sampling, data collection, measurement, and elementary statistical analysis. Every semester. *Prerequisite: SOCI/SOWK 310 and three courses in sociology or permission of instructor.*
- SOCI 312 Applied Social Research** 3 cr.
Collection and analysis of data to study applied social research problems. Research project, or participation in current research projects, required. Variable. *Prerequisite: SOCI/SOWK 310 and SOCI/SOWK 311, or permission of instructor.*
- SOCI 322 Social Demography** 3 cr.
A study of the measurement, analysis and explanation of population size, distribution, composition, changes and problems. Spring, alternate years. *Prerequisite: SOCI 100 or SOCI 111.*
- SOCI 325 Community Analysis** 3 cr.
A critical appraisal of community research, including comparisons of folk, rural, urban, and suburban studies; analysis of local institutional patterns; and specific community factors such as stratification, power, and collective actions. Spring, alternate years. *Prerequisite: SOCI 100 or SOCI 111.*
- SOCI 326 Sociology of Rural Life** 3 cr.
Characteristics of rural population, social structure, and institutional arrangements and changes. Fall, alternate years. *Prerequisite: SOCI 100 or SOCI 111.*
- SOCI 328 Sociology of Urban Life** 3 cr.
A study of the city, its role in history, the problems of today, and prospects for the future. Emphasis on urbanism as a way of life. Fall, alternate years. *Prerequisite: SOCI 100 or SOCI 111.*
- SOCI 332 Collective Behavior** 3 cr.
Analysis of relatively episodic, unstructured, and unconventional forms of social behavior and their consequences. Alternate years. *Prerequisite: SOCI 100 or SOCI 111.*
- SOCI 334 Gender and Social Life** 3 cr.
The social construction of gender and gender-based inequalities. Focus on contemporary American society but other cultures included. Variable.

- 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 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. Alternate years. *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 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 491 Seminar in Sociology** 3 cr.
Advanced studies in selected topics. Individual study and research for class reports. Formal paper required. Variable. May be repeated for credit if topics are substantially different (department chair's permission required). *Prerequisite: permission of instructor.*
- 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. May be repeated for credit if topics are substantially different (department chair's permission required). *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. May be repeated for credit if topics are substantially different (department chair's permission required). *Prerequisite: permission of instructor.*

Theatre

You may not receive credit for both a THEA course and the same course formerly labelled CMAT, unless the course is listed as repeatable.

- THEA 104 Theatre** 1/2 to 1 cr.
Practical application of principles of acting, directing, or technical aspects, open to all students. Minimum 45 clock hours. Repeatable; 3 credits applicable to major. Every semester.
- THEA 106 Introduction to Theatre** 3 cr.
Basic elements of the theatre; play, playwright, player, director, audience, designer, and technicians. A survey of theatrical forms from ancient times to the present. GEP LAC Group A. Every semester.
- THEA 107 Introduction to Theatrical Vision** 3 cr.
A general study of design for the theatre aimed at an understanding and facility in visual thinking, visual communication, and visual evaluation. Covers general design terminology, basic design research, basic design skills, and introduction to theatre styles and conventions. Two 75-minute lectures and one 75-minute lab. GEP LAC Group A. Every semester.
- THEA 110 Introduction to Acting** 3 cr.
Introductory preparation for acting through developmental exercises. Yearly.
- THEA 204 Stagecraft** 3 cr.
Advanced study and practice in constructing, handling, rigging, and shifting scenery and properties. Attention given to techniques with metals and plastics. Fundamentals of drafting techniques for theatrical application including CAD. Work on department productions required. Three hour lecture/demonstration. Spring.
- THEA 206 Modern American Drama** 3 cr.
An introductory survey of representative American plays and playwrights of the 20th century with attention to the evolution of Modern American Theatre and analysis of the efforts of the playwright and theatrical professionals. Also offered as ENGL 206. Yearly. *Prerequisites: THEA 106 and ENGL 101.*
- THEA 208 Acting: Stanislavskian Approaches** 3 cr.
An introduction to the basic principles of the Stanislavski approach to acting and to the application of its components, including: Sense Memory, Affective Memory, Relaxation, Concentration, Justification, Improvisation and Animal Exercises. Consists of work involving various exercises - very little text or scene work will be covered. Variable. *Prerequisite: THEA 110 or permission of instructor.*

- THEA 210 Voice and Movement** 3 cr.
Introduction to voice and movement for the stage. Development of vocal and physical awareness and expression through fundamental exercises for voice and body and study of the anatomy and physiology of vocal production. Variable. *Prerequisite: THEA 208 or permission of instructor.*
- THEA 305 Scene Design** 3 cr.
Techniques of scene design; scenic styles and forms; esthetic principles including ground plan, front and rear elevation, rendering, and building of models. Yearly. *Prerequisite: THEA 107 or permission of instructor. Recommended: THEA 204.*
- THEA 306 Stage Lighting** 3 cr.
Lighting as artistic design: theory and practice, types of equipment, use and deployment, and innovations. Yearly. Not open to students who have credit for former CMAT 306. *Prerequisite: THEA 107 or permission of instructor. Recommended: THEA 204.*
- THEA 307 Costume Design** 3 cr.
Studio course in design of costumes for theatre; visual interpretation of plays through character. History of dress; fashion effects; styles, fabric, draping, costume constructions. Yearly. *Prerequisite: THEA 107 or permission of instructor.*
- THEA 308 Directing** 3 cr.
Basic techniques for directing with practice in interpretation and staging of plays from the modern era. Every semester. *Prerequisite: THEA 106, 107, 206.*
- THEA 309 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. Alternate years. *Prerequisite: THEA 308 and 325 or permission of the 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 continuation of the study of the Stanislavskian approach to acting and the application of its principles through exercises, text analysis and rehearsals of scenes from major modern realistic playwrights. Yearly. *Prerequisite: THEA 208 or equivalent.*
- THEA 319 Acting in Pre-Modern Drama** 3 cr.
Preparation for acting the classical repertoire from the Renaissance through the eighteenth century. Alternate years.
- THEA 325 Advanced Directing** 3 cr.
Directing period and modern plays of various genres in a variety of styles. Alternate years. *Prerequisite: THEA 308, 425 and permission of instructor.*
- THEA 340 Theatre Management** 3 cr.
Business management of theatre organization; budget and finances, play leasing and promotion, box office. Alternate years. *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. *Prerequisites: ENGL 101, THEA 206 and permission of instructor.* Alternate years. Repeatable to 6 credits.
- THEA 400 Theatre Production** 3 cr.
Practical application of the principles of theatre production on the advanced level, involving participation in actual production, classes, and workshops of university-affiliated professional theatre. May be repeated. Variable. *Prerequisite: permission of department.*
- THEA 407 Topics in Production Techniques** 2 or 3 crs.
Detailed techniques concerning a particular production subject announced in advance. Lecture and practical laboratory. Repeatable on a different topic. Variable. *Prerequisite: permission of instructor.*
- 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. Yearly. *Prerequisites: THEA 318.*
- THEA 425 History of the Theatre I** 3 cr.
Study of the cultural background of the theatre and the historical development of dramatic art from its beginnings to the Elizabethan period. Alternate years. *Prerequisite: THEA 106.*
- THEA 426 History of the Theatre II** 3 cr.
Study of the cultural background of the theatre and the historical development of dramatic art from the English Renaissance to modern times. Alternate years. *Prerequisite: THEA 106.*
- THEA 427 History of the Theatre III** 3 cr.
Study of the cultural background of theatre and the development of dramatic art in the modern era (1850 A.D. to the present). Alternate 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.
- 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. Alternate years. *Prerequisite: ENGL 150, 250/MDFL 150 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 twentieth century. Representative dramatists and forms from both the West and the East. Multicultural emphasis on the variety of dramatic forms. Alternate years. *Prerequisite: ENGL 150, 250/MDFL 150 or THEA 106 or permission of instructor.* Also offered as ENGL 432.
- THEA 465 Projects in Theatrical Design** 3 cr.
Advanced design projects in scenery, lighting, or costumes. Emphasis on musical forms: opera, dance, and musical theatre. Weekly presentations. Repeatable to a maximum of 9 hrs. Variable. *Prerequisite: THEA 305, 306, or 307, and written permission of the instructor.*
- THEA 466 Projects in Directing** 1-3 cr.
Direction of a full-length play for public performance, preferably as part of University Theatre's "Season Too," which includes 2 productions for children and a maximum of 4 (fully-supported) other student productions annually. Admission to the class is highly competitive: (1) "Season Too" applicants *must* complete at least **two** upper-division directing classes. Preference is given to theatre majors who pursue a concentration in Directing; (2) applicants for children's productions must show a clear interest in children's theatre and, *minimally*, must have taken CMAT 308; directors of small projects designed for public performance may be considered for 1-2 credits, if appropriate course work is evident. *Prerequisites: THEA 107, 206, and 308. Additional requirements for "Season Too" projects: THEA 325 and/or 309. Admission to this course requires submission of a formal project proposal to the department at least 6 months in advance. REQUIRED: Approval by departmental committee.* Every semester (repeatable for up to 6 credits maximum).
- THEA 489 Special Topics in Acting** 3 cr.
Study and performance of scenes from important nonrealistic forms of drama—premodern, contemporary, or experimental. Three hrs. lecture, 1 hr. lab. Variable. *Prerequisite: permission of instructor.*
- THEA 490 Special Topics in Theatre Arts** 3 cr.
Research or applied experience on an announced selected topic. 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. Summer. *Corequisite: THEA 495.*
- THEA 493 Field Work in Theatre Practice** 1 to 3 crs.
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. May be repeated. Variable. *Prerequisite: permission of department.*

THEA 495 Internship in Theatre **6 or 12 crs.**

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 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 crs.**

Intensive study through faculty-directed projects or papers. Hours arranged. Variable. *Prerequisite: permission of Department Chair.*

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 also gain an understanding of the intersection of gender with race, class, ethnicity, religion, sexual orientation, and able-bodiedness by examining issues such as the social construction of gender; women's roles in the family, the workplace, social and political life, and the arts; the intellectual, physical, emotional, and spiritual experiences of women. Fall, even-numbered years.

WMST 301 Latin American Women's Issues **3 cr.**

The history and current realities of women in Latin America with a special focus on women in the Andean region. Offered in Ecuador during Intersession.

WMST 486 Women, Science and Society **3 cr.**

An interdisciplinary seminar. A study of gender-based values, beliefs, and biases that affect scientific theories and methodology. An examination of the relationship between technology and gender as it relates to work, health, education, economic status, and social mobility. Variable. *Prerequisite: junior/senior class standing.*

WMST 491 Seminar in Women's Studies **3 cr.**

A synthesizing experience required of students completing a minor in Women's Studies. Specific topics will be selected. Spring, even-numbered years. *Prerequisite: 12 credit hours in Women's Studies or permission of instructor.*

WMST 494 Practicum in Women's Studies **1-6 cr.**

Work experience with a federal, state or private organization that is related to Women's Studies. A maximum of three credits can be applied to the Women's Studies minor. A formal written report must be filed with the Women's Studies coordinator. Variable. Graded P/F. *Prerequisite: WMST 201, or two Women's Studies electives and permission of coordinator.*

WMST 499 Independent Study **1-3 cr.**

Directed research, practicum or other individualized learning experience on a specific interdisciplinary topic in Women's Studies. Formal written report to be filed with Women's Studies program coordinator. Variable. *Prerequisites: WMST 201 and permission of coordinator.*

Personnel Register

Personnel information current as of 4/28/03.

Administration

OFFICE OF THE PRESIDENT

CATHERINE R. GIRA, President. B.S., California State College, Pennsylvania; M.Ed., M.L.A., The Johns Hopkins University; Ph.D., The American University.

KAREN A. TREBER, Assistant to the President for Legal Affairs. B.A., Bryn Mawr College; J.D., The National Law Center, George Washington University.

GARY S. HOROWITZ, Coordinator of Governmental Relations. B.A., The City College of New York; M.A., Ph.D., The Ohio State University.

PANSY S. ATKINSON, Director of Affirmative Action/EEO. B.A., Fisk University; M.Ed., Frostburg State University.

JAMES W. SHAW, Director of the Hagerstown and Frederick Centers. B.A., B.S., Otterbein College; M.A., Ph.D., University of Michigan.

JO ELLEN M. BARNHART, Assistant to the Director of the Hagerstown Center. A.A., Hagerstown Junior College; B.S., Towson State University; M.L.A., Western Maryland College.

ACADEMIC AFFAIRS

STEPHEN J. SIMPSON, Provost. B.A., Dickinson College; M.A., Ph.D., Princeton University.

JOHN F. BOWMAN II, Associate Provost. B.S., The Ohio State University; M.A., University of Kentucky; Ph.D., University of Pittsburgh.

KAREN M. BAMBACUS, Director of Instructional Technology Support Center. B.S., M.Ed., Indiana University of Pennsylvania.

BRIAN K. WILSON, Distance Learning Specialist/Programmer. A.A., Allegany College; B.S., M.Ed., Frostburg State University.

VACANT, Director of Research and Sponsored Programs.

VACANT, Grant Compliance Specialist.

AMY C. SIMES, Director of the Center for International Education. B.S., Virginia Polytechnic Institute and State University; M.A., University of Georgia; Ph.D., University of Nottingham, U.K.

THOMAS A. CARR, International Education Coordinator. B.A., University of Michigan, Ann Arbor.

CHARLES E. TEETS, Director of Academic Computing. B.S., Bowie State University; M.Ed., Frostburg State University.

TERESA J. FECK, Associate Director of Academic Computing. A.A., Allegany College; B.S., M.B.A., Frostburg State University.

STEPHANIE R. CESNICK, Webmaster. B.S., Frostburg State University.

BRIAN K. WILSON, Programmer/Distance Learning Specialist. A.A., Allegany College; B.S., M.Ed., Frostburg State University.

DANNY E. JACKSON, System Support Liaison. A.A., Allegany College.

ROBERT E. SMITH, JR., Director of Information Services. B.S., M.B.A., Frostburg State University.

SELINA M. SMITH, Institutional Research Analyst. A.A., Allegany College; B.S., Frostburg State University.

DAVID A. WEBB, Institutional Research Analyst. B.A., Frostburg State University.

MARY J. GARTNER, Assistant Provost. A.B., Oberlin College; Ed.D., Harvard University.

DAVID M. GILLESPIE, Director of the Library. A.B., Glenville State College; M.L.S., Indiana University; A.M.D., Ph.D., Florida State University.

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- SARA L. PIERCE, B.M., Friends University; M.M., Northwestern University.
- ROBERT E. PLETTA, B.A., Baldwin Wallace College; M.A., Vanderbilt University.
- MARGARET L. PRECKEL, B.S., Florida Southern College; M.S., Ph.D., Northwestern University.
- DAVID R. PRESS, B.S., M.A., Northwestern University; Ph.D., Carnegie-Mellon University.
- ROBERT M. RIGGS, B.A., George Washington University; M.A., University of Illinois.
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- CHARLES R. STERRETT, B.S., The Pennsylvania State University; M.S., Air Force Institute of Technology; Ph.D., American University.
- KENNETH D. STEWART, A.B., Duke University; Ph.D., University of Nebraska.
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- MOLLY WALTER-BURNHAM, B.A., Florida Atlantic University; M.A., University of Georgia; Ph.D., Indiana University of Pennsylvania.
- ROBERT E. WELLS, B.S., University of Rhode Island; M.Ed., Fitchburg State College; M.S., Indiana University.
- KURT F. WOLFE, JR., B.S., Frostburg State University; M.A., Ph.D., University of Maryland.

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(effective July 1, 2003)

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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 April 2003, the programs listed here are the only forms of non-traditional credit accepted. Participants should consult the Admissions Office (301/687-4201) or the Assistant Provost (301/687-4212) for the most up-to-date information.

Source	Score or Transcript Required
Advanced Placement Program (CEEB)	3 or higher
CLEP	Minimum score varies by subject area with no score lower than 50 accepted
International Baccalaureate	4 or higher on each standard/subsidiary or higher level exam
College Courses at High School	If credit is recorded on a college transcript
Departmental Exams from Other Colleges	If credit is recorded on a college transcript
Military Credit	If equivalent to courses in FSU's curriculum
Portfolio Credit from Other Colleges	If credit is recorded on a college transcript
FSU Special Departmental Exams	See following list of tests currently available

Credit-By-Exam Policies

In addition to earning credit at FSU or transferring course credit from other accredited institutions, you may acquire up to 30 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 PT 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. PT's earned will not be used in computing your cumulative grade point average.

General Limitations

- To earn credit by examination, you must be currently enrolled at Frostburg State University as a full-time or part-time student.
- An examination cannot be used to remove a failure in a course completed at Frostburg or elsewhere.
- An examination cannot be used to remove a low grade earned in a course completed at Frostburg or elsewhere.
- An examination may not be repeated or retaken in order to earn a higher score.

- 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.
- If you achieve a satisfactory score, academic credit and a grade of PT will be recorded on your permanent record when you pay the credit charge.

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

- Make arrangements to take the Advanced Placement Examination at the appropriate time. Pay the examination fee to the appropriate agency.
- Your official score must be sent directly by the testing agency to the Assistant Provost. After you enroll at the University, you must request that your score be evaluated, and, if the score is high enough for credit to be given, reported to the Registrar's Office.

- The credit will be recorded on your transcript without charge.

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 Assistant Provost. Contact IB North America and the Caribbean, 200 Madison Ave., Suite 2007, New York, NY 10016; <http://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

- Request permission from the Department Chair to be evaluated for credit in a particular course.
- Pay a \$25 administrative testing fee at the University & Student Billing Office.
- The Department Chair assigns an appropriate faculty member to evaluate you. In some cases, the department offers the exam on a regularly scheduled basis. See the list that follows.
- The faculty member evaluates your work according to quantitative and qualitative standards previously established by the department — for example, by an oral or written examination or by performance.
- If the faculty member's evaluation reveals that

your achievement is equal or superior to that of a student passing the course in a traditional way, the department will report the grade of PT 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 offered as of 2002. Tests without course equivalency/credit listed may be accepted, but are not yet evaluated. Minimum score required is **3**, unless otherwise noted.

Title of Exam	FSU Course Equivalent(s)	Credit Hrs.
Art History	<i>Score of 3 or 4:</i>	
	ART 100 Art Appreciation	3
	<i>Score of 5:</i>	
	ART 111 Honors: Art Appreciation	3
Biology	BIOL 149 General Biology I	4
	BIOL 150 General Biology II	4
Calculus AB	<i>Score of 3:</i>	
	MATH 120 Pre-Calculus Mathematics	3
	<i>Score of 4 or 5:</i>	
	MATH 236 Calculus I	4
Calculus BC	<i>Score of 3:</i>	
	MATH 236 Calculus I	4
	<i>Score of 4 or 5:</i>	
	MATH 236 Calculus I	4
	MATH 237 Calculus II	4
Chemistry	<i>Score of 3 or 4:</i>	
	CHEM 101 General Chemistry I	4
	<i>Score of 5:</i>	
	CHEM 101 General Chemistry I	4
	CHEM 102 General Chemistry II	4
Computer Science A	<i>Score of 3 or 4:</i>	
	COSC 195 Computer Science Elective	3
	<i>Score of 5:</i>	
	COSC 240 Computer Science I	4
Computer Science AB	<i>Score of 3 or 4:</i>	
	COSC 240 Computer Science I	4
	<i>Score of 5:</i>	
	COSC 240 Computer Science I	4
	COSC 241 Computer Science II	4
Economics: Macro	ECON 201 Principles of Economics (Macro)	3
Economics: Micro	ECON 202 Principles of Economics (Micro)	3
English Language & Composition	<i>Score of 3 or 4:</i>	
	ENGL 101 Freshman Composition	
	<i>Score of 5:</i>	
	ENGL 111 Honors: Freshman Composition	3
English Literature & Composition	<i>Score of 3:</i>	
	ENGL 101 Freshman Composition	3
	<i>Score of 4:</i>	
	ENGL 101 Freshman Composition	3
	ENGL 150 Introduction to Literature	3
	<i>Score of 5:</i>	
	ENGL 111 Honors: Freshman Composition	3
	ENGL 150 Introduction to Literature	3
Environmental Science	SCIE 195 Science Elective	3
European History	HIST 195 History Elective	3
French Language	FREN 101 Basic Elements of French I	3
	FREN 102 Basic Elements of French II	3

Title of Exam	FSU Course Equivalent(s)	Credit Hrs. Awarded
French Literature	FREN 195 French Elective	3
German Language	MDFL 195 Foreign Language Elective	6
Govt. & Politics: Comparative	POSC 131 Introduction to Comparative Politics	3
Govt. & Politics: U.S.	POSC 110 Introduction to American Politics	3
Human Geography	GEOG 104 Human Geography	3
Internat'l. English Language/APIEL	<i>Not accepted</i>	
Latin Literature	Evaluated at student request	
Latin: Vergil	Evaluated at student request	
Music Theory	MUSC 195	3
Physics B	<i>Score of 3:</i>	
	PHYS 215 General Physics I	4
	<i>Score of 4 or 5:</i>	
	PHYS 215 General Physics I	4
	PHYS 216 General Physics II	4
Physics C: Electricity & Magnetism	PHYS 262 Principles of Physics II: Electricity and Magnetism	4
Physics C: Mechanics	PHYS 261 Principles of Physics I: Mechanics	4
Psychology	PSYC 150 General Psychology	3
Spanish Language	SPAN 101 Basic Elements of Spanish I	3
	SPAN 102 Basic Elements of Spanish II	3
Spanish Literature	SPAN 195 Spanish Elective	3
Statistics	MATH 209 Elements of Appl. Prob. & Statistics	3
Studio Art: Drawing	ART 212 Drawing	3
Studio Art: 2D Design	ART 104 Two-Dimensional Design	3
Studio Art: 3D Design	ART 105 Three-Dimensional Design	3
U.S. History	HIST 103 History of the United States	3
	HIST 104 History of the United States	3
World History	HIST 114 World History	3

International Baccalaureate Exams (IB)

Following is the list of International Baccalaureate Exams currently offered. 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.

Title of Exam	FSU Course Equivalent(s)	Credit Hrs. Awarded
Language A1	<i>Score of 4 or 5 (Standard):</i>	
	ENGL 101 Freshman Composition	3
	<i>Score of 6 or 7 (Standard):</i>	
	ENGL 101 Freshman Composition	3
	ENGL 150 Introduction to Literature	3
	<i>Score of 4 (Higher Level):</i>	
	ENGL 101 Freshman Composition	3
	<i>Score of 5, 6, or 7 (Higher Level):</i>	
	ENGL 101 Freshman Composition	3
	ENGL 150 Introduction to Literature	3
Language A2	<i>Currently being evaluated. Syllabus review required. Contact Foreign Languages Department.</i>	
Language B	<i>Currently being evaluated. Syllabus review required. Contact Foreign Languages Department.</i>	
Language ab initio	<i>Currently being evaluated. Syllabus review required. Contact Foreign Languages Department.</i>	
Business & Management	BUAD 100 Introduction to Business	3
Economics	ECON 200 Basic Economics	3
Geography	GEOG 195 Geography Elective	3
History	HIST 100 The Contemporary World in Historical Perspective	3
History of the Islamic World	<i>Score of 4 or higher (Standard):</i>	
	HIST 290 Special Topics in History	3
	<i>Score of 4 or higher (Higher Level):</i>	
	HIST 490 Special Topics in History	3

Title of Exam	FSU Course Equivalent(s)	Credit Hrs. Awarded
Info. Tech. in a Global Society	COSC 100 Introduction to Computer Science	3
Philosophy	<i>Score of 4 or higher (Standard):</i>	
	PHIL 101 Introduction to Philosophy	3
	<i>Score of 4 or higher (Higher Level):</i>	
	PHIL 101 Introduction to Philosophy	3
	PHIL 195 Philosophy Elective	3
Psychology	PSYC 150 General Psychology	3
Social & Cultural Anthropology	<i>Currently being evaluated.</i>	
Biology	BIOL 149 General Biology I	4
Chemistry	<i>Score of 4 or 5:</i>	
	CHEM 101 General Chemistry I	4
	<i>Score of 6 or 7:</i>	
	CHEM 101 General Chemistry I	4
	CHEM 102 General Chemistry II	4
Design Technology	PHYS 195 Physics Elective	3
Environmental Systems	SCIE 195 Science Elective	4
Physics	<i>Score of 4 or 5 (Higher Level):</i>	
	PHYS 215 General Physics I	4
	<i>Score of 6 or 7 (Higher Level):</i>	
	PHYS 215 General Physics I	4
	PHYS 216 General Physics II	4
Further Mathematics	<i>Score of 4 (Standard):</i>	
	MATH 236 Calculus I	4
	<i>Score of 5, 6, or 7:</i>	
	MATH 236 Calculus I and at least one additional course from MATH 237 or MATH 380. (Syllabus review required. Contact Math Dept.)	3-4
Mathematics Higher Level	<i>Score of 4:</i>	
	MATH 120 Pre-Calculus Mathematics	3
	<i>Score of 5, 6, or 7:</i>	
	MATH 120 Pre-Calculus Mathematics and at least one additional course from among MATH 236, MATH 237 or MATH 380. (Syllabus review required. Contact Math Department.)	3-4
Mathematical Methods	<i>Score of 4 (Standard):</i>	
	MATH 102 College Algebra	3
	<i>Score of 5, 6, or 7 (Standard):</i>	
	MATH 120 Pre-Calculus Mathematics	3
	<i>Score of 4 (Higher Level):</i>	
	MATH 120 Pre-Calculus Mathematics	3
	<i>Score of 5, 6, or 7 (Higher Level):</i>	
	MATH 236 Calculus I	4
Mathematical Studies	<i>Score of 4 (Standard):</i>	
	MATH 104 Intro to Math. Problem-Solving	3
	<i>Score of 5, 6, or 7: (Standard):</i>	
	MATH 104 Intro to Math. Problem-Solving and possibly one additional course from among MATH 102, MATH 120 or MATH 209 (Syllabus review required. Contact Math Dept.)	3
Computer Science	<i>Currently being evaluated.</i>	
Visual Arts	Course equivalency determined based on portfolio review. Contact Department of Visual Arts.	3
Music	MUSC 195 Music Elective	3
Theatre Arts	THEA 195 Theatre Elective	3

College Level Examination Program (CLEP)

Following is the list of College Level Examination Program exams offered as of 2002. Exams without course equivalency/credit listed may be accepted, but are not yet evaluated. Minimum score required is **50**, unless otherwise noted.

Title of Exam	FSU Course Equivalent(s)	Credit Hrs. Awarded
GENERAL		
English Composition (<i>essay required</i>)	ENGL 101 Freshman Composition	3
Humanities	HUMA 195 Humanities Elective	6
Mathematics	MATH 195 Mathematics Elective	6
Natural Sciences	SCIE 195 Natural Science Elective	6
Social Sciences & History	SOSC 195 Social Science Elective	6
SUBJECT		
Composition and Literature		
American Literature	ENGL 261 American Lit.: Colonial to Present	3
Analyzing & Interpreting Literature	ENGL 150 Introduction to Literature	3
English Literature	ENGL 260 British Literature: Beowulf to Present	3
Freshman College Composition	ENGL 101 Freshman Composition	3
Foreign Languages		
College-level French	<i>Level I: Score of 50 minimum:</i>	
	FREN 101 Basic Elements of French I	3
	FREN 102 Basic Elements of French II	3
	<i>Level II: Score of 62 minimum:</i>	
	FREN 101 Basic Elements of French I	3
	FREN 102 Basic Elements of French II	3
	FREN 211 French Grammar, Composition, and Conversation I	3
	FREN 212 French Grammar, Composition, and Conversation II	3
College-level German	Evaluated at student request	
College-level Spanish	<i>Level I: Score of 50 minimum:</i>	
	SPAN 101 Basic Elements of Spanish I	3
	SPAN 102 Basic Elements of Spanish II	3
	<i>LEVEL II: Score of 66 minimum:</i>	
	SPAN 101 Basic Elements of Spanish I	3
	SPAN 102 Basic Elements of Spanish II	3
	SPAN 211 Spanish Grammar, Composition, and Conversation I	3
	SPAN 212 Spanish Grammar, Composition, and Conversation II	3
Social Sciences and History		
American Government	POSC 110 Introduction to American Politics	3
History of the U.S. I:	HIST 103 History of the U.S. (to 1876)	
Early Colonizations to 1877		3
History of the U.S. II:	HIST 104 History of the U. S. (1876 to present)	
1865 to the Present		3
Human Growth & Development	<i>Score of 55 minimum required:</i>	
	PSYC 210 Child Development	3
Intro to Educational Psychology	<i>Currently being evaluated.</i>	
Introductory Psychology	PSYC 150 General Psychology	3
Introductory Sociology	SOCI 100 intro to Sociology	3
Principles of Macroeconomics	ECON 201 Principles of Economics (Macro)	3
Principles of Microeconomics	ECON 202 Principles of Economics (Micro)	3
Western Civilization I:	HIST 195 History Elective	
Ancient Near East to 1648		3
Western Civilization II:	HIST 195 History Elective	
1648 to the Present		3
Science and Mathematics		
Calculus w/Elementary Functions	MATH 236 Calculus I	4
College Algebra	MATH 102 College Algebra	3
College Algebra-Trigonometry	MATH 120 Pre-Calculus Mathematics	3
College Mathematics	MATH 195 Mathematics Elective	3
General Biology	BIOL 149 General Biology I	4
	BIOL 150 General Biology II	4

Title of Exam	FSU Course Equivalent(s)	Credit Hrs. Awarded
General Chemistry	CHEM 101 General Chemistry I	4
Trigonometry	MATH 103 Trigonometry	3
Business		
Information Systems & Computer Applications: <i>Currently being evaluated.</i>		
Introductory Business Law	BUAD 291 Legal Environment of Business	3
Principles of Accounting	ACCT 201 Introductory Accounting I	3
	ACCT 202 Introductory Accounting II	3
Principles of Management	BUAD 351 Management of Organizations	3
Principles of Marketing	BUAD 361 Principles of Marketing	3

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 Schedule Booklet for specific test dates or contact the department offering the exam for specific information.

Course		Credit Earned
ACCT 201	Intro. to Accounting I	3
ACCT 202	Intro. to Accounting II	3
ACCT 301	Intermediate Acct. I	3
ART 104	Two-Dimensional Design	3
ART 105	Three-Dimensional Design	3
ART 212	Drawing	3
BIOL 109	Human Biology & the Environment	4
BIOL 149	General Biology I	4
BIOL 150	General Biology II	4
BUAD 320	Advanced Computer Applications in Business	3
COSC 100	Intro. to Computer Science	3
COSC 240	Computer Science I	4
COSC 350	Computer Org./Assem.Language	3
ENGL 101	Freshman Comp.	3
ENGL 308	Soc. Science Adv. Comp	3
ENGL 310	General Adv. Comp.	3
GEOG 103	Physical Geography	4
GEOG 104	Human Geography	3
GEOG 207	Physical Geology	4
GEOG 208	Historical Geology	4
GEOG 275	Intro. to Spatial Analysis	3
HEED 100	Personal Wellness	2
MATH 102	College Algebra	3
MATH 103	Trigonometry	3
MATH 106	Algebra w/Calculus for Business	3
MATH 120	Pre-Calculus Math.	3
MATH 209	Elements of Probability & Statistics	3
MATH 220	Calculus for Applications I	3
MATH 236	Calculus I	4
MUSC 101	Music Fundamentals	2
MUSC 102	Theory I	3
MUSA 414	Class Piano IV	1
PSYC 150	General Psychology	3
PSYC 386	Drugs and Human Behavior	3
PSYC 387	Addictions Treatment Delivery	3
PSYC 388	Treatment Issues and Theory in Addictions	3
PSYC 389	Ethics for the Addiction Counselor	1
PSYC 404	Psychology of the Exceptional Child	3
PSYC 417	Psychology of Abnormal Behavior	3
PSYC 430	Health Psychology	3
SOWK 375	Human Behavior & the Social Environment	3

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).

University System of Maryland Policy for Student Residency Classification for Admission, Tuition and Charge-Differential Purposes

(Approved by the Board of Regents August 28, 1990; Amended July 10, 1998; Amended November 27, 2000; Amended April 11, 2003)

I. POLICY

It is the policy of the Board of Regents of the University System of Maryland (USM) to recognize the categories of In-State and Out-of-State students for the purpose of admission, tuition, and charge differentials at those institutions where such differentiation has been established.

A. An In-State student is a student whom the University determines to be a permanent resident of the State of Maryland. For the purposes of this Policy, "permanent resident" is defined as a person who satisfies all the following conditions and has done so 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 person seeks In-State Status:

1. Is not residing in the State of Maryland primarily to attend an educational institution; and,
2. Owns and continuously occupies or rents and continuously occupies living quarters in Maryland. There must exist a genuine deed or lease in the individual's name reflecting payments/rents and terms typical of those in the community at the time executed. Persons not having such a lease may submit an affidavit reflecting payments/rents and terms as well as the name and address of the person to whom payments are made which may be considered as meeting this condition. As an alternative to ownership or rental of living quarters in Maryland, a student may share living quarters in Maryland which are owned or rented and occupied by a parent, legal guardian, or spouse; and,
3. Maintains within Maryland substantially all personal property; and,
4. Pays Maryland income tax on all earned taxable income including all taxable income earned outside the State; and,
5. Registers all owned motor vehicles in Maryland in accordance with Maryland law; and,
6. Possesses a valid Maryland driver's license, if licensed, in accordance with Maryland law; and,
7. Is registered in Maryland, if registered to vote; and,
8. 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; and,
9. Has a legal ability under Federal and Maryland law to live permanently without interruption in Maryland.

B. 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:

1. A full-time or part-time (at least 50 percent time) regular employee of the University System of Maryland.
2. The spouse or financially dependent child of a full-time or part-time (at least 50 percent time) regular employee of the USM.
3. A full-time active member of the Armed Forces of the United States whose home of residency is Maryland or one who resides or is stationed in Maryland, or the spouse or a financially dependent child of such a person.
4. 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.
5. A graduate assistant appointed through the University System of Maryland for the semester/term of the appointment. Except through prior arrangement, this benefit is available only for enrollment at the institution awarding the assistantship.

- C. Students not entitled to In-State Status under the preceding paragraphs shall be assigned Out-of-State Status for admission, tuition, and charge-differential purposes.
- D. Assignment of In-State or Out-of-State classification will be made by the University upon an assessment of the totality of facts known or presented to it. The person seeking In-State Status shall have the burden of proving that he or she satisfies all requirements.
- E. Either of the following circumstances raise a presumption that the student is residing in the State of Maryland primarily for the purpose of attending an educational institution:
1. The student was attending high school or residing outside Maryland at the time of application for admission to a USM institution, or
 2. The student is both (a) not financially independent and (b) is financially dependent upon a person not a resident of Maryland.
- The burden shall be on the student to rebut the presumption.
- F. **Child:** A child is a natural child or a child legally adopted pursuant to a court order recognized under the law of Maryland.
- G. **Self-Generated:** Self-generated describes income which is derived solely from compensation for an individual's own efforts as evidenced, for example, by federal or state W-2 forms or IRS Form 1099 where interest income is based upon finances created from one's own efforts. For the purposes of this policy, grants, stipends, awards, benefits, loans and gifts (including federal and State aid, grants, and loans) may not be used as self-generated income.
- H. **Regular Employee:** A regular employee is a person employed by USM 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.

IMPLEMENTATION

This policy as amended by the Board of Regents on November 27, 2000 shall be applied to all student residency classification decisions made on or after this date.

FSU Procedure for Residency Status Appeals

Any student who wishes to appeal the decision of residency status previously determined by the Office of the Registrar or the Admissions Office, may do so in writing to the Appeals Board for Residency Status. This board shall consist of representatives designated by the Provost, the Vice President for Student and Educational Services, and the Vice President for Administration and Finance. The appeal will be reviewed by the board members in the order listed. Only by unanimous agreement of the board members will the decision of the Office of the Registrar or Admissions be overruled. Upon request, the President or designee has the authority to waive any residency requirements if it is determined that the student is indeed a permanent resident and application of the criteria creates an unjust result.

A student desiring to appeal should obtain and submit the University System of Maryland "Petition for Change in Residency Classification for Admission, Tuition and Charge Differential" through the office that made the original residency status decision, the Office of the Registrar or the Admissions Office.

II. PROCEDURES

- A. An initial determination of In-State Status will be made by the University at the time a student's application for admission is under consideration. 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 "Petition for Change in Classification for Admission, Tuition and Charge Differential". A student applying for a change to In-State Status must furnish all required documentation with the Petition by 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 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 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. If In-State Status is gained due to false or misleading information, the University reserves the right to retroactively assess all Out-of-State charges for each semester/term affected.
- E. Each institution of the University System of Maryland shall develop and publish additional procedures to implement this policy. Procedures shall provide that on request the President or designee has the authority to waive any residency criterion set forth in Section I if it is determined that the student is indeed a permanent resident and the application of the criteria creates an unjust result. These procedures shall be filed with the Office of the Chancellor.

III. 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 or who receives more than one-half of his or her support from another person during the twelve (12) month period immediately prior to the last published date for registration for the semester or session. If a student receives more than one-half of his or her support in the aggregate from more than one person, the student shall be considered financially dependent on the person providing the greater amount of support.
- B. **Financially Independent:** A financially independent student is one who (1) declares himself or herself to be financially independent as defined herein; (2) does not appear as a dependent on the Federal or State income tax return of any other person; (3) receives less than one-half of his or her support from any other person or persons; and (4) demonstrates that he or she provides through self-generated support one-half or more of his or her total expenses.
- C. **Parent:** A parent may be a natural parent, or, if established by a court order recognized under the law of the State of Maryland, an adoptive parent.
- D. **Guardian:** A guardian is a person so appointed by a court order recognized under the law of the State of Maryland.
- E. **Spouse:** A spouse is a partner in a legally contracted marriage.

General Education and Transfer

Subtitle 06

TITLE 13B - MARYLAND HIGHER EDUCATION COMMISSION

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) "Arts" means courses that examine aesthetics and the development of the aesthetic form and explore the relationship between theory and practice. Courses in this area may include fine arts, performing and studio arts, appreciation of the arts, and history of the arts.
- (4) "A.S. degree" means the Associate of Sciences degree.
- (5) "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.
- (6) "English composition courses" means courses that provide students with communication knowledge and skills appropriate to various writing situations, including intellectual inquiry and academic research.
- (7) "General education" means the foundation of the higher education curriculum providing a coherent intellectual experience for all students.
- (8) "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.
- (9) "Humanities" means courses that examine the values and cultural heritage that establish the framework for inquiry into the meaning of life. Courses in the humanities may include the language, history, literature, and philosophy of Western and other cultures.
- (10) "Mathematics" means courses that provide students with numerical, analytical, statistical and problem-solving skills.
- (11) "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.
- (12) "Parallel program" means the program of study or courses at one institution of higher education which has 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.
- (13) "Receiving institution" means the institution of higher education at which a transfer student currently desires to enroll.
- (14) "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 2 years of the baccalaureate degree.
- (15) "Sending institution" means the institution of higher education of most recent previous enrollment by a transfer student at which transferable academic credit was earned.

(16) "Social and behavioral sciences" means courses that examine the psychology of individuals and the ways in which individuals, groups, or segments of society behave, function, and influence one another. The courses include, but are not limited to, subjects which focus on:

- (a) history and cultural diversity;
- (b) concepts of groups, work and political systems;
- (c) applications of qualitative and quantitative data to social issues; and
- (d) interdependence of individuals, society, and the physical environment.

(17) "Transfer student" means a student entering an institution for the first time having successfully completed a minimum of 12 semester hours at another institution which is applicable for credit at the institution the student is entering.

.02-1 Admission of Transfer Students to Public Institutions

A. Admission to Institutions.

- (1) A student attending a public institution who has completed an A.A., A.A.S., or A.S. degree or who has completed 56 or more semester hours of credit, shall 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 in parallel courses, except as provided in subsection (4) below.
- (2) A student attending a public institution who has not completed an A.A., A.A.S., or A.S. degree or who has completed fewer than 56 semester hours of credit, shall be eligible to transfer to a public institution regardless of the number of credit hours earned if the student:
 - (a) Satisfied the admission criteria of that 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 in parallel courses.
- (3) 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 institution; 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 higher performance standards for admission to some programs if the standards and criteria for admission to the program:
 - (a) Are developed and published by the receiving institution; and
 - (b) Maintain fair and equal treatment for native and transfer students.
- (2) If the number of students seeking admission exceeds the number that can be accommodated in a particular professional or specialized program, admission decisions shall be:
 - (a) Based on criteria developed and published by the receiving institution; and
 - (b) Made to provide fair and equal treatment for native and transfer students.
- (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 a public institution granting the baccalaureate degree.

C. Receiving Institution Program Responsibility

- (1) The faculty of a receiving public institution shall be responsible for devel-

opment 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 institution may set program requirements in major fields of study which may simultaneously fulfill general education requirements.
- (3) A receiving public institution, in developing its lower division course work, shall exchange information with other public institutions to facilitate the transfer of credits into its program.

.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. A public institution shall satisfy the general education requirement by:
 - (1) Requiring each program leading to the A.A. or A.S. degree to include not less than 30 and no more than 36 semester hours, and each baccalaureate degree program to include not less than 40 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 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) One course in each of two disciplines in arts and humanities;
 - (2) One course in each of two disciplines in social and behavioral sciences;
 - (3) Two science courses, at least one of which shall be a laboratory course;
 - (4) One course in mathematics at or above the level of college algebra; and
 - (5) One course in English composition.
- D. Interdisciplinary and Emerging Issues.
 - (1) In addition to the five required areas in §A of this regulation, a public institution may include up to 8 semester hours in a sixth category that addresses emerging issues that institutions have identified as essential to a full program of general education for their students. These courses may:
 - (a) Be integrated into other general education courses or may be presented as separate courses; and
 - (b) Include courses that:
 - (i) Provide an interdisciplinary examination of issues across the five areas; or
 - (ii) Address other categories of knowledge, skills, and values that lie outside of the five areas.
 - (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 20 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).
- 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. Public institutions may incorporate knowledge and skills involving the use of quantitative data, effective writing, information retrieval, and information literacy when possible in the general education program.
- M. Notwithstanding §A(1) of this regulation, a public four-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.
- N. 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 General Education Credit.

- A. 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.
- B. 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.
- C. 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.
- D. 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.
- E. 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 10-16 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.
- F. A sending 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.
- G. A.A.S. Degrees.
 - (1) While there may be variance in the numbers of hours of general education required for A.A., A.S., and A.A.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.
 - (2) An A.A.S. student 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 .03M of this chapter, the total general education credits for baccalaureate degree-granting public receiving institutions may not exceed 46 semester hours.
- H. Student responsibilities. A student is held:
 - (1) Accountable for the loss of credits that:
 - (a) Result from changes in the student's selection of the major program of study,
 - (b) Were earned for remedial course work, or
 - (c) Exceed the total course credits accepted in transfer as allowed by this chapter; and

(2) Responsible for meeting all requirements of the academic program of the receiving institution.

.05 Transfer of Non-General Education Program Credit

A. Transfer 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 is limited to:

- (1) 1/2 the baccalaureate degree program requirement, but may not be more than 70 semester hours; and
- (2) The first two years of the undergraduate educational experience.

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:

- (a) Technical courses from career programs;
- (b) Course credit awarded through articulation agreements with other segments or agencies;
- (c) Credit awarded for clinical practice or cooperative education experiences; and
- (d) Credit awarded for life and work experiences.

(3) The basis for the awarding of the credit shall be indicated on the student's transcript by the receiving institution.

(4) The receiving institution shall inform a transfer student of the procedures for validation of course work for which there is no clear equivalency. Examples of validation procedures include ACE recommendations, portfolio assessment, credit through challenge, examinations and satisfactory completion of the next course in sequence in the academic area.

(5) The receiving baccalaureate degree-granting institution shall use validation procedures when a transferring student successfully completes a course at the lower division level that the receiving institution offers at the upper division level. The validated credits earned for the course shall be substituted for the upper division course.

D. Program Articulation.

(1) Recommended transfer programs shall be developed through consultation 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 their programs. 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.

.06 Academic Success and General Well-Being of Transfer Students.

A. Sending Institutions.

(1) Community colleges shall encourage their students to complete the associate degree or to complete 56 hours in a recommended transfer

program which 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 at 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 of a degree seeking transfer student as expeditiously as possible, and notify the student of the results not later than mid-semester of the student's first semester of enrollment at the receiving institution, if all official transcripts have been received at least 15 working days before mid-semester. The receiving institution shall inform a student of the courses which are acceptable for transfer credit and the courses which are applicable to the student's intended program of study.

(4) A receiving institution shall give a transfer student the option of satisfying institutional graduation requirements that were in effect at the receiving institution at the time the student enrolled as a freshman at the sending institution. In the case of major requirements, a transfer student may satisfy the major requirements in effect at the time when the student was identifiable as pursuing the recommended transfer program at the sending institution. These conditions are applicable to a student who has been continuously enrolled at the sending institution.

.07 Programmatic Currency.

A. A receiving institution shall provide to the community college current and accurate information on recommended transfer programs and the transferability status of courses. Community college students shall have access to this information.

B. Recommended transfer programs shall be developed with each community college whenever new baccalaureate programs are approved by the degree-granting institution.

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.

.08 Transfer Mediation Committee.

A. There is a Transfer Mediation Committee, appointed by the Secretary, which is representative of the public 4-year colleges and universities and the community colleges.

B. Sending and receiving institutions that disagree on the transferability of general education courses as defined by this chapter shall submit their disagreements to the Transfer Mediation Committee. The Transfer Mediation Committee shall address general questions regarding existing or past courses only, not individual student cases, and shall also address questions raised by institutions about the acceptability of new general education courses. 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.

.09 Appeal Process.

- A. Notice of Denial of Transfer Credit by the 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 the 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 the student 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.

.10 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)

Regulations .02, .03, and .05 amended. Effective date: July 1, 1996 (23:13 Md. R. 946)

Revised: February 11, 1998

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 Assistant to the Provost.

Stage I: Mediation

A student seeking review for a final grade in a course should make a reasonable effort to confer with the instructor 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.)

In cases where a resolution mutually acceptable to the student and the instructor is not forthcoming, and the student wishes to pursue a formal grievance, the student may proceed to Stage II.

Stage II: Formal Grievance

As a precondition to filing a formal grievance, a student must fulfill all of his/her responsibilities and meet the deadline specified in Stage I: Mediation above.

By the end of the 30th class day of the semester, a student wishing to grieve a grade must file a written grievance with the instructor's school 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.

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 Office of Affirmative Action/EEO 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 within ten class days a grade grievance committee of three tenured faculty members and shall schedule an informal, non-adversarial grade grievance hearing. 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 in order to protect the privacy of other students. At the conclusion of the hearing, the committee shall forward its recommendation to the dean, who 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. 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. Copies of the dean's decision, which shall be final, will be filed with the instructor and the chair.

Student Records Annual Notification

Under the Family Educational Rights and Privacy Act (commonly referred to as the "Buckley Amendment"), students have certain rights regarding the inspection and disclosure of education records directly related to the student and maintained by the University.

1. The right to inspect and review, with certain exceptions as stated in University Policy, the student's educational records. Requests for inspection should be made in writing and directed to the Registrar's Office.
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 right to privacy or other rights. A request to amend education records must be made in writing and submitted to the Registrar.
3. The right not to have the University disclose personally identifiable information contained in the student's education records without the student's prior, written consent, except to the extent such disclosure is authorized under the Buckley Amendment and implementing regulations.
4. The right to obtain a copy of the University's Policy on Compliance with the Buckley Amendment. Copies are available in the Office of the Registrar. That Policy contains a thorough review of the students' rights under the Buckley Amendment.
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 the Buckley Amendment. Complaints may be filed with the Family Policy and Regulations Office, U.S. Department of Education, Washington, D.C., 20202.

The following categories of information will be considered by the University to be directory information:

name, address, hometown, telephone, date of birth, major, activities, and sports, weight and height for athletes, dates of attendance, degrees and awards received, most recent educational agency or institution attended, classification.

Under the Buckley Amendment, this information may be disclosed without the student's prior consent unless the student submits on an annual basis a Non-Disclosure of Information Form with the Office of the Registrar. Parents may gain access to records as long as they provide the Registrar with a certified copy of their income tax return as proof of a student's dependency.

Non-Disclosure of Information Forms must be submitted to the Office of the Registrar by the end of the drop/add period each semester.