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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, tuition and fees, and course offerings may change during the period of your enrollment. Such changes will be published in official University publications such as the Undergraduate Catalog and Schedule Booklet, with prior notice of changes provided.

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.

In 1998, Frostburg State University celebrated the founding of our institution one hundred years ago. It was a time of celebration with the greater Frostburg community, as we joined with them to remember and give thanks to the townspeople and leaders who made that historic event possible. It was an exciting year!

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 1999-2000

Fall Semester 1999

Testing and Advising - 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
Parents' Weekend	October 8-10
Last day to withdraw from courses 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 22
Homecoming	October 22-24
Spring 2000 & Intercession regis., without payment	Oct. 25 - Nov. 12
Intercession registration, with payment	Nov. 15 - Dec. 10
Residence Halls close - 7 p.m.	Nov. 24
Thanksgiving Recess	Nov. 25 - 28
Residence Halls open - noon	Nov. 28
Classes resume	Nov. 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
Common Exams/Reading Day	December 11
Common Exams/Reading Day	December 12
Intercession course cancellations	December 14
Final Exams	December 13-17
Residence halls close 7 p.m.	December 17
Commencement	December 18

Spring Semester 2000

Residence halls open-9 a.m.	January 30
Classes begin	January 31
Late registration/drop/add	Jan. 31-Feb. 4
Last day to add classes	February 4
Summer school registration (without late fees)	March 6 - May 12
Last day to withdraw from courses with W - graduate students	March 10
Last day for removal of incomplete grades - undergrad. students	March 10
Mid-semester warnings distributed to undergraduate students	March 14
Residence Halls close - 7 p.m.	March 17
Spring Break	March 18-26
Residence Halls open - 12 noon	March 26
Classes resume	March 27
Last day to withdraw from courses with W - undergrad. students	March 31
Fall 2000 registration	April 3 - 21
Summer sessions course cancellations	May 16
Last day for removal of incomplete grades - graduate students	May 16
Last day to withdraw from courses with WF	May 16
Last day of classes	May 16
Reading Day	May 17
Final Exams	May 18-19
Common Exams/Reading Day	May 20
Reading Day	May 21
Final Exams	May 22-24
Residence halls close 7 p.m.	May 24
Honors Convocation	May 26
Commencement	May 27

Intercession 2000

Classes begin	Jan. 3
Martin Luther King Day, no classes	Jan. 17
Last day of classes	Jan. 28

Summer Sessions 2000

First Summer Session	May 30-July 3
Second Summer Session	July 6-Aug. 9
Internship Session	May 30-Aug. 22
MBA Session	May 30-Aug. 22

Calendar subject to change without notice.

The University

The Mission of the University

Frostburg State University (FSU), a multi-purpose, largely residential, regional university founded in 1898, is the University System of Maryland's only four-year institution west of the Baltimore/Washington metropolitan areas. It serves as a premier educational and cultural center for Western Maryland.

As a constituent institution of the University System of Maryland, FSU practices affirmative action, cooperates with other educational segments in Maryland, collaborates with other USM institutions to provide citizens access to high quality educational services, and serves the educational, economic and cultural needs of Maryland.

Frostburg State University's undergraduate programs combine a strong liberal arts foundation with preparation for a wide variety of professional careers and lifelong learning. Although primarily an undergraduate institution, Frostburg also offers several master's level programs responsive to regional and state needs.

Through the efforts of an excellent teaching faculty and a caring and responsible staff, the University provides a learner-centered environment which nurtures the physical and emotional well-being of its students and which aspires to involve every student in active learning.

FSU draws its diverse, largely residential and traditional student body from all areas of the State of Maryland, other nearby states, and a growing number of foreign countries. A substantial number of students come from the Washington and Baltimore areas. Frostburg invites applications from capable, serious students whose prior academic achievement ranks them in the top third of their high school or community college classes.

FSU offers a comprehensive array of baccalaureate and master's programs with a special emphasis on education, business, environmental studies, and the creative and performing arts. Programs in wildlife and fisheries, recreation, conservation biology, and environmental analysis and planning serve a state-wide need and enjoy the advantage of a diverse natural environment and a highly productive faculty engaged in research in environmental sciences.

Frostburg acknowledges its responsibility as the state university in western Maryland to offer life-long educational opportunities and professional development which are responsive to the needs of the people of the region. Frostburg State University's faculty and staff are actively engaged in environmental, educational, and economic research and service on state, regional and international levels. Through its academic and co-curricular programs, research, and service, Frostburg serves as a focal point for community cultural, educational, and public affairs activities.

This is an abbreviated version of the mission statement approved by the Board of Regents of the University System of Maryland and the Maryland Higher Education Commission.

Mission statements are under review. The new mission statement will be shared with the campus community when approved.

.....

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

Professor John Bambacus,
Political Science

.....

"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

.....

"Frostburg allows you to be yourself."

Todd Scott Unger,
Marketing, 1992

.....

"Community service gave me a sense of pride."

Jennifer M. Evans,
Accounting, 1993

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 34 different undergraduate majors. 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:

College of Liberal Arts and Sciences:

Actuarial Science
 Art and Design
 Biology
 Chemistry
 Computer Science
 Earth Science
 Electrical Engineering (in collaboration with UMCP)
 English
 Environmental Analysis and Planning
 Foreign Languages and Literature
 Geography
 History
 Justice Studies
 Mass Communication
 Mathematics
 Mechanical Engineering (in collaboration with UMCP)
 Music
 Philosophy
 Physics
 Political Science
 Psychology
 Social Science
 Social Work
 Sociology
 Speech Communication and Theatre
 Wildlife and Fisheries

College of Business

Accounting
 Business Administration
 Economics

College of Education

Business Education
 Elementary/Early Childhood Education
 Elementary Education
 Health and Physical Education
 Recreation

Inter-college Programs

International Studies
 Liberal Studies

Students have flexibility within some majors to select special areas of study. These special sequences of courses are called **concentrations**, **tracks** or **options** depending upon the standards for completing them. You will see these special groupings of courses listed under the majors to which they belong in the Courses of Study section.

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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

.....
 "As a history major at FSU, I gained a greater appreciation for the concept of the 'Past as Prologue'—what has gone before us has shaped the world as we know it."

Rita L. Knox,
 History, 1979

.....
 "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

Minors

You may also select from 31 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 include African American Studies, Art History, Coaching, Dance, Environmental Humanities, Environmental Policy, Fine Arts, Graphic Design, Public Relations, Women’s Studies, and Writing. These minors are listed separately in the Courses of Study section.

Distinctive Areas of Study and Focuses

The University offers 14 special course groupings which prepare students for different professions, or graduate programs, or give them academic distinction. Each of these areas of study is fully described in the Courses of Study section.

Dental Hygiene Preparation
Educational Professions
Education: K-12 Programs
Education: Secondary Programs
Engineering: Dual Degree Program
Honors Program
Law: Law School Preparation, Bachelors/Juris Doctorate 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

.....
“Service learning experiences help students learn something they couldn’t get in the classroom. When you work with people, there really is no right answer. It is not just a matter of memorizing theories—it is about applying them.”
Kathy Powell,
Chair, Department of Social Work

Choosing a Major

Career Services publishes a guide to selecting a major which is available in 107 Pullen 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.

- Majors Expo: annually in November
- Career Day: annually in October
- Computerized Career Guidance Programs: DISCOVER and VISIONS
- 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)

.....
“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

Declaring a Major

You may declare a major during admission, in October of your first year 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 114.

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.

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 at the USM Downtown Baltimore Center.

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.

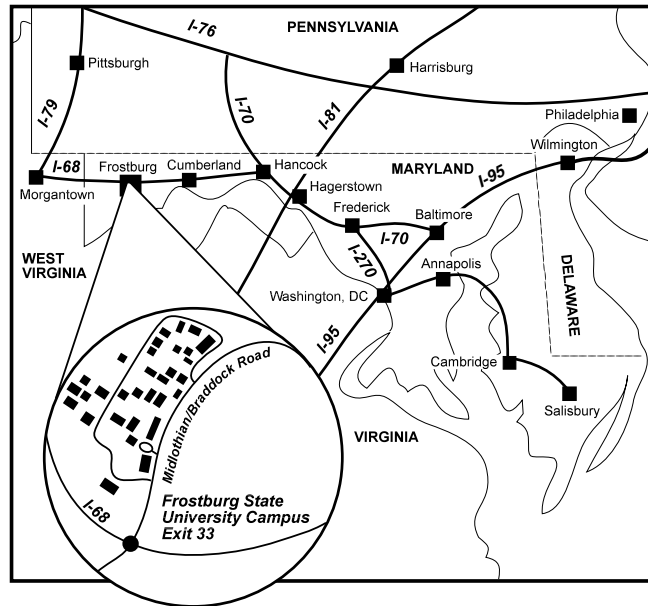
Getting to FSU

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 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. In the next few years, science facilities will be greatly expanded and improved through the renovation of Gunter and Tawes Halls, and the proposed 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.

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.

Student meals are served in the Chesapeake Dining Hall.

Executive offices are located in the Hitchins Administration Building.

Pullen Hall provides one-stop shopping for student services. Current occupants include the Office of

"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

Recruitment Services (Admissions and Financial Aid), Programs for Academic Support and Studies (P.A.S.S.), Disability Support Services, Student Support Services, the Counseling Center, Career Services, the Career Resource Center, Student Development, Upward Bound, the Regional/Math Science Center, Veterans' Affairs, and the University Children's Center. In late 1999, the offices of Graduate Services, Registrar, and University and Student Billing will relocate from Hitchins to Pullen to allow students to find the assistance they most often need in one location.

Specialized Facilities

Lane Center

This student union was built and operates with student fees. It contains student organization offices, bookstore, meeting and game rooms, restaurant and convenience store. Lane Center programs and services are described in the Campus Life chapter.

Performing Arts Center

Students studying 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.

Academic Computing

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

- Apple, Windows, and SGI 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 and programming languages through the academic mini-computer.

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.
- Assistance with general computer-related software and hardware questions and problems.

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

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"When the Communist Party removed books and forbade us from reading, it cut us off from the external world and thus blinded us. When I walked into the Lewis J. Ort Library on a mild sunny day in May 1992, I was amazed [that] I could reach those books, magazines, journals and newspapers. No sign said stop; no one told me to stay away from the bookshelves. I saw only smiling faces and heard a gentle voice of a librarian—"May I help you?" Suddenly I felt a burst of joy in my chest. It was a pleasure of release to freedom from long-time political and mental restraints."

Hua Lin Sun,
M.Ed., 1994

.....

"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



FSU's Performing Arts Center

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 1,300 subscriptions and 2,000 Web access titles
- Special collections with emphasis on Western Maryland
- Interlibrary loan services
- CD-ROM reference works
- Individual and group instruction for use of the library's print/electronic resources and effective research strategies
- Public Internet work stations
- Library's homepage at <http://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.

Distance Learning

Teaching and technology join together in the Distance Learning Classrooms to provide a cutting-edge learning environment supported by interactive video and multimedia equipment. In these "virtual" classrooms, students can participate in courses offered by other institutions as well as share on-campus classes with students at Frostburg State University's Hagerstown Center and at other locations throughout the State of Maryland. To find out more about distance learning, contact the Instructional Technology Support Center (301/687-4353).

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 301/687-4436.

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 in 104-105 Pullen Hall. 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 Women's Studies Program coordinator operates the Center, located in Room 510 of the Ort Library (301/687-7933).

Frederick and Hagerstown Centers

The Hagerstown Center (301/791-4020) offers a full MBA degree and a master's in education. Students may enroll in junior/senior-level courses leading to a bachelor's degree in accounting, business administration, justice 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 justice studies through evening and weekend classes.

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 "With Distance Learning opportunities, FSU students have the ability to interact academically with faculty and students of other colleges and universities. As the hub of Western Maryland's Interactive Distance Learning network, Frostburg State University is a regional leader in distributed learning as we move into the next century."

Karen Bambacus,
 Director of Instructional
 Technology, FSU

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	Townpeople 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 and the Tawes Science Hall and Planetarium in 1968.
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, Frampton 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	<ul style="list-style-type: none"> ● Bell Atlantic distance education classrooms were installed at Frostburg and the Hagerstown Center. ● FSU became the site of the Washington Redskins summer training camp.
1997	Groundbreaking for the Center for Environmental Science's Appalachian Laboratory was held.
1998	The University celebrated its Centennial with a year-long series of events.

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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

.....

"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

.....

"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.

.....

"Diversity is important because we need to know more about each other. It is not realistic at this stage in history to only 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

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)

Americans with Disabilities Act

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

It is committed to full compliance with the Americans with Disabilities Act (ADA). The ADA requires that all University programs, services, and activities be accessible to qualified individuals with disabilities. If a program or service is inaccessible to disabled persons, the University maintains responsibility for providing reasonable 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).

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 -- Maryland State Department of Education
- 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

Admission

Office of Recruitment Services
(Admissions/Financial Aid)
114 Pullen Hall
301/687-4201; FAX 301/687-7074

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 three factors: high school grade point average in academic subjects, performance on the SAT, and completion of a college preparatory program.

High School GPA

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

Performance on the SAT

The applicant's performance on the verbal and math sections of the SAT should be in the range that would normally predict success in college. However, our University does not set predetermined cut-off points on the SAT.

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* advanced technology education in a state approved Tech Prep program. The foreign language requirement may be waived for students who demonstrate proficiency in a foreign language if their high schools 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 their strengths and weaknesses in those areas.

If students earn below a predetermined standard on these examinations, they will be required to pass specified courses their first semester to develop their skills to a level which will enable them to function successfully at the University. Students are expected to reach these levels within two semesters or they will not be retained.

Transfer students

See separate section on the next page.

Special Standards

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

Right to Refuse Applications

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

First Year Admissions Procedures

Applications for admission are generally available through your high school guidance office or by contacting the Admissions Office at the University.

After completing the application, you should mail it directly to the Admissions Office. A non-refundable application fee of \$30 (check or money order) should be mailed directly to the University and Student Billing Office at the same time the application is mailed.

As part of your application, you must provide the University 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.

The SAT of The College Board is required for admission. You should take the SAT 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 sent to the University Admissions Office. Frostburg State University's College Board identification code is 5402. ACT test scores also are accepted.



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		

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. 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 above 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 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 will not seriously be considered for any student whose high school academic average is lower than 2.0 and whose SAT scores are below 800.

Campus Visits

The University does not require a campus visit for admission, but touring our facilities and speaking with students, faculty and ad-

ministrators 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 records, those who have completed part or all of your secondary and/or post-secondary education outside the United States, must follow the guidelines below in preparing your application.

- 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 560

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 (see international student admissions packet for list). Your credentials will be evaluated and a report forwarded to the Office of Admissions. No 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 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) Complete the Health Insurance Confirmation Form and submit it to the Office of Admissions. You are required to maintain adequate health insurance to continue as an active FSU student and as a valid F-1 visa holder.
- 7) Make sure all supporting documents are on file in the Admissions Office six months prior to the semester when you hope to begin your studies.

You cannot be granted admission or issued an I-20 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.

More detailed information about these requirements can be obtained by contacting the Office of Admissions.

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 Director of Admissions.

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

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, fees 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 Board of Regents' Policy on Student Residency Clas-

sification (*see below*) fully explains the policy and the procedures for establishing in-state residency.

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.

Policy on Student Residency Classification

The complete Board of Regents' Policy for Student Residency Classification is reprinted in this catalog's chapter on policies and is summarized below. In general, residency is based on domicile or special categories; and it is the policy of the University System of Maryland to assign out-of-state status to all other applicants.

- 1) If you are financially dependent on a parent, legal guardian, or spouse, the domicile of the parent, guardian, or spouse determines residency. If you are financially independent, your domicile determines residency.
- 2) To qualify for in-state status on the basis of domicile, you, or if you are financially dependent, your parent, legal guardian, or spouse, must have maintained domicile in Maryland for at least twelve (12) consecutive months immediately prior to and including the last date available for late registration for the forthcoming semester or session and must have continuously domiciled in Maryland during that period.

In addition, the following categories of students are granted in-state status:

- 1) The spouse or dependent child of a full-time or part-time (at least 50 percent time) permanent employee of the University System of Maryland;
- 2) A full-time member of the Armed Forces of the United States who resides in Maryland, or the spouse or financially dependent child of such a person;
- 3) A full- or part-time (at least 50 percent time) employee of the institution who is not on temporary appointment;
- 4) A graduate assistant at the institution.

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 December 1998, 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 Recreation Management/Adventure Sports Track (South Carolina, Virginia); M.S. in Applied Ecology and Conservation Biology (Tennessee); M.S. in Wildlife/Fisheries Biology (Delaware, Kentucky); and M.A. in Modern Humanities (Tennessee).

For further information, contact your state's higher education agency, the Southern Regional Education Board (404/875-9211), the Maryland Higher Education Commission (410/974-2971) 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 1999-2000 only. Please see appropriate Academic Schedule Booklets for 2000-2001 rates. All charges for tuition, room and board, and other fees and expenses are subject to change at any time by Frostburg State University and/or the Board of Regents of the University System of Maryland.

Tuition

Tuition for legal residents of Maryland is \$1,608 per semester plus all other applicable fees at the University. Tuition for out-of-state students is \$3,958 per semester plus all other applicable fees at the University.

Evening and part-time tuition is \$134 per credit hour for resident undergraduate students, \$236 per credit hour for non-resident undergraduate students, \$174 per credit hour for resident graduate students, and \$202 per credit hour for non-resident graduate students.

Summer tuition is \$134 per credit hour for resident undergraduate students, \$236 per credit hour for non-resident undergraduate students, \$174 per credit hour for resident graduate students, and \$202 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 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 \$4,558 per year to \$5,608 per year. Room con-

tracts 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 \$55 per semester for full-time students or \$8 per semester 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 \$155 per semester for full-time students and a \$15 per credit hour fee for part-time students is used to support the University's program in inter-collegiate 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

Undergraduate Tuition & Fees 1999- 2000

Tuition - full time (12 cr. or more)	1st Semester	2nd Semester	Total
Maryland Residents	\$1,608	\$1,608	\$3,216
Out-of-State Residents	3,958	3,958	7,916

Mandatory Fees

Activities Fee	\$55	\$55	\$110
Athletic Fee	155	155	310
Auxiliary Facilities Fee	65	65	130
Student Union Operating Fee	85	85	170
Transportation Fee	10	10	20
Total Fees	\$370	\$370	\$740

Total Tuition and Fees

Maryland Residents	\$1,978	\$1,978	\$3,956
Out-of-State Residents	4,328	4,328	8,656

Room Charges

Frederick, Westminster	double	\$1,317	\$1,317	\$2,634
All other halls	double	1,287	1,287	2,574
	small single	1,408	1,408	2,816
	large single	1,528	1,528	3,056

Board Charges

Carte Blanche with \$200 bonus bucks	\$1,282	\$1,282	\$2,564
Block Plan -150 meals w/\$100 bonus bucks	1,239	1,239	2,478
14-meal with \$100 bonus bucks	1,172	1,172	2,344
12-meal with \$250 bonus bucks	1,272	1,272	2,544
10-meal with \$75 bonus bucks	1,071	1,071	2,142
Straight 10-meal	992	992	1,984

Total tuition, fees, room and board*

Maryland Residents	\$4,577	\$4,577	\$9,154
Out-of-State Residents	6,927	6,927	13,854

*based on \$2,634 room rate and \$2,564 board rate

All fees subject to change.

of the auxiliary facilities.

Student Union Operating Fee: A Student Union operating fee of \$85 per semester for full-time students and \$9 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 Allegany Transit Authority buses by showing a student ID.

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.

Deferred Payment Participation Fee: A \$50 participation fee is charged 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 \$10 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) 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 \$20 and \$25 respectively for students enrolled in GEP science laboratory courses and courses utilizing the Academic Computing facility are collected to cover laboratory supplies, equipment, software.

Directed Practice Fee: A directed practice fee of \$100 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.

Room Reservation Fee

When you select or receive a room assignment, you must pay a \$100 room reservation fee. You will forfeit this room reservation fee

- (1) if you cancel your room for the fall semester after June 30;
- (2) if you receive your room assignment after June 30 and cancel the assignment later;
- (3) if you enter as a new student in the spring semester and cancel your room before the first day of classes.

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 specified 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

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
Biology (BIOL 109, 149)	\$20
Business Admin. (BUAD 320)	\$25
Chemistry (CHEM 100, 101)	\$20
Computer Sci. (COSC 100, 220, 230)	\$25
Geography (GEOG 103, 113)	\$20
Mathematics (102)	\$75
Physical Sci. (PHSC 101, 203)	\$20
Physics (PHYS 215, 261)	\$20
Sociology (SOCI 310)	\$25

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.
- 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 service charge of \$50.00 is added to each deferred payment.
- 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 May for the Fall semester. There is a 5 month plan available for graduating seniors. A \$10 handling charge is assessed for payments 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 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
Room reservation fee	- if written cancellation is received by June 30	100% refund
	- after June 30 prior to the fall semester	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		

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.

Pro-Rata Refund Policy for Title IV Recipients

Frostburg State University has a pro-rata refund policy that is mandated by federal regulations for Title IV recipients. It is appli-

cable to first-time students at our institution who withdraw before 60% of the enrollment period has elapsed. Details on the calculation process for this refund policy are available upon request from the Financial Aid Office or University and Student Billing Office.

In a case where a student withdraws or changes enrollment status and had received financial aid, their aid will be adjusted in the following sequence: (Federal Stafford, Federal Unsubsidized, Federal PLUS Loans), Federal Perkins Loan Program, Federal Pell Grant Program, Federal SEOG Program, Federal Work-Study. This sequence is part of FSU's refund policy concerning student financial aid programs.

Personal Funds

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

Financial Aid

Office of Recruitment 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. This is the only application necessary for Federal and State aid. The Free Application for Federal Student Aid includes detailed instructions and is available in late November/early December through our office or through high school guidance offices and higher education financial aid offices throughout the country. Mid-year transfers must secure financial aid transcripts from previously attended institutions. These transcripts must be on file at FSU before we will disburse any financial aid.

- 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 below. 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 and listing Frostburg State University in Step 5. Our Title IV code is 002072. The applicant will receive a Student Aid Report indicating eligibility approximately four weeks after submitting the FAFSA.

Federal Supplemental Educational Opportunity Grant Program - 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.

*rate subject to change



Educational Expenses

	In-State Resident	Out-Of-State Resident
*Tuition	\$3216	\$7916
*Fees	740	740
*Room and Board	5113	5113
Books	700	700
Transportation	500	700
Personal	900	900

*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.

Freshmen may borrow \$2,625 per year; sophomores, \$3,500; and for those who have attained junior class standing, \$5,500 per year. However, the amount you may borrow in any given year may not exceed the educational costs as certified by the Financial Aid Office. The aggregate amount one may borrow as an undergraduate cannot exceed \$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.

Federal Plus Loans

(Parent Loan to 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

Applicants for these awards must:

- (1) Be a Maryland resident
- (2) 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 (410/974-5370).

FSU Grants

Criteria:

- You must be a U.S. citizen.
- You must demonstrate financial need through the federal application process.
- You must have filed 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, at 301/687-4137.

Refund\Repayment Policy

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

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 Education 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

Full-time students will be evaluated for completion of minimum required number of credits (9 each semester). Additionally, students' records will be reviewed to determine if, based on the number of semesters a student has been in attendance, s/he has accumulated the number of total required credits. Example: a full-time student completing the 5th semester must have completed at least 45 credits (5 semesters x 9 credits per semester =

45 credits). All part-time students receiving financial aid must successfully complete a minimum of 6 credits per semester. 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 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 cumulative 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 responsibility 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.

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,WF) 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.)

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 to the above, 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 below.

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 Alderton, 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.

HallSTARS! Americorps Program

An FSU/Corporation for National Service Initiative

Eighty outstanding first year students committed to the concept of service in their communities, and enrolled for the 1999-2000 academic year, will be selected to participate in the HallSTARS! service program.

The HallSTARS! program is a unique, residential based living-learning environment designed to integrate community service activities and first year educational course work within the framework of an AmeriCorps Educational Awards Program. Students will perform 450 hours of combined service, training

activities and General Education Program (GEP) academic courses. Upon successful completion of the program, students will receive an educational award of \$1181 from the Corporation for National Service which can be used for educational expenses or applied towards an approved college loan. Those students who return to live on-campus for their sophomore year will receive an additional \$419 from Frostburg State University towards their residence hall room expense, for a total AmeriCorps/FSU educational award of \$1600.

Applications will be available from the Office of Admissions.

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.

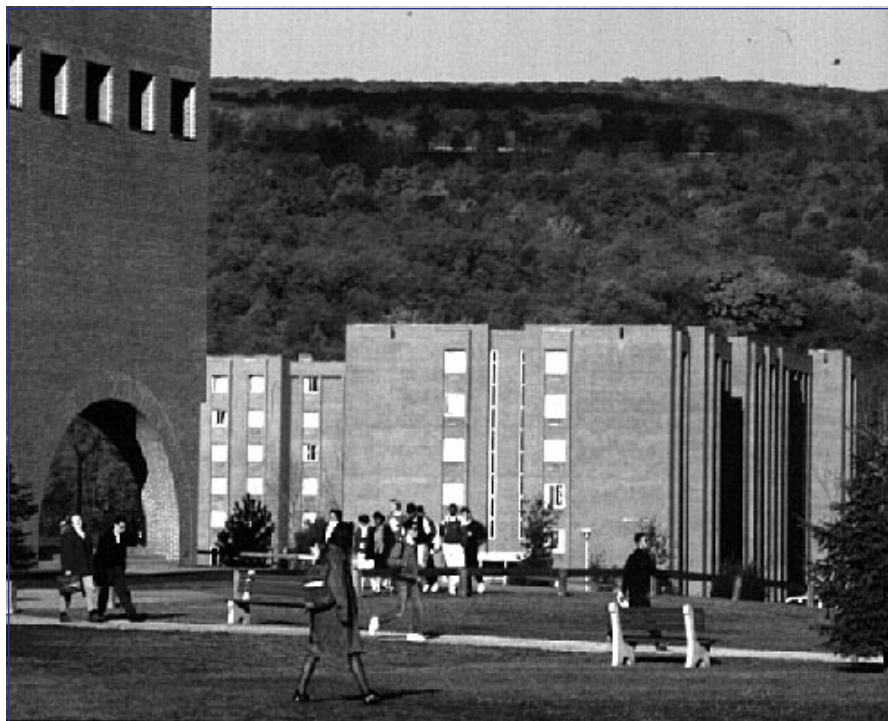
- Once you select a meal plan, that plan will continue unless you notify the University and Student Billing Office by the deadline. If you do not select a plan, the University and Student Billing Office will automatically assign you a meal option. See the Expenses, Financial Aid and Scholarships chapter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



Frederick and Westminster Residence Halls

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 which can help you develop an understanding of cultural differences and helps you develop the skills needed to work effectively with groups of different ethnic background; assists minority students in learning how to negotiate the University environment, and monitors the academic and social adjustment of students.

(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 de-

partments, 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 accom-

modations, 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.



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 (301/687-4226) 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.
- **Health Insurance and Fees:** Your tuition includes limited health care provided by the Brady Health Center. 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*, 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.
- **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 include the Graduate Record Exam, PRAXIS, Law School Admission Test, Medical College Admissions Test and others.

- **Alcohol/Drug Education Program:** The Counseling Center 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. The Counseling Center also provides individual and group counseling for students concerning substance abuse issues.

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 (Pullen 108) 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
- Visions, a computerized Maryland Occupation 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 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 fireplace lounge, game rooms, ticket office, a restaurant, and meeting rooms are all located here. The campus community uses the Lane 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 Center and Campus Activities Office (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. Its annual activities include

- Parents' Weekend
- 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 (301/687-4411) presents programs by distinguished performers and speakers like Metropolitan Opera star James Morris, Ed Bradley of *Sixty Minutes*, the Joffrey Ballet, the Moscow Boys' Choir, the National Theatre of the Deaf as well as Broadway musicals like *Ain't Misbehavin'*.

University departments also present major theatre productions featuring student actors, numerous music performances, poetry readings, lectures, art shows and other events.

Community Service

University students provide thousands of hours of community service each year. Volunteer work is coordinated through the Center for Service Learning (301/687-7598) which sponsors numerous projects and student organizations such as:

- READ TO SUCCEED! Program
- VOICE Program (Volunteer Opportunities in the Community Environment)
- VISTA Youth Service
- Environmental & Recycling Projects
- Student Organizations including Alternative Break, Alpha Phi Omega, the LEAD Team, and MAC (Making A Change)

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, in learning about local customs and culture, in adjusting to campus life, and in understanding the U.S. educational system. Call the Center for International Education (301/687-4714) for advising and programs.

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.



Scene from the recent University Theatre production of “Summer and Smoke.”



Department of Athletics

Frostburg State University has one of the finest and most comprehensive varsity sports programs in the country. FSU offers 20 inter-collegiate 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 baseball, 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, Eastern College Athletic Conference (ECAC) 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.

The athletic department also 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 of seven social fraternities or seven social sororities on campus which offer students opportunities in

- leadership
- community service
- personal development.

The coordinator of Greek Affairs 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.

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 Choral Directors Association
Art Club
Computer Club
Dance Club
Delta Omicron
Finance Club
Frostburg Business Association
Frostburg Marketing Association

Geography Club
History Club
Justice Studies Club
Phi Mu Alpha Sinfonia - music
Physics Club
Political Science Club
Psychology Club
Society for Advancement of Management
Sociology/Social Work Club
Spanish Club
Student Education Association
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

continued on page 26



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
 Psi Chi - psychology
 Sigma Beta Delta - business
 Sigma Delta Pi - Spanish
 Sigma Tau Delta - English
 Upsilon Pi Epsilon - computing sciences

Community Service

Alpha Phi Omega
 Alternative Break
 Best Buddies
 Making a Change
 Sierra Student Coalition

Greek Life

I.F.C. (Inter Fraternity Council)
 Delta Chi
 Phi Kappa Tau
 Pi Lambda Phi
 Sigma Alpha Epsilon
 Sigma Tau Gamma
 N.P.C. (National Panhellenic Conference)
 Alpha Sigma Tau
 Alpha Xi Delta
 Delta Zeta
 Phi Mu
 Phi Sigma Sigma
 N.P.H.C. (National Pan-Hellenic Council)
 Delta Sigma Theta
 Omega Psi Phi
 Phi Beta Sigma
 Zeta Phi Beta

Special Interest

Advertising Club
 AIDS Peer Educators
 Afrikan Student Network
 Amnesty International
 Athletic Training Club
 BURG/Peer Education Network
 Encore
 Fourth Dimension Science Fiction Club
 Frostburg Riders Club
 Gay, Lesbian and Bisexual Alliance
 G.O.L.D. (Generating Opportunities for Leadership Development)
 Intramural Officials Association
 L.E.A.D. (Leadership Education and Development Team)
 Martial Arts Club
 Maryland Student Legislature
 NAACP
 National Broadcasting Society
 Noble Order of the Unicorn
 Paintball Club
 Photography Club
 The Roots
 Ski Club
 Student Alumni Ambassadors
 Theatrical Visionaries
 Unified Voices Under God's Dominion

Religious Organizations

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

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, and (3) Bachelor of Fine Arts. We also offer the degrees of Master of Business Administration, Master of Education, Master of Arts, 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 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 75 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 212-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.

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.

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.

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.

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.
- Once you are enrolled in a Basic Requirement English course or HEED 100, 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

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 hours)

One of the following courses in mathematical problem solving:

MATH 104 Mathematical Problem Solving

MATH 102 College Algebra

MATH 120 Precalculus

MATH 207 Problem Solving for Elementary Teachers II

MATH 209/219* Elements of Applied Probability & Statistics

MATH 226 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.
- Prerequisites for the Freshman Project (IDIS 191): freshman standing; Learning Community member during the previous fall semester; and permission of the instructors.

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: CMAT 106 Intro. to Theatre
or CMAT 107 Intro. to Theatrical Vision
- Dance: PHEC 135 Dance Appreciation

B. Humanities:

(6 hours)

Choose Option 1 or 2:

Option 1: Select at least two of the following:

- History: HIST 100/111* 20th Century World History
- 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 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 211/213* Introduction to World 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

or the Freshman Project course (IDIS 191) and a minimum of three additional credits 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 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.

Majors offered at FSU	Career Cluster**
Accounting*	2
Actuarial Science*	2
Art and Design	6
Biology*	3,4,5
Business Administration*	1,2
Business Education	2,8
Chemistry*	3,4,5
Computer Science*	3
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
Foreign Languages & Literature*	1,6
Geography*	1,4,7,9
Health & Physical Education*	1,5,8
History*	6
International Studies	1,2,8
Justice Studies	8
Liberal Studies	all
Mass Communication	6
Mathematics*	3
Music*	6
Philosophy*	6
Physics*	3,4,5
Political Science*	8
Psychology	5,8
Recreation	1,4,5,8
Social Science	8
Social Work	5,8
Sociology*	8
Speech Communication & Theatre*	6
Wildlife & Fisheries	4

Minors

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

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, Justice Studies, and Sociology is offered at the FSU Center at Hagerstown.

The Frederick Center offers Business Administration and Justice Studies.

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 Environmental Analysis and Planning, Earth Science, International Studies, Justice Studies, Liberal Studies, and Social Science. You may also elect to complete an interdisciplinary minor such as African-American Studies, Environmental Humanities, Environmental Policy, 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 nine 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 nine 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

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. Beginning as freshmen, students participating in Learning Communities can continue studies in the Freshman Project course, in which class members prepare a project that applies the theoretical perspectives of the disciplines studied in the first semester.

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.

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

3. If you 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. 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

Learning Communities

Learning communities at FSU are designed to help new students build support networks important for academic success with their peers, the faculty, and the University. Each learning community is organized around a theme and consists of three or four linked courses, including 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 of their community.

The faculty who teach learning communities work together to coordinate readings and assignments. They also arrange learning community activities that help students learn outside of the classroom. New learning community themes are offered each year. Past themes have focused on the world of business, wellness, self-esteem and life-skills, learning and teaching, leadership, international relations, human society and the environment, multiculturalism, and engineering.

Learning communities offer entering students small classes and easier class registration. Community activities provide students a greater chance for interaction with one another and with their teachers. Most learning community courses fulfill FSU's General Education Program requirements and are open to first-semester freshmen.

Freshman Project

Selected fall semester learning communities continue into the following spring term as Freshman Project courses. In each Freshman Project course, students and instructors work together to apply in a real-world or laboratory setting the principles and concepts examined in their learning community during the previous fall semester. Students in each course will produce class projects shared with the University community at the end of the semester. Students successfully completing Freshman Project courses earn three hours of elective credit in the liberal arts component of the General Education Program.

Special Academic Services

The Office of Special Academic Services provides advising services for undeclared transfer and reentry students, administers academic eligibility compliance for FSU's NCAA athletes, and coordinates University Commencements. You are welcome to stop by the office at any time if you've questions on any of these areas. The office is located in the Ort Library, room 509, extensions 3130 or 4489.

Intersession

In January, GEP, major, special topics, and international study courses are offered in a compressed time period, usually 18 to 20 days. Intensive study is required during this session between the fall and spring semesters.

One three-credit course enrollment limit is recommended, although you can register for two courses and up to six credits. To register for Intercession, you may not be on academic probation during the fall semester. Refer to the intercession bulletin for further information.

Summer School

From May through August, a program of courses is offered during two sessions of six weeks and one of twelve weeks. Within sessions, classes are offered during the day and evening, in compressed times, and at multiple sites. Experimental teaching strategies, timely topics courses, and international study enrich the array of classes leading to degree requirements. Nearly 1,300 undergraduate and graduate students register for Summer School courses. Some students study to advance while others explore interests and some seek enrichment. Refer to the Summer School bulletin for further information.

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 INS regulations, and extracurricular programming.

Study Abroad Programs at FSU

Currently, FSU students may choose from a wide range of study abroad programs which are designed to suit a variety of academic and financial needs. Most students study abroad during their junior year, although it is possible to arrange programs during the sophomore or senior year as well. Programs vary in length and academic focus. Some programs are designed specifically for graduate students.

Interested students are advised to visit the CIE Office for individual guidance in choosing a program, or to attend one of the CIE study abroad information meetings held every semester. For further information, call the CIE Office at 301/687-3091 or visit our web page.

Study Abroad Opportunities

Program Country/University	Terms Offered	Language of Instruction	Subject Specialties
Ireland: Mary Immaculate College	Spring Semester	English	Arts, Humanities, and Sciences
International Student Exchange Program (ISEP)	Semester or Academic Year	Optional	Arts, Humanities, and Sciences
Mexico: National Autonomous University of Mexico	Semester or Academic Year	Spanish	Arts, Humanities, and Sciences
England: University of Northumbria at Newcastle	Semester or Academic Year	English	Art History, Design, Economics, Political Science, Psychology
Italy: American University of Rome	Semester or Academic Year	English	Arts, Humanities, and Sciences
Spain: University of Navarra, Pamplona	Semester or Academic Year	Spanish	Spanish Language, Literature, History & Culture
Ecuador: Centro de Estudios Interamericanos	Intercession; Summer	Spanish	Spanish, Latin American Studies, Biology
Canada: University of Quebec	Intercession	French	French Language and Culture
Africa: University of Ghana	Summer	English	Humanities and Social Sciences or Art and Design
England: Oxford University	Summer	English	Arts, Humanities, and Sciences
Germany: UMUC at Schwaebisch Gmuend	Summer	English	Arts, Humanities, and Sciences
Ireland Social Work Field Experience in Limerick	Summer	English	Human Services

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.

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, inter-session and the summer session. Apply at the CIE Office.

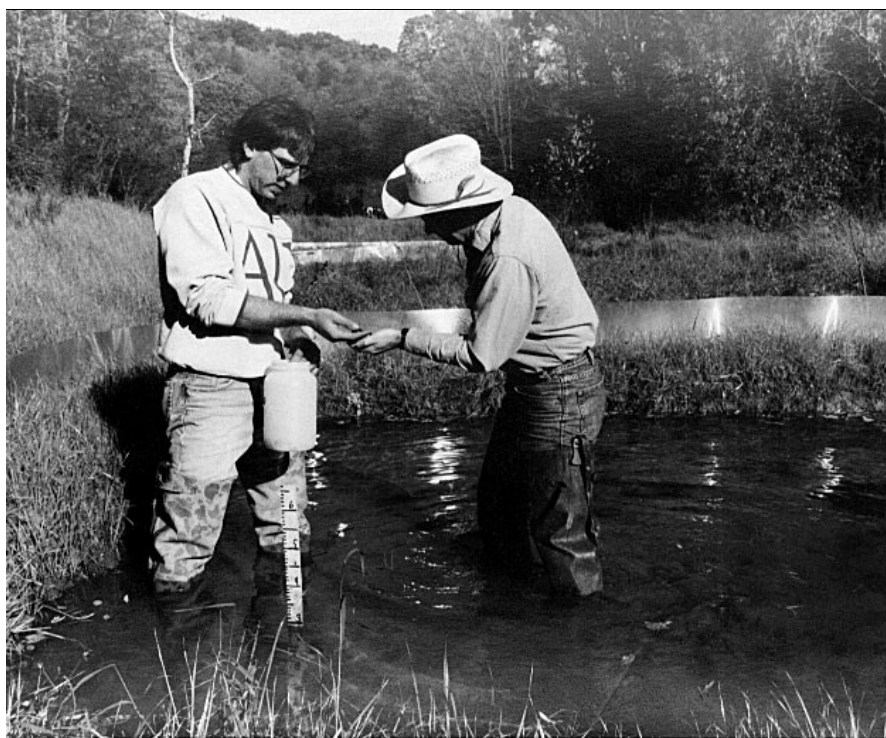
The International Program at FSU

Each semester Frostburg State University hosts a number of international students from all over the world. Faculty from international universities also join the FSU teaching faculty. The Center for International Education provides a number of services for both international students and faculty, including immigration advice, academic counseling and information about the surrounding communities. The International Program also provides social events, weekend excursions and fun days out for international students and faculty.

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. See the degree program listings for descriptions of current programs and selection criteria.

Graduate Studies

You may pursue such degree programs as MA, MBA, M.Ed., 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; our centers in Hagerstown, Frederick, and Baltimore; and distance education locations in the Allegany and Garrett County public schools.

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). Interdisci-

- plinary 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. In elementary education, complete the Master of Arts in Teaching, including any undergraduate course work deficiencies. Information about the Master of Arts in Teaching (Elementary) is available from the Department of Educational Professions and will be published in the 2000-2002 FSU *Graduate Catalog*. In the future, M.A.T.'s in secondary education will also be offered.
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.

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.

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 a Frostburg State University cumulative grade point average 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 no-

tifying 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 School offering the course, who will grant approval only under exceptional circumstances (e.g. serious illness) documented by the student, with information provided by the instructor of the course. 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 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, 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 earned (including previous transfer credit), 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 approved by the department chair or coordinator, and only if you will earn half of your major or minor credits at Frostburg State University.

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 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 Frostburg State University:

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 diagnos-

tic 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. If you are unsuccessful, you must re-enroll in the relevant course(s) in your second semester. If you do not meet the standards at the end of your first two semesters of 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 the Counseling Center.

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. These examinations may be in three forms: Advanced Placement Examinations; College Level Examination Programs (CLEP); and special departmental examinations. (The International Baccalaureate is being reviewed for credit.) 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. Of-

ficial transcripts will be forwarded to designated parties or may be picked up in person.

Withdrawal from the University

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

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

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

Graduation

To graduate with a Bachelor of Arts, Bachelor of Fine Arts, or Bachelor of Science 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 75 credit hours, or 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 appeal to the Academic Standards Subcommittee well in advance of the proposed commencement date.

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	Withdrew
WF	Withdrew after the withdrawal deadline (counts as an F, failure)
FX	Withdrew 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-Withdrew; WF-Withdrew After Deadline (Failing); FX-Withdrew Unofficially (Failing). The FX will be given only if you

have failed to withdraw or drop officially or have stopped going to class prior to the end of the semester. Failure to pass the course because you did not take the final exam or complete other course requirements will be recorded as an F grade rather than an FX.

NC Grade

The grade NC (No Credit) is to be used at an instructor's option (instead of a grade of F) if you have put forth effort to master the content of the course but have not achieved at a level to warrant a grade above F. The NC Grade may be used only if you have earned fewer than 56 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 Environmental Analysis and Planning; Earth Science; International Studies; Justice Studies; Liberal Studies and Social Science.
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 attempted 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 mathematics within your first two semesters of enrollment (see section 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. Your 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.
3. 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.
4. If you are reinstated on appeal, you will have to agree to meet specified conditions listed in the response to your appeal.
5. 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.

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 control which interfered with your ability to complete the required credits in a particular year, but you are still making satisfactory progress towards graduation.

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.

Rules established by the NCAA for Divisions I and II serve as guidelines for acceptable circumstances. To request an exception, you must submit a written appeal to the Athletics Program Advisory Group.

- b. 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.



Courses of Study

Accounting

Major and minor Combined BS/MBA Option

Professors:

Bandura, Plucinski,
Robinson (Chair), D.
Simmons

Associate Professors:

Groer, Hollar,
R. Johnson, Middleton,
Shaffer-Wilson

- 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.

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 165 hours of course work. After July 1, 1999, 150 hours of academic credit will be required of all CPA exam candidates. Completion of this combined BS/MBA program and an undergraduate elective course in Business Ethics will meet all requirements for CPA exam candidacy. A Business Ethics course may be taken as a general elective in the 120-hour undergraduate degree program.

Eligibility requirements for the combined BS/MBA

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

	For Major	For Minor	Combined BS/MBA
Hours Required in Accounting:	39	18	
Hours Required in Other Departments:	39	0	
Total Hours Required:	78	18	150

Summary of Requirements for Major/Minor in Accounting

Major	Minor
1. Introductory Level Courses: <i>(6 hours)</i> ACCT 201* Introductory Accounting I ACCT 202* Introductory Accounting II	<i>(6 hours)</i> ACCT 201 Introductory Accounting I ACCT 202 Introductory Accounting II
2. Intermediate Level Courses: <i>(9 hours)</i> ACCT 301* Intermediate Accounting I ACCT 302* Intermediate Accounting II ACCT 305* Accounting Systems	<i>(3 hours)</i> ACCT 301 Intermediate Accounting I
3. Distribution Within Department: <i>(18 hours)</i> ACCT 315 Cost Accounting ACCT 316 Advanced Cost Accounting ACCT 325 Auditing ACCT 380 Business Law for Accountants ACCT 401 Advanced Financial Accounting I ACCT 420 Tax	<i>(0 hours)</i>
4. Elective Hours in Department: <i>(6 hours)</i>	<i>(9 hours)</i> <i>From courses numbered higher than 301</i>
5. Required Courses in Other Departments: Business (9 hours) BUAD 351 Management of Organizations BUAD 361 Principles of Marketing BUAD 376 Financial Management	

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

Communication and Theatre Arts: (3 hours)

CMAT 102* Introduction to Speech 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 220 Calculus for Applications

MATH 106 Algebra with Calculus for Business

6. Elective Courses: (9 hours)**3 hours** in Economics (numbered higher than 202);**6 hours** from among courses in Accounting, Business, Computer Science and/or Economics (numbered higher than 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).****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 Legal Environment of Management

MGMT 580 Planning in the Managerial Environment

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

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

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. Variable. *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. Variable. *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. Variable. *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 only. *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 only. *Prerequisites: C grade or better in both ACCT 305 and 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 only. *Prerequisites: C grades or better in ACCT 302 and ACCT 305.*

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 only. *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. Variable. *Prerequisites: C grades or better in ACCT 301 and ACCT 305.*

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. Variable. *Prerequisite: Business Administration 370 or at least a C in ACCT 302.*

ACCT 380 Business Law for Accountants 3 cr.
The legal responsibility of accountants, contracts, personal property, documents of title, performance of sales contracts, passage of title and risk of loss, remedies of a seller and buyer, warranties, negotiable instruments and bankruptcy. Variable. *NOT OPEN AS AN ACCOUNTING ELECTIVE FOR MAJORS OR MINORS WITHOUT DEPARTMENT PERMISSION.* *Prerequisite: ACCT 202.*

ACCT 401 Advanced Financial Accounting I 3 cr.
Business combinations, consolidated financial statements using purchase and pooling methods, accounting errors and changes, other current topics. Variable. *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, non-profit entities, installment sales, consignments, interim reports, SEC reporting, bankruptcy, multinational entities, estates and trusts. Variable. *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 only. *Prerequisite: 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. Variable. *Prerequisites: C grade or better in ACCT 305 and ACCT 420.*

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 non-profit accounting. Minimum of 135 clock hours of experience. 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/Internship 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.*

ACCT 495 Internship in Accounting**9 or 15 cr.**

Guided work experience in public accounting, industry, government or non-profit accounting. Minimum of 360 clock hours on internship for 9 credits. Minimum of 600 clock hours (full-time work) for 15 credits. Academic component consists of two research papers on internship-related topics and a detailed report on the internship. Credit hours determined by departmental Field Experience/Internship Committee. Credit hours cannot be used toward accounting major requirements. Previous experience not acceptable for credit. Graded P/F. 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. Variable.

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.**

Study of contemporary issues concerning Africans of the Diaspora. Examines, in seminar format, some historical challenges to African Americans, along with adjustments made and initiatives taken in the face of various Euro-American systems and institutions. Variable.

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 Foundational Studies I**3 cr.**

Introduction to art as an intellectual, perceptual process. Critical study, art vocabulary, use of multi-media; visual organization and formalistic analysis of two- and three-dimensional design. Required of all art majors and minors. Two hr. lecture, 2 hr. lab. Fall only.

ART 105 Foundational Studies II**3 cr.**

Visual organization and formalistic analysis of two- and three-dimensional design. Critical study and the development and use of multi-media. Required of all art majors and minors. Two hr. lecture, 2 hr. lab. Spring only.

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 semester only. *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. 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 Core Review**0 cr.**

Graded P/N. May be taken no more than three times. Every semester.

ART 300 Introduction to the Visual Arts**3 cr.**

Experience and theory in art techniques, media, ideas, and teaching methods. Four hrs. combined studio and lecture. 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. Variable.

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. Variable.

- 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. Every semester.
- 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. Variable.
- 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. Variable.
- 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.
- ART 407 Advanced Graphic Design: Print & Video Media** 3 cr.
Continued study of print media and an introduction to video media. Students 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.
- 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. Variable.
- 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 core 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. 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. Variable. *Prerequisites:* ART 360 or ART 408, junior or senior standing.
- 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.
- 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.
- ART 435 Advanced Photography** 3 cr.
In-depth photographic exploration of selected subject matter. Unified photographic thesis required; critical analysis and research into historical and contemporary trends. At advanced levels, departmental majors will be involved in research and development of concepts culminating in a final senior exhibition or internship. May be taken no more than 4 times for credit. Two hr. lecture, 2 hrs. lab. Every semester. *Prerequisite:* ART 235.
- 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.
- 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*. Variable.
- 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 Seminar** 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.

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. Both semesters.

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. Both semesters.

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. Both semesters. *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. Both semesters. *Prerequisite:* BIOL 149 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 lectures and two 2-hour laboratory periods per week. Not for majors. Fall only. *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 lectures and two 2-hour laboratory periods per week. Not for majors. Spring only. *Prerequisite:* BIOL 201 or permission of instructor.

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 only. 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. Both semesters. *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 only. *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 hours lecture and two 2-hour laboratory periods per week. Both semesters. *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-hour labs. Fall only. *Prerequisite:* BIOL 149.

BIOL 306 Vertebrate Embryology

4 cr.

Development of the vertebrate from gametogenesis to the establishment of organ systems. Two hours lecture and two 2-hour labs. Spring only, 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 hours lecture, two 2-hour labs. Fall only, 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 hours lecture, one 2-hour lab. Fall only. *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-hour labs. Fall only. *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-hour labs. Spring only. *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-hour labs. Once per year. *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-hour labs. Both semesters. *Prerequisite:* BIOL 150.

BIOL 334 General Animal Behavior

3 cr.

Behavior of animals from an evolutionary approach. Research project required. Three hr. lecture. Spring only, 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-hour lab. Fall and summer. Not open to students who have credit for former BIOL 405. *Prerequisite:* BIOL 150, CHEM 102, 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 hours lecture. Spring only. *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-hour lab. Variable. *Prerequisite or corequisite:* BIOL 350.

BIOL 402 Evolution

3 cr.

Theories, evidences, and mechanisms of evolution. Three hours lecture. Fall only, odd-numbered years. *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-hour labs. Spring only, 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 only. *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 hours lecture. Spring only, odd-numbered years. *Prerequisite: BIOL 402 or permission of instructor.*

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 only, 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 only. *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 only, 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 only. *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 only. *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 only. *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. Every 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. Every 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-hour lab. Every 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 only. *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 only. *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 hours lecture, two 2-hr. labs. Fall only. *Prerequisite: BIOL 340.*

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 only, 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 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 only. *Prerequisites: BIOL 340, 406, 423 or 426.*

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. Department committee 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:* sophomore standing.

BUAD 301 Personal Finance 3 cr.
Practical guidance in analyzing and making personal financial decisions: budgeting; borrowing; savings and investments; life, health and casualty insurance. How to get the most from your income, increasing your income, and planning for retirement. Does not count for business or accounting majors. Variable.

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 business or accounting majors. Variable. *Prerequisites:* ECON 200 or ECON 202 and ACCT 100 or ACCT 202.

BUAD 320 Microcomputer 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. Three hrs. lecture/lab. Every semester. *Prerequisite:* COSC 220.

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. Variable. *Prerequisite:* 42 credits, or permission of instructor.

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, or permission of instructor.

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. Variable. *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 or permission of instructor.

BUAD 357 Human Resources Management 3 cr.
Effective utilization of human resources in organizations: Emphasis on principles, practices and legal aspect of job analysis, recruitment and selection, training, compensation, safety and health, employer-employee rights, union-management relations; current issues in the field. Every semester. *Prerequisite:* BUAD 351 or permission of instructor.

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. Variable. *Prerequisite:* BUAD 351.

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, or permission of instructor.

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. Variable. *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. Variable. *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. Variable. *Prerequisite:* BUAD 361 or permission of instructor.

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. Variable. *Prerequisite:* BUAD 361.

BUAD 370 Corporate Finance 3 cr.
Principles of financial management within business enterprises. Topics covered generally include, but are not limited to, 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:* ACCT 202 and ECON 202; junior standing or permission of instructor.

BUAD 371 Principles of Insurance 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. Variable. *Prerequisite:* sophomore standing.

- 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. Variable. *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. Variable. *Prerequisite: BUAD 370.*
- BUAD 376 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. Every semester. *Prerequisites: BUAD 370 or both ACCT 302 and 315.*
- BUAD 377 Pension Fund Management** 3 cr.
Retirement income savings planning. Characteristics of various private pension plans and 401(K) plans. Management of defined contribution plans and defined benefit plans, investment of pension assets and performance evaluation of pension funds. Variable. *Prerequisites: 3 credits of accounting and 3 credits of economics.*
- 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. Variable. *Prerequisite: sophomore standing.*
- 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. Every semester. *Prerequisites: BUAD 351, 361, and 303 or 370, or permission of instructor.*
- 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. Variable. *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. Variable. *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. Variable. *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. Variable. *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. Variable. *Prerequisite: BUAD 357.*
- 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. Variable. *Prerequisite: BUAD 361.*
- BUAD 461 Integrated Marketing Communications** 3 cr.
Study of theory and practice of integrating advertising, personal selling, sales promotion, public relations and other marketing communication tools to send to target audiences a consistent, persuasive message that promotes organizational goals. Variable. *Prerequisite: BUAD 363.*
- 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. Variable. *Prerequisite: 6 cr. in marketing, including BUAD 361, MATH 209; 2nd semester junior standing.*
- BUAD 463 Marketing Research II: Field Surveys** 3 cr.
Field applications of marketing research techniques thought design, implementation, analysis and reporting of questionnaires relating to current marketing situations. Variable. *Prerequisites: BUAD 462.*
- 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. Variable. *Prerequisites: 9 cr. in marketing and 2nd semester junior standing.*
- 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. Variable. *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. Variable. *Prerequisites: Senior standing and BUAD 363, 366, 462, 465 or permission of instructor.*
- 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. Variable. *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. Variable. *Prerequisite: BUAD 370 or senior standing.*
- BUAD 478 Options and Futures** 3 cr.
Study of financial futures, options and techniques of financial engineering. Institutional features, and basic valuation principles of futures contracts on interest rates, foreign currencies, and stock market indices. Valuation and application of put and call options. Options on futures and recent developments in financial engineering. Variable. *Prerequisite: BUAD 475 or permission of the instructor.*
- 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. Variable. *Prerequisites: 9 crs. in finance and senior standing.*

BUAD 480 Business and Society 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. Variable. *Prerequisite:* 6 crs. of business course work and senior standing.

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:* senior standing 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. Variable. *Prerequisites:* Senior standing and 18 hrs. of business administration course work, or permission of instructor.

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. Variable. *Prerequisite:* senior standing 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. Variable. *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. Variable. *Prerequisites:* junior or senior standing; minimum of 12 hrs. in business administration; approval of the department Internship Committee.

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. Variable. *Prerequisites:* junior or senior status, in good academic standing; submission of a completed Internship Agreement form to the departmental internship director 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, senior standing 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. Both semesters.

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. Both semesters.

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. Both semesters. *Prerequisite:* CHEM 101.

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 300 Chemical Problem Solving 1 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 semester. *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 stereochemistry. Three hrs. lecture, one 4-hr lab. Fall semester. *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 semester. *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 semester. *Prerequisites:* CHEM 101 and 102; MATH 120 or equivalent. *Corequisite:* PHYS 215 or equivalent, or permission of instructor.

CHEM 321 Instrumental Techniques 4 cr.
Applications of potentiometric, electrochemical, spectrophotometric, and chromatographic techniques to standard and trace analyses of water, soil, pharmaceuticals, and biological materials. For nonchemistry science majors. Not for major credit. Two hrs. lecture, two 3-hr. labs. Disallows credit for CHEM 421. Spring semester. *Prerequisites:* CHEM 101 and 102.

CHEM 411 Inorganic Chemistry 3 cr.
Theories of bonding, symmetry concepts, group theory, reaction mechanisms, spectroscopy, structure, stereochemistry, and biological aspects. Three hrs. lecture. Variable. *Prerequisite or corequisite:* CHEM 441 or permission of instructor.

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. Disallows credit for CHEM 321. Spring semester. *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. Variable. *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 semester. *Prerequisites:* 16 cr. in Chemistry from the following: CHEM 101, 102, 301, 302, 320; MATH 227, 228 and 320 or 432; 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 semester. *Prerequisite:* CHEM 441.

CHEM 445 Physical Chemistry Laboratory I 1 cr.
Experimental physical chemistry. One 3-hr lab. Fall semester. *Prerequisite or corequisite:* CHEM 441.

CHEM 446 Physical Chemistry Laboratory II 1 cr.
Continuation of CHEM 445. One 3-hr. lab. Spring semester. *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 semester. *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. Variable. *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 semester. *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. Variable. *Prerequisites:* CHEM 101, 102, and any of the following: BIOL 430, GEOG 432, CHEM 320 or 321.

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 1/2 cr.
Current topics in chemistry presented by students, faculty, and invited guests. One period biweekly. Required for majors. Fall semester. *Prerequisite:* junior or senior standing.

CHEM 492 Seminar in Chemistry II 1/2 cr.
Sequel to CHEM 491. One period biweekly. Required for majors. Spring semester. *Prerequisite:* junior or senior standing.

CHEM 499 Special Problems in Chemistry 1 to 6 cr.
Methods and techniques of basic research. Repeatable to 6 credits. Both semesters. *Prerequisite:* permission of department chair.

Communication & Theatre Arts

CMAT 100 Communication Practicum 1/2 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. *Prerequisite:* permission of instructor.

CMAT 102 Introduction to Speech Communication 3 cr.
Fundamental theory and practice of speech communication in dyadic, small-group, and public situations. Every semester.

CMAT 103 Voice and Articulation 3 cr.
Voice production and articulation standards. Quality, flexibility, resonance, force, freedom from dialect. Individual attention provided. Variable.

CMAT 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. Not for students currently enrolled in related courses. Repeatable; 3 credits applicable to major. Every semester.

CMAT 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.

CMAT 106 Introduction to Theatre 3 cr.
Basic elements of the theatre: play, playwright, player, director, audience. A survey of theatrical forms from ancient times to the present. GEP LAC Group A. Every semester.

CMAT 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. The course covers general design terminology, basic design research, basic design skills, and introduction to theatre styles and conventions. Three hours lecture, one two-hour lab. GEP LAC Group A. Every semester.

CMAT 110 Introduction to Acting 3 cr.
Introductory preparation for acting through developmental exercises. Every semester.

CMAT 112 Honors: Introduction to Speech Communication 3 cr.
Fundamental theory and practice of speech communication in dyadic, small-group, and public situations. Student-led discussions, activities. Variable. *Prerequisite:* admissions to Honors Program or written permission of instructor.

CMAT 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. Yearly.

CMAT 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. Yearly.

CMAT 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.

CMAT 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.

- CMAT 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. Work on department productions required. Two hours lecture, one two-hour studio. Yearly.
- CMAT 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: CMAT 110 or permission of the department.*
- CMAT 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.
- CMAT 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.
- CMAT 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.
- CMAT 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. Yearly.
- CMAT 225 Interviewing** 3 cr.
Communication in informational, appraisal, employment, and persuasive interviews. Selecting and structuring questions to achieve specific objectives. Every semester. *Prerequisite: CMAT 102/112.*
- CMAT 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: CMAT 212 and CMAT 225, or permission of instructor.*
- CMAT 300 Interpersonal Communication Theory** 3 cr.
Humanistic and scientific approaches to interpersonal communication. Philosophical bases of interpersonal communication theory. Every semester. *Prerequisite: CMAT 102/112 or CMAT 132 or permission of instructor.*
- CMAT 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: CMAT 200.*
- CMAT 302 Argumentation and Advocacy** 3 cr.
Analysis, construction, and communication of logical arguments in a variety of decision-making contexts. Alternate years. *Prerequisite: CMAT 102/112 or CMAT 122 or permission of instructor.*
- CMAT 303 Contemporary Public Address — 1960 to Present** 3 cr.
Study of leading contemporary speakers on major issues. During presidential election year, emphasis on candidates and issues. Analysis and criticism of content, style, organization, and delivery of current speeches. Alternate years.
- CMAT 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: CMAT 107 or permission of instructor. Recommended: CMAT 204.*
- CMAT 306 Stage Lighting** 3 cr.
Lighting as artistic design: theory and practice, types of equipment, use and deployment, and innovations. Yearly. *Prerequisite: CMAT 107 or permission of instructor. Recommended: CMAT 204.*
- CMAT 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: CMAT 107 or permission of instructor.*
- CMAT 308 Directing** 3 cr.
Techniques for directing with practice in interpretation and staging of plays from the modern era. Yearly. *Prerequisite: CMAT 107 or permission of instructor.*
- CMAT 309 Experiments in Scripting and Staging** 3 cr.
Creating scripts from short stories, novels, and such non-narrative sources as historical documents or poetry. Staging experimental performances of the scripts. Variable. *Prerequisite: CMAT 310 or permission of instructor.*
- CMAT 310 Performance Studies** 3 cr.
Development of specific skills needed for the interpretation and performance of various forms of literature. Yearly.
- CMAT 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. Fall and spring. *Prerequisite: CMAT 212 or permission of instructor.*
- CMAT 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. *Prerequisite: CMAT 102/112 or permission of instructor.*
- CMAT 313 American Popular Culture** 3 cr.
Popular customs and entertainment in a mass society with leisure time and technological innovations. American humor, story-telling, popular music, radio, television, film, and stage entertainment. Variable.
- CMAT 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.*
- CMAT 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. Yearly.
- CMAT 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: CMAT 208 or equivalent.*
- CMAT 319 Acting in Pre-Modern Drama** 3 cr.
Preparation for acting the classical repertoire from the Renaissance through the eighteenth century. Alternate years.

CMAT 322 Advanced Public Speaking 3 cr.
Theory, practice and criticism of speaking in public. Major attention to rhetorical sensitivity and analysis. Alternate years. *Prerequisite:* CMAT 102/112 or CMAT 122.

CMAT 325 Advanced Directing 3 cr.
Directing period and modern plays of various genres in a variety of styles. Yearly. *Prerequisite:* CMAT 308 or permission of instructor.

CMAT 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.

CMAT 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. Alternate years.

CMAT 340 Theatre Management 3 cr.
Business and production management of theatrical ventures; to include box office, budget, promotion, and personnel. Variable. *Prerequisite:* permission of instructor.

CMAT 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:* CMAT 102/112, 105, 225 or permission of instructor.

CMAT 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.

CMAT 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.

CMAT 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.

CMAT 422 Rhetorical Criticism 3 cr.
Criteria and methods for analysis of rhetorical discourse. Neo-Aristotelian, Genre, Feminist, Metaphoric, Narrative and Burkeian approaches. Alternate years. *Prerequisite:* CMAT 322 or permission of instructor.

CMAT 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:* permission of instructor.

CMAT 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:* permission of instructor.

CMAT 427 History of the Theatre III 3 cr.
Study of the cultural background of theatre and the historical development of dramatic art in the modern era (1850 A.D. to the present). Alternate years. *Prerequisite:* permission of instructor.

CMAT 428 Women Through Theatre 3 cr.
Seminar providing a historical survey of women's participation in theatre, examination of images of women presented by both female and male

dramatists, and exploration of the contemporary world of women in theatre and related fields. Alternate years. *Prerequisite:* permission of instructor.

CMAT 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. Also offered as ENGL 431. Alternate years. *Prerequisite:* ENGL/MDFL 150/250 or CMAT 106 or permission of instructor.

CMAT 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. Also offered as ENGL 432. Alternate years. *Prerequisite:* ENGL/MDFL 150/250 or CMAT 106 or permission of instructor.

CMAT 451 Theories of Persuasion 3 cr.
Seminar in the dynamics of persuasion in speaking and related modes. Contemporary and classical theory. Application to realistic settings. Alternate years. *Prerequisite:* permission of instructor.

CMAT 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 CMAT 326 or permission of the instructor.

CMAT 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:* CMAT 305, 306, or 307, and written permission of the instructor.

CMAT 475 Rhetorical Theories 3 cr.
Rhetorical theories from classical Greek times through the 20th century. Relationship of theories to practice in contemporary forums, cultures, environments, and media. Alternate years.

CMAT 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. Every semester.

CMAT 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:* CMAT 212, 311, or permission of instructor.

CMAT 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:* CMAT 311, CMAT 487, or permission of instructor.

CMAT 489 Special Topics in Acting 3 cr.
Studies and performance of scenes from contemporary non-realistic forms of drama including the works of Pinter, Brecht and Beckett. Variable. *Prerequisite:* permission of instructor.

CMAT 490 Special Topics in Communication and Theatre Arts 3 cr.
Research or applied experience on an announced selected topic. Variable. *Prerequisite:* permission of instructor.

CMAT 492 Internship Project 3 cr.
Academic component of internship experience, in conjunction with CMAT 495. Graded A through F. Every summer. *Corequisite:* CMAT 495.

CMAT 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.*

CMAT 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.*

CMAT 495 Internship in 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 only. *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.*

CMAT 499 Directed Study**1 to 6 crs.**

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, database managers, graphics packages, and telecommunications software. 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, database managers, programming languages, graphics packages, telecommunications software and desktop publishing software. Fall only. *Prerequisite: acceptance into the Honors Program or permission of instructor.*

COSC 120 Introduction to Cyberspace**3 cr.**

A survey of the primary Internet resources, using a world wide web browser as the interface to the Internet; WAN resources beyond the Internet will also be explored. Introduction to networks and communication hardware and software. The learning environment will be a combination of labs and lectures. Every semester.

COSC 200 Computer Science I**3 cr.**

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. *Prerequisite: COSC 100 or 110 or permission of instructor.*

COSC 201 Computer Science II**3 cr.**

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. *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 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 only. *Prerequisite: COSC 220 or COSC 320.*

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. Fall only. *Prerequisite: COSC 200.*

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 only. *Prerequisite: COSC 201.*

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 200.*

COSC 325 Software Engineering**3 cr.**

Techniques and methodologies of software engineering. Topics include quality assurance, software protection and security. Spring only. *Prerequisite: COSC 201.*

COSC 330 Graphical User Interfaces & Interactive Environments**3 cr.**

A practical study of the design, acquisition and technical manipulation of multimedia elements for inclusion in an interactive environment such as the World-Wide Web, presentation software, and tutorial/training packages. Course elements include: core concepts of Graphical User Interfaces (GUIs); elements of interface design; file formats, such as text, graphics, compression and archiving, encoding, sound, and video; file transfer; the acquisition and manipulation of multimedia data; and the implementation and evaluation of interactive software. Not open to students who have credit for former COSC 230. Every semester.

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 only, odd-numbered years. *Prerequisite: COSC 365.*

COSC 340 Database Applications for Microcomputers**3 cr.**

Database management systems for business applications with emphasis on database requirements and design using microcomputer relational databases. Fall only. *Prerequisite: COSC 201.*

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. Spring only, even-numbered years. *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 200.

COSC 365 Digital Logic and Computer Design 3 cr.
Basic switching theory. Design and analysis of combinational logic circuits and synchronous sequential systems. Minimization techniques. 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. *Prerequisites:* COSC 350 and MATH 200.

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 only. *Prerequisite:* COSC 200.

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 201.

COSC 410 Data and Computer Communication 3 cr.
Fundamentals of data communications. Transmission media characteristics, data encoding, and multiplexing. Causes of transmission errors and data link control. Circuit switching, message packing and packet switching. Local area networks, introduction to terrestrial and satellite networks, ISDN, and future trends. Spring only. *Prerequisite:* COSC 365.

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 200, 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. Fall only, odd years. *Prerequisite:* COSC 200.

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. Fall only, even-numbered years. *Prerequisite:* COSC 365.

COSC 440 Database Systems 3 cr.
Data modeling such as entity-relationship, relational network, and hierarchical data models. Topics include query languages, database management systems. Students are required to design and implement a database in a relational database system. Fall only, odd-numbered years. *Prerequisite:* COSC 201.

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. Spring only, odd-numbered years. *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 only. *Prerequisite:* COSC 310 and COSC 350.

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. Fall, even years. *Prerequisite:* COSC 201.

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 201 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. Spring only. *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 only. *Prerequisites:* COSC 201 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. Spring only. Even years. *Prerequisites:* COSC 310 and 350.

COSC 480 Knowledge-Based Systems 3 cr.
Concepts of knowledge-based systems with an emphasis on expert systems. Topics include production systems, building of knowledge-based systems and future trends with expert systems. Spring only, odd years. *Prerequisite:* COSC 380.

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. Fall only, even years. *Prerequisites:* COSC 310, COSC 365 and MATH 200.

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. Every semester. *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.*

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. Every 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. Every 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. Every Spring. *Prerequisites: ECON 201 and ECON 202.*

ECON 301 Labor Economics 3 cr.
The theory of labor supply and demand, labor force participation, investment in human capital, compensating wage differentials, government regulation, employment, unemployment, unionism, discrimination, wage-related income transfers and pensions. Every Spring. *Prerequisites: ECON 201 and ECON 202.*

ECON 303 American Economic Development 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 of 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 and Business 3 cr.
Economic aspects of the relation of government and business in the United States; antitrust, economic, and social regulation of business. Spring of 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 unplanned economics; free market pricing and direct controls; private enterprise and nationalized industry. Spring of 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 of 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 macroeconomic 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. Every spring. *Prerequisites: ECON 201 and ECON 202. May not receive credit if taken as ECON 402.*

ECON 404 Public Finance 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 of odd-numbered years. *Prerequisites: ECON 201 and ECON 202.*

ECON 405 Economic Growth & Development: The Developing Economies 3 cr.
Survey of underdeveloped economies. Theories of economic development and their application; appraisal of programs in selected developing countries. Fall of 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 of 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 of even-numbered years. *Prerequisite: ECON 202 or permission of the instructor.*

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. Every spring. *Prerequisites: ECON 201 and ECON 202.*

ECON 460 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 of 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. Every spring. *Prerequisites: ECON 201, ECON 202, ECON 351, ECON 352, and permission of the instructor or Department Chair.*

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**1-6cr.**

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 the 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.

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 instructor, 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 303 Integrated Curriculum & Methodology I: Curriculum Focus** 4 cr.
Component course of the 13 credit integrated Block I, Phase II of the elementary teacher education program. Block I courses center on the acquisition and integration 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 study of the elementary school curriculum. Fall, Spring. *Prerequisite: Admission to Phase II of the Teacher Education Program.*
- ELED 304 Integrated Curriculum & Methodology I: Methodology Focus** 4 cr.
Component course of the 13 credit integrated Block I, Phase II of the elementary teacher education program. Block I courses center on the acquisition and integration 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 study of teaching methodology. Fall, Spring. *Prerequisite: Admission to Phase II of the Teacher Education Program.*
- ELED 305 Integrated Curriculum & Methodology I: Diversity Focus** 4 cr.
Component course of the 13 credit integrated Block I, Phase II of the elementary teacher education program. Block I courses center on the acquisition and integration 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 study of teaching diverse classroom populations. Fall, Spring. *Prerequisite: Admission to Phase II of the Teacher Education Program.*
- ELED 306 Integrated Curriculum & Methodology I: Clinical Component** 1 cr.
Clinical component of the 13 credit integrated Block I, Phase II of the elementary teacher education program. Block I courses center on the acquisition and integration 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 clinical observation and application of the concepts included in Block I courses. The clinical experiences are provided in the Teaching Laboratory and in area schools. Fall, Spring. *Prerequisite: Admission to Phase II of the Teacher Education Program.*
- 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 only. *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 only. *Prerequisite: admission to Phase II or permission of Department Chair; EDUC 309 and EDUC 392 recommended concurrently.*
- SCED 310 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. Spring only. *Prerequisite: Phase II admission.*
- SCED 311 English in the Secondary School** 3 cr.
Subject methods course required for secondary certification in teaching English. Modern trends in curriculum and instruction. Fall only. *Prerequisite: Phase II admission or permission of Department Chair; EDUC 391 recommended concurrently.*
- SCED 314 Mathematics in the Secondary School** 3 cr.
Subject methods course required for secondary certification in teaching mathematics. Modern trends in curriculum and instruction. Fall only. *Prerequisite: Phase II admission or permission of Department Chair; EDUC 391 recommended concurrently.*
- SCED 315 Methods of Teaching Modern Foreign Languages** 3 cr.
A general methods course for foreign-language majors seeking certification at the secondary level or elementary education majors seeking certification in teaching a language at the elementary level. (Does not certify a secondary language major to teach the elementary level.) Fall only. *Prerequisites: Phase II admission or permission of Department Chair; EDUC 391 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 only. *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 318 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. Spring only. *Prerequisite: Phase II admission.*

SCED 319 Science in the Secondary School**3 cr.**

Subject methods course required for secondary certification in teaching science. Modern trends in curriculum and instruction. Fall only. *Prerequisites: Phase II admission or permission of Department Chair; EDUC 391 recommended concurrently.*

SCED 320 Social Studies in the Secondary School**3 cr.**

Subject methods course required for secondary certification in teaching social studies. Modern trends in curriculum and instruction. Fall only. *Prerequisites: Phase II admission or permission of Department Chair; EDUC 391 recommended concurrently.*

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.*

SPED 361 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. Every semester. *Prerequisite: Phase II admission.*

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 Secondary Field Experience**2 cr.**

Teacher assisting in middle and high school settings. Assignments coordinated with other Phase II courses. Graded P/F. Fall only. *Prerequisites: admission to Phase II and concurrent enrollment in secondary block courses.*

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. *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. Fall, Spring. *Prerequisite: Admission to Phase II of the Teacher Education Program and recommendation of Phase I, Block I faculty team.*

ELED 404 Integrated Curriculum & Methodology II: Organization & Management Focus**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 study of elementary school organization and management strategies. Fall, Spring. *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.*

ELED 405 Integrated Curriculum & Methodology II: Leadership Focus**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 instructional leadership in the elementary school. Fall, Spring. *Prerequisite: Admission to Phase II of the Teacher Education Program and recommendation of Phase I, Block I faculty team.*

- 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.
- ELED 406 Integrated Curriculum & Methodology II: Clinical Component** 1 cr.
Clinical component 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 clinical observation and application of the concepts included in Block II courses. The clinical experiences are provided in the Teaching Laboratory and in area schools. Fall, Spring. *Prerequisite:* Admission to Phase II of the Teacher Education Program and recommendation of Phase II, Block I faculty team.
- GUCO 406 Introduction to Guidance** 3 cr.
History and philosophy of Guidance programs; the role, organization, and methods of guidance.
- 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.
- 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 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.
- 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. *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.
- 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.
- 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.
- 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.
- 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.
- 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.
- 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. *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. *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.

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 only. *Prerequisite: REED 420 and 422.*

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.

SPED 462 Introduction to the Education of Exceptional Children 3 cr.
Understanding the educational needs of exceptional children; preventive and remedial education.

SPED 463 Teaching Children with Special Needs 3 cr.
Observation, identification, and management of children with mild to moderate learning problems. *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 teaching 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 and 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. *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. *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. 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. Graded P/F. Every semester. *Prerequisite: Phase III admission.*

SCED 496 Teaching Internship: 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. Fall.

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. Spring. *Prerequisites: MATH 226 and PHYS 261; Corequisites: MATH 227 and PHYS 262.*

ENES 220 Mechanics of Materials 3 cr.
FSU Course. Distortion of engineering materials in relation to changes in stress or temperature. Geometry of internal strain and external displacement. Application to beams, columns, shafts, tanks and other structural machine and vehicle members. Fall. *Prerequisites: ENES 102, MATH 227, PHYS 262. Corequisite: MATH 228.*

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. Fall. *Prerequisites: PHYS 262, ENES 102, MATH 228.*

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. Three hours of lecture and two hours of recitation per week. 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. Spring.

ENEE 204 Systems and Circuits I**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. Spring. *Prerequisite: PHYS 263. 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. 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. Fall. *Prerequisite: ENEE 114, MATH 227. Corequisite: MATH 228.*

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 Analog Electronic Circuits**3 cr.**

UMCP Course. Basic electronics elements (diodes, bipolar transistors, MOSFETs), their characteristics and principles of operation. Small signal analysis. Circuit models with controlled sources. Diode circuits. Low-frequency amplifiers and feedback. Frequency response of amplifiers. Operational amplifiers and their applications. Wave-shaping and waveform generators. Elements of power electronics. Fall. *Prerequisite: ENEE 204 and completion of all lower-division technical 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. Fall. *Prerequisite: ENEE 206 and ENEE 302.*

ENEE 312 Digital Electronics**3 cr.**

UMCP Course. Review of basic semiconductor devices and technology. Inverters, gates and logic families. Analysis and design of combinational circuits (adder, comparator, encoder/decoder). Memories. Analysis and design of sequential circuits (flip-flops, registers, counters). Large-scale integrated systems (dynamic MOS registers, EPROMs, PLA, CCDs). Analog-to-digital converters. Elements of CAD, including use of the SPICE computer package. Fall. *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 and discrete systems, time domain analysis of 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. Spring. *Prerequisite: ENEE 244 and completion of all lower division technical courses in the EE curriculum.*

ENEE 380 Electromagnetic Theory**3 cr.**

UMCP Course. Introduction to electromagnetic fields. Coulomb's law, Gauss' law, electrical potential, dielectric materials, capacitance, boundary value problems, BiotSavart law. Ampere's law, Lorentz force equation, magnetic materials, magnetic circuits, inductance, time varying fields and Maxwell's equations. Fall. *Prerequisites: MATH 228 and PHYS 263 and completion of all lower division technical courses in the EE curriculum.*

ENEE 381 Electromagnetic Wave Propagation**3 cr.**

UMCP Course. Review of Maxwell's equations, the wave equation, potentials, Poynting's theorem. Transmission, lossy medium, skin effect. Parallel-plate and rectangular waveguides. Radiation, retarded potentials, radiation from diople. Spring. *Prerequisite: ENEE 380 and completion of all lower division technical 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. Also offered as PHYS 282. Spring. *Prerequisites: PHYS 261 and 262.*

ENME 252 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. Spring. *Prerequisite: PHYS 263.*

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. Fall. *Prerequisites: ENES 221, ENME 232.*

ENME 332 Transfer Processes**3 cr.**

UMCP Course. The principles of heat transfer. Conduction in solids. Convection. Radiation. Modern measurement techniques. Computer analysis. Spring. *Prerequisite: ENME 331.*

ENME 351 Electronics and Instrumentation II**3 cr.**

FSU Course. Continuation of ENME 252. Modern instrumentation. Basic circuit design, standard microelectronic circuits. Digital data acquisition and control. Signal conditioning. Instrumentation interfacing. Designing and testing analog circuits. Laboratory experiments. Fall. *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. Fall. *Prerequisites: ENES 220, ENES 221, and MATH 432.*

ENME 362 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. Spring. *Prerequisites: ENME 351 and ENME 361.*

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. Fall. *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. Spring. *Prerequisite: MATH 228.*

ENME 471 Integrated Product and Process Development I**3 cr.**

UMCP Course. Integration of product development with the development process. Organizational structures. The nature of design. Product specification. Bench marking. Design concepts. Evaluation of alternatives. Fall. *Prerequisite: ENME 371.*

ENME 472 Integrated Product and Process Development II**3 cr.**

FSU Course. Continuation of ENME 471. Integration of product development with the development process. Design strategies. Product architecture. Design for manufacturing. Selection of materials. Design for assembly. Spring. *Prerequisite: ENME 471.*

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. Fall only. *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, in which case student may not withdraw unless withdrawing from the University.*

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 former 302. Every semester. *Prerequisites: C or better in ENGL 101 or 111; and at least 42 credits or permission of Chair. Basic University Requirement. Students may not withdraw unless withdrawing from the University.*

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 semester. *Prerequisites: C or better in English 101 or 111; and at least 42 credits or permission of instructor. Basic University Requirement. Students may not withdraw unless withdrawing from the University.*

ENGL 310 General Advanced Composition**3 cr.**

Development of advanced skills in writing. Students may receive credit for only one of the following: 308, 310, or former 302. Every semester. *Prerequisites: C or better in ENGL 101 or 111; and at least 42 credits or permission of Chair. Basic University Requirement. Students may not withdraw unless withdrawing from the University.*

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, 310) as Basic University Requirement, in which case student may not withdraw unless withdrawing from the University.*
- 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. Fall only. *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, and at least 42 credits or permission of Chair.*
- 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, 310) as Basic University Requirement, in which case students may not withdraw unless withdrawing from the University.*
- 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. Every semester. *Prerequisites: C or better in ENGL 101/111; at least 42 credits or permission from Chair. May substitute for Advanced Composition (ENGL 308, 310) as Basic University Requirement, in which case students may not withdraw unless withdrawing from the University.*
- ENGL 360 Creative Nonfiction** 3 cr.
Merging of the skills of storytelling and reporting to write personal essays and literary journalism. Fall only. *Prerequisite: ENGL 334 or ENGL 335 or ENGL 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. Spring, even-numbered years. *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. Reinforcement 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. Every spring. *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 only. *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 only. *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. 3 hrs. lecture/discussion. Spring only. *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 include tutorials, workshops, marketing and submission of original work, and final readings. Spring only. *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 and may not enroll in other courses. Part-time interns register for 6 credits in 495 and 1 credit in 492. English 495 is graded P/F. The credit is not applicable toward the major. 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; additional prerequisite for internships in public relations or technical writing (see internship director).*
- 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. For Writing Minors only.*
- Literature and Language**
- ENGL 150 Introduction to Literature** 3 cr.
Critical reading of significant poetry, drama, and fiction from a variety of cultures and eras, and continued development of expository writing skills. May not be taken by those who have already passed ENGL/MDFL 251. Every semester. *GEP LAC Group B. Also offered as MDFL 150.*
- ENGL 221 Introduction 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 semester. *Open only to students never enrolled in ENGL 101. Students may not withdraw unless withdrawing from the University.*

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 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. Variable.

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. Variable.

ENGL 290 Topics in Language and Literature 3 cr.
A selected aspect of language or literature, including, among others: MYTHOLOGY AND LITERATURE (study of mythology in relation to literature and human culture); CONTEMPORARY LITERATURE (American and English literature from 1950 to present, mainly fiction); and BLACK AMERICAN LITERATURE (historical survey and critical examination of major Black American writings from colonial times to present, emphasizing works since World War II). 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 291 Genre Study 3 cr.
A series of selected genre courses examining fiction, poetry, drama, non-fiction, or a particular sub-genre, such as science fiction, the poetry of war, the theater of the absurd, or Maryland essayists. May be taken more than once for credit if subtitle differs. Variable. *Prerequisite: C or better in ENGL 101 or 111.*

ENGL 303 American Romantic Literature 3 cr.
Writings of Emerson, Thoreau, Hawthorne, Poe, Melville, and Whitman. Reference to literary, social, and intellectual backgrounds. Fall of odd-numbered years. *Prerequisite: ENGL 300 or permission of instructor.*

ENGL 306 Introduction to English Linguistics 3 cr.
A critical survey of traditional, structural, and transformational grammar. 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 of even-numbered years. *Prerequisite: ENGL 300 or permission of instructor.*

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 of odd-numbered years. *Prerequisite: ENGL 300 or permission of instructor.*

ENGL 322 The Restoration and Augustan Age 3 cr.
English literature from Dryden through Pope. Major poets, dramatists, essayists, and fiction writers. Spring of odd-numbered years. *Prerequisite: ENGL 300 or permission of instructor.*

ENGL 323 Victorian Literature 3 cr.
Poetry and prose of the later 19th century; attention to major poets, essayists, and novelists. Spring of even-numbered years. *Prerequisite: ENGL 300 or permission of the instructor.*

ENGL 332 The Age of Johnson 3 cr.
Poetry and prose of the later 18th century. Attention to Johnson and Boswell, drama, and some major novels. Fall of odd-numbered years. *Prerequisite: ENGL 300 or permission of instructor.*

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 of even-numbered years. *Prerequisite: ENGL 300 or permission of instructor.*

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 of odd-numbered years. *Prerequisite: ENGL 300 or permission of instructor.*

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 of even-numbered years. *Prerequisite: ENGL 300 or permission of instructor.*

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 of odd-numbered years. *Prerequisite: ENGL 300 or permission of instructor.*

ENGL 411 Chaucer and His Times 3 cr.
The world of The Canterbury Tales and other English masterpieces of the high Middle Ages. Fall of odd-numbered years. *Prerequisite: ENGL 300 or permission of instructor.*

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 only. *Prerequisite: C or better in ENGL 101 or 111.*

ENGL 418 Second Language Acquisition: Theory & Application 3 cr.
Introduction to theories of how people learn second languages, with application to conducting research or to the teaching/tutoring of second/foreign languages (principally English as a second language). Spring of even-numbered years.

ENGL 420 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 only. *Prerequisite: 56 hrs. or permission of instructor.*

ENGL 424 20th-Century British Poetry 3 cr.
British poetry from Housman to the present, with emphasis on Yeats. Fall of even-numbered years. *Prerequisite: ENGL 300 or permission of instructor.*

ENGL 426 Modern American Poetry 3 cr.
From its antecedents in Whitman and Dickinson to contemporary poets, with emphasis on Frost and Eliot. Spring of even-numbered years. *Prerequisite: ENGL 300 or permission of instructor.*

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 of even-numbered years. *Prerequisite:* ENGL 150, 250/MDFL 150 or CMAT 106 or permission of instructor. Also offered as CMAT 431.

ENGL 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. Spring of odd-numbered years. *Prerequisite:* ENGL 150, 250/MDFL 150 or CMAT 106 or permission of instructor. Also offered as CMAT 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 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. Offered at variable intervals. Seniors only.

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 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 only.

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 Languages and Literature****3 cr.**

A variable topic on Germanic, Romance, or Slavic culture or literature (in English translation) or a special area such as comparative grammar, etymology, or elementary philology. Specific title listed in course schedule. Variable.

MDFL 290 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.

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.**

Critical reading of significant poetry, drama, and fiction from a variety of cultures and eras, and continued development of expository writing skills. May not be taken by those who already passed ENGL/MDFL 251. GEP LAC Group B. Variable. 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.

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. *Prerequisite:* permission of instructor.

French**FREN 101 Basic Elements of French I****4 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 4 cr.
Continued development of basic skills. Emphasis on active performance. Language laboratory. Variable. *Prerequisite: FREN 101.*

FREN 103 Review of Elementary French 4 cr.
Review of the fundamental skills, listening, speaking, reading, and writing with emphasis on language performance. Use of the language laboratory. Not open to students who have completed French 101 or 102. Variable. *Prerequisite: one or two years of high school French or placement by examination.*

FREN 211 French Grammar, Composition, and Conversation I 4 cr.
Intensive grammar, oral command of the language, introduction to expository writing. Language laboratory. For students with two or more years of high school French, FREN 102 or FREN 103. Variable.

FREN 212 French Grammar, Composition, and Conversation II 4 cr.
Sequel to FREN 211. Variable.

FREN 311 French for Practical Communication I 4 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. Variable. *Prerequisite: FREN 212 or equivalent.*

FREN 312 French for Practical Communication II 4 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. Variable. *Prerequisite: FREN 212 or equivalent.*

FREN 313 France Until 1789 4 cr.
French culture through representative works: the 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). Variable. *Prerequisite or corequisite: FREN 311 or FREN 312 (or equivalent).*

FREN 314 From 1789 to Contemporary France 4 cr.
French culture through representative works: the political, economic, philosophical, scientific, social, artistic, and literary life in France from the Revolution (1789) to the present. This course will cover the major literary movements such as Romanticism, Realism, and Symbolism. Variable. *Prerequisite or corequisite: FREN 311 or FREN 312 (or equivalent).*

FREN 315 Introduction to French Literary Texts 4 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. Variable. *Prerequisite or corequisite: FREN 313 or FREN 314 (or equivalent).*

FREN 401 French Poetry 3 cr.
Poetry as a genre in France. Study of structures, techniques, themes, imagery, etc. Textual analyses. Variable. *Prerequisite: FREN 315 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 315 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. *Prerequisites: FREN 315 or permission of instructor.*

FREN 404 French Fiction 3 cr.
Great novels, novellas, and short stories from the 17th century to the present. Variable. *Prerequisites: FREN 315 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 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 4 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 4 cr.
Continued development of basic skills. Emphasis on active performance. Language laboratory. Variable. *Prerequisite: SPAN 101.*

SPAN 103 Review of Elementary Spanish 4 cr.
Review of the fundamental skills, listening, speaking, reading, and writing with emphasis on language performance. Use of the language laboratory. Not open to students who have completed Spanish 101 and 102. Variable. *Prerequisite: One or two years of high school Spanish or placement by examination.*

SPAN 211 Spanish Grammar, Composition, & Conversation I 4 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 4 cr.
Sequel to SPAN 211. Variable.

SPAN 311 Spanish for Practical Communication I 4 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. Variable. *Prerequisite: SPAN 212 or equivalent.*

SPAN 312 Spanish for Practical Communication II 4 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. Variable. *Prerequisite: SPAN 212 or equivalent.*

SPAN 313 Introduction to Culture and Civilization of Spain 4 cr.
Spanish culture: political, literary, economic, social, and artistic life in Spain. Variable. *Prerequisite: SPAN 212 or equivalent.*

SPAN 314 Introduction to Culture & Civilization of Latin America 4 cr.
Latin American culture: political, literary, economic, social, and artistic life in Latin America. Variable. *Prerequisite: SPAN 212 or equivalent.*

SPAN 315 Introduction to Study of Spanish Literature 4 cr.
Esthetics of Spanish poetry, fiction, and drama. Variable. *Prerequisite: SPAN 212 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 315 or equivalent.*

SPAN 402 Spanish Fiction 3 cr.
Novels and short stories from Cervantes to the present. Variable. *Prerequisite: SPAN 315 or equivalent.*

SPAN 403 Spanish Poetry and Drama II 3 cr.
Drama and poetry from the Romantics to the present. Variable. *Prerequisite: SPAN 315 or equivalent.*

SPAN 404 Spanish Nonfiction Prose 3 cr.
The essay as Literature. Principal Spanish and Latin American essayists. Variable. *Prerequisite: SPAN 315 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 490 Special Topics in Hispanic 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 Spanish courses and permission of instructor.*

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. 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. GEP LAC Group D. *Prerequisite: acceptance into the Honors Program 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 types of spatial data, 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. Each semester. *Prerequisites or co-requisites: GEOG 103 /113 and GEOG 104/114, or sophomore standing (30 credits).*

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 1999. *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. *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 307 Advanced Physical Geology 4 cr.
Recognition and interpretation of landscape features. Structure and epigenic processes. Rock and mineral samples, topographic and geologic maps, geologic cross-sections, and aerial photographs. One field trip required. Three hrs. lecture and 2 hrs. lab. Spring. *Prerequisite: GEOG 103 (or 113) or permission of instructor.*

GEOG 308 Advanced Historical Geology 4 cr.
Chronology of the earth's history from hypothesized origins through the Holocene. Paleogeography, paleotectonics, and flora and faunal evolution. Lab study of sediments, fossils as indicators of rock age and environment, and geologic maps and structure sections. Three hrs. lecture and 2 hrs. lab. Fall. *Prerequisite: GEOG 103 (or 113) or permission of instructor.*

GEOG 310 Map Interpretation and Cartography 3 cr.
Principles of map interpretation, evaluation, and construction using computer applications. Compilation of maps from various information sources. Two hrs. lecture, 2 hrs. lab. Every semester. *Prerequisite: GEOG 103 (or 113) or permission of instructor.*

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 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. Fall. *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. Spring. *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. Fall semesters beginning Fall 2001. Also offered as SCIE 335. *Prerequisites: GEOG 103/113, BIOL 149, and completion of a college level mathematics course.*

GEOG 380 Geographic Research Methods & Field Techniques 3 cr.
Quantitative analysis applicable for spatial data. Design of geographic research, field methods, and report preparation with statistical analysis. Spring. *Prerequisite: MATH 209, 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. *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. *Prerequisites: GEOG 103 (or 113) and GEOG 104 (or 114) or permission of instructor.*

GEOG 405 Climatology 3 cr.
Controls, classifications, selected regions, and world patterns of climates. Every third semester beginning Spring 2000. *Prerequisite: GEOG 103 (or 113) or permission of instructor.*

GEOG 406 Conservation of Natural Resources 3 cr.
Current problems associated with the use and misuse of natural resources. Every third semester beginning Fall 2000. *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 Spring 2000. *Prerequisite: GEOG 104 (or 114) or permission of instructor.*

GEOG 412 Geographic Visualization 3 cr.
Current issues in cartography and geographic visualization are examined focusing on the use of maps and other visual representations to facilitate thinking, problem solving and decision making in geography. Key topics include the role of visualization in geography and cartography, visual functions and forms, interface design, map animation, multimedia, hypermedia, color, sound, and multivariate displays. Fall, even-numbered years. *Prerequisites: GEOG 275 and 310, or permission of instructor.*

GEOG 413 Remote Sensing — Aerial Photo Interpretation 3 cr.
Analysis of aerial photographs for geographic information; principles of image identification; stereoscopy and photo measurements; and interpretation of air photo images of natural and cultural landscapes. Two hrs. lecture and 2 hrs. lab. Fall. *Prerequisite: GEOG 103 (or 113) or permission of instructor.*

GEOG 414 Advanced Remote Sensing Techniques 3 cr.
Remote sensing of the environment with emphasis on interpretation. Use of digital imagery analysis, applications, modeling and geographic information systems (GIS) interfaces. Spring. *Prerequisites: GEOG 275 and 413 or permission of instructor.*

GEOG 415 Advanced Cartographic Techniques 3 cr.
Computer-based advanced techniques of cartographic presentation. Focus on cartographic theory, map communication and modern production cartography. Every semester. *Prerequisites: GEOG 275 and 310, and completion of two college mathematics courses.*

GEOG 421 Regional Planning 3 cr.
Contemporary topics in regional planning and development. Group and individual projects and research. Every third semester beginning Fall '99. *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 Fall 2000. *Prerequisite: GEOG 324 or 325 or permission of instructor.*

GEOG 430 Fluvial Geomorphology 3 cr.
Channelized and non-channelized flows in effecting landscape change; stream process-response relationships; and morphometric properties of drainage basins. Use of topographic maps and aerial photographs. Spring, odd-numbered years. *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 Hydrology 3 cr.
Physical and chemical processes of the movement of water through the rainfall-runoff segment of the hydrologic cycle. Infiltration and percolation, overland and channel flow, channel processes, and the nature of hydrographs. Spring. *Prerequisite: GEOG 103 (or 113) or permission of instructor.*

GEOG 433 Surveying 3 cr.
Theory of measurements, computation, and instrumentation; field work and compilation of topographic base maps; evaluation of errors; profiling, grading, slope and grade stakes. Two hrs. lecture and 3 hrs. lab. MATH 103 is recommended. Fall.

GEOG 440 Introduction to Soils 3 cr.
The identification and delineation of soil units on the landscape, their morphology, genesis, and use. Major soils profiles and soil/landscapes in relation to environmental factors. Two hrs. lecture and 2 hrs. lab./field session. Spring semester. *Prerequisite: GEOG 103 (or 113) or permission of instructor.*

GEOG 441 Soil Analysis 3 cr.
Physical and chemical characteristics of soils as they relate to suitability for plant growth and reproduction. Laboratory and field testing of soil and soil-forming material. Physical properties of soil, moisture relationships, organic matter content, and chemical constituents. Two hrs. lecture and 2 hrs. lab./field session. Fall semester. *Prerequisite: GEOG 440 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. Every third semester beginning Fall '99. *Prerequisite: GEOG 103/113 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 2000. *Prerequisite: GEOG 324 or permission of instructor.*

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. Every third semester beginning Fall '99. *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 semester. *Prerequisites:* Completion of BIOL 149 and 150, CHEM 101 and 102, MATH 209, GEOG 103 and 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 semester. *Prerequisites:* Completion of BIOL 149 and 150, CHEM 101 and 102, MATH 209, GEOG 103 and 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. Each semester.

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. Each semester.

GEOG 480 The Geographic Perspective**3 cr.**

The historical development of geographic thought with an emphasis on how geographers structure research questions. Every third semester beginning Fall 2000. *Prerequisite:* senior standing and 18 hours of geography completed.

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. Each semester and 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. Each semester and summer. *Prerequisites:* major in Geography, Earth Science, or Environmental Analysis and Planning with 24 hrs. completed, senior status, GPA of at least 2.5 in the major; approval of Department Chair; submission of Internship Agreement form to internship director prior to registering; requirements of cooperating agency, if any.

GEOG 499 Research in Geography**1-6 cr.**

Research in field of interest chosen by student and faculty. Each semester. Repeatable to 6 credits. *Prerequisites:* minimum of 15 hrs. of geography completed, GEOG 380, and permission of Department Chair.

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**2 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. Every semester.

HEED 102 First Aid**2 cr.**

Basic first aid procedures in emergencies. Maintaining self-confidence while handling an injured or suddenly ill victim. Every semester.

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. Spring only.

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. Every semester, summer.

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 only.

HEED 305 Athletic Training I**3 cr.**

Introduction into the field of athletic training. Emphasis on prevention and care of muscular skeletal injuries. Basic first aid procedures. Every semester. *Prerequisite:* BIOL 201 & 202 or permission of instructor.

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 only.

HEED 307 Consumer and Environmental Health**3 cr.**

Nature and effects of health hazards including radiation, noise, and all pollutants. Spring only.

HEED 316 Content in the School Health Program**3 cr.**

Covers tobacco, alcohol and other drugs; diseases; mental and emotional health; and safety and injury prevention as they relate to the school health program. Fall only.

HEED 401 School Health Problems**3 cr.**

Establishment of necessary health services; principles of health education in the elementary and secondary school. Every third semester beginning Spring 1998. *Prerequisite:* HEED 101.

HEED 404 Health Instruction**3 cr.**

Basic concepts of health education. Implementing a health education program for grades K-12. Every semester. Required in BLOCK semester prior to PHEC 497 in Health Education Teacher Education Track.

HEED 405 Sexuality 3 cr.
Family relationships and human sexuality. Physical and mental health, and sociological considerations of sex education. Every semester.

HEED 406 Athletic Training II 3 cr.
The advanced study of athletic training. Emphasis will be placed on the prevention of and the assessment of various athletic injuries. Spring only. *Prerequisites: HEED 305.*

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. Fall only. *Prerequisite: HEED 305*

Physical Education

One credit activity courses meet twice a week for a semester or four periods per week for a quarter. Half-credit activity courses meet twice a week for one quarter.

PHEC 101 Adapted Activities 1 cr.
An adapted program in lieu of regular physical education classes, for students with certain physical disabilities. Enrollment by recommendation of personal physician. Two periods per week. Every semester.

PHEC 102 Adapted Activities 1 cr.
Sequel to PHEC 101. Every semester.

PHEC 103 Foundations of Physical Education 3 cr.
History and philosophies of physical education. Career opportunities. Foundations for TOPE program. For teacher education track only. Fall.

PHEC 108 Wrestling 1 cr.
Fundamental skills of wrestling. Spring only.

PHEC 109 Aerobic Fitness 2 cr.
Laboratory in aerobic fitness dance with lecture sessions on weight control. Two 1-hr. labs, 1 hr. lecture. Every semester.

PHEC 111 Ballet I 1 cr.
Basic ballet techniques, creative composition, and style. Ballet personalities. Every semester.

PHEC 112 Modern Jazz I 1 cr.
Movement techniques of jazz dance; American vernacular dance; dance composition and improvisation. Every semester.

PHEC 113 Ballet II 2 cr.
Intermediate ballet techniques and terminology; ballet artists; ballet composition. Alternate springs beginning 1998. *Prerequisite: PHEC 111 or permission of instructor.*

PHEC 114 Modern Jazz II 2 cr.
Movement techniques, composition and improvisation in the jazz dance style. Fall only. *Prerequisite: PHEC 112 or permission of instructor.*

PHEC 124 Basketball 1 cr.
Fundamental skills of basketball. Every semester.

PHEC 126 Soccer 1 cr.
Fundamental skills of soccer. Spring only.

PHEC 129 Tennis 1 cr.
Fundamental skills of tennis. Every semester.

PHEC 135 Dance Appreciation 3 cr.
Dance forms, dance personalities, contemporary trends in dance. Every semester. GEP LAC Group A.

PHEC 163 Weight Training 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 for teacher education.*

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 for teacher education.*

PHEC 166 The Teaching of Physical Education Through Tactical Approaches 1 cr.
Fundamental skills of net/wall, target, fielding/striking, and invasion games. Every semester. *Prerequisite: PHEC 103 for teacher education.*

PHEC 167 The Teaching of Physical Education Through Educational Gymnastics 1 cr.
Fundamental skills of educational gymnastics. Every semester. *Prerequisite: PHEC 103 for teacher education.*

PHEC 168 The Teaching of Physical Education Through Dance Forms 1 cr.
Fundamental skills of dance. Every semester. *Prerequisite: PHEC 103 for teacher education.*

PHEC 169 The Teaching of Physical Education Through Weight Training 1 cr.
Fundamental skills of weight training and fitness. Every semester. *Prerequisite: PHEC 103 for teacher education.*

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. Spring.

PHEC 211 Modern Dance I 1 cr.
Fundamental skills of modern dance. Every semester.

PHEC 213 Modern Dance II 2 cr.
Skills of intermediate modern dance. Alternate Springs beginning 1998.

PHEC 230 Golf 1 cr.
Fundamental skills of golf. Every semester.

PHEC 236 Modern Dance III 3 cr.
Advanced dance techniques and basic choreography. Dance styles and personalities. One lecture, 4 labs per week. Alternate springs. *Prerequisite: PHEC 211 or permission of instructor.*

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. *Prerequisite: PHEC 250 or equivalent.*

PHEC 303 Biomechanics 3 cr.
Mechanics of human motion—muscles and joints. Motor skills in sports and in daily life. Required in BLOCK semester prior to PHEC 497 in Teacher Education Track. Every semester. *Prerequisites: BIOL 201 and BIOL 202 or equivalent.*

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 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. *Prerequisite: junior standing.*
- PHEC 311 Assessment & Evaluation Methodology** 3 cr.
Testing and measurement techniques; evaluation procedures. Practice in testing and interpretation. Every semester.
- 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. *Prerequisites: Emergency Water Safety certificate or Life Saving certificate.*
- PHEC 360 Theory of Track and Field** 3 cr.
Rules, fundamentals, and advanced strategy for officiating track and field; practice drills. Fall only.
- PHEC 361 Theory of Football** 3 cr.
Theory of football; officiating at the interscholastic and collegiate level. Spring only.
- PHEC 362 Theory of Baseball** 3 cr.
Fundamentals and advanced strategy for officiating baseball; practice drills. Fall only.
- PHEC 363 Theory of Field Hockey** 3 cr.
Fundamentals and advance strategy for officiating field hockey; practice drills. Spring only.
- PHEC 364 Theory of Basketball** 3 cr.
Fundamentals and advanced strategy for officiating basketball; practice drills. Fall only.
- PHEC 365 Theory of Volleyball** 3 cr.
Fundamentals and advanced strategy for officiating volleyball; practice drills. Fall only.
- PHEC 366 Theory of Soccer** 3 cr.
Fundamentals and advanced strategy for officiating soccer. Practice drills. Spring only.
- PHEC 367 Theory of Lacrosse** 3 cr.
Fundamentals and advanced strategy of officiating for lacrosse; practice drills. Spring only.
- PHEC 368 Theory of Wrestling** 3 cr.
Wrestling theory and coaching methods; officiating and rules interpretation. Application of theory. Alternate springs.
- 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. Two hrs. lecture, one 2-hr. lab. Every semester. *Prerequisite: BIOL 201 and 202.*
- PHEC 402 Adapted Physical Activities** 3 cr.
Adapting physical activities to individual disabilities. Fall - Teacher Education Track. Spring - non-Teacher Education tracks.
- PHEC 404 Supervision in Health and Physical Education** 3 cr.
Philosophy of leadership to enhance the health and physical education curriculum. Every third fall beginning in 1998.
- 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. Required in BLOCK prior to PHEC 497 in Teacher Education track. 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. Required in BLOCK semester prior to PHEC 497 in Teacher Education Track. *Prerequisite for PE majors only: junior standing or departmental permission; 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. Fall. *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. Fall. *Prerequisite: PHEC 401.*
- PHEC 412 Principles of Coaching** 3 cr.
Coaching in the school program; team psychology, training, motivation, schedule planning; application of sports knowledge to coaching. Student option to earn American Coaching Education Program Certification. Every semester. *Prerequisite: junior standing.*
- PHEC 413 Rehabilitation Techniques in Sport Medicine** 3 cr.
Various aspects of the rehabilitation process for the physically active or athletic population. Goals, techniques, evaluation methods and specific rehabilitation programs covered. Spring. *Prerequisite: HEED 406.*
- 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 track. Spring. *Prerequisite: junior standing.*
- PHEC 418 Physical Education in the Secondary Schools** 3 cr.
Materials and methods of instruction in physical education on the secondary level. Required in BLOCK semester prior to PHEC 497 in Teacher Education Track. *Prerequisite: junior standing or departmental permission; admission to Phase II teacher education.*
- PHEC 429 Special Topics in Dance** 1 to 3 cr.
Advanced analysis and practice in dance movement. Varying topics. Repeatable to 6 credits. Every semester. *Prerequisite: 2 credits in dance technique or permission of instructor.*
- PHEC 431 Dance Production** 3 cr.
Procedures for producing and directing dance productions, including the lecture-demonstration and the fall and spring dance concerts. Alternate springs. *Prerequisite: 2 credits in dance or permission of instructor.*
- 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 only. *Prerequisite: current Red Cross advanced life-saving certificate.*
- PHEC 480 Field Experience in Health, Physical Education, Sport and Recreation** 1 to 6 cr.
Special aspects of health, physical education, sport, and recreation. Sites of study may vary. Offered as needed. Repeatable up to a maximum of 6 credits.
- PHEC 490 Special Topics in Health, Physical Education, Recreation & Dance** 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, recreation and dance. It is arranged on a needs basis. Repeatable for credit if topics are substantially different.

PHEC 498 Readings in Health, Physical Education, and Recreation 1 to 4 cr.
Intensive reading on selected topic. Every semester. Repeatable for credit if topics are substantially different. *Prerequisite: major or minor in PE or Recreation and permission of instructor.*

PHEC 499 Individual Problems in Health, Physical Education, and Recreation 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 PE or Recreation and permission of instructor.*

Recreation

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 205 Camp Counseling 2 cr.
Development of the camping movement; qualifications and responsibilities of the camp counselor; leadership techniques in working with children; camp programs, outdoor skills. Weekend camp experiences provided when possible. Not open to students who have received credit for former PHEC 205. Variable.

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. *Prerequisite: RECR 221.*

RECR 330 Outdoor Education 3 cr.
Development of outdoor education in the school program. Integration of academic disciplines; conservation of the environment. Not open to students who have received credit for former course, PHEC 330. Variable offering. *Prerequisite: Permission of the instructor.*

RECR 342 Park and Facility Design 3 cr.
Study of park and recreation areas including acquisition, design and operating policies. Once a year. Not open to students who have received credit for former PHEC 442 or RECR 442. *Prerequisite: RECR 201 or permission of instructor.*

RECR 380 Recreation Leadership 3 cr.
Leadership techniques involved in recreation and park settings including leadership in small and large groups. Once a year. *Prerequisites: RECR 201, 221 or permission of instructor.*

RECR 382 Program Planning 3 cr.
Planning principles used in the development of recreation programs and leisure experiences. Once a year. Not open to students who have received credit for former course, PHEC 444. *Prerequisite: RECR 201, 221 or permission of instructor.*

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. Variable. *Prerequisite: RECR 201 or permission of instructor.*

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. Not open to students who have received credit for former PHEC 390. Every semester.

RECR 391 Management of Wilderness and Environmental Emergencies 3 cr.
Managing environmental emergencies in the backcountry including wilderness rescue and disaster planning, protecting the body from physical and biological forces and emergency care. Variable offering. *Prerequisites: RECR 390 or permission of the instructor.*

RECR 392 Backcountry Safety and Rescue 3 cr.
Application of backcountry safety and rescue techniques such as those used in high angle, whitewater and cave rescues. Variable offering. *Prerequisites: RECR 390 or permission of the instructor.*

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. *Prerequisite: RECR 221.*

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. *Prerequisite: RECR 221.*

RECR 440 Organization & Administration of Recreation & Parks 3 cr.
Structure and conduct of public, private, and school recreation and parks programs, special state and federal support programs. Not open to students who have received credit for former PHEC 440. Once a year. *Prerequisites: RECR 201, 221, 382 or permission of instructor.*

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. Once a year. *Prerequisites: RECR 201, 221, 382 or permission of instructor.*

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.

History

HIST 100 The Twentieth-Century World

3 cr.

A survey of major historical developments of the twentieth century in diverse areas of the world with the purpose of illuminating 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. Every 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. Every spring.

HIST 111 Honors: The Twentieth-Century World

3 cr.

Topical survey of the major social, political, and economic developments of the 20th century. Present world conditions and possible future developments resulting from wars, revolutions, and evolutionary social and economic forces. Both reading and writing assignments are more challenging than those in HIST 100. Every 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 Introduction to Historical Studies

3 cr.

Introduction to History as a discipline. The study and practice of the techniques of historical research and writing, and the exploration of issues of historical understanding. 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 additional 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. Variable.

HIST 302 Research Methods

1 cr.

Introduction to the methods of research and the presentation of research findings in history. Must be taken in conjunction with designated sections of English 310 and an upper level history course specified by the department. 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 additional history course.*

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 321 The Second World War

3 cr.

The military, political, economic, and social history of the war, with emphasis upon military history. Variable.

HIST 340 Ancient Egypt and the Near East

3 cr.

Mesopotamia, Egypt, Canaan, Israel. Balanced treatment of political, cultural, and socio-economic factors. 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. *Prerequisites: Completion of HIST 103, 104 recommended.*

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. Variable.

HIST 347 Tudor-Stuart England, 1485-1713

3 cr.

English history from Henry VII to Queen Anne. Variable.

HIST 348 Victorian Britain

3 cr.

Britain from about 1780 to the late 19th century. Problems and processes in the creation of the first modern industrial, urban society: the city, work, women and the family, and the Celtic regions. Variable.

- HIST 349 Twentieth-Century Britain** 3 cr.
A case study in the decline of an advanced industrial society and military giant. The pressures of war, economic changes, and the changing relationship with the United States. Primary emphasis on social history: women, the family, popular politics, social class, and Celtic nationalism. Variable.
- 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. *Prerequisite: HIST 104 or 200/300 level African American Studies course.*
- 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. Variable.
- 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 438 History of Canada** 3 cr.
Introduction to Canadian history, geography, political institutions, and social and economic development from the discovery of Canada and its settlement by the French and English to the present. 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 451 Contemporary Latin America** 3 cr.
Survey of developments in the principal Latin American nations since World War II. 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. Variable.
- 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. Variable.
- 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 United States 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 473 United States Military History, 1775-1914 3 cr.
From the American Revolution to the outbreak of World War I: the Revolutionary War, War of 1812, Mexican War, Civil War, Indian Wars, Spanish-American War, and United States imperial expansion. Variable.

HIST 474 United States Military History, 1914-Present 3 cr.
World War I, World War II, the Cold War, the Korean War, the Vietnam War, the nuclear-missile age, and the Persian Gulf War. Variable.

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 History 299 or 302 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 only. *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 only. *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 only.

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 only.

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 Honors: 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. Variable. *Prerequisite: Participation in the Honors Program, junior standing or permission of instructor.*

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 semester. 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. May be counted as a 3 hr. elective in the liberal arts component of the GEP. Every 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. Participation in a biweekly group meeting with other students enrolled in this course and a representative of the Honors Program required. 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. *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. Every Fall.

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. Every 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 only.

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 only. *Prerequisites: junior or senior standing, not on probation, Coordinator's approval of internship before registering.*

Mathematics

DVMT 100 Introductory 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.

Elements of set theory; logic of algebra; solutions of equations and inequalities; absolute value, relations, and functions; permutations and combinations; the binomial theorem; exponential and logarithmic functions; complex numbers; elements of the theory of equations. 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 226, MATH 227, MATH 228. 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 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.*

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: Mathematics 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 Applied 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 only. *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 sequences MATH 226, 227 and MATH 220, 221. 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. *MAY NOT BE USED TO SATISFY THE REQUIREMENTS FOR A MAJOR OR MINOR IN MATHEMATICS.*

MATH 226 Calculus I 3 cr.
First course of a three-course sequence; topics in the sequence include limits; derivatives and applications; integrals and applications; infinite series; introduction to vector calculus. Every semester. *Prerequisite: A passing score on the Mathematics Placement Test administered by the University or a C or better in MATH 120. MAY BE USED TO FULFILL THE BASIC MATH REQUIREMENT.*

MATH 227 Calculus II 3 cr.
Continuation of MATH 226. Every semester.

MATH 228 Calculus III 3 cr.
Continuation of MATH 227. Every semester.

MATH 320 Multivariable Calculus 3 cr.
Solid analytic geometry, partial derivatives, and multiple integrals. Spring only. *Prerequisite: MATH 228.*

MATH 340 Fundamental Concepts of Geometry 3 cr.
Experimental and informal geometry; properties of plane and space figures; geometric constructions; proof. *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 only. *Prerequisite: MATH 226 or MATH 220 or concurrent enrollment in MATH 226 or MATH 220.*

MATH 380 Introduction to Probability and Statistics 3 cr.
Discrete probability theory with statistical applications. Counting techniques, random variables, distributions, expectations, hypothesis testing and estimation, with emphasis on discrete models. Spring only.

MATH 415 Foundations of Mathematics 3 cr.
Theory of sets; mathematical logic, methods of proof in mathematics; the real number system; selected topics. Variable frequency. See department secretary for up-to-date schedule. *Prerequisite: MATH 228 or concurrent enrollment in MATH 228.*

MATH 420 Advanced Calculus 3 cr.
Limits, continuity, differentiation and integration extended to higher dimensional spaces. Topics from vector analysis and Fourier analysis. Variable frequency. See department secretary for up-to-date schedule. *Prerequisite: MATH 320.*

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 frequency. See department secretary for up-to-date schedule. *Prerequisite: MATH 228.*

MATH 426 Introduction to Complex Analysis 3 cr.
Analytic functions; Cauchy's Theorem; Taylor and Laurent series; meromorphic functions; residue theory; conformal mapping. Variable frequency. See department secretary for up-to-date schedule. *Prerequisite: MATH 228.*

MATH 432 Differential Equations 3 cr.
Solution of ordinary differential equations; Laplace transforms; numerical methods; solution by series. Fall only. *Prerequisite: MATH 228.*

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 frequency. See department secretary for up-to-date schedule. *Prerequisite: MATH 228 and COSC 200 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 frequency. See department secretary for up-to-date schedule. *Prerequisite: MATH 228 or permission of instructor.*

MATH 440 Modern College Geometry 3 cr.
An introductory synthetic study of geometry: finite, absolute, affine, Euclidean, hyperbolic, elliptic, and projective geometries. Variable frequency. See department secretary for up-to-date schedule. *Prerequisite: MATH 228.*

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 frequency. See department secretary for up-to-date schedule. *Prerequisite: MATH 228.*

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 frequency. See department secretary for up-to-date schedule. *Prerequisite: MATH 228. MATH 350 strongly recommended.*

MATH 460 Introductory Topology 3 cr.
The topology of metric spaces; introduction to general topological spaces; the separation axioms; compactness; connectedness. Variable frequency. See department secretary for up-to-date schedule. *Prerequisite: MATH 228.*

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 frequency. See department secretary for up-to-date schedule. *Prerequisite: MATH 228.*

MATH 465 Theory of Numbers 3 cr.
Divisibility; Diophantine equations; congruences; sums of squares; additional topics. Variable frequency. See department secretary for up-to-date schedule. *Prerequisite: MATH 228.*

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 1997. *Prerequisites: MATH 228 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 frequency. See department secretary for up-to-date schedule. *Prerequisite:* MATH 228, 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 frequency. See department secretary for up-to-date schedule. *Prerequisite:* MATH 380 (or MATH 209) and MATH 350 or permission of instructor.

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 frequency. See department secretary for up-to-date schedule. *Prerequisite:* MATH 209 or MATH 219 or MATH 380.

MATH 483 Theory of Interest 3 cr.
Topics include the 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 frequency. See department secretary for up-to-date schedule. *Prerequisite:* MATH 228. **MAY NOT BE USED TO SATISFY THE REQUIREMENTS FOR A MAJOR OR MINOR IN MATHEMATICS.**

MATH 484 Actuarial Mathematics I 3 cr.
Topics include survival distributions and life tables, life insurance, life annuities, net premiums, and net premium reserves. Variable frequency. See department secretary for up-to-date schedule. *Prerequisite:* MATH 228 and MATH 483.

MATH 485 Actuarial Mathematics II 3 cr.
Topics include multiple life functions, multiple decrement models, valuation theory for pension plans, nonforfeiture benefits. Variable frequency. 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 228 or permission of instructor.

MATH 491 Seminar in Mathematics 3 cr.
Individual reports and group discussions on mathematical topics and applications. Written project required. Spring, odd-numbered years. *Prerequisites:* permission of instructor and upper division standing.

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 226, 227, 228, 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 4 cr.
The structure of music, the elements that make it aurally and visually comprehensible. Application and analysis of the patterns of music. Required for majors and minors. Fall only.

MUSC 103 Theory II 4 cr.
Continuation of MUSC 102, with further emphasis on the development of aural and visual perception, and the organization of musical materials through analysis and written work. Required for majors. Spring only. *Prerequisite:* MUSC 102 or permission of instructor.

MUSC 204 Theory III 3 cr.
A continuation of MUSC 102 and 103, exploring chromatic harmony and modulation. Continued aural and visual comprehension and analysis. Required for majors. Fall only. *Prerequisite:* MUSC 103.

MUSC 205 Theory IV 3 cr.
Further application of chromatic, impressionistic, and 20th-century materials. Aural, visual, and analytical application continues. Required for majors. Spring only. *Prerequisite:* MUSC 204.

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. Fall only. *Prerequisite: permission of the Department.*

MUSC 401 Theory V 3 cr.
(Form and Analysis.) Analysis of musical structure and style in Western civilization. Required for performance specialization. Fall only. *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 Stylistic 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 115 Introduction to Music Literature 3 cr.
Overview of the general history of music: the significant literature of the major composers; stylistic changes from the Medieval period to Early Contemporary. Fall only. *Prerequisite: ability to read music fluently.*

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. Every fall semester. *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. Every spring semester. *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. Every semester.

MUSC 345 The Symphony 2 cr.
The origin and development of the symphony from the 18th century to the present. Variable. *Prerequisite: permission of instructor.*

MUSC 346 The Opera 2 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 only. *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.

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 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 only. *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 495 Internship in Music Management 9 or 15 cr.
Guided work experience with an academic component. Work must be directly related to academic program. Full-time interns register for 15 credits and may not enroll in other courses. Part-time interns register for 9 credits. Both the experiential and academic components are graded P/F. *Prerequisites: junior or 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. Every semester. *Prerequisite: permission of instructor.*

- MUSA 105 Class Piano II** 1 cr.
Continuation of MUSA 104, with emphasis on styles of harmonization, transposition, and sight-reading. Spring only. *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 only. *Prerequisite: permission of instructor.*
- MUSA 107 Class Voice II** 1 cr.
Continuation of MUSA 106. Spring only. *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 only.
- 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 only.
- 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 only. *Prerequisite: MUSA 111 or permission of instructor.*
- MUSA 116-122 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 \$50 per semester. Performance for a faculty jury at the end of each semester in lieu of a final examination. Every semester. *Prerequisite: permission of 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 only. *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 only.
- 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 only.
- 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 only.
- MUSC 325 Accompanying** 1 cr.
Supervised experience for pianists in accompanying instrumental and vocal soloists and ensembles. Every semester. *Prerequisite: permission of instructor.*
- MUSC 413 Vocal Pedagogy** 2 cr.
The various schools of vocal technique. Designed to prepare the prospective teacher of private and class voice. Two periods per week. Variable. *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 only. *Prerequisite: MUSA 203 or permission of instructor.*
- MUSA 356-362 Private Instruction** 2 cr.
Individual instruction in piano, organ, voice, strings, woodwinds, brass, and percussion. Minimum of 1 clock-hour per day intensive individual practice. Special fee \$100 per semester. One hour private lesson or two half-hour private lessons per week. At least one student recital or 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 instructor.*
- 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.*
- MUSA 392 Performance Seminar** 2 cr.
Continuation of MUSA 391. Recital required.
- MUSA 491 Performance Seminar** 3 cr.
Continuation of MUSA 392.
- MUSA 492 Performance Seminar** 3 cr.
Continuation of MUSA 491. Recital required.
- Ensemble**
All ensemble courses may be repeated for credit.
- MUSC 319 University Choral** 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 323 Choral Ensemble Laboratory** 1 cr.
Chamber choir, women's chorus, men's chorus. Open to all students. Every semester.
- 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 semester only. *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 only. *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 only. *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 333 Orchestra 1 cr.
Open to all qualifying on needed instruments. Two rehearsals per week. Every semester. *Prerequisite: permission of instructor.*

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.*

Orientation

ORIE 101 Introduction to Higher Education 1 cr.
Orientation of incoming students to academic and social contexts of college life. Nature and process of higher education; educational and career planning; learning skills; support services. Required of all 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.

Philosophy

PHIL 101 Introduction to Philosophy 3 cr.
Philosophical approaches to three major content areas: Personal Relationships (e.g., friendship), Social-Political Structures (e.g., democracy), Worldviews (e.g., the problem of God). Every semester. GEP LAC Group B.

PHIL 102 Contemporary Ethical Problems 3 cr.
Ethical issues such as abortion, euthanasia, preferential treatment, censorship of pornography, world hunger, the environment, and the treatment of animals. Every semester. GEP LAC Group B.

PHIL 111 Honors: Introduction to Philosophy 3 cr.
Philosophical problems such as the meaning of existence, freedom and determinism, body versus mind, the existence of God, the human person and human relationships. Variable. GEP LAC Group B. *Prerequisite: acceptance into Honors Program or permission of instructor.*

PHIL 201 Ethics 3 cr.
Ethical theories or selected problems in moral philosophy (e.g., relativism versus absolutism, the nature of value judgments). Variable.

PHIL 202 History of Philosophy: Ancient and Medieval 3 cr.
Classical western philosophy from the early Greeks to the Renaissance. Emphasis on Pre-Socratics, Plato, Aristotle, Augustine, and Aquinas. Fall only.

PHIL 203 History of Modern Philosophy 3 cr.
Western philosophy in the modern period; the rationalist tradition (Descartes, Spinoza, Leibniz) and the empiricist tradition (Locke, Berkeley, Hume); some reference to Kant. Spring only.

PHIL 205 Logic 3 cr.
A study of the forms of reasoning: inductive, deductive; fallacies. Variable.

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. *Prerequisite: 3 cr. in philosophy or permission of instructor.*

PHIL 303 Aesthetics 3 cr.
Analysis of the nature of art and its creation, appreciation, and criticism; the major theories of art. Variable. *Prerequisite: 3 cr. in philosophy or permission of instructor.*

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 only. *Prerequisite: 3 cr. in philosophy or permission of instructor.*

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. *Prerequisite: 3 cr. in philosophy or permission of instructor.*

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. *Prerequisite: 3 cr. in philosophy or permission of instructor.*

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. *Prerequisite: 3 cr. in philosophy or permission of instructor.*

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 only. *Prerequisite: 3 cr. in philosophy or permission of instructor.*

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. *Prerequisite: 3 cr. in philosophy or permission of instructor.*

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. *Prerequisite:* 3 cr. in philosophy or permission of instructor.

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. *Prerequisite:* 3 cr. in philosophy or permission of instructor.

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. *Prerequisites:* 3 credits in philosophy or *Introduction to Women's Studies* or permission of the instructor.

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 only. *Prerequisite:* 3 cr. in philosophy or permission of instructor.

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. *Prerequisite:* 3 cr. in philosophy or permission of instructor.

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. *GEPLAC 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. *GEPLAC 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. *GEPLAC 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 Honors: 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. Variable. *Prerequisite:* Participation in the Honors program, junior standing or permission of instructor.

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.* *GEPLAC 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. *Prerequisite: working knowledge of high school mathematics which should include algebra, geometry, and trigonometry. 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 226.*

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: MATH 226 and PHYS 262. Corequisite: MATH 227.*

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 include heat, thermodynamics, kinetic theory, atomic physics, and quantum physics. Six hours of integrated lecture/lab/discussion per week. Spring. *Corequisite: MATH 228. Prerequisite: MATH 227 and PHYS 263.*

PHYS 282 Thermodynamics**3 cr.**

Introduction to thermodynamics. Thermodynamic properties of matter. Three laws of thermodynamics, cycles, reactions, mixtures. Variable. 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 years. *Prerequisites: PHYS 216, or PHYS 262 and MATH 228, 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. *Prerequisites: PHYS 312 and MATH 432. Prerequisite or corequisite: MATH 227 and PHYS 264 or permission of instructor.*

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. *Prerequisites: PHYS 263 and MATH 320. 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 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. 3 hrs. lecture and 3 hrs. lab. Not open to students with credit for PHYS 316. Fall. *Prerequisites: PHYS 216 or PHYS 262, MATH 226, 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. 3 hrs. lecture and 3 hrs. lab. Spring. *Prerequisite: PHYS 331.*

PHYS 400 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. For physics majors with senior standing. Spring. *May be repeated once for credit.*

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 Schrodinger 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 228, and COSC 200 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 1 cr.
Individual reports and group discussions on current topics. Subject matter selected jointly by student and instructor. Fall. *For physics majors with junior or senior standing. May be repeated once for credit.*

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 211 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. Every semester. GEP LAC Group D.

POSC 213 Honors Introduction to World Politics 3 cr.
Accelerated study of the major issues in international relations; causes of war; determinants of peace; international political economy; relevance of international organizations. Considered through three theoretical perspectives: Realism; Idealism; Rationalism. Variable. GEP LAC Group D. *Prerequisite: Acceptance into the Honors Program or permission of the instructor.*

POSC 231 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. Every semester.

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 211/213 or POSC 231; POSC 231 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 211/213 or POSC 231; POSC 231 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 211/213 or POSC 231; POSC 231 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. Every fall. *Prerequisite: POSC 211/213 or POSC 231 or permission of instructor; POSC 231 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 211/213 or POSC 231; POSC 231 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. Every spring. *Prerequisite: POSC 211/213 or POSC 231 or permission of instructor.*

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. Every fall. *Prerequisite: POSC 211/213 or POSC 231 or permission of instructor.*

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 211/213 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. Every 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. Every 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. Every fall. *Prerequisite:* POSC 211/213 or POSC 231 or permission of instructor; POSC 231 preferred.
- POSC 435 Model Organization of American States** 3 cr.
Detailed examination of the structure, functions, procedures, and issues associated with contemporary international organizations through preparation for and participation in the Model Organization of American States. Every year. Not open to students who have credit for former POSC 445. *Prerequisite:* POSC 341 and permission of instructor.
- POSC 441 Theories of International Politics** 3 cr.
Current theoretical approaches to the study of international politics. Structure of the international system; modes of conflict and cooperation among nations; the making of foreign policy. Every fall. *Prerequisites:* POSC 341 or 342 or permission of 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. Every spring. *Prerequisite:* POSC 211/213 or POSC 231 or permission of instructor; POSC 231 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. Fall, spring and summer.
- 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. Fall, spring and summer. *Prerequisites:* junior or senior standing, not on probation; departmental approval of internship before registering.

POSC 498 Readings in Political Science**1 to 6 cr.**

Individual advanced readings on a special interest. Regular conferences with instructor. Repeatable to 6 credits. Every semester. *Prerequisite: written permission of instructor.*

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 only. GEP LAC Group D. *Prerequisite: acceptance into the University Honors Program or permission of instructor.*

PSYC 210 Child Psychology**3 cr.**

From conception through childhood, for understanding the early formative years. Variable. *Prerequisite: PSYC 150 or PSYC 151.*

PSYC 212 Adolescence and Adulthood**3 cr.**

Introduction to psychological development, adolescence through maturity. Variable. *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. Summer session or Intersession. *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. *Prerequisites: admission to the Psychology major 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. *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 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. *Prerequisite: PSYC 300 with a C or better.*

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. Variable. *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. Variable. *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. Variable. *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 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. Variable. *Prerequisites: PSYC 150/151 and 3 additional credits in Psychology or permission of instructor.*

- PSYC 404 Psychology of the Exceptional Child** 3 cr.
Developmental and behavioral characteristics of exceptional children — the mentally deficient, physically handicapped, exceptionally gifted, and children having serious personality and conduct problems. Education, home management, social control, and psychological treatment. Brief practicum with an exceptional child can be arranged. *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. Variable. *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. Variable. *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. Variable. *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. Variable. *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. Variable. *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. Variable. *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. Variable. *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. Variable. *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** 3 cr.
Focuses on developing the skills and a conceptual framework that will enhance the student's ability to counsel individuals of diverse cultural backgrounds. Self-understanding and its effect on cross-cultural relationships will also be emphasized. Variable. *Prerequisites:* PSYC 410 or permission of the instructor.
- 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. Variable. *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. Variable. *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. Variable. *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. Variable. *Prerequisites:* PSYC 150/151, PSYC 210 or 212; at least junior status 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 credits 495). Graded A-F. *Prerequisites:* see PSYC 495.
- PSYC 495 Internship in Psychology** 6 or 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 credits in 495 and 3 credits of 492. Graded P/F. *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. *Prerequisites: PSYC 150/151 and 3 additional credits in Psychology or permission of instructor; senior standing; or permission of the 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 department. 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. *Prerequisites: PSYC 297; PSYC 300; PSYC 301; admission to the Psychology major; submission of a detailed written proposal to the Department Chair, endorsed by the faculty director, prior to registering for the course and, if possible, before the end of the preceding semester.*

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. *Prerequisites: PSYC 297; PSYC 300; PSYC 301; admission to the Psychology major; submission of a detailed written proposal to the Department Chair, endorsed by the faculty director, prior to registering for the course and, if possible, before the end of the preceding semester.*

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. Fall semesters beginning Fall 2001. *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 only. *Prerequisites: completion of introductory courses and progress on concentration plus written permission of social science coordinator.*

Social Work

SOWK 220 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 220. Fall semester. Not open to students who have credit for former 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. Every 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

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 220, 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 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; 2.5 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 220 Racial and Cultural Minorities 3 cr.
Analysis of minority-majority group situations, their causes and consequences. Minorities in the United States. Every fall. Not open to students who have credit for former SOCI 320. *Prerequisite:* SOCI 100 or SOCI 111. Also offered as SOWK 220.

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 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. Every 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. *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 semester in 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 semester in 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 semester in 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 semester in 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.*

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 which 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 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 4/1/99.

Administration

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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.

PANSYE S. ATKINSON, Director of Affirmative Action/EEO. B.A., Fisk University; M.Ed., Frostburg State University.

JAMES W. SHAW, Director of Hagerstown and Frederick Centers. B.A., B.S., Otterbein College; M.A., Ph.D., University of Michigan.

VACANT, Assistant to the Director of the Hagerstown Center.

UNIVERSITY ADVANCEMENT

GARY S. HOROWITZ, Vice President for University Advancement. B.A., The City College of New York; M.A., Ph.D., The Ohio State University.

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A. TYRONE DEMARTINO, Director of News & Media Services. B.A., Frostburg State University.

VACANT, Associate Director of News & Media Services.

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CHRISTOPHER J. HARMON, Director of Annual Giving. B.S., University of Maryland, College Park.

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ANN TOWNSELL, Graphic Designer. B.S. Frostburg State University.

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STEPHANIE R. CESNICK, Webmaster. B.S., Frostburg State University.

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VACANT, Dean, College of Liberal Arts and Sciences.

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BRYCE W. QUARVE, Performing Arts Center Facilities Manager. B.M., University of Idaho; M.A., St. Mary's University of Minnesota.

JOHN R. CATTANACH, Performing Arts Center Technical Director. B.A., University of Minnesota; M.F.A., University of Florida.

STEVEN P. WILKINSON, Dean, College of Business. B.S., Ph.D., Southern Illinois University.

SUSAN ARISMAN, Dean, College of Education. B.S., Marquette University; M.A., University of Minnesota; Ph.D., The University of Chicago.

OSCAR J. LEWIS, Athletic Facilities Manager. B.S., M.Ed., Frostburg State University.

DIANE M. MOREA, Director of Athletics. B.S., M.A., Western Michigan University; M.B.A., Lake Erie College.

ANTHONY J. ZALOGA, Head Athletic Trainer. B.S., Northeastern University; M.S., Indiana State University.

JEFF P. KRONE, Director of Sports Information/Assistant to Director of Athletics.

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JENNIFER BOWMAN, Head Coach, Women's Volleyball. B.A., B.S., Salisbury State University.

PHILIP G. CARUSO, Head Coach, Baseball. B.S., M.Ed., Frostburg State University.

JAMES M. CRAWLEY, Head Coach, Women's Basketball. B.A., Lynchburg College; M.A., George Peabody College.

ERIC B. DAY, Head Coach, Women's Lacrosse. B.S., M.Ed., Frostburg State University.

JOHNSTON N. HEGEMAN, Head Coach, Men's Soccer. B.S., M.Ed., Frostburg State University.

REBECCA S. KELLER, Head Coach, Women's Softball. B.S., Salisbury State University.

ROBERT W. LEWIS, Head Coach, Men's & Women's Cross Country; Head Coach, Men's & Women's Indoor Track and Head Coach, Men's & Women's Outdoor Track. B.S., Capital University; M.A., Ph.D., The Ohio State University.

JODI L. PEPPEL, Director of Intramurals and Assistant Women's Basketball Coach. A.A., Hagerstown Junior College; B.S., Alderson-Broaddus College; Master of Sports Science, U.S. Sports Academy.

ROBERT G. RONAI, Head Coach, Men's Basketball. B.S., St. Francis College; M.A., Ball State University.

KRISTIN S. SCAROLA, Head Coach, Women's Field Hockey. B.S., B.A., Salisbury State University.

RUBIN STEVENSON, Compliance Officer and Assistant Coach, Football. B.S.W., Salisbury State University; M.S., Central Connecticut State University.

EDWARD F. SWEENEY, Head Coach, Football. B.A., C.W. Post College; M.Ed., University of Vermont.

ERNEST C. MCCOOK, Assistant Coach, Football. B.S., Wesley College; M.S.S., U.S. Sports Academy.

GEORGE C. VILLARREAL, Head Coach, Men's and Women's Swimming. B.A., Emory University; M.S., Texas A&M University.

VACANT, Head Coach, Women's Soccer.

STUDENT AND EDUCATIONAL SERVICES

ALICE R. MANICUR, Vice President for Student and Educational Services. B.S., Berea College; M.S., Ed.D., Indiana University.

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CARMEN B. JACKSON, Assistant to the Vice President for Student and Educational Services. B.S., M.S., Illinois State University.

E. BOYD YARBROUGH, Assistant to the Vice President for Student and Educational Services. B.A., Furman University; M.A., Appalachian State University, Ph.D., Florida State University.

BERNARD WYNDER, Director of Recruitment Services. B.S., M.Ed., Frostburg State University.

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M. EDGERTON DEUEL, II, Director of Admissions. B.A., Bucknell University; M.A., Syracuse University.

WRAY N. BLAIR, Associate Director of Admissions. B.S., M.S.J., West Virginia University.

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ANGELA L. HOVATTER, Financial Aid Counselor. B.S., Frostburg State University.

MORRIS H. WILLEY, Registrar. B.S., M.Ed., Frostburg State University.

PHYLLIS M. CASEY, Associate Registrar. B.A., Virginia State University; M.Ed., The Pennsylvania State University.

JOHNSTON N. HEGEMAN, Director of PASS and Coordinator of TRIO Programs. B.S., M.Ed., Frostburg State University.

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Policies

Credit-by-Exam and Other Non-traditional Learning

Following is a list of the types of examinations and other non-traditional learning experiences that Frostburg State University will accept for credit towards a degree. Students will receive elective or required credit depending on the content of the test or other experience evaluated. As of April 1999, the programs listed here are the only forms of non-traditional credit accepted. (Faculty are currently reviewing the International Baccalaureate.) 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 (see following list of tests currently evaluated)
CLEP	Minimum score varies (see following list of tests currently evaluated)
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
Special FSU 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 additional credits through examination. These examinations may be in three forms: Advanced Placement Examinations; College Level Examination Program (CLEP); 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

1. To earn credit by examination, you must be currently enrolled at Frostburg State University as a full-time or part-time student.
2. An examination cannot be used to remove a failure in a course completed at Frostburg or elsewhere.
3. An examination cannot be used to remove a low grade earned in a course completed at Frostburg or elsewhere.

4. An examination may not be repeated or retaken in order to earn a higher score.
5. Students currently registered for an equivalent course are ineligible to receive credit-by-examination. If you believe you may qualify for credit-by-exam, you should take the examination prior to enrollment in the course. You cannot receive credit-by-exam and credit through course completion for the same course.
6. 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. You may receive credit by examination for grades of 3, 4 or 5 on the College Board Advanced Placement Examinations.

Procedures

1. Make arrangements to take the Advanced Placement Examination at the appropriate time. Pay the examination fee to the appropriate agency.

2. Your official score must be sent directly by the testing agency to the 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.
3. The credit will be recorded on your transcript without charge.

College Level Examination Program (CLEP)

CLEP is administered by the College Entrance Examination Board also. See the address above.

The examinations consist of college-level general and subject examinations designed to measure knowledge acquired through ways 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.

Special Departmental Examinations

After paying a \$25 testing fee for each departmental exam, you may take a special examination in place of any course for which credit by examination has been established. If you pass the examination, the course will be waived, and you may receive credit for it by paying an additional processing fee. The department determines passing standards, as well as eligibility standards, if applicable. Students currently or formerly enrolled in a course are ineligible to take a special departmental exam to exempt from the same course.

Procedures

1. Request permission from the Department Chair to be evaluated for credit in a particular course.
2. Pay a \$25 administrative testing fee at the University & Student Billing Office.
3. The Department Chair assigns an appropriate faculty member to evaluate you. In some cases, the department offers the exam on a regularly scheduled basis. See the list that follows.
4. The faculty member evaluates your work according to quantitative and qualitative standards previously established by the department — for example, by an oral or written examination or by performance.
5. If the faculty member's evaluation reveals that your achievement is equal or superior

to that of a student passing the course in a traditional way, the department will report the grade of 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.

Advanced Placement Tests

The following is the list of Advanced Placement Tests currently evaluated. Other tests may be accepted, but they will need to be evaluated for course equivalency prior to the awarding of credit. Minimum score required is 3, unless otherwise noted.

Title of Test	FSU Course Equivalent(s)	Credit Hours Awarded
ENGLANG/COMP	ENGL 101 Freshman Composition	3
ENGLIT/COMP	Score of 3: ENGL 101 Freshman Composition	3
	Score of 4 or 5: ENGL 101 Freshman Composition and ENGL 150 Intro. to Literature	3
ENGLIT	ENGL 150 Intro. to Literature	3
EUROPEAN HISTORY	HIST 113 World History I	3
	HIST 114 World History II	3
U.S. HISTORY	HIST 103 History of U.S. I	3
	HIST 104 History of U.S. II	3
ART - GENERAL	ART 104 Foundational Studies I or ART 105 Foundational Studies II	3
ART - DRAWING	ART 212 Drawing	3
ART HISTORY	ART 100 Art Appreciation	3
SPAN LANG	SPAN 101 Basic Elements of Spanish I	4
	SPAN 102 Basic Elements of Spanish II	4
BIOLOGY	BIOL 149 General Biology I	4
	BIOL 150 General Biology II	4
CHEMISTRY	CHEM 101 General Chemistry I	4
	CHEM 102 General Chemistry II	4
PHYSICSB	PHYS 215 General Physics I	4
	PHYS 216 General Physics II	4
PHYSICS C (Mechanics)	PHYS 261 Principles of Physics I: Mechanics	4
PHYSICS C (Electricity & Magnetism)	PHYS 262 Principles of Physics II: Electricity & Magnetism	4
CALCULUS AB	MATH 120 Pre-Calculus I	3
	MATH 226 Calculus I	3
CALCULUS BC	MATH 120 Pre-Calculus Math	3
	MATH 226 Calculus I	3
	MATH 227 Calculus II	3
COMPUTER SCIENCE A	Scores of 3 or 4: COSC 195 Computer Science Elective	3
	Score of 5: COSC 200 Computer Science I	3
COMPUTER SCIENCE AB	Scores of 3 or 4: COSC 200 Computer Science I	3
	Score of 5: COSC 200 Computer Science I	3
	COSC 201 Computer Science II	3
MACROECONOMICS	ECON 201 Principles of Econ. (Macro)	3
MICROECONOMICS	ECON 202 Principles of Econ. (Micro)	3
GOV'T POSC - U.S.	POSC 110 Intro. to American Politics	3
GOV'T POSC - COMP	POSC Elective 195	3
PSYCHOLOGY	PSYC 150 General Psychology	3
STATISTICS	MATH 209 Elements of Applied Probability and Statistics	3

CLEP Tests

As of April 1999, the following CLEP (College Level Examination Program) tests have been evaluated for credit by the department offering course work in the subject area at FSU. Other tests may be acceptable for credit, but they would have to be evaluated, and credit is not guaranteed.

Title of Test	Min. Score Required	FSU Equivalent(s)	Credit Hours Awarded
CLEP General Exams:			
English Composition w/essay	500	ENGL 101	3
General Humanities	500	HUM 195 (elec)	6
General Mathematics	500	MATH 195 (elec)	6
General Natural Science	500	NAT SCI 195 (elec)	6
General Social Sci. - Hist.	500	SOC SCI 195 (elec)	6

CLEP Subject Exams:

Intro. Accounting	50	ACCT 101, 102	6
Afro-Amer. History	50	HIST 315	3
American Government	47	POSC 110	3
American History I & II	46	HIST 103, 104	6
American Literature	47	ENGL 261	3
Analysis & Interp./Lit.	50	ENGL 150	3
Biology	49	BIOL 149, 150	8
Intro. Business Law	51	BUAD 291	3
Intro. Business Mgt.	47	BUAD 100	3
Intro. Calculus	48	MATH 220, 221, or 120	6 or 3
Calculus w/Anal. Geometry	51	MATH 226, 227	6
General Chemistry	48	CHEM 101, 102	8
College Algebra	50	MATH 102	3
College Algebra - Trig.	49	MATH 120	3
College Composition	48	ENGL 101	3
Computer & Data Proc.	46	COSC 200	3
Computer Prog. Elem. (Fortran IV)	48	COSC 201	3
Info Syst. & Computer App.	55	COSC 100	3
Intro. Economics	48	ECON 201, 202	6
English Composition	47	ENGL 101	3
English Literature	47	ENGL 260	3
Freshman English	48	ENGL 101, 150	6
Geology	49	GEOG 307, 308	8
Human Growth & Develop.	45	PSYC 210	3
Intro. Marketing	48	BUAD 361	3
Microbiology	48	BIOL 304	4
Gen. Psychology	47	PSYCH 150	3
Intro. Sociology	46	SOCI 100	3
Statistics	48	MATH 209	3
Tests & Measurements	46	PSYC 408	3
Trigonometry	49	MATH 103	3
Western Civilization I&II	50	HIST 113, 114	6

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
ACCT 302	Intermediate Acct. II	3
ART 104	Foundational Studies I	3
ART 105	Foundational Studies II	3
ART 212	Drawing	3
BIOL 109	Human Biology & the Environment	4
BIOL 149	General Biology I	4
BIOL 150	General Biology II	4
COSC 100	Intro. to Computer Science	3
COSC 200	Computer Science I	3
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 275	Intro. to Spatial Analysis	3
GEOG 307	Adv.Physical Geology	4
GEOG 308	Adv.Historical Geology	4
HEED 100	Personal Wellness	2
MATH 102	College Algebra	3
MATH 103	Trigonometry	per course
MATH 106	Algebra w/Calculus for Business	
MATH 120	Pre-Calculus Math.	
MATH 209	Elements of Probability & Statistics	
MATH 220	Calculus for Applications I	
MATH 226	Calculus I	
MUSC 101	Music Fundamentals	2
MUSC 102	Theory I	4
MUSC 414	Class Piano IV	1
PHYS 203	Physical Science	4
PSYC 150	General Psychology	3
PSYC 210	Child Psychology	3
PSYC 212	Adolescence & Adulthood	3
PSYC 404	Psychology Exceptional Child	3
PSYC 414	Theories of Personality	3
PSYC 417	Psychology of Abnormal Behavior	3
PSYC 418	Social 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; SPAN 101, 102, 211, 212 (4 credits per course).

7. You may take such exams only once.

University System of Maryland Policy for Student Residency Classification

for Admission, Tuition and Charge-Differential Purposes

I. Policy

It is the policy of the Board of Regents of the University System of Maryland to recognize the categories of in-state and out-of-state students for purposes of admission, tuition, and charge differentials at those constituent institutions where such differentiation has been established. The student is responsible for providing the information to establish eligibility for in-state resident status.

Students who are financially independent or financially dependent, as defined herein, shall have their residency classification determined on the basis of permanent residency which for purposes of this policy shall be determined by the criteria set forth in I. A. through E. below. A student will be assigned in-state status for admission, tuition, and charge differential purposes only if the student, or if the student is financially dependent, the parent, guardian or spouse, fulfills all of the following:

A. FOR AT LEAST TWELVE CONSECUTIVE MONTHS immediately prior to and including the last date available to register for courses in the semester/term for which the petition applies, the student, or in the case of a financially dependent student, the student's parent, guardian or spouse MUST:

- own and continuously occupy or rent and continuously occupy 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;
- maintain within Maryland substantially all personal property;
- pay Maryland income taxes on all earned taxable income, including all taxable income earned outside the state;
- receive 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;
- have a legal ability under federal and Maryland law to reside permanently in Maryland without interruption.

B. For at least eleven consecutive months immediately prior to and including the last date available to register for courses in the semester for which the application applies, the student, or if the student is financially dependent, the parent, guardian or spouse, must:

- Register all owned motor vehicles in Maryland; and
- Obtain a valid driver's license issued by the State of Maryland, if licensed to drive in any other jurisdiction;

C. Within twelve consecutive months immediately prior to and including the last date available to register for courses in the semester for which the application applies, the student, or if the student is financially dependent, the parent, guardian or spouse must register to vote in Maryland, if registered in any other jurisdiction.

D. A financially independent student classified as in-state loses that status at such time as the student no longer meets one or more of the criteria set forth in I. A.-C. A financially dependent student

classified as in-state loses that status at such time as the parent, guardian or spouse on whom the status was based no longer meets one or more of those criteria.

- E. In addition, persons in the following categories shall be accorded the benefits of in-state status for the period in which any of the following conditions apply:
 1. A full-time or part-time (at least 50 percent time) regular employee of the University System of Maryland;
 2. The spouse or dependent child of a full-time or part-time (at least 50 percent time) regular employee of the University System of Maryland;
 3. A full-time active member of the Armed Forces of the United States whose home of residence 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;
 4. A graduate assistant appointed through the University System of Maryland for the semester/term of the appointment. Except through prior arrangement, status is applicable only for enrollment at the institution awarding the assistantship.
- F. 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.

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 residency status must be requested by submitting a University System of Maryland "Petition for Change in Residency 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 a residency classification is sought.
- C. The student shall notify the institution in writing within fifteen (15) days of any change of 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 other disciplinary actions provided for by the institution's policy. 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 as set forth in Section I, if it is determined that application of the criterion creates an unjust result. These procedures shall be filed with the Office of the Chancellor.

III. Definitions

- A. Financially Dependent: For 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 a parent, legal guardian, or spouse 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 a parent and/or legal guardian and/or spouse, the student shall be considered financially dependent on the person providing the greater amount of support. The dependent relationship must have formally existed by legally contracted marriage or court order recognized under the laws of the State of Maryland for at least 12 consecutive months immediately prior to and including the last date available to register for courses in the semester/term for which the petition applies.

- 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 laws of the State of Maryland, an adoptive parent.
- D. Guardian: A guardian is a person so appointed by a court order recognized under the laws of the State of Maryland.
- E. Spouse: A spouse is a partner in a legally contracted marriage as recognized under the laws of the State of Maryland.
- F. 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.
- G. Regular Employee: A regular employee is a person employed by the University System of Maryland who is assigned to a state budget line. Examples of categories NOT considered regular employees are graduate assistants, contingent employees, if-and-when needed, and temporaries.

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 from the Provost, the Student and Educational Services, and the Administration and Finance divisions. 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.

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 development and determination of the program requirements in major fields of study for a baccalaureate degree, including courses in the major field of study taken in the lower division.
- (2) A receiving 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.