University of Maryland University College

School of Undergraduate Studies

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www.umuc.edu

UMUC in Maryland and Around the World

At University of Maryland University College (UMUC), a high-quality education is always within reach. UMUC is dedicated to offering on-site and online courses and resources to adult students in Maryland and around the world. The leading education provider for the U.S. military, UMUC serves nearly 42,000 servicemembers worldwide. With more than 100 global course locations and 120 undergraduate and graduate degree and certificate programs offered entirely online, UMUC makes it possible to earn a widely respected degree from just about anywhere.

UMUC's commitment to students around the globe extends far beyond providing access to excellent degree programs. An online academic and administrative services portal, MyUMUC, makes it simple for students to register for courses, pay tuition, and order textbooks and other supplies when it's convenient for them. Students can also access academic and career advising, financial aid counseling, library services, and much more online via the university's Web site or by phone or e-mail. All over the world, UMUC gives its students what they need to succeed, putting goals within their reach.

This catalog provides the degree requirements and recommended curriculum for students who begin continuous study on or after August 1, 2008. (Details are listed on p. 7.) Students should keep their catalog available for easy reference throughout their degree program.

From the Dean

I want to personally welcome you to UMUC, an institution devoted to serving your needs as an adult learner. Whether you are about to begin your first college-level course or well on your way toward finishing your degree, you'll find this catalog will help you plan your pathway to meet your educational and professional goals.

The catalog does more than list courses to choose from; it also provides answers to many of the questions you may have about UMUC— from details about particular majors to information on transferring credit from a community college or joining student clubs. You should also take advantage of the university's online portal to information and services, MyUMUC.

But the catalog is only the beginning of your connection to UMUC. Completing your undergraduate education is an important milestone in your life, and UMUC has more than 60 years of experience in helping adult students earn their degrees while also balancing family and work responsibilities. We put our experience to work for you by continuously developing new educational programs, delivery formats, and support services that allow you to focus on gaining an education without obstacles. We want to help you acquire the education and skills that will serve you now and for the rest of your life.

If we can assist you in any way, never hesitate to contact my office at *deanundergrad@umuc.edu.* I look forward to hearing from you.

Sincerely,

Marie A. Cini

Marie A. Cini, PhD
Vice Provost and Dean,
School of Undergraduate Studies

Table of Contents

MAJORS are indicated in bold.

Welcome to UMUC

A UNIQUE INSTITUTION

University of Maryland University College (UMUC) is unique among institutions of higher education. From its founding in 1947, UMUC was designed to meet the educational needs of adult students—students who must balance study with the demands of work and family life.

Today UMUC has grown to be the second largest public university in Maryland, serving students throughout the state, the nation, and the world. Yet its focus on providing open access to high-quality educational programs and services—eliminating the barriers that can keep students from achieving their educational goals—remains unchanged.

CARRYING OUT THE MISSION

Students First

At UMUC, student success is of paramount importance. The university seeks not only to help students fulfill their current education goals but also to create an educational partnership that will last throughout their lives.

To that end, the university looks first for ways to ensure that students can easily access programs and services. Admission policies are designed to simplify the process (standardized tests are not required), making it possible for students to apply and register at the same time.

As a global university, UMUC makes it possible for students to take classes any time, any place, by offering the largest selection of online programs available—in addition to classes at sites throughout Maryland and the metropolitan Washington area and at military sites in Europe and Asia. Student services can also be accessed online and by phone, as well as on-site.

Convenience and flexibility are not the only concern, however. UMUC seeks to create a learning environment that students will find respectful of their diverse backgrounds, inclusive, responsive, and relevant.

Recognizing that financial concerns are often the biggest obstacle to higher education, UMUC also strives to keep tuition costs low and provides numerous financial aid opportunities, including scholarships for military or community college students.

Excellence

An accredited university, UMUC is dedicated to providing the highest quality programs and services to its students and ensuring excellence in its online and on-site courses.

In providing these programs, UMUC relies on a renowned faculty of scholar-practitioners—teachers who bring real-world experience to courses—and the use of the latest technologies. UMUC also is able to provide a wealth of resources to its students because of its place within the University System of Maryland.

The success of UMUC's efforts is evident. Year after year, UMUC continues to garner awards from such notable organizations as the University Continuing Education Association, the Sloan Consortium, and the Maryland Distance Learning Association.

Innovation

UMUC has always looked for new and better ways to serve students. Long before the online revolution, UMUC was delivering courses to students at distant locations, using any and all available technologies—from interactive television to voice mail. Today, students access both courses and services online, using WebTycho, UMUC's proprietary course-delivery system, and MyUMUC, the university's online gateway to services and information. UMUC's faculty also strive to find new ways to best use these technologies to assist their students' learning.

FACILITIES AND PROGRAMS

UMUC offers degree programs from the associate's level to the doctorate. Most undergraduate and graduate programs are available online. These academic programs are administered by the School of Undergraduate Studies and the Graduate School of Management and Technology. The Graduate School also comprises the National Leadership Institute (which provides noncredit leadership development training), the Institute for Environmental Management, and the Institute for Global Management.

Headquarters for these programs are located in Adelphi, Maryland, and also serve as home to a prestigious art collection and a conference facility, the Inn and Conference Center, operated by Marriott. Most classes and services, however, are provided at nearly 150 sites worldwide, as well as through cutting-edge technology—online via the university Web site, WebTycho, and MyUMUC and by phone via the Interactive Registration and Information System (IRIS).

FOR ASSISTANCE

Assistance is available by e-mail at *info@umuc.edu,* or by phone at 800-888-UMUC (8682).

School of Undergraduate Studies

The mission of the School of Undergraduate Studies at University of Maryland University College is to provide open access to quality undergraduate educational opportunities to women and men around the world, including residents of the state of Maryland, members of the U.S. Armed Services, and national and international students pursuing a university education online. The School of Undergraduate Studies welcomes students and assists them as they enter and progress through the university. It seeks to prepare graduates who are and will become effective citizens and professionals in their organizations, communities, and families.

At the undergraduate level, UMUC offers the Associate of Arts (for active-duty military personnel only), the Bachelor of Arts, the Bachelor of Science, and the Bachelor of Technical and Professional Studies degrees, as well as a wide range of undergraduate certificates. The School of Undergraduate Studies is committed to meeting undergraduate students' needs for life-long learning by providing innovative delivery of high-quality educational programs, ensuring substantive and relevant curricula, and recognizing the value of experiential learning.

PREPARING CITIZENS FOR THE 21ST CENTURY

UMUC prepares graduates to be effective professionals and citizens in their organizations, communities, and families. The university values the contributions of both a broad-based education and specific disciplines to the undergraduate experience and thus incorporates cross-curricular context and analytical approaches in all programs to complement practice.

Instruction and curricula at UMUC are based on the belief that central to all learning is the ability to participate in an increasingly global and diverse society and to interact in civil and humane ways. UMUC

also recognizes the value of historical insight while ensuring that its programs are contemporary in approach. Understanding the importance of contemporary skills in information acquisition and evaluation, effective writing, and technological fluency, the university expects students to master and practice those skills as part of their study toward their undergraduate degree. In fulfillment of these principles, UMUC provides undergraduate students with a broad foundation in general education.

For their core academic studies, students may choose one of 32 academic majors from a wide variety of academic fields, including business, computing, humanities, communications, biotechnology, social sciences, legal studies, environmental management, gerontology, and fire science. (A chart of available programs is on pp. 10–11.) Academic minors are available in 38 different areas. The majors and minors provide focused courses of study that are developed and kept current through consultation with faculty, employers, professional and educational organizations, and other experts in the field. These academic programs prepare students for the modern workplace and also help working students put their current knowledge into a broader context.

Recognizing the importance of lifelong learning, UMUC also offers 48 undergraduate certificates covering specific content areas in business and management, communications, computing and technology, gerontology, paralegal studies, and science and security. Certificates are especially valuable for students who wish to refresh their skills and knowledge, advance to a higher level or different specialty in the workplace, or earn a credential for career advancement while progressing toward the bachelor's degree. (Full descriptions of certificates begin on p. 94.) Courses toward these certificates may also be applied toward the bachelor's degree.

UMUC welcomes all students and helps them achieve their educational goals but has a special focus on the needs of adult students in the workforce. In 2007, 82 percent of UMUC undergraduates worked full-time, and more than half had at least one child. Currently, the median age for stateside undergraduate students is 31 years old.

In recognition of the diverse educational goals and aspirations of its students, the university uses a variety of strategies to ensure access and facilitate degree completion. Knowing that adult students bring experience as well as a willingness to learn, UMUC acknowledges the value of that experience by incorporating the assessment of nontraditional learning in the evaluation of students. Since adult students may have gained college-level learning from multiple sources, UMUC offers a number of innovative credit options that recognize the learning achieved through work and life experience and accelerate progress toward the degree. These options (described on pp. 245–47) include Cooperative Education, which offers credit for new learning in the workplace, and Prior Learning, which offers credit for college-level learning acquired through previous life or work experience. UMUC also accepts credit from community college coursework and a variety of other sources, including military service credit and credit by examination (described on pp. 245–49).

UMUC understands the demands of balancing work, family, and study and responds by offering undergraduate classes at convenient locations and times, including evenings and weekends. Courses are also provided in innovative formats, including accelerated sessions, online delivery, and hybrid courses that combine on-site and online delivery. The rapid growth in undergraduate enrollments at UMUC testifies to the convenience, flexibility, and substantive content of its academic offerings in all formats.

EDUCATIONAL PARTNERSHIPS

UMUC is dedicated to collaboration and cooperation with other Maryland educational institutions, both public and private, and actively seeks partnerships with those institutions to benefit Maryland citizens. For 60 years, UMUC has proudly served the U.S. military through its educational partnership in Europe and Asia. The university also reaches out through educational collaborations around the world.

In support of the university's mission to extend access to educational opportunities to Maryland's adult students, UMUC has formed alliances with 15 Maryland community colleges (listed at right), enabling students to earn an associate's degree at an allied community college and finish a bachelor's degree by completing upper-level coursework at UMUC. These alliances offer students a seamless transition between curricula through linked degree programs. Numerous locations in Maryland and the Washington, D.C., area and online courses enable students to complete associate's and bachelor's degrees conveniently close to home.

UMUC's partnerships with Maryland community colleges have expanded further with the creation of several specialized programs. The Bachelor of Technical and Professional Studies programs in biotechnology (described on p. 19) and laboratory management (described on p. 66) are joint initiatives with several community colleges in Maryland. Special UMUC scholarships are also available for graduates from Maryland community colleges.

UMUC is a charter member of Maryland-Online, a consortium of Maryland community colleges and universities formed to encourage collaboration among institutions across Maryland and to extend resources for the development and delivery of online courses.

UMUC also works to develop strong strategic partnerships with local and national leaders in business and industry, government, and nonprofit organizations and is an important partner in the region's economic development.

Advisory councils made up of corporate, governmental, and nonprofit leaders assist the School of Undergraduate Studies in developing and maintaining workplace-relevant curricula and programs. Consistent with its mission of bringing convenient and relevant learning opportunities to the workforce, UMUC has developed strong relationships with many prominent employers in the area and around the country, including the World Bank, Comcast, UAW-Ford, the Federal Bureau of Investigation, and Northrop Grumman. UMUC has developed a certificate program with the National Volunteer Firefighter Council and other customized programs for employers and organizations across the country. The university has developed articulated programs with other educational institutions nationwide—including community colleges across the United States—and internationally, including Far East National University and Irkutsk State University in Russia.

FOR MORE INFORMATION

For more information about UMUC and the School of Undergraduate Studies, students should contact the university by phone at 800-888-UMUC (8682) or by e-mail at *umucinfo@umuc.edu.*

ALLIANCE PARTNERS INCLUDE

- **Allegany College of Maryland**
- **Anne Arundel Community College**
- **Baltimore City Community College**
- **Carroll Community College**
- **Cecil Community College**
- **Chesapeake College**
- **College of Southern Maryland**
- **Community College of Baltimore County**
- **Frederick Community College**
- **Garrett College**
- **Hagerstown Community College**
- **Harford Community College**
- **Howard Community College**
- **Montgomery College**
- **Prince George's Community College**

BACHELOR'S DEGREE REQUIREMENTS

At the undergraduate level, UMUC offers the Bachelor of Arts (BA), Bachelor of Science (BS), and Bachelor of Technical and Professional Studies (BTPS) degrees, as well as 48 certificates. The Associate of Arts degree, the Bachelor of Science in general studies, and several other certificates are available only to active-duty military personnel and others who conform to special stipulations. The Bachelor of Technical and Professional Studies degree programs are available only to students who have earned the Associate of Applied Science degree from a community college with which UMUC has an appropriate articulation agreement.

Except for those restricted programs, current UMUC degree programs are open to UMUC students anywhere in the world. However, offerings sufficient to complete every program may not be available at every location or in every format. Students should consult advisors, current schedules, and site-specific materials to determine which programs they may normally expect to complete from their geographic location.

Requirements for degrees vary according to the major and minor. The requirements that all candidates for the bachelor's degree must meet are summarized in the following sections.

EXPECTATIONS

UMUC aims to produce graduates who are well prepared to be responsible citizens of a global society as well as effective participants in the complex, fast-changing world of work. A bachelor's degree from UMUC offers a multidimensional experience, combining a solid educational foundation with cross-curricular breadth and focused study in an academic discipline. Through that experience, UMUC graduates develop and demonstrate the hallmarks of the educated person: intellectual ability, curiosity, and flexibility; fundamental skills in reasoning, analysis, investigation, and expression; understanding of the principles of scientific and intellectual inquiry; awareness of global and historical context; and civic and ethical responsibility.

UMUC demands that students meet expectations in specific core learning areas across the bachelor's degree as well as within the major disciplines. The UMUC degree begins with basic intellectual tools, ensuring through the general education requirements that students are able to

- Demonstrate competence in effective writing and oral communication.
- Understand information technology broadly enough to apply technology productively to academic studies, work, and everyday life; recognize when information technology would assist or impede the achievement of a goal; and adapt to the changes in and advancement of information technology.
- Demonstrate competence in information literacy by using libraries and other information resources to locate, evaluate, and use needed information effectively.
- Demonstrate the application of mathematical and numerical reasoning skills.
- Demonstrate the ability to understand key concepts and principles of the natural, social, and behavioral sciences and apply these principles appropriately within their lives.
- Demonstrate knowledge of relationships to other times and cultures, past and present, and an appreciation of major contributions of various events and individuals to human civilization; gain a chronological knowledge of the past and/or factual knowledge of a specific historical period; and study historical topics, trends, or events in the context of other disciplines to foster an understanding of issues of cause and effect.

These core learning areas are further promoted by integration throughout all programs. UMUC conducts learning outcomes assessments to measure and improve student learning in these areas as well as in specific disciplinary knowledge and skills.

In pursuit of an academic major (and minor), the UMUC student acquires mastery of a considerable body of knowledge in a specific academic subject area or group of related subjects. Each major and minor provides clearly articulated objectives for the knowledge, skills, and abilities a student acquires in completing the major.

REQUIREMENTS

In general, the UMUC degree requirements that apply to a student are those that were in effect when the student began continuous enrollment in any public institution of higher education in Maryland (including UMUC). If the student has not been continuously enrolled, the requirements that apply are those in effect at UMUC when the student resumes continuous enrollment. To be considered continuously enrolled, degree-seeking students must be or have been enrolled at UMUC or another Maryland public institution of higher education and have had no more than two sequential years of nonenrollment. When a continuously enrolled student chooses to change his or her degree program, the student may be subject to all degree requirements in effect at the time of the change.

The following requirements for the BA, BS, and BTPS are applicable to students who enroll on or after August 1, 2008.

BACHELOR'S DEGREE REQUIREMENTS

GENERAL EDUCATION REQUIREMENTS   CREDITS

Note: Courses applied to general education requirements may not be applied toward major, minor, or elective requirements and may not be taken pass/fail.

A. Communications   12

WRTG 101/101X (3 credits)
Must be completed within the first 18 credits. Placement test required. May not be earned through credit by examination.

Another writing course (3 credits)
All 3-credit WRTG courses (except WRTG 288, 486A, or 486B); ENGL 102, 294, 303, and 485; and JOUR 201 apply.

A third course in writing or a course in speech communication (3 credits)
All 3-credit COMM, SPCH, and WRTG courses (except 486A and 486B); ENGL 102, 294, 303, and 485; and JOUR 201 apply.

An upper-level intensive writing course (3 credits)
WRTG 391/391X, 393/393X, and 394/394X apply.
May not be earned through credit by examination.

No more than 3 credits of writing credit may be earned through credit by examination.

B. Arts and Humanities   6

One course that offers a historical perspective (any 3-credit ARTH or HIST course except ARTH 100).

One 3-credit course chosen from the following disciplines: ARTH, ARTT, ASTD (depending on course content), HIST, HUMN, MUSC, PHIL, THET, dance, literature, or foreign language.

The two courses must be in different disciplines.

C. Behavioral and Social Sciences   6

One 3-credit course each in two of the following disciplines: AASP (AASP 201 only), ANTH, ASTD (depending on course content), BEHS, CCJS (CCJS 100, 105, 350, 360, 432, 453, 454, and 461 only), ECON, GEOG, GERO (except GERO 341, 342, 351, and 353), GVPT, PSYC, SOCY, or WMST (WMST 200 only).

D. Biological and Physical Sciences   7

A science lecture course (3 credits) with related laboratory course (1 credit) or a science course combining lecture and laboratory (4 credits).

Any other science course (3 credits).

Courses from the following disciplines satisfy both requirements: ASTR, BIOL, CHEM, GEOL, NSCI, PHYS, biotechnology, botany, entomology, general science, and zoology.

E. Mathematics   3

MATH 106, MATH 107, or a course at or above the level of college algebra.

Must be completed within the first 18 credits. Placement test required.

Note: MATH 115 (or MATH 107–108) is required for the majors in computer science and environmental management.

F. Interdisciplinary or Emerging Issues   7

One course (LIBS 150) in information literacy and research methods (1 credit), which must be completed within the first 18 credits.

A total of 6 credits in computing courses as follows:

• IFSM 201 or CMST 303 (3 credits)

• An additional computing course appropriate to the academic major (3 credits)

Students should refer to the specific major for requirements or recommendations. Unless otherwise specified, upper- or lower-level courses in CMIS, CMIT, CMSC, CMST, and IFSM; ACCT 326; and LGST 360 and 363A apply. **Note:** Either IFSM 300 or ACCT 326 is required for majors in emergency management, homeland security, and all business-related fields.

Total General Education Requirements   41

MAJOR, MINOR, AND ELECTIVE REQUIREMENTS   CREDITS

A. Academic Major   30–38

The number of credits required to complete an academic major varies according to academic program. At least half the credits earned within the major must be upper level (i.e., earned in courses numbered 300 and higher) and must be earned through UMUC. No grade may be lower than C. Specific coursework is prescribed for each major and is described in the following chapter.

Students may receive a dual major upon completion of all requirements for both majors, including the required minimum number of credits for each major and all related requirements for both majors; however, the same course may not be used to fulfill requirements for more than one major. Certain restrictions (including use of credit and acceptable combinations of majors) apply for double majors. Students may not major in two programs with excessive overlap of required coursework. Students should consult an advisor before selecting a double major.

B. Academic Minor   15–17

Choosing a minor is strongly encouraged even though it is optional for all but accounting majors. Students may not take a major and minor in the same area and may not receive a dual minor. The number of credits required to complete an academic minor varies according to academic program. At least half the credits earned within the minor must be upper level (unless otherwise specified) and must be earned through UMUC. No grade may be lower than C. Specific coursework is prescribed for each minor and is described in the following chapter.

C. Electives   24–34

Electives may be taken in any academic discipline. No more than 21 credits may consist of vocational or technical credit (described on p. 248). Pass/fail credit, up to a maximum of 18 credits, may be applied toward electives only.

Total Major, Minor, and Elective Requirements   79

Overall Bachelor's Degree Requirements

In addition to the general education requirements and the major, minor, and elective requirements listed on p. 8, the overall requirements listed below pertain to all bachelor's degrees.

1. Students must complete a minimum of 120 credits.

2. Students must maintain a minimum grade point average of 2.0 (C) overall and a minimum grade of C (2.0) for any course applied to the academic major or minor.

3. Within the 120 credits required, the following coursework must be taken through UMUC:

   - 30 credits (normally the final 30)

   - Half of the required number of credits within both the major and the minor

   - 15 credits at the upper level (i.e., earned in courses numbered 300 to 499), preferably within the major or minor

4. At least 45 credits must be upper level and include

   - At least one-half of the credits required for the major

   - 3 credits in intensive writing

   The remaining upper-level credits may be earned in any part of the curriculum.

5. At least half the required number of credits for any academic major or minor must be earned through graded coursework. Credit earned by examination, portfolio assessment, internships/Cooperative Education, or noncollegiate training does not count as graded coursework.

Total Degree Requirements   120 Credits

Second Bachelor's Degree

At UMUC, students who have already received a bachelor's degree from UMUC or from another regionally accredited institution can broaden their education by earning a second bachelor's degree with a different major. However, students may not earn a second bachelor's degree with a double major. Students may not earn a second degree in general studies and, except for the accounting degree which has a mandatory minor, may not obtain an academic minor in the second degree.

A student must have received the first bachelor's degree to be eligible to begin a second. For a second bachelor's degree, the student needs to complete at least 30 credits through UMUC after completing the first degree. The combined credit in both degrees must add up to at least 150 credits.

Students must complete all requirements for the major. If any of these requirements were satisfied in the previous degree, the remainder necessary to complete the minimum 30 credits of new courses should be satisfied with courses related to the major. For purposes of determining what major requirements apply to a given student, the applicable date is the date the student started coursework at UMUC after being admitted into the second undergraduate degree program. As with other degrees, continuous enrollment at UMUC is required. A minimum grade point average of 2.0 in all courses taken through UMUC is required for graduation.

To qualify for academic honors in a second bachelor's degree, the student must complete at least 45 new credits through UMUC with the requisite grade point average.

All students need to be aware of what is entailed in a second bachelor's degree. Before beginning work or considering nontraditional options toward a second degree, each student should consult an academic advisor. Advisors will be glad to explain the requirements for a second bachelor's degree and clarify its limitations.

BACHELOR'S DEGREE REQUIREMENTS

PROGRAM CHOICES			
DISCIPLINE	**MAJOR**	**MINOR**	**CERTIFICATE(S)**
Accounting	p. 13	p. 15	Introductory accounting, p. 95
			Advanced accounting, p. 95
African American studies		p. 15	
Art		p. 16	Computer graphics and design, p. 98
			Web design, p. 114
Art history		p. 16	
Asian studies	p. 17	p. 18	
Biology		p. 19	Biosecurity, p. 96
Biotechnology	p. 19		
Business administration	p. 21	p. 22	Business project management, p. 97
			E-commerce in small business, p. 102
			Management foundations, p. 107
			Women in business, p. 115
Business law and public policy		p. 23	
Business supply chain management		p. 23	E-commerce in small business, p. 102
			E-commerce management, p. 102
Communication studies	p. 24	p. 26	Negotiation and conflict management, p. 108
			Workplace communications, p. 115
Computer and information science	p. 26		Database design and implementation, p. 100
			Object-oriented design and programming, p. 109
			Software engineering, p. 111
			UNIX system administration, p. 113
			Web programming, p. 114
Computer information technology	p. 28		Computer networking, p. 98
Computer science	p. 30		Game development, p. 103
			Object-oriented programming using Java, p. 109
Computer studies	p. 31		Computer applications, p. 98
			Desktop publishing, p. 101
			Internet technologies, p. 106
			Visual Basic programming, p. 113
Computing		p. 33	
Criminal justice	p. 33	p. 35	Correctional administration, p. 99
			Criminal justice intelligence, p. 99
			Security management, p. 111
Customer service management		p. 35	
Economics		p. 36	
Emergency management	p. 36	p. 38	
English	p. 38	p. 40	
Environmental management	p. 40	p. 42	Environmental and occupational health and safety management, p. 102
Finance	p. 43	p. 44	Financial management, p. 103

PROGRAM CHOICES (CONTINUED)

DISCIPLINE	MAJOR	MINOR	CERTIFICATE(S)
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			Systems approach to fire safety, p. 112
Forensics		p. 47	
General studies	p. 47		
Gerontology	p. 48	p. 49	Health issues for the aging adult, p. 104
Global business and public policy	p. 50		
History	p. 52	p. 53	
Homeland security	p. 54	p. 55	
Humanities	p. 56	p. 57	
Human resource management	p. 58	p. 60	Human resource management, p. 105
Information assurance	p. 60		Information assurance, p. 105
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			Information management, p. 106
			Project management for IT professionals, p. 110
			Technology and management, p. 112
			Visual Basic programming, p. 113
International business management		p. 64	
Investigative forensics	p. 64		
Journalism		p. 66	
Laboratory management	p. 66		Laboratory management, p. 106
Legal studies	p. 68		Paralegal studies, p. 110
Management studies	p. 70		Management foundations, p. 107
			Technology and management, p. 112
Marketing	p. 72	p. 73	Marketing communications, p. 107
			Marketing management, p. 108
Mathematical sciences		p. 74	
Microbiology		p. 74	
Natural science		p. 75	
Philosophy		p. 75	
Political science	p. 76	p. 77	Terrorism and institutions: Prevention and response, p. 112
Psychology	p. 78	p. 79	Clinical mental health care, p. 97
			Human development, p. 104
Social science	p. 80		Applied behavioral and social sciences, p. 96
			Diversity awareness, p. 101
Sociology		p. 81	
Spanish			Workplace Spanish, p. 115
Speech communication		p. 82	Negotiation and conflict management, p. 108
Strategic and entrepreneurial management		p. 82	E-commerce in small business, p. 102
Women's studies		p. 83	Women in business, p. 115

BACHELOR'S DEGREE CURRICULA

The academic major requires 30 to 38 credits, while the minor (optional) requires 15 to 17 credits. Students must maintain a minimum grade point average of 2.0 (C) and earn a minimum grade of C (2.0) for any course applied to the major or minor. Half of the credit applied toward any major must be upper level, and at least half of the credit for any major or minor must be taken through UMUC. At least half of the credit applied toward a major or minor must be earned through graded coursework. A maximum of six 1-credit courses may be applied to a major or minor. Students must also fulfill all overall requirements for the bachelor's degree (listed on p. 9).

Majors and minors are described in the following section.

Majors

Each major is available only for the Bachelor of Arts (BA), the Bachelor of Science (BS), or the Bachelor of Technical and Professional Studies (BTPS) degree. Dual majors are available only for the Bachelor of Science degree.

Available for the BA

Asian studies*
Communication studies
English
History
Humanities

Available for the BS

Accounting
Business administration
Computer and information science
Computer information technology
Computer science
Computer studies
Criminal justice
Emergency management
Environmental management
Finance
Fire science
General studies**
Gerontology
Global business and public policy
Homeland security

Human resource management
Information assurance
Information systems management
Investigative forensics
Legal studies
Management studies
Marketing
Political science
Psychology
Social science

Available for the BTPS***

Biotechnology
Laboratory management

Minors

Academic minors are strongly recommended but optional. They are available in the following areas:

Accounting
African American studies
Art
Art history
Asian studies
Biology
Business administration
Business law and public policy
Business supply chain management
Communication studies
Computing
Criminal justice
Customer service management
Economics
Emergency management
English
Environmental management
Finance
Fire science
Forensics
Gerontology
History
Homeland security
Humanities
Human resource management
International business management
Journalism
Marketing

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* Not available in all locations. Students should consult an advisor before selecting this major or minor.

** Available only to active-duty military personnel in UMUC Europe and UMUC Asia and certain others who conform to special stipulations. General studies is not available for a double major.

*** Available only to students who have completed an Associate of Applied Science degree in an appropriate field from a community college with which UMUC has an articulation agreement. Students should consult an advisor before selecting these majors.

Mathematical sciences
Microbiology
Natural science
Philosophy
Political science
Psychology
Sociology
Speech communication
Strategic and entrepreneurial management
Women's studies

Accounting

Students may seek either an academic major or minor in accounting.

Major in Accounting

The accounting major focuses on the processes for analyzing and reporting the economic activities of organizations and communicating that information to decision makers. The accounting curriculum includes studies in managerial accounting, budgeting, accounting systems, internal controls, financial analysis, financial reporting, internal and external auditing, taxation, international accounting, and accounting issues related to for-profit, not-for-profit, and government organizations.

Objectives

The student who graduates with a major in accounting will be able to

- Employ critical-thinking, analytical, and problem-solving skills to resolve complex business and accounting issues.
- Use clear and concise communication to convey relevant financial and nonfinancial information to the target audience so that decision makers can formulate informed decisions and take action.
- Utilize technology (such as computers, accounting software, information databases, and the World Wide Web) to facilitate and enhance accounting and financial reporting processes.
- Identify the appropriate managerial and business issues critical to analyzing accounting data and other information used for identifying and assessing opportunities and risks, developing organizational plans, allocating resources, and accomplishing objectives.

- Apply relevant accounting principles and standards to specific business activities and workplace situations.
- Employ national, international, and historical perspectives to analyze accounting and business issues.
- Identify ethical issues associated with accounting and business situations and apply appropriate principles of ethics and civic responsibility.
- Use analytical and research tools to monitor evolving accounting standards and practices and to maintain professional skills in a changing business environment.
- Apply the interpersonal and leadership skills expected of today's accounting professional.

Degree Requirements

A degree with a major in accounting requires the successful completion of 120 credits of coursework, including 54 credits for the major and mandatory minor in business administration, 41 credits in general education requirements, and 25 credits in electives and other requirements. At least 18 credits in the major and 9 credits in the minor must be earned in upper-level courses (numbered 300 or above).

REQUIREMENTS FOR THE ACCOUNTING MAJOR

Coursework for a major in accounting, with a mandatory minor in business administration, includes the following:

- Required core courses (21 credits): ACCT 220, 221, 310, 311, 321, 323, and 422
- Supplemental major courses (12 credits): Any upper-level ACCT courses
- Required capstone course (3 credits): ACCT 495
- Required minor courses (18 credits): STAT 230 (or 200); BMGT 364, 380, and 496; FINC 330; and MRKT 310
- Required related courses (9 credits), which may be applied anywhere in the degree: ACCT 326 (or IFSM 300) and ECON 201 and 203

RECOMMENDED SEQUENCE

The following course sequence will fulfill all the requirements for the BS in accounting. Coursework for the major is indicated by ◆. Since some recommended courses fulfill more than one requirement, substituting courses for those listed may make it necessary to take additional courses to meet degree requirements. Students should consult an advisor whenever taking advantage of other options. Information on alternate courses (where allowable) to fulfill general education requirements (in communications, arts and humanities, behavioral and social sciences, biological and physical sciences, mathematics, and interdisciplinary issues) may be found on p. 8.

BACHELOR'S DEGREE CURRICULA

Accounting Degree Courses   **Credits**

First Courses *(to be taken within the first 18 credits)*
Note: Placement tests are required for math and writing courses.

EDCP 100	Principles and Strategies of Successful Learning *(strongly recommended as first course)*	3
LIBS 150	Information Literacy and Research Methods	1
WRTG 101/101X	Introduction to Writing	3
MATH 106	Finite Mathematics *or a higher-level math course*	3
BMGT 110	Introduction to Business and Management *(strongly recommended elective for students with no prior business experience)*	3
◆ ACCT 220	Principles of Accounting I	3

Introductory Courses *(to be taken within the first 30 credits)*

◆ ACCT 221	Principles of Accounting II	3
ECON 201	Principles of Macroeconomics *(related requirement for the major; also fulfills the first behavioral and social sciences requirement)*	3
NSCI 100	Introduction to Physical Science	3
and NSCI 101	Physical Science Laboratory *or other course(s) to fulfill the biological and physical sciences lecture and laboratory requirement*	1
WRTG 291	Expository and Research Writing *or other course to fulfill the communications/ writing requirement*	3
IFSM 201	Introduction to Computer-Based Systems	3
or CMST 303	Advanced Application Software	

Foundation Courses *(to be taken within the first 60 credits)*

PHIL 140	Contemporary Moral Issues	3
or a foreign language course	*or other ARTH, ARTT, HIST, HUMN, MUSC, PHIL, THET, dance, or literature course to fulfill the arts and humanities requirement*	
◆ STAT 230	Business Statistics	3
or STAT 200	Introduction to Statistics	
ECON 203	Principles of Microeconomics *(related requirement for the major)*	3
PSYC 100	Introduction to Psychology	3
or SOCY 100	Introduction to Sociology *or other course to fulfill the second behavioral and social sciences requirement (discipline must differ from first)*	
BIOL 101	Concepts of Biology	3
or ASTR 100	Introduction to Astronomy *or other course to fulfill the biological and physical sciences lecture requirement*	
◆ ACCT 310	Intermediate Accounting I	3

HIST 142	Western Civilization II	3
or HIST 157	History of the United States Since 1865 *or other ARTH or HIST course to fulfill the arts and humanities requirement in historical perspective (discipline must differ from other humanities course)*	
◆ ACCT 321	Cost Accounting	3
SPCH 100	Foundations of Speech Communication	3
or WRTG 390	Writing for Managers *or other course to fulfill the communications/ writing or speech requirement*	
ACCT 326	Accounting Information Systems	3
or IFSM 300	Information Systems in Organizations *(fulfills the interdisciplinary issues/computing requirement; students should note prerequisites)*	

Additional Required Courses *(to be taken after introductory and foundation courses)*

◆ BMGT 364	Management and Organization Theory	3
◆ ACCT 311	Intermediate Accounting II	3
◆ ACCT 323	Taxation of Individuals	3
◆ BMGT 496	Business Ethics	3
◆ ACCT 422	Auditing Theory and Practice	3
WRTG 394/394X	Business Writing *or other course to fulfill the communications/ upper-level intensive writing requirement*	3
◆ ACCT 424	Advanced Accounting *or other upper-level ACCT course*	3
◆ ACCT 425	International Accounting *or other supplemental major course*	3
◆ FINC 330	Business Finance	3
◆ Any upper-level ACCT course	*(supplemental major course)*	3
◆ BMGT 380	Business Law I	3
◆ A supplemental major course		3
◆ MRKT 310	Marketing Principles and Organization	3

Capstone Course for Major *(to be taken in the last 15 credits)*

◆ ACCT 495	Contemporary Issues in Accounting Practice	3

Additional Elective Courses *(to be taken in the last 60 credits along with required major courses)*   16

Total credits for BS in accounting   **120**

Minor in Accounting

The accounting minor complements the skills the student gains in his or her major discipline by providing a study of how the accounting environment measures and communicates the economic activities of organizations to enable stakeholders to make informed decisions regarding the allocation of limited resources.

Objectives

The student who graduates with a minor in accounting will be able to
- Employ critical-thinking, analytical, and problem-solving skills to resolve business and accounting issues.
- Use clear and concise communication to convey relevant financial and nonfinancial information to the target audience so that decision makers can formulate informed decisions and take action.
- Utilize technology (such as computers, accounting software, information databases, and the World Wide Web) to facilitate and enhance accounting and financial reporting processes.
- Apply relevant accounting principles and standards to specific business activities and workplace situations.
- Identify ethical issues associated with accounting and business situations and apply appropriate principles of ethics and civic responsibility.

Requirements for the Minor

A minor in accounting requires the completion of 15 credits of coursework in accounting. Any ACCT courses apply. Courses may not duplicate those used to satisfy requirements for the major. At least 9 credits must be earned in upper-level courses (numbered 300 or above). Prerequisites apply for all courses.

For a listing of all the requirements for the bachelor's degree, students should refer to their major and pp. 8–9.

African American Studies

Students may seek an academic minor in African American studies.

Minor in African American Studies

The African American studies minor complements the skills the student gains in his or her major discipline by offering an interdisciplinary approach to study of the contemporary life, history, and culture of African Americans.

Objectives

The student who graduates with a minor in African American studies will be able to
- Discuss the diversity and historical development of the African American experience.
- Explain aspects of the cultural and historical expression of the African American experience.
- Demonstrate an understanding of fundamental interdisciplinary methods, research, and topics relevant to African American studies.

Requirements for the Minor

A minor in African American studies requires the completion of 15 credits of coursework focusing on African American issues, chosen from the following courses:

AASP	Any course
CCJS 370	Race, Crime, and Criminal Justice
ENGL 363	African American Authors to 1900
ENGL 364	African American Authors Since 1900
GVPT 434	Race Relations and Public Law
HIST 255	African American History
HIST 372	Legacy of the Civil Rights Movement
HIST 460	African American Life: 1500 to 1865
HIST 461	African American Life Since 1865
MUSC 436	Jazz: Then and Now
SOCY 423	Ethnic Minorities
SOCY 424	Sociology of Race Relations

It is recommended that students take AASP 201 as the first course in the minor (if they have not already applied the course toward other degree requirements).

Courses may not duplicate those used to satisfy requirements for the major. At least 9 credits must be earned in upper-level courses (numbered 300 or above). Prerequisites apply for all courses.

For a listing of all the requirements for the bachelor's degree, students should refer to their major and pp. 8–9.

Art

Students may seek an academic minor in art.

Minor in Art

The art minor complements the skills the student gains in his or her major discipline by offering an aesthetic and personal exploration of imagery, media, and composition through a balance of art theory and practice.

Objectives

The student who graduates with a minor in art will be able to

- Understand models of artistic expression and be able to demonstrate that understanding through various media, including drawing, painting, and graphics and design.
- Articulate the language of art as a continuation of the development of aesthetic sensibilities, individual goals, and personal styles.
- Select and unify concepts, ideas, and images in creative visual composition.
- Acquire the techniques of a variety of visual media and materials, including new technologies.

Requirements for the Minor

A minor in art requires the completion of 15 credits of art coursework. All ARTT courses apply. It is recommended that students take ARTT 110 (or ARTT 220) and 210 (or ARTT 320) as the first courses in the minor (if they have not already applied the courses toward other degree requirements).

Courses may not duplicate those used to satisfy requirements for the major. At least 9 credits must be earned in upper-level courses (numbered 300 or above). Prerequisites apply for all courses.

For a listing of all the requirements for the bachelor's degree, students should refer to their major and pp. 8–9.

Art History

Students may seek an academic minor in art history.

Minor in Art History

The art history minor complements the skills the student gains in his or her major discipline by developing skills in historical and cultural interpretation and critical analysis of works of architecture, sculpture, painting, and the allied arts.

Objectives

The student who graduates with a minor in art history will be able to

- Demonstrate visual and critical abilities.
- Relate direct observation to appropriate historical, political, social, and environmental contexts.
- Study original works of art in local museums and electronic images from museums worldwide.
- Enhance intensive research and writing skills.

Requirements for the Minor

A minor in art history requires the completion of 15 credits in art history. It is recommended that students take one 3-credit course focusing on each of the following periods: ancient world (pre–Common Era), premodern (Common Era to 1850), and modern (after 1850).

Courses may not duplicate those used to satisfy requirements for the major. At least 9 credits must be earned in upper-level courses (numbered 300 or above). Prerequisites apply for all courses.

For a listing of all the requirements for the bachelor's degree, students should refer to their major and pp. 8–9.

Asian Studies

The Asian studies major and minor are not available at all locations. Students should consult an advisor before selecting this program.

Major in Asian Studies

The Asian studies major provides an interdisciplinary overview of the history, business, economics, politics, and culture of the Asian/Pacific region. It examines that region's rich past and continuing contributions to the global community. The curriculum reflects this commitment to cultural awareness and scholarly analysis within the format of Asian life and influence.

Objectives

The student who graduates with a major in Asian studies will be able to

- Demonstrate understanding of the historical and cultural dimensions of Asia.
- Think critically and perform research in Asian studies.
- Demonstrate effective communication skills, both orally and in writing, within the sphere of Asian economic, political, cultural, and historical developments.
- Demonstrate an understanding of Asian social, political, and economic structures and their local and global influences.
- Demonstrate fluency in technology appropriate for research, study, and communication in relation to Asian studies.
- Demonstrate competence in an Asian language.
- Demonstrate a knowledge of ethical and social responsibility issues within an Asian context.

Degree Requirements

A degree with a major in Asian studies requires the successful completion of 120 credits of coursework, including 30 credits for the major; 41 credits in general education requirements; and 49 credits in the minor, electives, and other degree requirements. At least 15 credits in the major must be earned in upper-level courses (numbered 300 or above).

REQUIREMENTS FOR THE ASIAN STUDIES MAJOR

Coursework for a major in Asian studies includes the following:

- Required foundation courses (9 credits): ASTD 150 and 160 and PHIL 307

- Required Asian language sequence (9 credits): Either JAPN 111, 112, and 114; KORN 111, 112, and 114; or CHIN 111, 112, and 114

- Supplemental major courses (9 credits): Chosen from ANTH 417; ECON 380 and 484; HUMN 312 and 350 (or HUMN 348 and 349); and any upper-level ASTD, JAPN, KORN, Asian HIST, and Asian GVPT courses

- Required capstone course (3 credits): ASTD 485

RECOMMENDED SEQUENCE

The following course sequence will fulfill all the requirements for the BA in Asian studies. Coursework for the major is indicated by ◆. Since some recommended courses fulfill more than one requirement, substituting courses for those listed may make it necessary to take additional courses to meet degree requirements. Students should consult an advisor whenever taking advantage of other options. Information on alternate courses (where allowable) to fulfill general education requirements (in communications, arts and humanities, behavioral and social sciences, biological and physical sciences, mathematics, and interdisciplinary issues) may be found on p. 8.

Asian Studies Degree Courses		Credits

First Courses *(to be taken within the first 18 credits)*
Note: Placement tests are required for math and writing courses.

EDCP 100	Principles and Strategies of Successful Learning *(strongly recommended as first course)*	3
LIBS 150	Information Literacy and Research Methods	1
WRTG 101/101X	Introduction to Writing	3
MATH 106	Finite Mathematics *or a higher-level math course*	3

Introductory Courses *(to be taken within the first 30 credits)*

PHIL 140	Contemporary Moral Issues	3
or ENGL 240	Introduction to Fiction, Poetry, and Drama *or other ARTH, ARTT, HIST, HUMN, MUSC, PHIL, THET, dance, literature, or foreign language course to fulfill the arts and humanities requirement*	
Both BIOL 101	Concepts of Biology	3
and BIOL 102	Laboratory in Biology	1
or BIOL 103	Introduction to Biology *or other course(s) to fulfill the biological and physical sciences lecture and laboratory requirement*	
WRTG 291	Expository and Research Writing *or other course to fulfill the communications/ writing requirement*	3
GVPT 170	American Government *or other ANTH, BEHS, ECON, GEOG, GVPT, PSYC, SOCY, or eligible AASP, CCJS, GERO, or WMST course to fulfill the first behavioral and social sciences requirement*	3
IFSM 201	Introduction to Computer-Based Systems	3
or CMST 303	Advanced Application Software	
◆ ASTD 150	Introduction to Asian Studies I	3
◆ JAPN 111	Elementary Japanese I *or other first Asian language course for the major*	3

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Foundation Courses *(to be taken within the first 60 credits)*

◆ ASTD 160	Introduction to Asian Studies II	3
ANTH 102	Introduction to Anthropology:	
	Cultural Anthropology	3
	or other course to fulfill the second behavioral and social sciences requirement (discipline must differ from first)	
NSCI 100	Introduction to Physical Science	3
or ASTR 100	Introduction to Astronomy	
	or other course to fulfill the biological and physical sciences lecture requirement	
HIST 141	Western Civilization I	3
or HIST 142	Western Civilization II	
	or other ARTH or HIST course to fulfill the arts and humanities requirement in historical perspective (discipline must differ from other humanities course)	
IFSM 304	Ethics in the Information Age	3
	or other course to fulfill the interdisciplinary issues/computing requirement	
SPCH 100	Foundations of Speech Communication	3
or COMM 380	Language in Social Contexts	
	or other course to fulfill the communications/ writing or speech requirement	
◆ JAPN 112	Elementary Japanese II	3
	or other second Asian language course for the major	
◆ PHIL 307	Asian Philosophy	3

Additional Required Courses *(to be taken after introductory and foundation courses)*

WRTG 391/391X	Advanced Expository and Research Writing	3
	or other course to fulfill the communications/ upper-level intensive writing requirement	
◆ ASTD 309	Business in Asia	3
or HIST 483	History of Japan Since 1800	
	or other supplemental major course	
◆ JAPN 114	Elementary Japanese III	3
	or other third Asian language course for the major	
◆ ASTD 333	Japanese Life and Culture I	3
or ASTD 353	Korean Life and Culture	
	or other supplemental major course	
◆ ASTD 397	Anthropology of Asian Religions	3
	or other supplemental major course	

Capstone Course for Major *(to be taken in the last 15 credits)*

◆ ASTD 485	Great Issues in Asian Studies	3

Minor and/or Elective Courses *(to be taken in the last 60 credits along with required major courses)*   46

Total credits for BA in Asian studies	**120**

Minor in Asian Studies

The Asian studies minor complements the skills the student gains in his or her major discipline by providing an interdisciplinary study of the cultural, historical, political, and contemporary business reality of the Asian/Pacific world.

Objectives

The student who graduates with a minor in Asian studies will be able to

- Examine and analyze aspects of Asian history, politics, business, economics, and society.
- Examine and analyze aspects of Asian culture.
- Hone analytical, research, and writing skills within Asia-centered topics and themes.

Requirements for the Minor

A minor in Asian studies requires the completion of 15 credits of coursework in Asian studies, which must include ASTD 150 and 160. Courses appropriate for the major in Asian studies apply. Courses may not duplicate those used to satisfy requirements for the major. At least 9 credits must be earned in upper-level courses (numbered 300 or above). Prerequisites apply for all courses.

For a listing of all the requirements for the bachelor's degree, students should refer to their major and pp. 8–9.

Biology

Students may seek an academic minor in biology.

Minor in Biology

The biology minor complements the skills the student gains in his or her major discipline by providing an underlying scientific base upon which to build a career in the life sciences, allied health fields, bioinformatics, environmental management, science journalism, or science education.

Objectives

The student who graduates with a minor in biology will be able to

- Demonstrate an understanding of the basic structure and function of living organisms, including the principles of molecular and cellular biology, inheritance, evolution, and ecology.
- Perform standard laboratory procedures and apply the scientific method, as appropriate.
- Apply basic scientific knowledge to problems encountered in medicine, public health, biotechnology, agriculture, and environmental science.

Requirements for the Minor

A minor in biology requires the completion of 15 credits of coursework in biology. Any BIOL courses apply. Courses already applied toward other degree requirements (e.g., major or general education) may not be applied toward the minor. At least 9 credits must be earned in upper-level courses (numbered 300 or above). Prerequisites apply for all courses.

For a listing of all the requirements for the bachelor's degree, students should refer to their major and pp. 8–9.

Biotechnology

Students who have completed an Associate of Applied Science degree in biotechnology or a related field from a community college with which UMUC has an articulation agreement for this major may seek an academic major in biotechnology. Students should consult an advisor before selecting this major.

The major in biotechnology is based on a collaborative arrangement between UMUC and specific Maryland community colleges. Students with a similar degree from another institution may be considered for this program based only on an institutional articulation agreement with UMUC.

Major in Biotechnology

The biotechnology major is designed to build on the technical and scientific knowledge gained through the associate's degree program and direct experience in the field. It combines laboratory skills and applied coursework relevant to the biotechnology industry with extensive biotechnology internship experience and upper-level study.

Objectives

The student who graduates with a major in biotechnology will be able to

- Understand and explain the basic principles of biotechnology, cell biology, genetics, microbiology, and molecular biology.
- Perform standard laboratory procedures employed in academic, industry, and government biotechnology and molecular biology laboratories.
- Apply the principles of biotechnology to problems encountered in medicine, public health, research and development, agriculture, industrial and commercial production, and environmental science.

Degree Requirements

A degree with a major in biotechnology requires the successful completion of 120 credits of coursework from UMUC and the collaborating community college, including 36 credits for the major; 41 credits in general education requirements; and 43 credits in the minor, electives, and other degree requirements. At least 18 credits in the major must be earned in upper-level courses (numbered 300 or above).

BACHELOR'S DEGREE CURRICULA

REQUIREMENTS FOR THE BIOTECHNOLOGY MAJOR

Coursework for a major in biotechnology includes the following lower-level coursework taken as part of an appropriate Associate of Applied Science degree program at a collaborating community college:

- Foundation courses (15 credits): General microbiology (with laboratory), general genetics (with laboratory), and biotechnology techniques

- Required related courses (17 credits), which may be applied anywhere in the bachelor's degree: Chosen from biotechnology, biochemistry, cell biology, chemistry, genetics, immunology, microbiology, molecular biology, physics, and virology courses

Coursework for a major in biotechnology also includes the following:

- Required core courses (12 credits): BIOL 350 and 400 and 6 credits in Co-op internship courses (numbered 486A or 486B) in any discipline related to biotechnology

- Supplemental major courses (9 credits): Chosen from BIOL 320, 330–339, 350–359, 362, 422, and 430–439; NSCI 301; and an additional Co-op internship

RECOMMENDED SEQUENCE

The following course sequence will fulfill all the requirements for the BTPS in biotechnology (if the student selects appropriate courses as part of the articulated degree program from the community college). Coursework for the major is indicated by ◆. Since some recommended courses fulfill more than one requirement, substituting courses for those listed may make it necessary to take additional courses to meet degree requirements. Students should consult an advisor whenever taking advantage of other options. Information on alternate courses (where allowable) to fulfill general education requirements (in communications, arts and humanities, behavioral and social sciences, biological and physical sciences, mathematics, and interdisciplinary issues) may be found on p. 8.

Biotechnology Degree Courses		Credits
Required Courses from Community College		
◆ Lower-level coursework in the following areas:		15
General microbiology with lab		
General genetics with lab		
Biotechnology techniques		
Additional coursework related to biotechnology		17

Selected from biotechnology, biochemistry, cell biology, chemistry, genetics, immunology, microbiology, molecular biology, physics, or virology, as specified by the articulated associate's degree program (should also fulfill general education requirements in biological and physical sciences)

First Courses *(to be taken within the first 18 credits at UMUC if not brought in transfer)*

Note: Placement tests are required for math and writing courses.

LIBS 150	Information Literacy and Research Methods	1
WRTG 101/101X	Introduction to Writing	3
MATH 106	Finite Mathematics	3
	or a higher-level math course	

Introductory and General Education Courses *(to be taken within the first 30 credits)*

IFSM 201	Introduction to Computer-Based Systems	3
or CMST 303	Advanced Application Software	
WRTG 291	Expository and Research Writing	3
	or other course to fulfill the communications/ writing requirement	
GVPT 170	American Government	3
	or other ANTH, BEHS, ECON, GEOG, GVPT, PSYC, SOCY, or eligible AASP, CCJS, GERO, or WMST course to fulfill the first behavioral and social sciences requirement	
PHIL 140	Contemporary Moral Issues	3
or a foreign language course		
	or other ARTH, ARTT, HIST, HUMN, MUSC, PHIL, THET, dance, or literature course to fulfill the arts and humanities requirement	
PSYC 100	Introduction to Psychology	3
or SOCY 100	Introduction to Sociology	
	or other course to fulfill the second behavioral and social sciences requirement (discipline must differ from first)	
HIST 142	Western Civilization II	3
or HIST 157	History of the United States Since 1865	
	or other ARTH or HIST course to fulfill the arts and humanities requirement in historical perspective (discipline must differ from other humanities course)	
SPCH 100	Foundations of Speech Communication	3
or WRTG 390	Writing for Managers	
	or other course to fulfill the communications/ writing or speech requirement	
IFSM 304	Ethics in the Information Age	3
	or other course to fulfill the interdisciplinary issues/computing requirement	
ANTH 344	Cultural Anthropology and Linguistics	3
or SPCH 482	Intercultural Communication *(recommended elective)*	

Required Upper-Level Courses for Major *(to be taken after introductory and general education courses)*

WRTG 393/393X	Technical Writing	3
	or other course to fulfill the communications/ upper-level intensive writing requirement	
◆ BIOL 350	Molecular and Cellular Biology	3
◆ BIOL 400	Life Science Seminar	3
◆ BIOL 362	Neurobiology	3
	or other supplemental major course	
◆ BIOL 320	Forensic Biology	3
	or other supplemental major course	
◆ BIOL 422	Epidemiology of Emerging Infections	3
	or other supplemental major course	

Internship for Major *(to be taken in the last 30 credits)*

◆ Internship through Cooperative Education		6

Minor and/or Elective Courses *(to be taken in the last 60 credits along with required major courses)* — 30

Total credits for BTPS in biotechnology	**120**

Business Administration

Students may seek either an academic major or minor in business administration.

Major in Business Administration

The business administration curriculum includes studies in accounting, business law and public policy, business supply chain management, customer service and operations management, ethics and social responsibility, finance, human resource management and labor relations, international business, strategic and entrepreneurial management, organizational behavior, marketing and sales, and statistical analysis. A major in business administration prepares graduates for business- and management-related careers in for-profit and not-for-profit organizations and the public sector, encouraging critical thinking and problem solving.

Objectives

The student who graduates with a major in business administration will be able to
- Use critical-thinking skills in conducting research in business and management.
- Apply analytical and problem-solving skills in resolving business management problems and issues.
- Identify and apply key concepts and theories in business and management.
- Articulate the domestic and global dimensions of and influences on business and management.
- Employ effective communication skills, orally and in writing, consistent with the business and professional environment.
- Use computer applications and technology currently in the workplace.
- Assess philosophies of ethics and social responsibility relevant to business and management.
- Develop innovative leadership and team-management skills necessary for success in a diverse and changing workplace.
- Recognize the history and development of theories and concepts in business management, accounting, economics, statistics, finance, marketing, human resource management, business law, and strategic management and apply these theories and concepts to various business situations.
- Evaluate ethical, social, civic, cultural, and political issues as they relate to business operations, human resources and human factors, information systems, governmental regulation, and domestic and international ventures.
- Apply appropriate information technology to analyze problems and issues, develop business research, report key data, and recommend management strategy and action plans.

Degree Requirements

A degree with a major in business administration requires the successful completion of 120 credits of coursework, including 36 credits for the major; 41 credits in general education requirements; and 43 credits in the minor, electives, and other degree requirements. At least 18 credits in the major must be earned in upper-level courses (numbered 300 or above).

REQUIREMENTS FOR THE BUSINESS ADMINISTRATION MAJOR

Coursework for a major in business administration includes the following:
- Required foundation courses (12 credits): BMGT 110 (or prior business experience and an additional supplemental course), ACCT 220 and 221, and STAT 230 (or 200)
- Required core courses (18 credits): BMGT 364, 380, and 496; FINC 330; HRMN 300; and MRKT 310
- Supplemental major course or courses (3 credits): Any ACCT, BMGT, ENMT, FINC, HRMN, MRKT, and MGST course
- Required capstone course (3 credits): BMGT 495
- Required related courses (9 credits), which may be applied anywhere in the degree: ACCT 326 (or IFSM 300) and ECON 201 and 203

RECOMMENDED SEQUENCE

The following course sequence will fulfill all the requirements for the BS in business administration. Coursework for the major is indicated by ◆. Since some recommended courses fulfill more than one requirement, substituting courses for those listed may make it necessary to take additional courses to meet degree requirements. Students should consult an advisor whenever taking advantage of other options. Information on alternate courses (where allowable) to fulfill general education requirements (in communications, arts and humanities, behavioral and social sciences, biological and physical sciences, mathematics, and interdisciplinary issues) may be found on p. 8.

Business Administration Degree Courses		Credits

First Courses (to be taken within the first 18 credits)
Note: Placement tests are required for math and writing courses.

EDCP 100	Principles and Strategies of Successful Learning *(strongly recommended as first course)*	3
LIBS 150	Information Literacy and Research Methods	1
WRTG 101/101X	Introduction to Writing	3
MATH 106	Finite Mathematics *or a higher-level math course*	3
◆ BMGT 110	Introduction to Business and Management *(students with business experience should substitute a supplemental major course in the last 60 credits of study)*	3

Introductory Courses (to be taken within the first 30 credits)

ECON 201	Principles of Macroeconomics *(related requirement for the major; also fulfills the first behavioral and social sciences requirement)*	3

NSCI 100	Introduction to Physical Science	3
and NSCI 101	Physical Science Laboratory	1
	or other course(s) to fulfill the biological and physical sciences lecture and laboratory requirement	
WRTG 291	Expository and Research Writing	3
	or other course to fulfill the communications/ writing requirement	
IFSM 201	Introduction to Computer-Based Systems	3
or CMST 303	Advanced Application Software	
◆ ACCT 220	Principles of Accounting I	3
PHIL 140	Contemporary Moral Issues	3
or a foreign language course		
	or other ARTH, ARTT, HIST, HUMN, MUSC, PHIL, THET, dance, or literature course to fulfill the arts and humanities requirement	

Foundation Courses *(to be taken within the first 60 credits)*

◆ STAT 230	Business Statistics	3
or STAT 200	Introduction to Statistics	
PSYC 100	Introduction to Psychology	3
or SOCY 100	Introduction to Sociology	
	or other course to fulfill the second behavioral and social sciences requirement (discipline must differ from first)	
◆ ACCT 221	Principles of Accounting II	3
BIOL 101	Concepts of Biology	3
or ASTR 100	Introduction to Astronomy	
	or other course to fulfill the biological and physical sciences lecture requirement	
ECON 203	Principles of Microeconomics	3
	(related requirement for the major)	
HIST 142	Western Civilization II	3
or HIST 157	History of the United States Since 1865	
	or other ARTH or HIST course to fulfill the arts and humanities requirement in historical perspective (discipline must differ from other humanities course)	
IFSM 300	Information Systems in Organizations	3
or ACCT 326	Accounting Information Systems	
	(related requirement for the major; also fulfills the interdisciplinary issues/computing requirement)	
SPCH 100	Foundations of Speech Communication	3
or WRTG 390	Writing for Managers	
	or other course to fulfill the communications/ writing or speech requirement	

Additional Required Courses *(to be taken after introductory and foundation courses)*

◆ BMGT 364	Management and Organization Theory	3
WRTG 394/394X	Business Writing	3
	or other course to fulfill the communications/ upper-level intensive writing requirement	
◆ MRKT 310	Marketing Principles and Organization	3
◆ BMGT 380	Business Law I	3
◆ HRMN 300	Human Resource Management	3
◆ FINC 330	Business Finance	3

◆ BMGT 392	Global Business Management	3
	or other supplemental major course	
◆ BMGT 496	Business Ethics	3

Capstone Course for Major *(to be taken in the last 15 credits)*

◆ BMGT 495	Strategic Management	3

Minor and/or Elective Courses *(to be taken in the last 60 credits along with required major courses)* — 37

Recommended Minors
Human resource management, marketing, finance, or other business-related minor

Recommended Elective

MATH 140	Calculus I	
	(for students who plan to go on to graduate school)	

Total credits for BS in business administration — 120

Minor in Business Administration

The business administration minor complements the skills the student gains in his or her major discipline by providing a study of principles and techniques used in organizing, planning, managing, and leading within various organizations.

Objectives

The student who graduates with a minor in business administration will be able to
- Use critical-thinking skills in conducting research in business and management.
- Apply analytical and problem-solving methods in resolving business management problems and issues.
- Identify and apply key concepts and theories in business and management.
- Employ effective written and oral communication skills consistent with the business and professional environment.
- Develop innovative leadership and team-management skills necessary for success in a diverse and changing workplace.

Requirements for the Minor

A minor in business administration requires the completion of 15 credits of coursework in business administration. Any ACCT, BMGT, ENMT, FINC, HRMN, MGST, and MRKT courses apply. It is recommended that students take BMGT 364 as the first course in the minor (if they have not already applied the course to other requirements).

Courses may not duplicate those used to satisfy requirements for the major. At least 9 credits must be earned in upper-level courses (numbered 300 or above). Prerequisites apply for all courses.

For a listing of all the requirements for the bachelor's degree, students should refer to their major and pp. 8–9.

Business Law and Public Policy

Students may seek an academic minor in business law and public policy.

Minor in Business Law and Public Policy

The business law and public policy minor complements the skills the student gains in his or her major discipline by exploring and analyzing legal, social, environmental, technological, and ethical issues affecting business, industry, and government.

Objectives

The student who graduates with a minor in business law and public policy will be able to

- Discuss and analyze legal theories, concepts, and issues related to the conduct of business transactions.
- Describe the integral and complex interactions among law, business, and public policy variables and their significant societal and ethical considerations.
- Employ critical-thinking, analytic, and effective communication skills—developed through case briefings, presentations, and discussions—when engaged in problem solving.
- Participate in collaborative strategies to encourage cooperative team efforts and enhance problem-solving skills.
- Undertake pertinent research at a professional level using computer-based technology.

Requirements for the Minor

A minor in business law and public policy requires the completion of 15 credits of coursework in business law and public policy, chosen from the following courses:

BMGT 378	Legal Environment of Business
BMGT 380	Business Law I
BMGT 381	Business Law II
BMGT 405	Environmental Management and Business
BMGT 428	Legal Aspects of Technology Management
BMGT 437	International Business Law
BMGT 454	The Global Manager and Public Policy
BMGT 482	Business and Government
BMGT 496	Business Ethics
HRMN 408	Employment Law for Business
HRMN 462	Labor Relations Law

Students are recommended to take BMGT 380 and 496 as the first courses in the minor (if they have not already applied the course toward other degree requirements).

Courses may not duplicate those used to satisfy requirements for the major. At least 9 credits must be earned in upper-level courses (numbered 300 or above). Prerequisites apply for all courses.

For a listing of all the requirements for the bachelor's degree, students should refer to their major and pp. 8–9.

Business Supply Chain Management

Students may seek an academic minor in business supply chain management.

Minor in Business Supply Chain Management

The business supply chain management minor complements the skills the student gains in his or her major discipline by increasing the student's capabilities as a manager to analyze operational performance within supply chains, to design and manage processes for competitive advantage, and to manage systems acquisition and development in technical enterprises.

Objectives

The student who graduates with a minor in business supply chain management will be able to

- Use key concepts and theories in business and management.
- Synthesize the various factors of management planning, implementation, and control into appropriate mathematical models that guide optimal decisions and can be used to conduct sensitivity analysis on the resulting decisions.
- Explain the role of a decision maker in both management and staff activities in business, government, and nonprofit organizations.
- Manage operations with a focus on streamlining, improving performance, and giving significant strategic advantage to organizations in order to transform inputs into the goods and services supplied to customers.
- Analyze operational performance within supply chains and design and manage processes for competitive advantage.

- Understand and explain current topics such as e-commerce, knowledge management, virtual management, Internet infrastructure, Web technology, computer-based systems, project management, systems performance, and futurology.
- Explain technology, business, and management issues and their relation to professional workplace requirements.
- Demonstrate effective techniques for communicating business, professional, and legal information in both oral and written formats.
- Develop strategies employing current skills in critical thinking, problem solving, project management, interpersonal relations, and team building.
- Incorporate computer applications, information technology, and international perspectives in articulating the domestic and global dimensions of and influences on business and management.

Requirements for the Minor

The minor in business supply chain management requires the completion of 15 credits of coursework in business supply chain management, chosen from the following courses:

BMGT 304	Managing E-Commerce in Organizations
BMGT 305	Knowledge Management
BMGT 317	Problem Solving for Managers
BMGT 372	Supply Chain Management
BMGT 375	Procurement Management
BMGT 487	Program Management I
BMGT 488	Program Management II
BMGT 491	Exploring the Future
MRKT 457	E-Marketing

Students are recommended to take BMGT 304, 317, and 372 as the first courses in the minor (if they have not already applied the courses toward other degree requirements).

Courses may not duplicate those used to satisfy requirements for the major. At least 9 credits must be earned in upper-level courses (numbered 300 or above). Prerequisites apply for all courses.

For a listing of all the requirements for the bachelor's degree, students should refer to their major and pp. 8–9.

Communication Studies

Students may seek either an academic major or minor in communication studies.

Major in Communication Studies

The communication studies major offers a multidisciplinary study of communication that integrates topics in business and technical writing, mass communication, journalism, public relations, and speech communication. This integrated major encourages thinking across traditional disciplines. Students explore various aspects of workplace communication, including the development of written and oral communication skills and an increasing understanding of human interaction. The major's multidisciplinary approach produces graduates who have the appropriate balance of theoretical background and sophisticated, practical communication skills needed in today's workplace.

Objectives

The student who graduates with a major in communication studies will be able to

- Apply communication theories—including both speech communication and mass communication theories—to various situations and contexts.
- Identify and apply effective strategies for creating, editing, and presenting effective written messages to different audiences and within different contexts.
- Explain the role media and mass communication play in society.
- Describe and use effective interaction styles in communication with others across a variety of contexts.
- Analyze any communication situation and be able to apply appropriate oral and/or written communication skills as needed.
- Use tools and technology to gather information, as well as to develop and deliver messages.
- Critically analyze information for creating effective oral or written messages and for evaluating messages.

Degree Requirements

A degree with a major in communication studies requires the successful completion of 120 credits of coursework, including 30 credits for the major; 41 credits in general education requirements; and 49 credits in the minor, electives, and other degree requirements. At least 15 credits in the major must be earned in upper-level courses (numbered 300 or above).

REQUIREMENTS FOR THE COMMUNICATION STUDIES MAJOR

Coursework for a major in communication studies includes the following:

- Required foundation course (3 credits): COMM 300

- Writing and language arts course (3 credits): Chosen from COMM 380 and WRTG 288/288X, 289, 388, 390, 391/391X, 393/393X, 394/394X, and 489

- Mass communication course (3 credits): Chosen from COMM 379A and 400 and any JOUR courses

- Speech communication course (3 credits): Any SPCH course

- Capstone course (3 credits): Chosen from COMM 495, SPCH 397, and WRTG 493

- Supplemental major courses (15 credits): Chosen from PSYC 334 and 424; HRMN 302 and 367; MRKT 310 and 456; and any COMM, JOUR, SPCH, or WRTG courses

RECOMMENDED SEQUENCE

The following course sequence will fulfill all the requirements for the BA in communication studies. Coursework for the major is indicated by ◆. Since some recommended courses fulfill more than one requirement, substituting courses for those listed may make it necessary to take additional courses to meet degree requirements. Students should consult an advisor whenever taking advantage of other options. Information on alternate courses (where allowable) to fulfill general education requirements (in communications, arts and humanities, behavioral and social sciences, biological and physical sciences, mathematics, and interdisciplinary issues) may be found on p. 8.

Communication Studies Degree Courses		Credits
First Courses *(to be taken within the first 18 credits)*		
Note: Placement tests are required for math and writing courses.		
EDCP 100	Principles and Strategies of Successful Learning *(strongly recommended as first course)*	3
LIBS 150	Information Literacy and Research Methods	1
WRTG 101/101X	Introduction to Writing	3
MATH 106	Finite Mathematics *or a higher-level math course*	3
Introductory Courses *(to be taken within the first 30 credits)*		
HIST 142	Western Civilization II	3
or HIST 157	History of the United States Since 1865 *or other ARTH or HIST course to fulfill the arts and humanities requirement in historical perspective*	
Both BIOL 101	Concepts of Biology	3
and BIOL 102	Laboratory in Biology	1
or BIOL 103	Introduction to Biology *or other course(s) to fulfill the biological and physical sciences lecture and laboratory requirement*	
WRTG 291	Expository and Research Writing *or other course to fulfill the communications/ writing requirement*	3

SOCY 100	Introduction to Sociology	
or GVPT 170	American Government *or other ANTH, BEHS, ECON, GEOG, GVPT, PSYC, SOCY, or eligible AASP, CCJS, GERO, or WMST course to fulfill the first behavioral and social sciences requirement*	3
IFSM 201	Introduction to Computer-Based Systems	3
or CMST 303	Advanced Application Software	
Foundation Courses *(to be taken within the first 60 credits)*		
PSYC 100	Introduction to Psychology	3
or BEHS 210	Introduction to Social and Behavioral Science *or other course to fulfill the second behavioral and social sciences requirement (discipline must differ from first)*	
NSCI 100	Introduction to Physical Science	3
or ASTR 100	Introduction to Astronomy *or other course to fulfill the biological and physical sciences lecture requirement*	
PHIL 140	Contemporary Moral Issues	3
or a foreign language course		
	or other ARTH, ARTT, HIST, HUMN, MUSC, PHIL, THET, dance, or literature course to fulfill the arts and humanities requirement (discipline must differ from other humanities course)	
SPCH 100	Foundations of Speech Communication	3
or JOUR 201	Writing for the Mass Media *or other course to fulfill the communications/ writing or speech requirement*	
IFSM 304	Ethics in the Information Age *or other course to fulfill the interdisciplinary issues/computing requirement*	3
◆ COMM 300	Communication Theory	3
Additional Required Courses *(to be taken after introductory and foundation courses)*		
WRTG 393/393X	Technical Writing	3
or WRTG 394/394X	Business Writing *or other course to fulfill the communications/ upper-level intensive writing requirement*	
◆ COMM 380	Language in Social Contexts *or other writing or language arts course for the major*	3
◆ COMM 400	Communication and the Law	3
or JOUR 330	Public Relations Theory *or other mass communication course for the major*	
◆ SPCH 470	Listening *or other speech communication course for the major*	3
◆ COMM 493	Advanced Technical Writing *or other supplemental major course*	3
◆ SPCH 482	Intercultural Communication *or other supplemental major course*	3
◆ Any COMM, JOUR, SPCH, or WRTG course *(supplemental major course)*		3

◆ A supplemental major course   3
◆ A supplemental major course   3

Capstone Course for Major *(to be taken in the last 15 credits)*
◆ COMM 495   Seminar in Workplace Communication   3
or SPCH 397   Organizational Presentations
or WRTG 493   Advanced Technical Writing

Minor and/or Elective Courses *(to be taken in the last 60 credits along with required major courses)*   46

Total credits for BA in communication studies   **120**

Minor in Communication Studies

The communication studies minor complements the skills the student gains in his or her major discipline by providing specialized skills in workplace communication, including the development of written and oral communication skills and a greater understanding of human interaction.

Objectives

The student who graduates with a minor in communication studies will be able to

- Apply communication theories—including both speech communication and mass communication theories—to various situations and contexts.
- Identify and apply effective strategies for creating, editing, and presenting effective written messages to different audiences and within different contexts.
- Use tools and technology to gather information, as well as to develop and deliver messages.
- Critically analyze information for creating effective oral or written messages and for evaluating messages.

Requirements for the Minor

A minor in communication studies requires the completion of 15 credits of coursework in communication studies. All COMM, JOUR, SPCH, and WRTG courses apply. It is recommended that students take COMM 300 early in the minor (if they have not already applied the course toward other degree requirements).

Courses may not duplicate those used to satisfy requirements for the major. At least 9 credits must be earned in upper-level courses (numbered 300 or above). Prerequisites apply for all courses.

For a listing of all the requirements for the bachelor's degree, students should refer to their major and pp. 8–9.

Computer and Information Science

Students may seek an academic major in computer and information science.

Major in Computer and Information Science

The computer and information science major provides a coherent, sequential, and integrated academic program of in-depth study that furnishes a body of knowledge and methods, as well as practice in the area of computer and information science. The curriculum focuses on the problem-solving skills and techniques needed to provide computer-based solutions to practical problems, including fundamental practical knowledge in the fields of software engineering, relational databases, programming languages, operating systems, computer networks, and distributed systems.

Objectives

The student who graduates with a major in computer and information science will be able to

- Incorporate relevant theory, techniques, and knowledge of programming languages and computer systems in developing computer-based solutions to practical problems in the field of information systems and technology.
- Effectively use object-oriented programming languages, such as Java or C++, in developing computer-based solutions to practical problems.
- Pursue careers as programmers and programmer analysts, software engineers, and system/network administrators working with operating systems such as UNIX/Linux and Windows; programming languages such as Java, C++, and Perl; and relational and object-oriented database systems such as Oracle.
- Develop clear and precise oral and written communications and enhance skills in the analysis, definition, and documentation of problems and solutions in the field of computer and information science.
- Apply knowledge of the concepts and principles of computer and information science to the management of changes and developments in information systems and technology.
- Discuss the environmental, ethical, and social implications of the rapidly changing field of information technology.
- Identify current and historical trends and patterns in computer and information science and the individuals and organizations that influence and foster these global patterns of change.

- Apply the tools and techniques in research and analysis required to evaluate computer and information science products.
- Discuss the implications and significance of computer and information science for other disciplines and fields of scholarship.

Degree Requirements

A degree with a major in computer and information science requires the successful completion of 120 credits of coursework, including 30 credits for the major; 41 credits in general education requirements; and 49 credits in the minor, electives, and other degree requirements. At least 15 credits in the major must be earned in upper-level courses (numbered 300 or above).

REQUIREMENTS FOR THE COMPUTER AND INFORMATION SCIENCE MAJOR

Coursework for a major in computer and information science includes the following:

- Required core courses (12 credits): CMIS 141/141A, 170, 242, and 310
- Supplemental major courses (18 credits, 6 of which must be 400 level): Chosen from CMIS 102/102A (for students with no prior programming experience) and any upper-level CMIS courses except CMIS 486A and 486B (**Note:** Students should take CMIS 102/102A before core courses and may apply it toward the interdisciplinary issues/computing requirement rather than toward the major.)

RECOMMENDED SEQUENCE

The following course sequence will fulfill all the requirements for the BS in computer and information science. Coursework for the major is indicated by ◆. Since some recommended courses fulfill more than one requirement, substituting courses for those listed may make it necessary to take additional courses to meet degree requirements. Students should consult an advisor whenever taking advantage of other options. Information on alternate courses (where allowable) to fulfill general education requirements (in communications, arts and humanities, behavioral and social sciences, biological and physical sciences, mathematics, and interdisciplinary issues) may be found on p. 8.

**Computer and Information Science
Degree Courses** — **Credits**

First Courses *(to be taken within the first 18 credits)*
Note: Placement tests are required for math and writing courses.

EDCP 100	Principles and Strategies of Successful Learning *(strongly recommended as first course)*	3
LIBS 150	Information Literacy and Research Methods	1
WRTG 101/101X	Introduction to Writing	3
MATH 106	Finite Mathematics *or a higher-level math course*	3

Introductory Courses *(to be taken within the first 30 credits)*

CMIS 102	Introduction to Problem Solving and Algorithm Design	3
or CMIS 102A	Fundamentals of Programming I *(fulfills the interdisciplinary issues/computing requirement and prerequisite for later courses)*	
IFSM 201	Introduction to Computer-Based Systems	3
or CMST 303	Advanced Application Software	
PHIL 140	Contemporary Moral Issues	3
or ENGL 240	Introduction to Fiction, Poetry, and Drama *or other ARTH, ARTT, HIST, HUMN, MUSC, PHIL, THET, dance, literature, or foreign language course to fulfill the arts and humanities requirement*	
◆ CMIS 141	Introductory Programming	3
or CMIS 141A	Fundamentals of Programming II	
Both BIOL 101	Concepts of Biology	3
and BIOL 102	Laboratory in Biology	1
or BIOL 103	Introduction to Biology *or other course(s) to fulfill the biological and physical sciences lecture and laboratory requirement*	
◆ CMIS 170	Introduction to XML	3
WRTG 291	Expository and Research Writing *or other course to fulfill the communications/ writing requirement*	3
GVPT 170	American Government *or other ANTH, BEHS, ECON, GEOG, GVPT, PSYC, SOCY, or eligible AASP, CCJS, GERO, or WMST course to fulfill the first behavioral and social sciences requirement*	3

Foundation Courses *(to be taken within the first 60 credits)*

◆ CMIS 242	Intermediate Programming	3
PSYC 100	Introduction to Psychology	3
or SOCY 100	Introduction to Sociology *or other course to fulfill the second behavioral and social sciences requirement (discipline must differ from first)*	
NSCI 100	Introduction to Physical Science	3
or ASTR 100	Introduction to Astronomy *or other course to fulfill the biological and physical sciences lecture requirement*	
HIST 142	Western Civilization II	3
or HIST 157	History of the United States Since 1865 *or other ARTH or HIST course to fulfill the arts and humanities requirement in historical perspective (discipline must differ from other humanities course)*	
ANTH 344	Cultural Anthropology and Linguistics	3
or a foreign language course *(recommended elective)*		
SPCH 100	Foundations of Speech Communication	3
or WRTG 390	Writing for Managers *or other course to fulfill the communications/ writing or speech requirement*	
◆ CMIS 310	Computer Systems and Architecture	3

Additional Required Courses *(to be taken after introductory and foundation courses)*

WRTG 393/393X	Technical Writing	3
	or other course to fulfill the communications/ upper-level intensive writing requirement	
◆ CMIS 325	UNIX with Shell Programming	3
	or other supplemental major course	
◆ CMIS 330	Software Engineering Principles and Techniques	3
	or other supplemental major course	
◆ CMIS 320	Relational Databases	3
or CMIS 370	Data Communications	
	or other supplemental major course	
◆ Any CMIS course	*(supplemental major course)*	3
◆ CMIS 415	Advanced UNIX and C	3
or CMIS 460	Software Design and Development	
	or other 400-level supplemental major course	
◆ CMIS 420	Advanced Relational Databases	3
or CMIS 435	Computer Networking	
	or other 400-level supplemental major course	

Minor and/or Elective Courses *(to be taken in the last 60 credits along with required major courses)* 43

Recommended Minor
Computing

Total credits for BS in computer and information science	**120**

Computer Information Technology

Students may seek an academic major in computer information technology.

Major in Computer Information Technology

The computer information technology major is designed to combine the benefits of a traditional college education with the benefits of hands-on training in state-of-the-art computer technology. Students become technically competent but also learn to write well-organized and clear memoranda and reports. The computer information technology curriculum integrates technical skill with communication skills, superior general education requirements, and breadth of knowledge in the computer information technology field.

Objectives

The student who graduates with a major in computer information technology will be able to

- Design and implement network and database administration solutions.
- Produce effective proposals, reports, memoranda, briefings, and documentation.
- Communicate effectively using oral and computer-based presentation techniques.
- Apply effective information research techniques.
- Discuss information technology from an international and historical perspective.
- Apply ethical judgments to thinking critically and systematically about the impact of information technology on contemporary social, political, and economic issues.

Degree Requirements

A degree with a major in computer information technology requires the successful completion of 120 credits of coursework, including 33 credits for the major, 41 credits in general education requirements, and 46 credits in the minor, electives, and other degree requirements. At least 17 credits in the major must be earned in upper-level courses (numbered 300 or above), and 18 credits in courses designated CMIT.

REQUIREMENTS FOR THE COMPUTER INFORMATION TECHNOLOGY MAJOR

Coursework for a major in computer information technology includes the following:

- Required foundation courses (6 credits): CMIS 310 and CMIT 265
- Core courses (15 credits): Any upper-level CMIT courses
- Supplemental major courses (12 credits): Any CMIS, CMIT, CMSC, CMST, and IFSM courses (**Note:** Students without prior programming experience should take CMIS 102/102A before core courses and may apply it toward the interdisciplinary issues/computing requirement rather than toward the major.)

RECOMMENDED SEQUENCE

The following course sequence will fulfill all the requirements for the BS in computer information technology. Coursework for the major is indicated by ◆. Since some recommended courses fulfill more than one requirement, substituting courses for those listed may make it necessary to take additional courses to meet degree requirements. Students should consult an advisor whenever taking advantage of other options. Information on alternate courses (where allowable) to fulfill general education requirements (in communications, arts and humanities, behavioral and social sciences, biological and physical sciences, mathematics, and interdisciplinary issues) may be found on p. 8.

Computer Information Technology
Degree Courses   **Credits**

First Courses *(to be taken within the first 18 credits)*
Note: Placement tests are required for math and writing courses.

EDCP 100	Principles and Strategies of Successful Learning *(strongly recommended as first course)*	3
LIBS 150	Information Literacy and Research Methods	1
WRTG 101/101X	Introduction to Writing	3
MATH 106	Finite Mathematics *or a higher-level math course*	3

Introductory Courses *(to be taken within the first 30 credits)*

CMIS 102	Introduction to Problem Solving and Algorithm Design	3
or CMIS 102A	Fundamentals of Programming I *(fulfills the interdisciplinary issues/computing requirement and prerequisite for later courses)*	
IFSM 201	Introduction to Computer-Based Systems	3
or CMST 303	Advanced Application Software	
PHIL 140	Contemporary Moral Issues	3
or ENGL 240	Introduction to Fiction, Poetry, and Drama *or other ARTH, ARTT, HIST, HUMN, MUSC, PHIL, THET, dance, literature, or foreign language course to fulfill the arts and humanities requirement*	
Both BIOL 101	Concepts of Biology	3
and BIOL 102	Laboratory in Biology	1
or BIOL 103	Introduction to Biology *or other course(s) to fulfill the biological and physical sciences lecture and laboratory requirement*	
CMIS 160	Discrete Mathematics for Computing *(recommended elective)*	3
WRTG 291	Expository and Research Writing *or other course to fulfill the communications/ writing requirement*	3
GVPT 170	American Government *or other ANTH, BEHS, ECON, GEOG, GVPT, PSYC, SOCY, or eligible AASP, CCJS, GERO, or WMST course to fulfill the first behavioral and social sciences requirement*	3

Foundation Courses *(to be taken within the first 60 credits)*

◆ CMIT 265	Networking Essentials	3
PSYC 100	Introduction to Psychology	3
or SOCY 100	Introduction to Sociology *or other course to fulfill the second behavioral and social sciences requirement (discipline must differ from first)*	
NSCI 100	Introduction to Physical Science	3
or ASTR 100	Introduction to Astronomy *or other course to fulfill the biological and physical sciences lecture requirement*	

HIST 142	Western Civilization II	3
or HIST 157	History of the United States Since 1865 *or other ARTH or HIST course to fulfill the arts and humanities requirement in historical perspective (discipline must differ from other humanities course)*	
IFSM 304	Ethics in the Information Age *(recommended elective)*	3
ANTH 344	Cultural Anthropology and Linguistics	3
or a foreign language course	*(recommended elective)*	
SPCH 100	Foundations of Speech Communication	3
or WRTG 390	Writing for Managers *or other course to fulfill the communications/ writing or speech requirement*	
◆ CMIS 310	Computer Systems and Architecture	3

Additional Required Courses *(to be taken after introductory and foundation courses)*

WRTG 393/393X	Technical Writing *or other course to fulfill the communications/ upper-level intensive writing requirement*	3
◆ CMIT 364	Windows XP Professional *or other core course for the major*	3
◆ CMIT 368	Windows Server 2003 *or other core course for the major*	3
◆ CMIT 376	Windows Network Infrastructure *or other core course for the major*	3
◆ CMIT 377	Windows Directory Services Infrastructure *or other core course for the major*	3
◆ CMIT 320	Network Security *or other core course for the major*	3
◆ CMIT 486A	Internship in Computer Information Technology Through Co-op *or other supplemental major course*	3
◆ CMIT 350	Interconnecting Cisco Devices *or other supplemental major course*	3
◆ CMIT 374	Exchange Server *or other supplemental major course*	3
◆ Any CMIS, CMIT, CMSC, CMST, or IFSM course	*(supplemental major course)*	3

Minor and/or Elective Courses *(to be taken in the last 60 credits along with required major courses)*   34

<u>Recommended Minors</u>
Computing, English, or mathematics

<u>Recommended Elective</u>

MATH 140	Calculus I *or other calculus course (for students planning to go on to graduate school)*	

Total credits for BS in computer information technology   **120**

Computer Science

Students may seek an academic major in computer science.

Major in Computer Science

The computer science major is designed for students who have a good background in mathematics and an interest in the theory, practice, art, and science of computer programming. This major provides graduates with an educational foundation appropriate for careers in computer software or computer system design, including careers as software engineers, application software designers, system programmers, and system engineers.

Objectives

The student who graduates with a major in computer science will be able to

- Analyze the effects of computerization on the global workplace.
- Develop and present computer software and system designs effectively, both orally and in writing.
- Design and develop computer software using appropriate programming languages.
- Utilize effective computer organization and system architecture to enhance performance.
- Design and use efficient algorithms and data structures in writing computer programs.
- Apply the mathematical foundations of computer science in analyses of models of computation.
- Use information resources to assist with projects or research.

Degree Requirements

A degree with a major in computer science requires the successful completion of 120 credits of coursework, including 38 credits for the major; 41 credits in general education requirements; and 41 credits in the minor, electives, and other degree requirements. At least 18 credits in the major must be earned in upper-level courses (numbered 300 or above).

REQUIREMENTS FOR THE COMPUTER SCIENCE MAJOR

Coursework for a major in computer science includes the following:

- Required mathematics courses (8 credits): MATH 140 and 141
- Required foundation courses (9 credits): CMSC 130, 150, and 230
- Required core courses (9 credits): CMSC 330 and 335 and any 300-level CMSC course

- Supplemental major courses (9 credits): Chosen from CMSC 101 (for students without prior programming experience) and any 400-level CMSC courses except CMSC 486A and 486B (**Note:** Students should take CMSC 101 before core courses and may apply it toward the interdisciplinary issues/computing requirement rather than toward the major.)
- Required capstone course (3 credits): CMSC 495

RECOMMENDED SEQUENCE

The following course sequence will fulfill all the requirements for the BS in computer science. Coursework for the major is indicated by ◆. Since some recommended courses fulfill more than one requirement, substituting courses for those listed may make it necessary to take additional courses to meet degree requirements. Students should consult an advisor whenever taking advantage of other options. Information on alternate courses (where allowable) to fulfill general education requirements (in communications, arts and humanities, behavioral and social sciences, biological and physical sciences, mathematics, and interdisciplinary issues) may be found on p. 8.

Computer Science Degree Courses		Credits
First Courses *(to be taken within the first 18 credits)*		
Note: Placement tests are required for math and writing courses.		
EDCP 100	Principles and Strategies of Successful Learning *(strongly recommended as first course)*	3
LIBS 150	Information Literacy and Research Methods	1
WRTG 101/101X	Introduction to Writing	3
MATH 115	Pre-Calculus	3
or both MATH 107	College Algebra	
and MATH 108	Trigonometry and Analytical Geometry *(prerequisite for later courses)*	
Introductory Courses *(to be taken within the first 30 credits)*		
◆ MATH 140	Calculus I	4
IFSM 201	Introduction to Computer-Based Systems	3
or CMST 303	Advanced Application Software	
CMSC 101	Introductory Computer Science *(fulfills the interdisciplinary issues/computing requirement and prerequisite for later courses)*	3
GVPT 170	American Government *or other ANTH, BEHS, ECON, GEOG, GVPT, PSYC, SOCY, or eligible AASP, CCJS, GERO, or WMST course to fulfill the first behavioral and social sciences requirement*	3
Both BIOL 101	Concepts of Biology	3
and BIOL 102	Laboratory in Biology	1
or BIOL 103	Introduction to Biology *or other course(s) to fulfill the biological and physical sciences lecture and laboratory requirement*	
WRTG 291	Expository and Research Writing *or other course to fulfill the communications/ writing requirement*	3
◆ CMSC 150	Introduction to Discrete Structures	3

PHIL 140	Contemporary Moral Issues	3
or ENGL 240	Introduction to Fiction, Poetry, and Drama *or other ARTH, ARTT, HIST, HUMN, MUSC, PHIL, THET, dance, literature, or foreign language course to fulfill the arts and humanities requirement*	

Foundation Courses *(to be taken within the first 60 credits)*

◆ CMSC 130	Computer Science I	3
◆ MATH 141	Calculus II	4
PSYC 100	Introduction to Psychology	3
or SOCY 100	Introduction to Sociology *or other course to fulfill the second behavioral and social sciences requirement (discipline must differ from first)*	
NSCI 100	Introduction to Physical Science	3
or ASTR 100	Introduction to Astronomy *or other course to fulfill the biological and physical sciences lecture requirement*	
◆ CMSC 230	Computer Science II	3
HIST 142	Western Civilization II	3
or HIST 157	History of the United States Since 1865 *or other ARTH or HIST course to fulfill the arts and humanities requirement in historical perspective (discipline must differ from other humanities course)*	
IFSM 304	Ethics in the Information Age *(recommended elective)*	3
SPCH 100	Foundations of Speech Communication	3
or WRTG 390	Writing for Managers *or other course to fulfill the communications/ writing or speech requirement*	
ANTH 344	Cultural Anthropology and Linguistics	3
or a foreign language course	*(recommended elective)*	

Additional Required Courses *(to be taken after introductory and foundation courses)*

WRTG 393/393X	Technical Writing *or other course to fulfill the communications/ upper-level intensive writing requirement*	3
◆ CMSC 311	Computer Organization *or any 300-level CMSC course*	3
◆ CMSC 330	Advanced Programming Languages	3
◆ CMSC 335	Object-Oriented and Concurrent Programming	3
◆ Any 400-level CMSC course except CMSC 486A/B *(supplemental major course)*		3
◆ A supplemental major course		3
◆ A supplemental major course		3

Capstone Course for Major *(to be taken in the last 15 credits)*

◆ CMSC 495	Current Trends and and Projects in Computer Science	3

Minor and/or Elective Courses *(to be taken in the last 60 credits along with required major courses)* **32**

Recommended Minors
Computing or mathematics

Total credits for BS in computer science **120**

Computer Studies

Students may seek an academic major in computer studies.

Major in Computer Studies

The computer studies major provides a flexible and coherent program of study integrating courses from several of the specialized computer and information fields. The interdisciplinary approach helps prepare students for a variety of entry-level and midlevel technical and management positions within the information technology field.

Objectives

The student who graduates with a major in computer studies will be able to

- Incorporate relevant theory, techniques, languages, and systems in developing computer-related solutions to practical problems.
- Apply appropriate knowledge, concepts, and principles to facilitate the management of change in computer technology.
- Conceptualize and manage the design and implementation of high-quality information systems.
- Design and develop computer software using a programming language.
- Use technology to research information and provide a critical analysis of alternatives to help organizations make informed decisions.
- Apply standard system practices to the planning, implementation, management, and evaluation of information systems in an organization.
- Design and produce accurate and precise written documentation in all phases of the system development life cycle from preliminary feasibility studies to end-user documentation and manuals.
- Analyze information technology needs from historical and international perspectives in regard to advances in worldwide e-commerce.

Degree Requirements

A degree with a major in computer studies requires the successful completion of 120 credits of coursework, including 30 credits for the major; 41 credits in general education requirements; and 49 credits in the minor, electives, and other degree requirements. At least 15 credits in the major must be earned in upper-level courses (numbered 300 or above).

BACHELOR'S DEGREE CURRICULA

REQUIREMENTS FOR THE COMPUTER STUDIES MAJOR

Coursework for a major in computer studies includes the following:

- Programming language course (3 credits): Chosen from CMIS 141/141A and 170, CMSC 130, and CMST 306
- Foundation courses (6 credits): Chosen from CMIS 241 (or CMSC 230), IFSM 300 and 310, and CMST 340
- Supplemental major courses (21 credits, at least 15 of which must be upper level): Chosen from any CMST, CMIS, CMIT, CMSC, and IFSM courses (**Note:** Students without prior programming experience should take CMIS 102/102A before core courses and may apply it toward the interdisciplinary issues/computing requirement rather than toward the major.)

RECOMMENDED SEQUENCE

The following course sequence will fulfill all the requirements for the BS in computer studies. Coursework for the major is indicated by ◆. Since some recommended courses fulfill more than one requirement, substituting courses for those listed may make it necessary to take additional courses to meet degree requirements. Students should consult an advisor whenever taking advantage of other options. Information on alternate courses (where allowable) to fulfill general education requirements (in communications, arts and humanities, behavioral and social sciences, biological and physical sciences, mathematics, and interdisciplinary issues) may be found on p. 8.

Computer Studies Degree Courses		Credits
First Courses *(to be taken within the first 18 credits)*		
Note: Placement tests are required for math and writing courses.		
EDCP 100	Principles and Strategies of Successful Learning *(strongly recommended as first course)*	3
LIBS 150	Information Literacy and Research Methods	1
WRTG 101/101X	Introduction to Writing	3
MATH 106	Finite Mathematics *or a higher-level math course*	3
Introductory Courses *(to be taken within the first 30 credits)*		
PHIL 140	Contemporary Moral Issues	3
or ENGL 240	Introduction to Fiction, Poetry, and Drama *or other ARTH, ARTT, HIST, HUMN, MUSC, PHIL, THET, dance, literature, or foreign language course to fulfill the arts and humanities requirement*	
IFSM 201	Introduction to Computer-Based Systems	3
or CMST 303	Advanced Application Software	
Both BIOL 101	Concepts of Biology	3
and BIOL 102	Laboratory in Biology	1
or BIOL 103	Introduction to Biology *or other course(s) to fulfill the biological and physical sciences lecture and laboratory requirement*	
CMIS 102	Introduction to Problem Solving and Algorithm Design	3
or CMIS 102A	Fundamentals of Programming I *(fulfills the interdisciplinary issues/computing requirement and prerequisite for later courses)*	

WRTG 291	Expository and Research Writing *or other course to fulfill the communications/ writing requirement*	3
GVPT 170	American Government *or other ANTH, BEHS, ECON, GEOG, GVPT, PSYC, SOCY, or eligible AASP, CCJS, GERO, or WMST course to fulfill the first behavioral and social sciences requirement*	3
◆ CMST 306	Introduction to Visual Basic Programming *or other programming language course*	3
Foundation Courses *(to be taken within the first 60 credits)*		
PSYC 100	Introduction to Psychology	3
or SOCY 100	Introduction to Sociology *or other course to fulfill the second behavioral and social sciences requirement (discipline must differ from first)*	
◆ CMST 340	Computer Applications in Management *or other foundation course for the major*	3
NSCI 100	Introduction to Physical Science	3
or ASTR 100	Introduction to Astronomy *or other course to fulfill the biological and physical sciences lecture requirement*	
HIST 142	Western Civilization II	3
or HIST 157	History of the United States Since 1865 *or other ARTH or HIST course to fulfill the arts and humanities requirement in historical perspective (discipline must differ from other humanities course)*	
◆ IFSM 300	Information Systems in Organizations *or other foundation course for the major*	3
ANTH 344	Cultural Anthropology and Linguistics	3
or a foreign language course	*(recommended elective)*	
SPCH 100	Foundations of Speech Communication	3
or WRTG 390	Writing for Managers *or other course to fulfill the communications/ writing or speech requirement*	
IFSM 304	Ethics in the Information Age *(recommended elective)*	3
Additional Required Courses *(to be taken after introductory and foundation courses)*		
WRTG 393/393X	Technical Writing *or other course to fulfill the communications/ upper-level intensive writing requirement*	3
◆ CMST 310	Electronic Publishing *or other supplemental major course*	3
◆ CMST 416	Advanced Visual Basic Programming *or other supplemental major course*	3
◆ CMST 385	Internet and Web Design *or other supplemental major course*	3
◆ CMST 386	Advanced Internet and Web Design *or other supplemental major course*	3
◆ CMIS 430	Web Site Management *or other supplemental major course*	3

◆ CMIS 450   Web Design with XML   3
or other supplemental major course

◆ CMIS 460   Web Application Development Using ColdFusion   3
or other supplemental major course

Minor and/or Elective Courses *(to be taken in the last 60 credits along with required major courses)*   40

Recommended Minor
Business administration

Total credits for BS in computer studies   **120**

Computing

Students may seek an academic minor in computing.

Minor in Computing

The computing minor complements the skills the student gains in his or her major discipline by providing a study of the principles and techniques used in developing computer-related solutions to practical problems.

Objectives

The student who graduates with a minor in computing will be able to

• Incorporate relevant theory, techniques, languages, and systems in developing computer-related solutions to practical problems.
• Apply appropriate knowledge, concepts, and principles to facilitate the management of change in computer technology.
• Use technology to research information and provide a critical analysis of alternatives to help organizations make informed decisions.
• Apply standard system practices to the planning, implementation, management, and evaluation of information systems in an organization.

Requirements for the Minor

A minor in computer studies requires the completion of 15 credits of coursework chosen from any courses in computer and information science, computer information technology, computer science, computer studies, and information systems management. At least 9 credits must be earned in upper-level courses (numbered 300 or above). Courses may not duplicate those used to satisfy requirements for the major. Prerequisites apply for all courses.

For a listing of all the requirements for the bachelor's degree, students should refer to their major and pp. 8–9.

Criminal Justice

Students may seek either an academic major or minor in criminal justice.

Major in Criminal Justice

The criminal justice major focuses on the nature of crime and the institutions and processes that prevent and respond to crime in a democratic society. The curriculum covers the study of crime and criminal behavior, law enforcement, courts, corrections, security, and investigative forensics. The criminal justice major is designed to provide students with a broad understanding of crime and justice.

Objectives

The student who graduates with a major in criminal justice will be able to

• Describe the history and development of criminal justice organizations and the worldwide diversity of the rule of law in various countries.
• Analyze the operations, policies, and procedures within the criminal justice system.
• Recognize trends in crime and criminal behavior and methods of prevention and treatment.
• Explain the role of the criminal justice system (police, courts, and corrections) in the administration of justice in the United States and other countries.
• Analyze the theories related to deviance and critique the effectiveness of their practical application to behavioral change.
• Demonstrate a cohesive base of skills, techniques, and principles related to the practice of criminal justice.
• Identify and compare international and cross-cultural approaches to crime and prevention.
• Demonstrate the ability to access, interpret, and apply criminal justice research findings.

Degree Requirements

A degree with a major in criminal justice requires the successful completion of 120 credits of coursework, including 30 credits for the major; 41 credits in general education requirements; and 49 credits in the minor, electives, and other degree requirements. At least 15 credits in the major must be earned in upper-level courses (numbered 300 or above).

BACHELOR'S DEGREE CURRICULA

REQUIREMENTS FOR THE CRIMINAL JUSTICE MAJOR

Coursework for a major in criminal justice includes the following:

- Required foundation course (3 credits): CCJS 100 or 105
- Required statistics course (3 credits): STAT 200
- Core courses (15 credits): CCJS 230 (or 234), 340 (or 320), 350 (or 461), 345 (or 430), and 497 (or 432)
- Supplemental major courses (9 credits, 3 of which must be upper level): Any CCJS courses or HMLS 495

RECOMMENDED SEQUENCE

The following course sequence will fulfill all the requirements for the BS in criminal justice. Coursework for the major is indicated by ◆. Since some recommended courses fulfill more than one requirement, substituting courses for those listed may make it necessary to take additional courses to meet degree requirements. Students should consult an advisor whenever taking advantage of other options. Information on alternate courses (where allowable) to fulfill general education requirements (in communications, arts and humanities, behavioral and social sciences, biological and physical sciences, mathematics, and interdisciplinary issues) may be found on p. 8.

Criminal Justice Degree Courses		Credits

First Courses *(to be taken within the first 18 credits)*
Note: Placement tests are required for math and writing courses.

EDCP 100	Principles and Strategies of Successful Learning *(strongly recommended as first course)*	3
LIBS 150	Information Literacy and Research Methods	1
WRTG 101/101X	Introduction to Writing	3
MATH 106	Finite Mathematics *or a higher-level math course*	3
◆ CCJS 100	Introduction to Criminal Justice	3
or CCJS 105	Introduction to Criminology	

Introductory Courses *(to be taken within the first 30 credits)*

GVPT 170	American Government *or other ANTH, BEHS, ECON, GEOG, GVPT, PSYC, SOCY, or eligible AASP, CCJS, GERO, or WMST course to fulfill the first behavioral and social sciences requirement*	3
Both BIOL 101	Concepts of Biology	3
and BIOL 102	Laboratory in Biology	1
or BIOL 103	Introduction to Biology *or other course(s) to fulfill the biological and physical sciences lecture and laboratory requirement*	
WRTG 291	Expository and Research Writing *or other course to fulfill the communications/ writing requirement*	3
IFSM 201	Introduction to Computer-Based Systems	3
or CMST 303	Advanced Application Software	
◆ CCJS 230	Criminal Law in Action	3
or CCJS 234	Criminal Procedure and Evidence	

PHIL 140	Contemporary Moral Issues	3
or a foreign language course		
	or other ARTH, ARTT, HIST, HUMN, MUSC, PHIL, THET, dance, or literature course to fulfill the arts and humanities requirement	

Foundation Courses *(to be taken within the first 60 credits)*

◆ STAT 200	Introduction to Statistics	3
PSYC 100	Introduction to Psychology	3
or SOCY 100	Introduction to Sociology *or other course to fulfill the second behavioral and social sciences requirement (discipline must differ from first)*	
NSCI 100	Introduction to Physical Science	3
or ASTR 100	Introduction to Astronomy *or other course to fulfill the biological and physical sciences lecture requirement*	
HIST 142	Western Civilization II	3
or HIST 157	History of the United States Since 1865 *or other ARTH or HIST course to fulfill the arts and humanities requirement in historical perspective (discipline must differ from other humanities course)*	
ANTH 344	Cultural Anthropology and Linguistics *(recommended elective)*	3
SPCH 100	Foundations of Speech Communication	3
or COMM 380	Language in Social Contexts *or other course to fulfill the communications/ writing or speech requirement*	
IFSM 304	Ethics in the Information Age *or other course to fulfill the interdisciplinary issues/computing requirement*	3

Additional Required Courses *(to be taken after introductory and foundation courses)*

◆ CCJS 340	Law-Enforcement Administration	3
or CCJS 320	Introduction to Criminalistics	
◆ CCJS 350	Juvenile Delinquency	3
or CCJS 461	Psychology of Criminal Behavior	
◆ CCJS 497	Correctional Administration	3
or CCJS 432	Law of Corrections	
WRTG 391/391X	Advanced Expository and Research Writing *or other course to fulfill the communications/ upper-level intensive writing requirement*	3
◆ CCJS 345	Introduction to Security Management	3
or CCJS 430	Legal and Ethical Issues in Security Management	
◆ Any CCJS course	*(supplemental major course)*	3
◆ CCJS 486A	Internship in Criminal Justice Through Co-op *or other supplemental major course*	3
◆ HMLS 495	Public Safety Policies and Leadership *or other supplemental major course*	3

Minor and/or Elective Courses *(to be taken in the last 60 credits along with required major courses)* 43

Recommended Electives

CAPL 398A	Career Planning Management *(for students not taking EDCP 100)*
CCJS 360	Victimology
CCJS 352	Drugs and Crime

Total credits for BS in criminal justice 120

Minor in Criminal Justice

The criminal justice minor complements the skills the student gains in his or her major discipline by providing a study of crime, law enforcement, courts, corrections, security, and investigative forensics.

Objectives

The student who graduates with a minor in criminal justice will be able to

- Analyze the operations, policies, and procedures within the criminal justice system.
- Identify the causes of criminal behavior.
- Demonstrate a cohesive base of job-related skills, techniques, and principles related to criminal justice in various countries.
- Recognize trends in crime and criminal behavior.
- Explain the role of the criminal justice system (police, courts, corrections) in the administration of justice worldwide.

Requirements for the Minor

A minor in criminal justice requires the completion of 15 credits of coursework in criminal justice. Any CCJS courses apply. It is recommended that students take CCJS 100, 105, or 230 as the first course in the minor (if they have not already applied the course toward other degree requirements).

Courses may not duplicate those used to satisfy requirements for the major. At least 9 credits must be earned in upper-level courses (numbered 300 or above). Prerequisites apply for all courses.

For a listing of all the requirements for the bachelor's degree, students should refer to their major and pp. 8–9.

Customer Service Management

Students may seek an academic minor in customer service management.

Minor in Customer Service Management

The customer service management minor complements the skills the student gains in his or her major discipline by providing a study of how customer service managers make informed decisions regarding organization, planning, operating procedures, management, and allocation of limited resources.

Objectives

The student who graduates with a minor in customer service management will be able to

- Apply key concepts in customer service planning and management.
- Analyze the relationship of customer service activities and procedures to the overall organization.

Requirements for the Minor

A minor in customer service management requires the completion of 15 credits in customer service management coursework, chosen from the following courses:

ACCT 301	Accounting for Nonaccounting Managers
BMGT 317	Problem Solving for Managers
BMGT 364	Management and Organization Theory
BMGT 375	Procurement Management
BMGT 378	Legal Environment of Business
BMGT 487	Project Management I
HRMN 302	Organizational Communication
HRMN 406	Employee Training and Development
MRKT 395	Customer Relationship Management
MRKT 396	Customer Consultation and Needs Analysis

Courses may not duplicate those used to satisfy requirements for the major. At least 9 credits must be earned in upper-level courses (numbered 300 or above). Prerequisites apply for all courses.

For a listing of all the requirements for the bachelor's degree, students should refer to their major and pp. 8–9.

Economics

Students may seek an academic minor in economics.

Minor in Economics

The economics minor complements the skills the student gains in his or her major discipline by providing a study of the forces that determine production and distribution, price levels, and income distribution, as well as other economic factors that influence the quality of life.

Objectives

The student who graduates with a minor in economics will be able to

- Explain fundamental economic concepts and understand the principles and problems of modern economic life.
- Examine the relation of economic concepts to a variety of current social problems, including poverty, divorce, social stratification, and unemployment.
- Analyze economic and social issues and their relationship to personal, public, and business decisions.

Requirements for the Minor

A minor in economics requires the completion of 15 credits in economics. All ECON courses apply. Students should take ECON 201 and 203 as the first courses in the minor (if they have not already applied the courses toward other degree requirements).

Courses may not duplicate those used to satisfy requirements for the major. At least 9 credits must be earned in upper-level courses (numbered 300 or above). Prerequisites apply for all courses.

For a listing of all the requirements for the bachelor's degree, students should refer to their major and pp. 8–9.

Emergency Management

Students may seek either an academic major or minor in emergency management.

Major in Emergency Management

The emergency management major focuses on disaster prevention, planning, preparedness, response, mitigation, and recovery. The curriculum covers needs and issues, operations management, planning and response, and terrorism and is designed to provide students with a global outlook, interpersonal skills, and emergency management knowledge and skills. Students are prepared for leadership positions in emergency management in government and industry or for graduate study in emergency management, homeland security, or management and leadership. Coursework may also fill requirements related to the National Fire Protection Association Standard on Disaster/ Emergency Management and Business Continuity Programs (1600), qualification as a Certified Emergency Manager, and other professional association certifications.

Objectives

The student who graduates with a major in emergency management will be able to

- Analyze the response of government and industry to disasters and other significant events in history in order to develop emergency management principles and policies.
- Describe current emergency management policies, operational theories, and functions in relation to significant and potential disasters.
- Explain the ethical, political, social, environmental, and economic issues related to emergency management planning and operations.
- Demonstrate the critical thinking and program management skills necessary to provide leadership and support in emergency situations.
- Identify the technological tools used for the effective administration of an emergency management program.
- Explain the importance of leadership and performance in emergency management and identify the leadership traits of competent emergency management personnel.
- Describe and analyze integrated emergency management planning and operations in relation to public safety agencies, different levels of government, nongovernmental organizations, private industry, and public policy.
- Evaluate current challenges and issues in emergency management.

Degree Requirements

A degree with a major in emergency management requires the successful completion of 120 credits of coursework, including 30 credits for the major; 41 credits in general education requirements; and 49 credits in the minor, electives, and other degree requirements. At least 15 credits in the major must be earned in upper-level courses (numbered 300 or above).

REQUIREMENTS FOR THE EMERGENCY MANAGEMENT MAJOR

Coursework for a major in emergency management includes the following:

- Required core courses (15 credits): EMGT 302, 304, 306, 312, and 486A

- Supplemental major course in needs and issues (3 credits): Chosen from EMGT 308 and IFSM 432, 433, 457, and 459

- Supplemental major course in operations management (3 credits): Chosen from EMGT 310; BMGT 309, 366, and 405; and ENMT 310

- Supplemental major course in planning and response (3 credits): HMLS 302 or EMGT 404

- Supplemental major course in terrorism (3 credits): GVPT 406 or 407

- Required capstone course (3 credits): HMLS 495

- Required related course (3 credits), which may be applied anywhere in the degree: ACCT 326 or IFSM 300

RECOMMENDED SEQUENCE

The following course sequence will fulfill all the requirements for the BS in emergency management. Coursework for the major is indicated by ◆. Since some recommended courses fulfill more than one requirement, substituting courses for those listed may make it necessary to take additional courses to meet degree requirements. Students should consult an advisor whenever taking advantage of other options. Information on alternate courses (where allowable) to fulfill general education requirements (in communications, arts and humanities, behavioral and social sciences, biological and physical sciences, mathematics, and interdisciplinary issues) may be found on p. 8.

Emergency Management Degree Courses		Credits

First Courses *(to be taken within the first 18 credits)*
Note: Placement tests are required for math and writing courses.

EDCP 100	Principles and Strategies of Successful Learning *(strongly recommended as first course)*	3
LIBS 150	Information Literacy and Research Methods	1
WRTG 101/101X	Introduction to Writing	3
MATH 106	Finite Mathematics *or a higher-level math course*	3

Introductory Courses *(to be taken within the first 30 credits)*

GVPT 170	American Government *or other ANTH, BEHS, ECON, GEOG, GVPT, PSYC, SOCY, or eligible AASP, CCJS, GERO, or WMST course to fulfill the first behavioral and social sciences requirement*	3
Both BIOL 101	Concepts of Biology	3
and BIOL 102	Laboratory in Biology	1
or BIOL 103	Introduction to Biology *or other course(s) to fulfill the biological and physical sciences lecture and laboratory requirement*	
WRTG 291	Expository and Research Writing *or other course to fulfill the communications/ writing requirement*	3
IFSM 201	Introduction to Computer-Based Systems	3
or CMST 303	Advanced Application Software	
PHIL 140	Contemporary Moral Issues	3
or a foreign language course	*or other ARTH, ARTT, HIST, HUMN, MUSC, PHIL, THET, dance, or literature, course to fulfill the arts and humanities requirement*	

Foundation Courses *(to be taken within the first 60 credits)*

PSYC 100	Introduction to Psychology	3
or SOCY 100	Introduction to Sociology *or other course to fulfill the second behavioral and social sciences requirement (discipline must differ from first)*	
NSCI 100	Introduction to Physical Science	3
or ASTR 100	Introduction to Astronomy *or other course to fulfill the biological and physical sciences lecture requirement*	
HIST 142	Western Civilization II	3
or HIST 157	History of the United States Since 1865 *or other ARTH or HIST course to fulfill the arts and humanities requirement in historical perspective (discipline must differ from other humanities course)*	
◆ EMGT 302	Concepts of Emergency Management	3
ANTH 344	Cultural Anthropology and Linguistics	3
or SPCH 482	Intercultural Communication *(recommended elective)*	
WRTG 390	Writing for Managers *or other course to fulfill the communications/ writing or speech requirement*	3
IFSM 300	Information Systems in Organizations	3
or ACCT 326	Accounting Information Systems *(fulfills the interdisciplinary issues/computing requirement; students should note prerequisites)*	
◆ EMGT 304	Emergency Response Preparedness and Planning	3
IFSM 304	Ethics in the Information Age *(recommended elective)*	3

Additional Required Courses *(to be taken after introductory and foundation courses)*

WRTG 394/394X	Business Writing *or other course to fulfill the communications/upper-level intensive writing requirement*	3
◆ EMGT 306	Political and Policy Issues in Emergency Management	3
◆ EMGT 312	Social Dimensions of Disaster	3
◆ EMGT 486A	Internship in Emergency Management Through Cooperative Education	3
◆ IFSM 432	Disaster Recovery Planning *or other supplemental major course in needs and issues*	3
◆ BMGT 366	Managing in the Public Sector *or other supplemental major course in operations management*	3
◆ HMLS 302	Introduction to Homeland Security *or other supplemental major course in planning and response*	3
◆ GVPT 406	Global Terrorism *or other supplemental major course in terrorism*	3

Capstone Course for Major *(to be taken after all other courses for the major)*

◆ HMLS 495	Public Safety Policies and Leadership	3

Minor and/or Elective Courses *(to be taken in the last 60 credits along with required major courses)* — 40

Recommended Elective
STAT 200   Introduction to Statistics

Total credits for BS in emergency management   120

Minor in Emergency Management

The emergency management curriculum complements the skills the student gains in his or her major discipline by providing knowledge of emergency management, including disaster planning and operations and allocation of limited resources.

Objectives

The student who graduates with a minor in emergency management will be able to

- Analyze the response by government and industry to disasters and other significant events in history in order to develop emergency management principles and policies.
- Describe the current emergency management policies, operational theories, and functions in relation to significant and potential disasters.
- Explain the ethical, political, social, environmental, and economic issues related to emergency management planning and operations.
- Explain the importance of leadership and performance in emergency management and identify the leadership traits of competent emergency management personnel.
- Describe and analyze the concept of integrated emergency management planning and operations in relation to public safety agencies, different levels of government, nongovernmental organizations, private industry, and public policy.

Requirements for the Minor

A minor in emergency management requires the completion of 15 credits of coursework in emergency management. All EMGT courses apply. It is recommended that students take EMGT 302 or 304 as the first course in the minor (if they have not already applied the course toward other degree requirements).

Courses may not duplicate those used to satisfy requirements for the major. At least 9 credits must be earned in upper-level courses (numbered 300 or above). Prerequisites apply for all courses.

For a listing of all the requirements for the bachelor's degree, students should refer to their major and pp. 8–9.

English

Students may seek either an academic major or minor in English.

Major in English

The major in English produces graduates with demonstrated skills in literary analysis, critical thinking, and writing. These skills prepare students majoring in English for careers in education, law, writing and publishing, journalism, public relations, business, and management.

Objectives

The student who graduates with a major in English will be able to

- Analyze significant literary works, primarily those written in English.
- Critically examine intellectual, moral, and ethical issues as they are presented or implied in works of literature.
- Apply techniques of literary research, including research that uses technology and fosters information literacy.
- Analyze genre, style, structure, and other textual features in a broad range of literary texts.
- Evaluate and apply a variety of critical theories of literary interpretation.
- Analyze the structure and development of the English language.

- Examine the contributions of major authors, including minority and women writers, in the context of the cultures within which these authors lived and wrote.
- Analyze literature from non-Western cultures.
- Write effectively and demonstrate superior understanding of the writing process and writing techniques.

Degree Requirements

A degree with a major in English requires the successful completion of 120 credits of coursework, including 33 credits for the major; 41 credits in general education requirements; and 43 credits in the minor, electives, and other degree requirements. At least 17 credits in the major must be earned in upper-level courses (numbered 300 or above).

REQUIREMENTS FOR THE ENGLISH MAJOR

Coursework for a major in English includes the following:

- Required foundation course (3 credits): ENGL 303
- Fiction genre course (3 credits): ENGL 240, 246, 441, or 457
- Poetry genre course (3 credits): ENGL 240, 345, or 446
- Drama genre course (3 credits): ENGL 240, 434, or 454
- Pre-1800 historical period course (3 credits): ENGL 201, 211, 221, 310, or 311
- Historical period course (3 credits): ENGL 201, 211, 221, 222, 310, 311, 312, 425, 433, or 437
- American author course (3 credits): ENGL 354, 363, 364, or 439
- British author course (3 credits): ENGL 205, 304, 358, 406, 418, or 419
- Supplemental major courses (9 credits): Chosen from any ENGL courses and WRTG 288, 289, 387, 388, 393, or 394

Note: ENGL 240 may be applied to only one genre requirement.

RECOMMENDED SEQUENCE

The following course sequence will fulfill all the requirements for the BA in English. Coursework for the major is indicated by ◆. Since some recommended courses fulfill more than one requirement, substituting courses for those listed may make it necessary to take additional courses to meet degree requirements. Students should consult an advisor whenever taking advantage of other options. Information on alternate courses (where allowable) to fulfill general education requirements (in communications, arts and humanities, behavioral and social sciences, biological and physical sciences, mathematics, and interdisciplinary issues) may be found on p. 8.

English Degree Courses		Credits

First Courses *(to be taken within the first 18 credits)*
Note: Placement tests are required for math and writing courses.

EDCP 100	Principles and Strategies of Successful Learning *(strongly recommended as first course)*	3
LIBS 150	Information Literacy and Research Methods	1
WRTG 101/101X	Introduction to Writing	3
MATH 106	Finite Mathematics *or a higher-level math course*	3

Introductory Courses *(to be taken within the first 30 credits)*

PHIL 140	Contemporary Moral Issues	3
or a foreign language course	*or other ARTH, ARTT, HIST, HUMN, MUSC, PHIL, THET, dance, or literature course to fulfill the arts and humanities requirement*	
Both BIOL 101	Concepts of Biology	3
and BIOL 102	Laboratory in Biology	1
or BIOL 103	Introduction to Biology *or other course(s) to fulfill the biological and physical sciences lecture and laboratory requirement*	
WRTG 291	Expository and Research Writing *or other course to fulfill the communications/ writing requirement*	3
GVPT 170	American Government *or other ANTH, BEHS, ECON, GEOG, GVPT, PSYC, SOCY, or eligible AASP, CCJS, GERO, or WMST course to fulfill the first behavioral and social sciences requirement*	3
IFSM 201	Introduction to Computer-Based Systems	3
or CMST 303	Advanced Application Software	

Foundation Courses *(to be taken within the first 60 credits)*

PSYC 100	Introduction to Psychology	3
or SOCY 100	Introduction to Sociology *or other course to fulfill the second behavioral and social sciences requirement (discipline must differ from first)*	
NSCI 100	Introduction to Physical Science	3
or ASTR 100	Introduction to Astronomy *or other course to fulfill the biological and physical sciences lecture requirement*	
HIST 142	Western Civilization II	3
or HIST 157	History of the United States Since 1865 *or other ARTH or HIST course to fulfill the arts and humanities requirement in historical perspective (discipline must differ from other humanities course)*	
IFSM 304	Ethics in the Information Age *or other course to fulfill the interdisciplinary issues/computing requirement*	3
SPCH 100	Foundations of Speech Communication	3
or COMM 380	Language in Social Contexts *or other course to fulfill the communications/ writing or speech requirement*	

◆ ENGL 240   Introduction to Fiction, Poetry, and Drama   3
or other supplemental major course

◆ ENGL 303   Critical Approaches to Literature   3

Additional Required Courses *(to be taken after introductory and foundation courses)*

WRTG 391/391X   Advanced Expository and Research Writing   3
or other course to fulfill the communications/ upper-level intensive writing requirement

◆ ENGL 345   Modern Poetry   3
or other poetry genre course for the major

◆ ENGL 441   The Novel in America Since 1914   3
or other fiction genre course for the major

◆ ENGL 311   17th- and 18th-Century British Literature   3
or other pre-1800 period course for the major

◆ ENGL 433   American Literature: 1914 to the Present   3
or ENGL 425   Modern British Literature
or other historical period course for the major

◆ ENGL 364   African American Authors Since 1900   3
or ENGL 354   American Women Writers Since 1900
or other American author course for the major

◆ ENGL 406   Shakespeare: Power and Justice   3
or other British author course for the major

◆ ENGL 454   Modern World Drama   3
or other drama genre course for the major

◆ A supplemental major course   3
◆ A supplemental major course   3

Minor and/or Elective Courses *(to be taken in the last 60 credits along with required major courses)*   43

Recommended Elective
WRTG 388   Advanced Grammar and Style

Total credits for BA in English   **120**

Minor in English

The English minor complements the skills the student gains in his or her major discipline by providing exposure to literary analysis, critical thinking and reading, and the study of the relationship of literature to contemporary intellectual issues.

Objectives

The student who graduates with a minor in English will be able to

• Analyze significant literary works written in, or translated into, English.
• Analyze literary works, literary genres, literary criticism, the historical development of literature and language, and the contributions of major authors in the context of the cultures within which these authors lived and wrote.

• Formulate ideas, especially for literary analysis, and convey them clearly in both written and spoken English.
• Write effectively and demonstrate superior understanding of the writing process and writing techniques.

Requirements for the Minor

A minor in English requires the completion of 15 credits of English coursework. All ENGL courses apply. It is recommended that students take ENGL 240 and 303 as the first courses in the minor (if they have not already applied the courses toward other degree requirements).

Courses may not duplicate those used to satisfy requirements for the major. At least 9 credits must be earned in upper-level courses (numbered 300 or above). Prerequisites apply for all courses.

For a listing of all the requirements for the bachelor's degree, students should refer to their major and pp. 8–9.

Environmental Management

Students may seek either an academic major or minor in environmental management.

Major in Environmental Management

The major in environmental management educates students to become environmental managers who not only understand all aspects of the environmental industry but also have "new work skills," including skills in critical thinking, problem solving, project management, interpersonal relations, and team building. The major in environmental management prepares students to plan, implement, and control all facets of environmental management.

Objectives

The student who graduates with a major in environmental management will be able to

• Apply and interpret the scientific principles, guiding regulations, and recommended practices in environmental management.
• Demonstrate knowledge of effective techniques for communicating scientific, technical, and legal information to diverse populations, including industry managers and employees, community groups, and the media.
• Develop comprehensive environmental management strategies and possess "new work skills," i.e., skills in critical thinking, problem solving, project management, interpersonal relations, and team building.

- Combine information technology, international perspectives, and an understanding of the new environmental paradigm of management and prevention in addition to control and remediation.
- Demonstrate a broad understanding of multimedia (air, water, land) environmental contexts, the development of cutting-edge technologies, and the application of existing and emerging environmental technologies in cost-effective and work-efficient ways.
- Demonstrate a broad understanding of multimedia environmental management, regulatory compliance, recent technological changes, emergency management, health and safety management, global resource conservation, and sustainable development.
- Discuss the history and development of theories and concepts in environmental management and their application to various environmental situations.
- Evaluate ethical, social, civic, cultural, and political issues as they relate to environmental management, business operations, human factors, information systems, governmental regulation, and domestic and international ventures.
- Apply appropriate information technology to analyze problems and issues, develop business research, report key data, and recommend management strategy and action plans.

Degree Requirements

A degree with a major in environmental management requires the successful completion of 120 credits of coursework, including 30 credits for the major; 41 credits in general education requirements; and 49 credits in the minor, electives, and other degree requirements. At least 15 credits in the major must be earned in upper-level courses (numbered 300 or above).

REQUIREMENTS FOR THE ENVIRONMENTAL MANAGEMENT MAJOR

Coursework for a major in environmental management includes the following:

- Required core courses (15 credits): ENMT 301, 303, 321, 322 (or 405), and 340
- Supplemental major courses (12 credits): Any ENMT courses
- Required capstone course (3 credits): ENMT 495
- Required related courses (12 credits), which may be applied anywhere in the degree: BIOL 101, MATH 115 (or MATH 107–108), NSCI 100, and STAT 230

RECOMMENDED SEQUENCE

The following course sequence will fulfill all the requirements for the BS in environmental management. Coursework for the major is indicated by ◆. Since some recommended courses fulfill more than one requirement, substituting courses for those listed may make it necessary to take additional courses to meet degree requirements. Students should consult an advisor whenever taking advantage of other options. Information on alternate courses (where allowable) to fulfill general education requirements (in communications, arts and humanities, behavioral and social sciences, biological and physical sciences, mathematics, and interdisciplinary issues) may be found on p. 8.

Environmental Management Degree Courses — Credits

First Courses *(to be taken within the first 18 credits)*
Note: Placement tests are required for math and writing courses.

EDCP 100	Principles and Strategies of Successful Learning *(strongly recommended as first course)*	3
LIBS 150	Information Literacy and Research Methods	1
WRTG 101/101X	Introduction to Writing	3
MATH 115	Pre-Calculus	3
or both MATH 107	College Algebra	
and MATH 108	Trigonometry and Analytical Geometry *(related requirement for the major)*	

Introductory Courses *(to be taken within the first 30 credits)*

NSCI 100	Introduction to Physical Science	3
and NSCI 101	Physical Science Laboratory *(related requirement for the major; also fulfills the biological and physical sciences lecture and laboratory requirement)*	1
IFSM 201	Introduction to Computer-Based Systems	3
or CMST 303	Advanced Application Software	
GVPT 170	American Government *or other ANTH, BEHS, ECON, GEOG, GVPT, PSYC, SOCY, or eligible AASP, CCJS, GERO, or WMST course to fulfill the first behavioral and social sciences requirement*	3
BIOL 101	Concepts of Biology *(related requirement for the major; also fulfills the biological and physical sciences lecture requirement)*	3
WRTG 291	Expository and Research Writing *or other course to fulfill the communications/ writing requirement*	3
STAT 230	Business Statistics	3
or STAT 200	Introduction to Statistics *(related requirement for the major)*	
PHIL 140	Contemporary Moral Issues	3
or a foreign language course		
	or other ARTH, ARTT, HIST, HUMN, MUSC, PHIL, THET, dance, or literature course to fulfill the arts and humanities requirement	

Foundation Courses *(to be taken within the first 60 credits)*

PSYC 100	Introduction to Psychology	3
or SOCY 100	Introduction to Sociology *or other course to fulfill the second behavioral and social sciences requirement (discipline must differ from first)*	
HIST 142	Western Civilization II	3
or HIST 157	History of the United States Since 1865 *or other ARTH or HIST course to fulfill the arts and humanities requirement in historical perspective (discipline must differ from other humanities course)*	
WRTG 390	Writing for Managers *or other course to fulfill the communications/ writing or speech requirement*	3
IFSM 300	Information Systems in Organizations *or other course to fulfill the interdisciplinary issues/computing requirement*	3
ANTH 344	Cultural Anthropology and Linguistics *(recommended elective)*	3
IFSM 304	Ethics in the Information Age *(recommended elective)*	3
◆ ENMT 301	Environment and Ecosystems Management	3

Additional Required Courses *(to be taken after introductory and foundation courses)*

WRTG 394/394X	Business Writing *or other course to fulfill the communications/ upper-level intensive writing requirement*	3
◆ ENMT 303	Environmental Regulations and Policy	3
◆ ENMT 321	Environmental Health	3
◆ ENMT 322	Occupational Health and Safety	3
or ENMT 405	Pollution Prevention Strategies	
◆ ENMT 340	Environmental Technology	3
◆ Any ENMT course	*(supplemental major course)*	3
◆ A supplemental major course		3
◆ A supplemental major course		3
◆ A supplemental major course		3

Capstone Course for Major *(to be taken in the last 15 credits)*

◆ ENMT 495	Global Environmental Management Issues	3

Minor and/or Elective Courses *(to be taken in the last 60 credits along with required major courses)*   37

Total credits for BS in environmental management	**120**

Minor in Environmental Management

The environmental management minor complements the skills the student gains in his or her major discipline by providing a study of interdisciplinary and multimedia (air, water, land) environmental management and related issues on a fundamental, practical, and global level.

Objectives

The student who graduates with a minor in environmental management will be able to

- Apply and interpret the scientific principles, guiding regulations, and recommended practices in environmental management.
- Demonstrate knowledge of effective techniques for communicating scientific, technical, and legal information.
- Develop strategies and employ today's required skills in critical thinking, problem solving, project management, interpersonal relations, and team building.
- Combine information technology and international perspectives.
- Describe the new paradigm of environmental management and prevention and relate it to multimedia environment and sustainable development.

Requirements for the Minor

A minor in environmental management requires the completion of 15 credits of coursework in environmental management. All ENMT courses apply. It is recommended that students take ENMT 301 as the first course in the minor (if they have not already applied the course toward other degree requirements).

Courses may not duplicate those used to satisfy requirements for the major. At least 9 credits must be earned in upper-level courses (numbered 300 or above). Prerequisites apply for all courses.

For a listing of all the requirements for the bachelor's degree, students should refer to their major and pp. 8–9.

Finance

Students may seek either an academic major or minor in finance.

Major in Finance

The finance major combines a foundation in the principles of business, economics, and accounting with an in-depth focus on issues and knowledge in the areas of finance and financial management. It includes the study of business finance, financial management, investments, and security analysis and valuation. The finance major prepares graduates for career opportunities in the global business community, with emphasis on careers in financial analysis and management, investment analysis and portfolio management, commercial and investment banking, insurance, risk management, and international finance.

Objectives

The student who graduates with a major in finance will be able to

- Identify the most current methods for analyzing, interpreting, and reporting financial information.
- Develop, integrate, and apply information to assess the present and future financial status of an organization.
- Use current analytical tools to measure and control the risk of an investment portfolio or a business.
- Estimate short- and long-term financing needs.
- Prepare and analyze capital budgeting projects.
- Determine the value of potential acquisitions and analyze competitors.
- Determine the role of derivatives in the financial process.
- Describe the different dimensions of international finance.
- Use effective written and oral communication skills consistent with the business and professional environment.
- Think critically, analyze information, and solve problems related to complex financial issues.
- Use computers, financial software, and databases for advanced financial analysis and presentation.

Degree Requirements

A degree with a major in finance requires the successful completion of 120 credits of coursework, including 36 credits for the major; 41 credits in general education requirements; and 43 credits in the minor, electives, and other degree requirements. At least 18 credits in the major must be earned in upper-level courses (numbered 300 or above).

REQUIREMENTS FOR THE FINANCE MAJOR

Coursework for a major in finance includes the following:

- Required foundation courses (15 credits): ACCT 220 and 221, STAT 230 (or 200), BMGT 364, and MRKT 310
- Required core courses (12 credits): FINC 330, 340, 430, and 440
- Supplemental major courses (6 credits): Chosen from any FINC courses and ECON 305, 306, and 430
- Required capstone course (3 credits): FINC 495
- Required related courses (9 credits), which may be applied anywhere in the degree: ACCT 326 (or IFSM 300) and ECON 201 and 203

RECOMMENDED SEQUENCE

The following course sequence will fulfill all the requirements for the BS in finance. Coursework for the major is indicated by ◆. Since some recommended courses fulfill more than one requirement, substituting courses for those listed may make it necessary to take additional courses to meet degree requirements. Students should consult an advisor whenever taking advantage of other options. Information on alternate courses (where allowable) to fulfill general education requirements (in communications, arts and humanities, behavioral and social sciences, biological and physical sciences, mathematics, and interdisciplinary issues) may be found on p. 8.

Finance Degree Courses		Credits
First Courses *(to be taken within the first 18 credits)*		
Note: Placement tests are required for math and writing courses.		
EDCP 100	Principles and Strategies of Successful Learning *(strongly recommended as first course)*	3
LIBS 150	Information Literacy and Research Methods	1
WRTG 101/101X	Introduction to Writing	3
MATH 106	Finite Mathematics *or a higher-level math course*	3
BMGT 110	Introduction to Business and Management *(strongly recommended elective for students with no prior business experience)*	3
Introductory Courses *(to be taken within the first 30 credits)*		
◆ ACCT 220	Principles of Accounting I	3
ECON 201	Principles of Macroeconomics *(related requirement for the major; also fulfills the first behavioral and social sciences requirement)*	3
NSCI 100	Introduction to Physical Science	3
and NSCI 101	Physical Science Laboratory *or other course(s) to fulfill the biological and physical sciences lecture and laboratory requirement*	1
WRTG 291	Expository and Research Writing *or other course to fulfill the communications/ writing requirement*	3
IFSM 201	Introduction to Computer-Based Systems	3
or CMST 303	Advanced Application Software	

PHIL 140	Contemporary Moral Issues	3
or a foreign language course		
	or other ARTH, ARTT, HIST, HUMN, MUSC, PHIL, THET, dance, or literature course to fulfill the arts and humanities requirement	

Foundation Courses *(to be taken within the first 60 credits)*

◆ STAT 230	Business Statistics	3
or STAT 200	Introduction to Statistics	
PSYC 100	Introduction to Psychology	3
or SOCY 100	Introduction to Sociology	
	or other course to fulfill the second behavioral and social sciences requirement (discipline must differ from first)	
◆ ACCT 221	Principles of Accounting II	3
BIOL 101	Concepts of Biology	3
or ASTR 100	Introduction to Astronomy	
	or other course to fulfill the biological and physical sciences lecture requirement	
ECON 203	Principles of Microeconomics	3
	(related requirement for the major)	
HIST 142	Western Civilization II	3
or HIST 157	History of the United States Since 1865	
	or other ARTH or HIST course to fulfill the arts and humanities requirement in historical perspective (discipline must differ from other humanities course)	
SPCH 100	Foundations of Speech Communication	3
or WRTG 390	Writing for Managers	
	or other course to fulfill the communications/ writing or speech requirement	
IFSM 300	Information Systems in Organizations	3
or ACCT 326	Accounting Information Systems	
	(related requirement for the major; also fulfills the interdisciplinary issues/computing requirement)	
◆ BMGT 364	Management and Organization Theory	3

Additional Required Courses *(to be taken after introductory and foundation courses)*

◆ FINC 330	Business Finance	3
◆ MRKT 310	Marketing Principles and Organization	3
◆ FINC 340	Investments	3
WRTG 394/394X	Business Writing	3
	or other course to fulfill the communications/ upper-level intensive writing requirement	
◆ ECON 430	Money and Banking	3
	or other supplemental major course	
◆ FINC 430	Financial Management	3
◆ FINC 440	Security Analysis and Valuation	3
◆ FINC 460	International Finance	3
	or other supplemental major course	
BMGT 392	Global Business Management	3
	(recommended elective)	
BMGT 496	Business Ethics	3
	(recommended elective)	

Capstone Course for Major *(to be taken in the last 15 credits)*

◆ FINC 495	Contemporary Issues in Finance Practice	3

Minor and/or Elective Courses *(to be taken in the last 60 credits along with required major courses)* — 28

<u>Recommended Minors</u>
Human resource management, marketing, or other business-related minor

Total credits for BS in finance	**120**

Minor in Finance

The finance minor complements the skills the student gains in his or her major discipline by providing a study of the institutions, theory, and practice associated with the allocation of financial resources within the private sector.

Objectives

The student who graduates with a minor in finance will be able to

- Identify the latest methods for analyzing, interpreting, and reporting financial data.
- Develop information to assess the present and future financial status of an organization.
- Use current analytical tools to measure and control the risk of an investment portfolio or a business.
- Estimate short- and long-term financing needs.
- Analyze capital budgeting projects.
- Determine the value of potential acquisitions and analyze competitors.
- Determine the role of derivatives in the financial process.
- Describe the various dimensions of international finance.
- Use effective written and oral communication skills consistent with the business and professional environment.
- Think critically, analyze information, and solve problems when dealing with complex financial issues.
- Use financial and database software and other computer technologies.

Requirements for the Minor

A minor in finance requires the completion of 15 credits of coursework in finance. All FINC courses apply. It is recommended that students take FINC 330 and 340 as the first courses in the minor (if they have not already applied the courses toward other degree requirements).

Courses may not duplicate those used to satisfy requirements for the major. At least 9 credits must be earned in upper-level courses (numbered 300 or above). Prerequisites apply for all courses.

For a listing of all the requirements for the bachelor's degree, students should refer to their major and pp. 8–9.

Fire Science

Students may seek either an academic major or minor in fire science.

Major in Fire Science

The major in fire science covers disaster planning and the administration of fire-protection services, encompassing all areas of incendiary-fire management. Developed in conjunction with the National Fire Academy of the Federal Emergency Management Agency, the major serves fire-service professionals seeking state-of-the-art knowledge to support advancement to chief executive management and senior leadership positions. It also serves professionals in related fields such as public safety, law enforcement, government, health services, insurance, and private-industry emergency response, as well as those in military fire departments in the United States and abroad. The major provides an understanding of the interagency coordination necessary for fire prevention, emergency management, safe and successful fire-incident command, and arson investigation. The curriculum includes analytical approaches to fire protection and investigation, personnel management, disaster and fire-defense planning, hazardous materials management, fire-protection structure and system design, the role of the fire service within the community and political structure, and the phenomena of fire propagation.

Objectives

The student who graduates with a major in fire science will be able to

- Explain and apply the organizational theories and skills required for fire service administration.
- Apply personnel management procedures and practices to manage career and volunteer fire-protection organizations effectively.
- Demonstrate fire prevention as the primary community-based strategy for fire protection and emergency management.
- Develop and administer a comprehensive hazardous materials management program, from planning to postincident phases.
- Analyze the legal implications and aspects of the fire department's role in public safety.
- Describe the fire-related social, cultural, behavioral, economic, and political characteristics of diverse populations in the United States and abroad and analyze their global impact on the fire problem.
- Conduct research using library resources, information technology, analytical tools, and the scientific method to predict and control fire problems and advance the body of knowledge in fire science.

- Develop effective written communications consistent with the fire service and related professional environment.
- Discuss the historical development of fire protection and apply historical lessons to contemporary issues in fire protection and emergency management.

Degree Requirements

A degree with a major in fire science requires the successful completion of 120 credits of coursework, including 30 credits for the major; 41 credits in general education requirements; and 49 credits in the minor, electives, and other degree requirements. At least 15 credits in the major must be earned in upper-level courses (numbered 300 or above).

REQUIREMENTS FOR THE FIRE SCIENCE MAJOR

Coursework for a major in fire science includes the following:

- Required core courses (15 credits): FSCN 302, 304, 305, 412, and 416
- Supplemental major courses (12 credits): Any upper-level FSCN courses
- Required capstone course (3 credits): HMLS 495
- Required related course (3 credits), which may be applied anywhere in the degree: ACCT 326 or IFSM 300

RECOMMENDED SEQUENCE

The following course sequence will fulfill all the requirements for the BS in fire science. Coursework for the major is indicated by ◆. Since some recommended courses fulfill more than one requirement, substituting courses for those listed may make it necessary to take additional courses to meet degree requirements. Students should consult an advisor whenever taking advantage of other options. Information on alternate courses (where allowable) to fulfill general education requirements (in communications, arts and humanities, behavioral and social sciences, biological and physical sciences, mathematics, and interdisciplinary issues) may be found on p. 8.

Fire Science Degree Courses		Credits
First Courses *(to be taken within the first 18 credits)*		
Note: Placement tests are required for math and writing courses.		
EDCP 100	Principles and Strategies of Successful Learning *(strongly recommended as first course)*	3
LIBS 150	Information Literacy and Research Methods	1
WRTG 101/101X	Introduction to Writing	3
MATH 106	Finite Mathematics *or a higher-level math course*	3
Introductory Courses *(to be taken within the first 30 credits)*		
GVPT 170	American Government *or other ANTH, BEHS, ECON, GEOG, GVPT, PSYC, SOCY, or eligible AASP, CCJS, GERO, or WMST course to fulfill the first behavioral and social sciences requirement*	3

BACHELOR'S DEGREE CURRICULA

Both BIOL 101	Concepts of Biology		3
and BIOL 102	Laboratory in Biology		1
or BIOL 103	Introduction to Biology		
	or other course(s) to fulfill the biological and physical sciences lecture and laboratory requirement		
WRTG 291	Expository and Research Writing		3
	or other course to fulfill the communications/ writing requirement		
IFSM 201	Introduction to Computer-Based Systems		3
or CMST 303	Advanced Application Software		
PHIL 140	Contemporary Moral Issues		3
or a foreign language course			
	or other ARTH, ARTT, HIST, HUMN, MUSC, PHIL, THET, dance, or literature course to fulfill the arts and humanities requirement		

Foundation Courses *(to be taken within the first 60 credits)*

PSYC 100	Introduction to Psychology		3
or SOCY 100	Introduction to Sociology		
	or other course to fulfill the second behavioral and social sciences requirement (discipline must differ from first)		
NSCI 100	Introduction to Physical Science		3
or ASTR 100	Introduction to Astronomy		
	or other course to fulfill the biological and physical sciences lecture requirement		
HIST 142	Western Civilization II		3
or HIST 157	History of the United States Since 1865		
	or other ARTH or HIST course to fulfill the arts and humanities requirement in historical perspective (discipline must differ from other humanities course)		
◆ FSCN 302	Fire and Emergency Services Administration		3
ANTH 344	Cultural Anthropology and Linguistics		3
or SPCH 482	Intercultural Communication		
	(recommended elective)		
WRTG 390	Writing for Managers		3
	or other course to fulfill the communications/ writing or speech requirement		
IFSM 300	Information Systems in Organizations		3
or ACCT 326	Accounting Information Systems		
	(fulfills the interdisciplinary issues/computing requirement; students should note prerequisites)		
◆ FSCN 304	Personnel Management for Fire and Emergency Services		3
IFSM 304	Ethics in the Information Age		3
	(recommended elective)		

Additional Required Courses *(to be taken after introductory and foundation courses)*

WRTG 394/394X	Business Writing		3
	or other course to fulfill the communications/ upper-level intensive writing requirement		
◆ FSCN 305	Fire-Prevention Organization and Management		3
◆ FSCN 412	Political and Legal Foundations of Fire Protection		3
◆ FSCN 416	Emergency Services Training and Education		3

◆ Any FSCN course *(supplemental major course)*			3
◆ A supplemental major course			3
◆ A supplemental major course			3
◆ A supplemental major course			3

Capstone Course for Major *(to be taken after all other courses for the major)*

◆ HMLS 495	Public Safety Policies and Leadership		3

Minor and/or Elective Courses *(to be taken in the last 60 credits along with required major courses)* **40**

<u>Recommended Elective</u>

STAT 200	Introduction to Statistics	

Total credits for BS in fire science   **120**

Minor in Fire Science

The fire science minor complements the skills the student gains in his or her major discipline by providing knowledge of disaster planning and the administration of fire-protection services, including organization, planning, operating procedures, management, and allocation of limited resources.

Objectives

The student who graduates with a minor in fire science will be able to

- Recognize the legal basis for public safety responsibility and product liability.
- Develop innovative leadership and team-management skills necessary for success in a diverse and changing workplace.
- Use computer technology to inform and enhance operational and strategic management decisions.
- Apply current computer applications and technology in the workplace.
- Explain fire fighting and disaster planning as practiced in other parts of the world.
- Write reports and make presentations of the quality expected by senior management.
- Use current information technology to access relevant managerial and educational resources worldwide.
- Develop a comprehensive hazardous materials management program, including preincident planning, on-site emergency response, and postincident analysis and investigation.
- Apply skills in analysis and evaluation to complete fire-risk assessment.
- Think critically and constructively and perform research in fire science using commonly accepted quantitative and qualitative analytical tools to understand and evaluate fire and emergency situations and scenarios.

- Apply analytical and problem-solving methods in resolving fire and other emergency problems and issues.
- Analyze the domestic and global dimensions of fire science.
- Develop effective written and oral communications consistent with the fire service and related professional environment.
- Describe the impact of historical events and social change on the fire and rescue service of today.

Requirements for the Minor

A minor in fire science requires the completion of 15 credits of coursework in fire science. All FSCN courses apply. It is recommended that students take FSCN 302 or 304 as the first course for the minor (if they have not already applied the course toward other degree requirements).

Courses may not duplicate those used to satisfy requirements for the major. At least 9 credits must be earned in upper-level courses (numbered 300 or above). Prerequisites apply for all courses.

For a listing of all the requirements for the bachelor's degree, students should refer to their major and pp. 8–9.

Forensics

Students may seek an academic minor in forensics. A related academic major is available in investigative forensics (p. 64).

Minor in Forensics

The minor in forensics complements the skills the student gains in his or her major discipline by providing interdisciplinary study in selected areas of criminal justice, natural science, social science, investigation and security, information and computer systems, psychology, and sociology. It combines laboratory and field skills in the collection and analysis of physical evidence with further study in the various subfields of forensics.

Objectives

The student who graduates with a minor in forensics will be able to
- Collect, manipulate, and analyze various pieces of evidence and data from crime scenes.
- Articulate the role of crime scene investigation and evidence in the criminal justice system.
- Explain the role of the social, behavioral, natural, and computer sciences in forensics.

Requirements for the Minor

A minor in forensics requires the completion of 15 credits of coursework in forensics, chosen from those listed in the requirements for the major in investigative forensics. It is recommended that students take CCJS 100, 234, or 320 as the first course for the minor (if they have not already applied the course toward other degree requirements).

Courses may not duplicate those used to satisfy requirements for the major. At least 9 credits must be earned in upper-level courses (numbered 300 or above). Prerequisites apply for all courses.

For a listing of all the requirements for the bachelor's degree, students should refer to their major and pp. 8–9.

General Studies

The general studies major is available only to active-duty military personnel and certain others who conform to specific stipulations. Students outside UMUC Europe and UMUC Asia should not select this major.

Major in General Studies

The general studies major allows students to draw from various disciplines that provide a body of knowledge appropriate to an identified area of interest (for example, an aspect of culture, a historical period, or a geographical location). The interdisciplinary approach emphasizes analysis and synthesis of diverse theory and practice.

Objectives

The student who graduates with a major in general studies will be able to
- Understand and apply key concepts from chosen disciplines.
- Develop effective written and oral communication skills consistent with the chosen areas of study.
- Apply skills and concepts to problems of modern life.
- Define an approach grounded in the chosen disciplines and appropriate to the study of a specific topic, area, or theme.
- Develop effective skills in cross-disciplinary comparison, historical and critical analysis, research, and evaluation.
- Use computers for communication and research.
- Demonstrate information literacy through research and resource evaluation appropriate to the chosen area of study.

Degree Requirements

A degree with a major in general studies requires the successful completion of 120 credits of coursework, including 30 credits for the major; 41 credits in general education requirements; and 49 credits in the minor, electives, and other degree requirements. At least 15 credits in the major must be earned in upper-level courses (numbered 300 or above).

REQUIREMENTS FOR THE GENERAL STUDIES MAJOR

Coursework for the major in general studies includes either 15 credits in each of two different disciplines or specific coursework for a particular curriculum as defined by UMUC. The general studies major requires prior approval. Unless the curriculum has already been defined by UMUC, students must submit a formal proposal explaining the focus and curricular objectives of the proposed course of study and identifying specific courses to fulfill those objectives. Students should consult an advisor about eligibility for the major and about the requirements and procedure for submitting a proposal.

Gerontology

Students may seek an academic major or minor in gerontology.

Major in Gerontology

The major in gerontology prepares students to implement and manage health and human service programs in gerontology. It combines a foundation in the psychological and physical aspects of aging with an understanding of programs, services, and policies related to aging and older adults.

Objectives

The student who graduates with a major in gerontology will be able to

- Describe and analyze the biological and psychosocial processes of aging.
- Demonstrate an understanding of historical trends in the field of gerontology.
- Analyze the impact of race, ethnicity, gender, and social class on the aging process.
- Identify and apply cross-cultural and international perspectives on aging.
- Identify services and programs available to older adults locally and nationally.
- Articulate and analyze the development of policies related to aging and their impact on programs for older adults, both locally and nationally.

- Demonstrate the ability to access, interpret, and apply gerontological research findings.
- Apply interdisciplinary gerontological knowledge to work with older adults in one's chosen area of practice.
- Effectively communicate gerontological concepts in oral and written form.

Degree Requirements

A degree with a major in gerontology requires the successful completion of 120 credits of coursework, including 30 credits for the major; 41 credits in general education requirements; and 49 credits in the minor, electives, and other degree requirements. At least 15 credits in the major must be earned in upper-level courses (numbered 300 or above).

REQUIREMENTS FOR THE GERONTOLOGY MAJOR

Coursework for a major in gerontology includes the following:

- Required foundation courses (9 credits): GERO 100, 220 (or PSYC 357), and 302 (or BIOL 307)
- Required management courses (9 credits): STAT 225 (or 200 or 230) and GERO 301 (or BMGT 361) and 306
- Health-related course (3 credits): GERO 338, 350, 355, 380, 391, or 460
- Supplemental major courses (6 credits): Any GERO courses
- Required internship (3 credits): GERO 486A

RECOMMENDED SEQUENCE

The following course sequence will fulfill all the requirements for the BS in gerontology. Coursework for the major is indicated by ◆. Since some recommended courses fulfill more than one requirement, substituting courses for those listed may make it necessary to take additional courses to meet degree requirements. Students should consult an advisor whenever taking advantage of other options. Information on alternate courses (where allowable) to fulfill general education requirements (in communications, arts and humanities, behavioral and social sciences, biological and physical sciences, mathematics, and interdisciplinary issues) may be found on p. 8.

Gerontology Degree Courses		Credits
First Courses *(to be taken within the first 18 credits)*		
Note: Placement tests are required for math and writing courses.		
EDCP 100	Principles and Strategies of Successful Learning *(strongly recommended as first course)*	3
LIBS 150	Information Literacy and Research Methods	1
WRTG 101/101X	Introduction to Writing	3
MATH 106	Finite Mathematics *or a higher-level math course*	3

Introductory Courses *(to be taken within the first 30 credits)*

◆ GERO 100	Introduction to Gerontology	3
GVPT 170	American Government *or other ANTH, BEHS, ECON, GEOG, GVPT, PSYC, SOCY, or eligible AASP, CCJS, GERO, or WMST course to fulfill the first behavioral and social sciences requirement*	3
Both BIOL 101	Concepts of Biology	3
and BIOL 102	Laboratory in Biology	1
or BIOL 103	Introduction to Biology *or other course(s) to fulfill the biological and physical sciences lecture and laboratory requirement*	
WRTG 291	Expository and Research Writing *or other course to fulfill the communications/ writing requirement*	3
IFSM 201	Introduction to Computer-Based Systems	3
or CMST 303	Advanced Application Software	
PHIL 140	Contemporary Moral Issues	3
or a foreign language course		
	or other ARTH, ARTT, HIST, HUMN, MUSC, PHIL, THET, dance, or literature course to fulfill the arts and humanities requirement	

Foundation Courses *(to be taken within the first 60 credits)*

◆ GERO 220	Psychological Aspects of Aging	3
or PSYC 357	Psychology of Adulthood and Aging	
◆ STAT 225	Introduction to Statistical Methods in Psychology	3
or STAT 200	Introduction to Statistics	
or STAT 230	Business Statistics	
PSYC 100	Introduction to Psychology	3
or SOCY 100	Introduction to Sociology *or other course to fulfill the second behavioral and social sciences requirement (discipline must differ from first)*	
NSCI 100	Introduction to Physical Science	3
or ASTR 100	Introduction to Astronomy *or other course to fulfill the biological and physical sciences lecture requirement*	
HIST 142	Western Civilization II	3
or HIST 157	History of the United States Since 1865 *or other ARTH or HIST course to fulfill the arts and humanities requirement in historical perspective (discipline must differ from other humanities course)*	
SPCH 100	Foundations of Speech Communication	3
or COMM 380	Language in Social Contexts *or other course to fulfill the communications/ writing or speech requirement*	
IFSM 304	Ethics in the Information Age *or other course to fulfill the interdisciplinary issues/computing requirement*	3
◆ GERO 302	Health and Aging	3
or BIOL 307	The Biology of Aging	

Additional Required Courses *(to be taken after introductory and foundation courses)*

ANTH 344	Cultural Anthropology and Linguistics	3
or SPCH 482	Intercultural Communications *(recommended elective)*	
◆ GERO 301	Service/Program Management	3
or BMGT 361	Health Management	
◆ GERO 306	Programs, Services, and Policies	3
WRTG 391/391X	Advanced Expository and Research Writing *or other course to fulfill the communications/ upper-level intensive writing requirement*	3
◆ GERO 338	Health Promotion in Older Adults *or other health-related course for the major*	3
◆ GERO 311	Women and Aging	3
or GERO 410	Cross-Cultural Perspectives of Aging *or other supplemental major course*	
◆ GERO 327	Ethnicity and Aging *or other supplemental major course*	3

Internship for Major *(to be taken within the last 30 credits)*

◆ GERO 486A	Internship in Gerontology Through Co-op	3

Minor and/or Elective Courses *(to be taken within the last 60 credits along with required major courses)* 43

Total credits for BS in gerontology	**120**

Minor in Gerontology

The gerontology minor complements the skills the student gains in his or her major discipline by examining aging from a multi-disciplinary perspective that integrates biological, sociological, psychological, and historical perspectives. It provides the student with the opportunity to study complex processes and aspects of aging and the field of gerontology.

Objectives

The student who graduates with a minor in gerontology will be able to

- Demonstrate the ability to apply—in an integrated, interdisciplinary way—biological, sociological, psychological, and health concepts to work with older adults.
- Evaluate important historical trends in the field of aging and their effect on understanding the aging process for different generations.
- Analyze the impact of gender, ethnicity, and socioeconomic status on the experience of aging from an interdisciplinary perspective.
- Analyze current family and intergenerational issues related to aging from an interdisciplinary perspective.

- Articulate the social, political, legal, health, and policy implications of a rapidly expanding aging population for society.
- Analyze important cross-cultural issues in aging and gerontology.
- Use information technology skills to access and retrieve information on aging and gerontology.

Requirements for the Minor

A minor in gerontology requires the completion of 15 credits of coursework in gerontology. Courses appropriate for the major in gerontology apply. It is recommended that students take GERO 100 and 220 (or PSYC 357) as the first courses in the minor (if they have not already applied the courses toward other degree requirements).

Courses may not duplicate those used to satisfy requirements for the major. At least 9 credits must be earned in upper-level courses (numbered 300 or above). Prerequisites apply for all courses.

For a listing of all the requirements for the bachelor's degree, students should refer to their major and pp. 8–9.

Global Business and Public Policy

Students may seek an academic major in global business and public policy.

Major in Global Business and Public Policy

The major in global business and public policy prepares students for career opportunities in all economic sectors, including domestic and global business; federal, state, and local governments; international governmental organization; and domestic and international nongovernmental or nonprofit sectors. The major combines a foundation in the principles of business, marketing, and accounting with an in-depth focus on global business and public policy, including study in international and multinational management, public policy and management, and issues related to international law, marketing, finance, and development.

Objectives

The student who graduates with a major in global business and public policy will be able to

- Define relevant theories and concepts and explain their applications to global business and public policy.
- Identify and assess the impact of national social systems on international business and public policy and describe the dynamic interrelationships between the domestic and global environments.
- Demonstrate an understanding of the roles of government, multinational corporations, and global and regional organizations in international business and identify related public policy issues.
- Explain the role of the manager as a global leader in today's complex, cross-functional, multicultural economic and political settings.
- Apply critical-thinking, analytic, communication, and team building skills.

Degree Requirements

A degree with a major in global business and public policy requires the successful completion of 120 credits of coursework, including 36 credits for the major; 41 credits in general education requirements; and 43 credits in the minor, electives, and other degree requirements. At least 18 credits in the major must be earned in upper-level courses (numbered 300 or above).

REQUIREMENTS FOR THE GLOBAL BUSINESS AND PUBLIC POLICY MAJOR

Coursework for a major in global business and public policy includes the following:

- Required foundation courses (15 credits): ACCT 220 and 221, BMGT 364, FINC 330, and MRKT 310
- Required core courses (15 credits): BMGT 366, 392, 454 (or MRKT 454), 456, and 482
- Supplemental major courses (6 credits): Chosen from ACCT 425; BMGT 339, 405, 407, 428, 437, and 496; FINC 460; and HRMN 408
- Required related courses (15 credits), which may be applied anywhere in the degree: ACCT 326 (or IFSM 300), BMGT 380, ECON 201 and 203, and STAT 230

RECOMMENDED SEQUENCE

The following course sequence will fulfill all the requirements for the BS in global business and public policy. Coursework for the major is indicated by ◆. Since some recommended courses fulfill more than one requirement, substituting courses for those listed may make it necessary to take additional courses to meet degree requirements. Students should consult an advisor whenever taking advantage of other options. Information on alternate

courses (where allowable) to fulfill general education requirements (in communications, arts and humanities, behavioral and social sciences, biological and physical sciences, mathematics, and interdisciplinary issues) may be found on p. 8.

Global Business and Public Policy Degree Courses

		Credits

First Courses *(to be taken within the first 18 credits)*
Note: Placement tests are required for math and writing courses.

EDCP 100	Principles and Strategies of Successful Learning *(strongly recommended as first course)*	3
LIBS 150	Information Literacy and Research Methods	1
WRTG 101/101X	Introduction to Writing	3
MATH 106	Finite Mathematics *or a higher-level math course*	3
BMGT 110	Introduction to Business and Management *(strongly recommended elective for students with no prior business experience)*	3

Introductory Courses *(to be taken within the first 30 credits)*

◆ ACCT 220	Principles of Accounting I	3
ECON 201	Principles of Macroeconomics *(related requirement for the major; also fulfills first behavioral and social sciences requirement)*	3
NSCI 100	Introduction to Physical Science	3
and NSCI 101	Physical Science Laboratory *or other course(s) to fulfill the biological and physical sciences lecture and laboratory requirement*	1
WRTG 291	Expository and Research Writing *or other course to fulfill the communications/ writing requirement*	3
IFSM 201	Introduction to Computer-Based Systems	3
or CMST 303	Advanced Application Software	
PHIL 140	Contemporary Moral Issues	3
or a foreign language course	*or other ARTH, ARTT, HIST, HUMN, MUSC, PHIL, THET, dance, or literature course to fulfill the arts and humanities requirement*	

Foundation Courses *(to be taken within the first 60 credits)*

STAT 230	Business Statistics *(related requirement for the major)*	3
◆ ACCT 221	Principles of Accounting II	3
ECON 203	Principles of Microeconomics *(related requirement for the major)*	3
HIST 142	Western Civilization II	3
or HIST 157	History of the United States Since 1865 *or other ARTH or HIST course to fulfill the arts and humanities requirement in historical perspective (discipline must differ from other humanities course)*	

PSYC 100	Introduction to Psychology	3
or SOCY 100	Introduction to Sociology *or other course to fulfill the second behavioral and social sciences requirement (discipline must differ from first)*	
SPCH 100	Foundations of Speech Communication	3
or WRTG 390	Writing for Managers *or other course to fulfill the communications/ writing or speech requirement*	
BIOL 101	Concepts of Biology	3
or ASTR 100	Introduction to Astronomy *or other course to fulfill the biological and physical sciences lecture requirement*	
◆ BMGT 364	Management and Organization Theory	3
◆ MRKT 310	Marketing Principles and Organization	3
IFSM 300	Information Systems in Organizations	3
or ACCT 326	Accounting Information Systems *(related requirement for the major; also fulfills the interdisciplinary issues/computing requirement)*	

Additional Required Courses *(to be taken after introductory and foundation courses)*

WRTG 394/394X	Business Writing *or other course to fulfill the communications/ upper-level intensive writing requirement*	3
BMGT 380	Business Law I *(related requirement for the major)*	3
◆ BMGT 392	Global Business Management	3
◆ FINC 330	Business Finance	3
◆ BMGT 437	International Business Law *or other supplemental major course*	3
◆ BMGT 366	Managing in the Public Sector	3
◆ BMGT 456	Multinational Management	3
◆ BMGT 482	Business and Government	3
◆ BMGT 454	The Global Manager and Public Policy	3
or MRKT 454	Global Marketing	
◆ BMGT 339	Government and Business Contracting *or other supplemental major course*	3
BMGT 496	Business Ethics *(recommended elective)*	3

Minor and/or Elective Courses *(to be taken in the last 60 credits along with required major courses)*

	25

Total credits for BS in global business and public policy	**120**

History

Students may seek either an academic major or minor in history.

Major in History

The major in history provides students with skills in historical research and analysis, a chronological understanding of the past, and factual knowledge of specific historical periods. Study yields an appreciation of U.S. history, as well as the histories of other peoples and cultures, that enhances multicultural understanding in the workplace and everyday society. Such skills and knowledge prepare students for careers in education, law, government, business, management, public relations, writing, and research.

Objectives

The student who graduates with a major in history will be able to

- Demonstrate an understanding of historical methods and appreciate how history has been written and interpreted over recorded time.
- Articulate how he or she is uniquely affected by the U.S. historical experience.
- Demonstrate a chronological understanding of the diverse peoples, events, and cultures that have shaped human civilization.
- Think and read critically and conduct research that includes identifying, evaluating, and presenting with integrity the primary and secondary sources of historical information.
- Demonstrate awareness of the ethical and social issues associated with the writing and interpreting of history.
- Demonstrate an increased awareness of current events and the ability to evaluate these events from a historical perspective.
- Use research opportunities to develop and refine technological skills.
- Write cogent, documented, historical papers that exhibit interpretive skill as well as factual knowledge.

Degree Requirements

A degree with a major in history requires the successful completion of 120 credits of coursework, including 33 credits for the major; 41 credits in general education requirements; and 46 credits in the minor, electives, and other degree requirements. At least 17 credits in the major must be earned in upper-level courses (numbered 300 or above).

REQUIREMENTS FOR THE HISTORY MAJOR

Coursework for a major in history includes the following:

- Required U.S. history sequence (6 credits): HIST 156 and 157
- Required methodology course (3 credits): HIST 309
- World history sequence (6 credits): HIST 115–116, 141–142, or 284–285
- U.S. distribution course (3 credits): HIST 255, 266, 360, 361, 362, 363, 364, 365, 372, 376, 377, 381, 453, 460, 461, 462, 463, or 467
- European distribution course (3 credits): HIST 324, 325, 326, 327, 332, 333, 334, 335, 336, 337, 358, 375, 430, 431, 432, 433, 434, 437, 438, 439, 440, 441, 443, or 448
- World regions distribution course (3 credits): HIST 284, 285, 341, 342, 353, 354, 382, 383, 389, 391, 392, 464, 465, 466, 480, 481, 482, 483, or 485
- Supplemental major courses (9 credits): Any HIST courses

RECOMMENDED SEQUENCE

The following course sequence will fulfill all the requirements for the BA in history. Coursework for the major is indicated by ◆. Since some recommended courses fulfill more than one requirement, substituting courses for those listed may make it necessary to take additional courses to meet degree requirements. Students should consult an advisor whenever taking advantage of other options. Information on alternate courses (where allowable) to fulfill general education requirements (in communications, arts and humanities, behavioral and social sciences, biological and physical sciences, mathematics, and interdisciplinary issues) may be found on p. 8.

History Degree Courses		Credits

First Courses *(to be taken within the first 18 credits)*
Note: Placement tests are required for math and writing courses.

EDCP 100	Principles and Strategies of Successful Learning *(strongly recommended as first course)*	3
LIBS 150	Information Literacy and Research Methods	1
WRTG 101/101X	Introduction to Writing	3
MATH 106	Finite Mathematics *or a higher-level math course*	3

Introductory Courses *(to be taken within the first 30 credits)*

◆ HIST 115	World History I	3
or HIST 141	Western Civilization I	
or HIST 284	East Asian Civilization I *(first course in required world history sequence for the major)*	
PHIL 140	Contemporary Moral Issues	3
or a foreign language course		
	or other ARTH, ARTT, HIST, HUMN, MUSC, PHIL, THET, dance, or literature course to fulfill the arts and humanities requirement	

Both BIOL 101	Concepts of Biology	3
and BIOL 102	Laboratory in Biology	1
or BIOL 103	Introduction to Biology *or other course(s) to fulfill the biological and physical sciences lecture and laboratory requirement*	
WRTG 291	Expository and Research Writing *or other course to fulfill the communications/ writing requirement*	3
GVPT 170	American Government *or other ANTH, BEHS, ECON, GEOG, GVPT, PSYC, SOCY, or eligible AASP, CCJS, GERO, or WMST course to fulfill the first behavioral and social sciences requirement*	3
IFSM 201	Introduction to Computer-Based Systems	3
or CMST 303	Advanced Application Software	
◆ HIST 116	World History II	3
or HIST 142	Western Civilization II	
or HIST 285	East Asian Civilization II *(second course in required world history sequence for the major)*	

Foundation Courses *(to be taken within the first 60 credits)*

◆ HIST 156	History of the United States to 1865	3
PSYC 100	Introduction to Psychology	3
or SOCY 100	Introduction to Sociology *or other course to fulfill the second behavioral and social sciences requirement (discipline must differ from first)*	
NSCI 100	Introduction to Physical Science	3
or ASTR 100	Introduction to Astronomy *or other course to fulfill the biological and physical sciences lecture requirement*	
◆ HIST 157	History of the United States Since 1865	3
ARTH 370	History of World Art I *or other ARTH or HIST course to fulfill the arts and humanities requirement in historical perspective (discipline must differ from other humanities course)*	3
SPCH 100	Foundations of Speech Communication	3
or COMM 380	Language in Social Contexts *or other course to fulfill the communications/ writing or speech requirement*	
IFSM 304	Ethics in the Information Age *or other course to fulfill the interdisciplinary issues/computing requirement*	3
HUMN 351	Myth and Culture *(recommended elective)*	3

Additional Required Courses *(to be taken after introductory and foundation courses)*

WRTG 391/391X	Advanced Expository and Research Writing *or other course to fulfill the communications/ upper-level intensive writing requirement*	3
◆ HIST 309	Introduction to Historical Writing	3
◆ HIST 364	Emergence of Modern America: 1900 to 1945 *or other U.S. distribution course for the major*	3

◆ HIST 336	Europe in the 19th Century: 1815 to 1919 *or other European distribution course for the major*	3
◆ HIST 481	History of Modern China *or other world regions distribution course for the major*	3
◆ Any HIST course *(supplemental major course)*		3
◆ An upper-level supplemental major course		3
◆ An upper-level supplemental major course		3

Minor and/or Elective Courses *(to be taken in the last 60 credits along with required major courses)* — 40

Total credits for BA in history	**120**

Minor in History

The history minor complements the skills the student gains in his or her major discipline by offering a historical perspective and by developing critical thinking and an appreciation of the major contributions of various events and individuals to human civilization.

Objectives

The student who graduates with a minor in history will be able to

- Demonstrate an understanding of historical methods and appreciate how history has been written and interpreted over recorded time.
- Articulate how he or she is uniquely affected by the U.S. historical experience.
- Demonstrate a chronological understanding of the diverse peoples, events, and cultures that have shaped human civilization.
- Demonstrate an increased awareness of current events and the ability to evaluate these events from a historical perspective.

Requirements for the Minor

A minor in history requires the completion of 15 credits of coursework in history. All HIST courses apply. Students are recommended to take HIST 309 after all other courses in the minor.

Courses may not duplicate those used to satisfy requirements for the major. At least 9 credits must be earned in upper-level courses (numbered 300 or above). Prerequisites apply for all courses.

For a listing of all the requirements for the bachelor's degree, students should refer to their major and pp. 8–9.

Homeland Security

Students may seek either an academic major or minor in homeland security.

Major in Homeland Security

The major in homeland security focuses on the domestic and international security issues of homeland security, including international and domestic terrorism, infrastructure protection, strategic planning for security, international relations, intelligence operations and evaluation, and program management. The curriculum is designed to provide students with a global outlook, interpersonal skills, and awareness of current issues in homeland security. Graduates of the program will have the knowledge and skills to be leaders in government and industry security.

Objectives

The student who graduates with a major in homeland security will be able to

- Analyze the history of homeland security and evolving concepts in the field in relation to domestic and international security.
- Describe current homeland security policies, operational theories, functions, and issues from both domestic and international perspectives.
- Discuss the ethical, political, social, environmental, and economic issues related to homeland security planning and operations.
- Differentiate the various threats to domestic and international security, including technological and political forms of terrorism.
- Distinguish the various phases of intelligence operations, including planning, execution, administration, and evaluation.
- Demonstrate the critical-thinking and program-management skills necessary to provide leadership and support in homeland security.
- Identify and use appropriate technological tools for effective operations in homeland security.
- Explain the importance of leadership and performance in homeland security and identify the leadership traits of competent homeland security personnel.
- Describe and analyze issues related to cooperation among the international community, state governments, local jurisdictions, and private industry in facilitating intelligence operations, infrastructure protection, responses to terrorism and terrorist incidents, and the development of homeland security.

Degree Requirements

A degree with a major in homeland security requires the successful completion of 120 credits of coursework, including 30 credits for the major; 41 credits in general education requirements; and 49 credits in the minor, electives, and other degree requirements. At least 15 credits in the major must be earned in upper-level courses (numbered 300 or above).

REQUIREMENTS FOR THE HOMELAND SECURITY MAJOR

Coursework for a major in homeland security includes the following:

- Required core courses (15 credits): HMLS 302, 304, 406, 408, and 414
- Supplemental major course in technology (3 credits): Chosen from BIOL 422, CCJS 462, ENMT 321, FSCN 303, and IFSM 430 and 450
- Supplemental major course in operations (3 credits): Chosen from BMGT 366; EMGT 302, 308, 310, and 404; and IFSM 432
- Supplemental major course in intelligence (3 credits): Chosen from CCJS 491 and 496, GVPT 408 and 409, and IFSM 459
- Supplemental major course in applied concepts (3 credits): Chosen from ECON 440; EMGT 312; GVPT 200, 306, and 405; HMLS 486A; or SOCY 473
- Required capstone course (3 credits): HMLS 495
- Required related course (3 credits), which may be applied anywhere in the degree: ACCT 326 or IFSM 300

RECOMMENDED SEQUENCE

The following course sequence will fulfill all the requirements for the BS in homeland security. Coursework for the major is indicated by ◆. Since some recommended courses fulfill more than one requirement, substituting courses for those listed may make it necessary to take additional courses to meet degree requirements. Students should consult an advisor whenever taking advantage of other options. Information on alternate courses (where allowable) to fulfill general education requirements (in communications, arts and humanities, behavioral and social sciences, biological and physical sciences, mathematics, and interdisciplinary issues) may be found on p. 8.

Homeland Security Degree Courses		Credits
First Courses *(to be taken within the first 18 credits)*		
Note: Placement tests are required for math and writing courses.		
EDCP 100	Principles and Strategies of Successful Learning *(strongly recommended as first course)*	3
LIBS 150	Information Literacy and Research Methods	1
WRTG 101/101X	Introduction to Writing	3
MATH 106	Finite Mathematics *or a higher-level math course*	3
Introductory Courses *(to be taken within the first 30 credits)*		
GVPT 170	American Government *or other ANTH, BEHS, ECON, GEOG, GVPT, PSYC, SOCY, or eligible AASP, CCJS, GERO, or WMST course to fulfill the first behavioral and social sciences requirement*	3

Both BIOL 101	Concepts of Biology	3
and BIOL 102	Laboratory in Biology	1
or BIOL 103	Introduction to Biology	
	or other course(s) to fulfill the biological and physi-cal sciences lecture and laboratory requirement	
WRTG 291	Expository and Research Writing	3
	or other course to fulfill the communications/writing requirement	
IFSM 201	Introduction to Computer-Based Systems	3
or CMST 303	Advanced Application Software	
PHIL 140	Contemporary Moral Issues	3
or a foreign language course		
	or other ARTH, ARTT, HIST, HUMN, MUSC, PHIL, THET, dance, or literature course to fulfill the arts and humanities requirement	

Foundation Courses *(to be taken within the first 60 credits)*

PSYC 100	Introduction to Psychology	3
or SOCY 100	Introduction to Sociology	
	or other course to fulfill the second behavioral and social sciences requirement (discipline must differ from first)	
NSCI 100	Introduction to Physical Science	3
or ASTR 100	Introduction to Astronomy	
	or other course to fulfill the biological and physical sciences lecture requirement	
HIST 142	Western Civilization II	3
or HIST 157	History of the United States Since 1865	
	or other ARTH or HIST course to fulfill the arts and humanities requirement in historical perspective (discipline must differ from other humanities course)	
◆ HMLS 302	Introduction to Homeland Security	3
ANTH 344	Cultural Anthropology and Linguistics	3
or SPCH 482	Intercultural Communication *(recommended elective)*	
WRTG 390	Writing for Managers	3
	or other course to fulfill the communications/writing or speech requirement	
IFSM 300	Information Systems in Organizations	3
or ACCT 326	Accounting Information Systems *(related requirement for the major; also fulfills the interdisciplinary issues/computing requirement; students should note prerequisites)*	
◆ HMLS 304	Strategic Planning in Homeland Security	3
IFSM 304	Ethics in the Information Age *(recommended elective)*	3

Additional Required Courses *(to be taken after introductory and foundation courses)*

WRTG 394/394X	Business Writing	3
	or other course to fulfill the communications/upper-level intensive writing requirement	
◆ HMLS 406	Legal and Political Issues of Homeland Security	3
◆ HMLS 408	Infrastructure Security Issues	3
◆ HMLS 414	International Security Issues	3

◆ IFSM 430	Information Systems and Security *or other supplemental major course in technology*	3
◆ BMGT 366	Managing in the Public Sector *or other supplemental major course in operations*	3
◆ GVPT 409	Terrorism, Antiterrorism, and Homeland Security *or other supplemental major course in intelligence*	3
◆ HMLS 486A	Internship in Homeland Security Through Co-op *or other supplemental major course in applied concepts*	3

Capstone Course for Major *(to be taken in the last 15 credits)*

◆ HMLS 495	Public Safety Policies and Leadership	3

Minor and/or Elective Courses *(to be taken in the last 60 credits along with required major courses)* — 40

Recommended Elective
STAT 200	Introduction to Statistics	

Total credits for BS in homeland security — **120**

Minor in Homeland Security

The homeland security minor complements the skills the student gains in his or her major discipline by providing knowledge of the concepts of domestic and international security.

Objectives

The student who graduates with a minor in homeland security will be able to

- Analyze the history of homeland security and evolving concepts in the field in relation to domestic and international security.
- Describe current homeland security policies, operational theories, functions, and issues from both domestic and international perspectives.
- Explain the ethical, political, social, environmental, and economic issues related to homeland security planning and operations.
- Differentiate the various threats to domestic and international security, including technological and political forms of terrorism.
- Distinguish the various phases of intelligence operations, including planning, execution, administration, and evaluation.
- Describe and analyze issues related to cooperation among the international community, state governments, local jurisdictions, and private industry in facilitating intelligence operations, infrastructure protection, responses to terrorism and terrorist incidents, and the development of homeland security.

Requirements for the Minor

A minor in homeland security requires the completion of 15 credits of coursework in homeland security. All HMLS courses apply.It is recommended that students take HMLS 302 or 304 as the first course in the minor (if they have not already applied the course toward other degree requirements).

Courses may not duplicate those used to satisfy requirements for the major. At least 9 credits must be earned in upper-level courses (numbered 300 or above). Prerequisites apply for all courses.

For a listing of all the requirements for the bachelor's degree, students should refer to their major and pp. 8–9.

Humanities

Students may seek either an academic major or minor in humanities.

Major in Humanities

The humanities major offers a multidisciplinary study of global humanities that integrates topics in the arts, history, language and culture, literature, and philosophy and religion. The humanities major provides a broad perspective on human behavior, thought, and values and focuses on American, Asian, and European cultures. The integrated humanities major encourages thinking across traditional disciplines.

Objectives

The student who graduates with a major in the humanities will be able to

- Demonstrate knowledge of and appreciation for the cultural traditions, major ideas, and historical developments of the human experience.
- Explain and critically assess the interrelationships of the arts, history, language and culture, literature, and philosophy.
- Understand the major historical and cultural forces that influence and control American, Asian, and European societies.
- Develop interdisciplinary and multicultural perspectives for analyzing and comparing the arts, history, language and culture, literature, and philosophy.
- Apply critical reasoning, judgment, and choice.
- Write and speak effectively and clearly.
- Use computers for communication and research.

Degree Requirements

A degree with a major in humanities requires the successful completion of 120 credits of coursework, including 30 credits for the major; 41 credits in general education requirements; and 49 credits in the minor, electives, and other degree requirements. At least 15 credits in the major must be earned in upper-level courses (numbered 300 or above).

REQUIREMENTS FOR THE HUMANITIES MAJOR

Coursework for a major in humanities includes the following:

- Foundation courses (6 credits): Chosen from HUMN 100, 102, and 351
- Arts breadth course (3 credits): Chosen from HUMN 334 and any 3-credit ARTT, ARTH, MUSC, THET, and dance courses
- Language and linguistics breadth course (3 credits): Chosen from COMM 380 and any 3-credit foreign language (not literature) courses
- Literature breadth course (3 credits): Chosen from ENGL 303 and any 3-credit English or foreign-language literature courses
- Philosophy and religion breadth course (3 credits): Chosen from HUMN 311, 312, 348, 349, and 351 and any 3-credit PHIL courses
- Supplemental major courses (12 credits): 6 credits in HUMN courses and 6 credits in HUMN or other courses listed for the arts, language, literature, and philosophy breadth course requirements

RECOMMENDED SEQUENCE

The following course sequence will fulfill all the requirements for the BA in humanities. Coursework for the major is indicated by ◆. Since some recommended courses fulfill more than one requirement, substituting courses for those listed may make it necessary to take additional courses to meet degree requirements. Students should consult an advisor whenever taking advantage of other options. Information on alternate courses (where allowable) to fulfill general education requirements (in communications, arts and humanities, behavioral and social sciences, biological and physical sciences, mathematics, and interdisciplinary issues) may be found on p. 8.

Humanities Degree Courses		Credits

First Courses *(to be taken within the first 18 credits)*
Note: Placement tests are required for math and writing courses.

EDCP 100	Principles and Strategies of Successful Learning *(strongly recommended as first course)*	3
LIBS 150	Information Literacy and Research Methods	1
WRTG 101/101X	Introduction to Writing	3
MATH 106	Finite Mathematics *or a higher-level math course*	3

Introductory Courses *(to be taken within the first 30 credits)*

PHIL 140	Contemporary Moral Issues	3
or a foreign language course		
	or other ARTH, ARTT, HIST, HUMN, MUSC, PHIL, THET, dance, or literature course to fulfill the arts and humanities requirement	
Both BIOL 101	Concepts of Biology	3
and BIOL 102	Laboratory in Biology	1
or BIOL 103	Introduction to Biology	
	or other course(s) to fulfill the biological and physical sciences lecture and laboratory requirement	
WRTG 291	Expository and Research Writing	3
	or other course to fulfill the communications/ writing requirement	
GVPT 170	American Government	3
	or other ANTH, BEHS, ECON, GEOG, GVPT, PSYC, SOCY, or eligible AASP, CCJS, GERO, or WMST course to fulfill the first behavioral and social sciences requirement	
IFSM 201	Introduction to Computer-Based Systems	3
or CMST 303	Advanced Application Software	
◆ HUMN 102	Classical Foundations	3

Foundation Courses *(to be taken within the first 60 credits)*

PSYC 100	Introduction to Psychology	3
or SOCY 100	Introduction to Sociology	
	or other course to fulfill the second behavioral and social sciences requirement (discipline must differ from first)	
NSCI 100	Introduction to Physical Science	3
or ASTR 100	Introduction to Astronomy	
	or other course to fulfill the biological and physical sciences lecture requirement	
HIST 142	Western Civilization II	3
or HIST 157	History of the United States Since 1865	
	or other ARTH or HIST course to fulfill the arts and humanities requirement in historical perspective (discipline must differ from other humanities course)	
IFSM 304	Ethics in the Information Age	3
	or other course to fulfill the interdisciplinary issues/computing requirement	
SPCH 100	Foundations of Speech Communication	3
or WRTG 288/288X	Standard English Grammar, Usage, and Diction	
	or other course to fulfill the communications/ writing or speech requirement	
◆ HUMN 351	Myth and Culture	3

Additional Required Courses *(to be taken after introductory and foundation courses)*

WRTG 391/391X	Advanced Expository and Research Writing	3
	or other course to fulfill the communications/ upper-level intensive writing requirement	
◆ ARTH 370	History of World Art I	3
	or other arts breadth course for the major	

◆ COMM 380	Language in Social Contexts	3
	or other language and linguistics breadth course for the major	
◆ ENGL 303	Critical Approaches to Literature	3
	or other literature breadth course for the major	
◆ HUMN 311	Workplace Ethics	3
	or other philosophy and religion breadth course for the major	
◆ HUMN 336	Ideas Shaping the 21st Century	3
	or other supplemental major course	
◆ Any HUMN course *(supplemental major course)*		3
◆ A supplemental major course		3
◆ A supplemental major course		3

Minor and/or Elective Courses *(to be taken in the last 60 credits along with required major courses)* 46

Total credits for BA in humanities	**120**

Minor in Humanities

The humanities minor complements the skills the student gains in his or her major discipline by providing an integrated curriculum for enrichment and exploration of culture and ideas, as well as a broad perspective on human behavior, thought, and values across traditional disciplines.

Objectives

A student graduating with a minor in humanities will be able to

- Describe and interpret some of the cultural traditions and interplay of cultural elements in human experience around the world.

- Interpret some of the major cultural forces that influence and control society.

- Think critically about real-world issues.

- Write and speak effectively and clearly.

Requirements for the Minor

A minor in humanities requires the completion of 15 credits of coursework in humanities. Courses appropriate for the major apply. Courses may not duplicate those used to satisfy requirements for the major. At least 9 credits must be earned in upper-level HUMN courses (numbered 300 or above). Prerequisites apply for all courses.

For a listing of all the requirements for the bachelor's degree, students should refer to their major and pp. 8–9.

Human Resource Management

Students may seek either an academic major or minor in human resource management.

Major in Human Resource Management

The human resource major provides 21st-century skills, knowledge, and understanding of human resource functions in private- and public-sector organizational settings. These functions include human resource planning; recruitment, selection, placement, and orientation of employees; training and career development; labor relations; management of performance appraisal, compensation, and benefit programs; and development of personnel policies and procedures. The human resource management major prepares students for work in business administration and human resources. Through the proper selection of courses, the student can prepare for the certification examinations for Professional in Human Resources, Senior Professional in Human Resources, and Global Professional in Human Resources, which are offered by the Society of Human Resource Management. In addition to the focus on human resource functions, the major includes courses in management and organization theory, organizational behavior and development approaches, labor relations theory and practice, interpersonal skill development, and women's perspectives in management.

Objectives

The student who graduates with a major in human resource management will be able to

- Conduct effective human resource planning for technological innovation in a global environment.
- Describe the importance of internal and external organizational environments and the impact of their interrelationships on human resource functions.
- Explain the processes of job analysis, staffing, appraisal and compensation, career training, and development.
- Identify various performance appraisal systems and critically evaluate their pros and cons.
- Demonstrate cohesive team-management skills with a focus on the group dynamics of an increasingly diverse workforce.
- Discuss the history of union/management relations and associated major federal, state, and local legislation; executive orders; and court decisions.
- Describe the interaction among management, labor, and the federal agencies.

- Utilize various processes and tools for bargaining, negotiating, and resolving disputes.
- Use quantitative and qualitative analytical research methods to evaluate human resource initiatives and solve problems.
- Develop effective written and oral communications consistent with the business and professional environment.
- Apply appropriate information technology to analyze problems and issues, develop business research, report key data, and recommend management strategy and action plans.
- Interpret and apply human resource principles in a global setting.
- Describe the history of theories and concepts in human resource management and related fields and apply them in appropriate situations.
- Evaluate ethical, social, civic, cultural, and political issues as they relate to human resource management.

Degree Requirements

A degree with a major in human resource management requires the successful completion of 120 credits of coursework, including 36 credits for the major; 41 credits in general education requirements; and 43 credits in the minor, electives, and other degree requirements. At least 18 credits in the major must be earned in upper-level courses (numbered 300 or above).

REQUIREMENTS FOR THE HUMAN RESOURCE MANAGEMENT MAJOR

Coursework for a major in human resource management includes the following:

- Required foundation courses (9 credits): BMGT 110 (or prior business experience and an additional supplemental course), ACCT 221 (or ACCT 301), and STAT 230
- Required core courses (15 credits): BMGT 364 and HRMN 300, 362 (or 395 or 406), 400, and 408
- Supplemental major courses (9 credits): Chosen from BMGT 380, 381, 391, 464, 465, and 484; FINC 330; MRKT 310; and any HRMN courses
- Required capstone course (3 credits): HRMN 495
- Required related courses (9 credits), which may be applied anywhere in the degree: ACCT 326 (or IFSM 300) and ECON 201 and 203

RECOMMENDED SEQUENCE

The following course sequence will fulfill all the requirements for the BS in human resource management. Coursework for the major is indicated by ◆. Since some recommended courses fulfill more than one requirement, substituting courses for those listed may make it necessary to take additional courses to meet degree requirements. Students should consult an advisor whenever taking advantage of other options. Information on alternate courses (where allowable) to fulfill general education requirements (in communications, arts and humanities, behavioral and social sciences, biological and physical sciences, mathematics, and interdisciplinary issues) may be found on p. 8.

Human Resource Management
Degree Courses   Credits

First Courses *(to be taken within the first 18 credits)*
Note: Placement tests are required for math and writing courses.

EDCP 100	Principles and Strategies of Successful Learning *(strongly recommended as first course)*	3
LIBS 150	Information Literacy and Research Methods	1
WRTG 101/101X	Introduction to Writing	3
MATH 106	Finite Mathematics *or a higher-level math course*	3
◆ BMGT 110	Introduction to Business and Management *(students with business experience should substitute a supplemental major course in the last 60 credits of study)*	3

Introductory Courses *(to be taken within the first 30 credits)*

ECON 201	Principles of Macroeconomics *(related requirement for the major; also fulfills first behavioral and social sciences requirement)*	3
NSCI 100	Introduction to Physical Science	3
and NSCI 101	Physical Science Laboratory *or other course(s) to fulfill the biological and physical sciences lecture and laboratory requirement*	1
WRTG 291	Expository and Research Writing *or other course to fulfill the communications/ writing requirement*	3
IFSM 201	Introduction to Computer-Based Systems	3
or CMST 303	Advanced Application Software	
PHIL 140	Contemporary Moral Issues	3
or a foreign language course		
	or other ARTH, ARTT, HIST, HUMN, MUSC, PHIL, THET, dance, or literature course to fulfill the arts and humanities requirement	
◆ STAT 230	Business Statistics	3
or STAT 200	Introduction to Statistics	

Foundation Courses *(to be taken within the first 60 credits)*

PSYC 100	Introduction to Psychology	3
or SOCY 100	Introduction to Sociology *or other course to fulfill the second behavioral and social sciences requirement (discipline must differ from first)*	
◆ ACCT 301	Accounting for Nonaccounting Majors	3
or ACCT 221	Principles of Accounting II *(students should note prerequisite)*	
BIOL 101	Concepts of Biology	3
or ASTR 100	Introduction to Astronomy *or other course to fulfill the biological and physical sciences lecture requirement*	
ECON 203	Principles of Microeconomics *(related requirement for the major)*	3

HIST 142	Western Civilization II	3
or HIST 157	History of the United States Since 1865 *or other ARTH or HIST course to fulfill the arts and humanities requirement in historical perspective (discipline must differ from other humanities course)*	
IFSM 300	Information Systems in Organizations	3
or ACCT 326	Accounting Information Systems *(related requirement for the major; also fulfills the interdisciplinary issues/computing requirement; students should note prerequisite)*	
SPCH 100	Foundations of Speech Communication	3
or WRTG 390	Writing for Managers *or other course to fulfill the communications/ writing or speech requirement*	
◆ BMGT 364	Management and Organization Theory	3
◆ HRMN 300	Human Resource Management	3

Additional Required Courses *(to be taken after introductory and foundation courses)*

WRTG 394/394X	Business Writing *or other course to fulfill the communications/ upper-level intensive writing requirement*	3
BMGT 392	Global Business Management *(recommended elective)*	3
◆ HRMN 400	Human Resource Management: Analysis and Problems	3
◆ HRMN 408	Employment Law for Business	3
◆ HRMN 362	Labor Relations	3
or HRMN 395	The Total Rewards Approach to Compensation Management	
or HRMN 406	Employee Training and Development	
◆ FINC 330	Business Finance *(supplemental major course and prerequisite for capstone course)*	3
◆ MRKT 310	Marketing Principles and Organization *(supplemental major course and prerequisite for capstone course)*	3
BMGT 496	Business Ethics *(recommended elective)*	3
◆ BMGT 380	Business Law I *or other supplemental major course*	3

Capstone Course for Major *(to be taken in the last 15 credits)*

◆ HRMN 495	Contemporary Issues in Human Resource Management Practice	3

Minor and/or Elective Courses *(to be taken in the last 60 credits along with required major courses)* 31

Recommended Elective
MATH 140   Calculus I

Recommended Minors
Business administration, finance, or other business-related minor

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Total credits for BS in human resource management   120

BACHELOR'S DEGREE CURRICULA

Minor in Human Resource Management

The human resource management minor complements the skills the student gains in his or her major discipline by examining the human resource functions in a private- or public-sector organizational setting. These functions include human resource planning; recruitment, selection, and placement; employee appraisal and compensation; employee training and career development; management of labor relations; and development of a human resource department implementation plan.

Objectives

A student graduating with a minor in human resource management will be able to

- Conduct effective human resource planning for technological innovation in a global environment.
- Describe the importance of internal and external organizational environments and the impact of their interrelationships on human resource functions.
- Explain the processes of job analysis, staffing, appraisal and compensation, career training, and development.
- Identify various performance appraisal systems and critically evaluate their pros and cons.
- Demonstrate cohesive team-management skills in decision making, communications, motivation, and interpersonal behavior by focusing on the group dynamics that occur within an increasingly diverse workforce.
- Discuss the history of union/management relations and associated major federal, state, and local legislation; executive orders; and court decisions.
- Understand the interaction among management, labor, and the federal agencies.
- Learn the processes and tools for bargaining, negotiating, and resolving disputes.
- Demonstrate information literacy through the use of commonly accepted quantitative and qualitative analytical research methods to evaluate human resource initiatives and solve problems.
- Develop effective written and oral communications consistent with the business and professional environment.

Requirements for the Minor

A minor in human resource management requires the completion of 15 credits of coursework in human resource management. Any HRMN course applies. It is recommended that students take HRMN 300 and 400 for the minor (if the courses have not already applied elsewhere in the degree).

Courses may not duplicate those used to satisfy requirements for the major. At least 9 credits must be earned in upper-level courses (numbered 300 or above). Prerequisites apply for all courses.

For a listing of all the requirements for the bachelor's degree, students should refer to their major and pp. 8–9.

Information Assurance

Students may seek an academic major in information assurance.

Major in Information Assurance

The major in information assurance offers a broad-based program of study designed to prepare graduates to be information assurance leaders (in both government and industry), with a global outlook, interpersonal skills, leadership and management skills, and awareness of current issues in the field. The curriculum focuses on the practices, policies, operational procedures and technology, and future of information assurance. The major prepares students for careers as information systems security professionals, senior system managers, and system administrators responsible for information systems and security of those systems.

Objectives

The student who graduates with a major in information assurance will be able to

- Identify the terms, functions, and interrelationships among the hardware, software, firmware, and other components of an information system.
- Demonstrate a working knowledge of the principles and practices of information security.
- Develop policies and procedures to ensure reliability and accessibility of information systems and to prevent and defend against unauthorized access to systems, networks, and data.
- Conduct risk and vulnerability assessments of planned and installed information systems to identify vulnerabilities, risks, and protection needs.
- Develop systems security contingency plans and disaster recovery procedures.
- Develop and maintain strategic information assurance plans.
- Establish metrics to measure and evaluate systems performance and total cost of ownership.
- Identify and address information technology workforce planning and management issues such as recruitment, retention, and training.

Degree Requirements

A degree with a major in information assurance requires the successful completion of 120 credits of coursework, including 30 credits for the major; 41 credits in general education requirements; and 49 credits in the minor, electives, and other degree requirements. At least 15 credits in the major must be earned in upper-level courses (numbered 300 or above).

REQUIREMENTS FOR THE INFORMATION ASSURANCE MAJOR

Coursework for a major in information assurance includes the following:

- Required foundation courses (9 credits): IFSM 310, 430, and 450

- Required core courses (6 credits): IFSM 433 and 454

- Supplemental major courses (12 credits): Chosen from BMGT 305; CMIT 320; IFSM 350, 431, 432, 457, and 459; and EMGT 312

- Required capstone course (3 credits): IFSM 485

RECOMMENDED SEQUENCE

The following course sequence will fulfill all the requirements for the BS in information assurance. Coursework for the major is indicated by ◆. Since some recommended courses fulfill more than one requirement, substituting courses for those listed may make it necessary to take additional courses to meet degree requirements. Students should consult an advisor whenever taking advantage of other options. Information on alternate courses (where allowable) to fulfill general education requirements (in communications, arts and humanities, behavioral and social sciences, biological and physical sciences, mathematics, and interdisciplinary issues) may be found on p. 8.

Information Assurance Degree Courses		Credits
First Courses *(to be taken within the first 18 credits)*		
Note: Placement tests are required for math and writing courses.		
EDCP 100	Principles and Strategies of Successful Learning *(strongly recommended as first course)*	3
LIBS 150	Information Literacy and Research Methods	1
WRTG 101/101X	Introduction to Writing	3
MATH 106	Finite Mathematics *or a higher-level math course*	3
Introductory Courses *(to be taken within the first 30 credits)*		
IFSM 201	Introduction to Computer-Based Systems *(prerequisite to later courses)*	3
CMIS 102	Introduction to Problem Solving and Algorithm Design *(prerequisite to later courses)*	3
PHIL 140 *or* ENGL 240	Contemporary Moral Issues Introduction to Fiction, Poetry, and Drama *or other ARTH, ARTT, HIST, HUMN, MUSC, PHIL, THET, dance, literature, or foreign language course to fulfill the arts and humanities requirement*	3

Both BIOL 101	Concepts of Biology	3
and BIOL 102	Laboratory in Biology	1
or BIOL 103	Introduction to Biology *or other course(s) to fulfill the biological and physical sciences lecture and laboratory requirement*	
WRTG 291	Expository and Research Writing *or other course to fulfill the communications/ writing requirement*	3
GVPT 170	American Government *or other ANTH, BEHS, ECON, GEOG, GVPT, PSYC, SOCY, or eligible AASP, CCJS, GERO, or WMST course to fulfill the first behavioral and social sciences requirement*	3
Foundation Courses *(to be taken within the first 60 credits)*		
PSYC 100 *or* SOCY 100	Introduction to Psychology Introduction to Sociology *or other course to fulfill the second behavioral and social sciences requirement (discipline must differ from first)*	3
NSCI 100 *or* ASTR 100	Introduction to Physical Science Introduction to Astronomy *or other course to fulfill the biological and physical sciences lecture requirement*	3
HIST 142 *or* HIST 157	Western Civilization II History of the United States Since 1865 *or other ARTH or HIST course to fulfill the arts and humanities requirement in historical perspective (discipline must differ from other humanities course)*	3
IFSM 300	Information Systems in Organizations *(prerequisite to later courses)*	3
ANTH 344 *or* a foreign language course	Cultural Anthropology and Linguistics *(recommended elective)*	3
SPCH 100 *or* WRTG 390	Foundations of Speech Communication Writing for Managers *or other course to fulfill the communications/ writing or speech requirement*	3
IFSM 304	Ethics in the Information Age *(fulfills the interdisciplinary issues/computing requirement)*	3
Additional Required Courses *(to be taken after introductory and foundation courses)*		
WRTG 393/393X	Technical Writing *or other course to fulfill the communications/ upper-level intensive writing requirement*	3
◆ IFSM 310	Software and Hardware Concepts	3
◆ IFSM 430	Information Systems and Security	3
◆ IFSM 450	Telecommunication Systems in Management	3
◆ IFSM 433	Information Security Needs Assessment and Planning	3
◆ IFSM 454	Information System Security Mechanisms	3
◆ IFSM 350	Wireless Telecommunications *or other supplemental major course*	3

◆ IFSM 431   Policy Planning for Security Architects   3
               or other supplemental major course

◆ IFSM 432   Disaster Recovery Planning   3
               or other supplemental major course

◆ IFSM 457   Cyberterrorism   3
               or other supplemental major course

Capstone Course for Major *(to be taken in the last 15 credits)*

◆ IFSM 485   Trends and Projects in Information Assurance   3

Minor and/or Elective Courses *(to be taken in the last 60 credits along with required major courses)*   37

Total credits for BS in information assurance   **120**

Information Systems Management

Students may seek an academic major in information systems management.

Major in Information Systems Management

The information systems management major provides students with the skills needed to successfully participate in and support the increasingly visible role of information technology in corporate decision making. The curriculum focuses on the methods, concepts, and practical applications of information systems in the workplace. It develops graduates' abilities to conceptualize and manage the design and implementation of high-quality information systems.

Objectives

The student who graduates with a major in information systems management will be able to

- Apply appropriate problem-solving methodologies to the analysis and solution of problems.
- Apply standard systems practices to the planning, implementation, management, and evaluation of information systems.
- Communicate effectively using oral, written, and multimedia techniques.
- Manage change in the dynamic and global environments of automated systems.
- Use technology to research information needed to produce informed decisions for organizations.
- Identify relationships between programming languages and information systems.

- Demonstrate skills in systems analysis appropriate to the management of information systems projects.
- Demonstrate skills in the design, creation, maintenance, and reporting functions of database systems and database systems management.
- Use a systems approach to select hardware and software for an organization.
- Evaluate ethical issues related to information systems, work productivity, and human factors.

Degree Requirements

A degree with a major in information systems management requires the successful completion of 120 credits of coursework, including 30 credits for the major; 41 credits in general education requirements; and 49 credits in the minor, electives, and other degree requirements. At least 15 credits in the major must be earned in upper-level courses (numbered 300 or above).

REQUIREMENTS FOR THE INFORMATION SYSTEMS MANAGEMENT MAJOR

Coursework for a major in information systems management includes the following:

- Required foundation courses (15 credits): CMIS 141/141A (or other programming language course) and IFSM 300, 310, 410, and 461
- Core courses (9 credits): Any upper-level IFSM courses (3 credits must be in 400-level coursework)
- Supplemental major courses (6 credits): Any IFSM, CMIS, CMIT, CMSC, or CMST courses
- Required related course (3 credits), which may be applied anywhere in the degree: STAT 200

RECOMMENDED SEQUENCE

The following course sequence will fulfill all the requirements for the BS in information systems management. Coursework for the major is indicated by ◆. Since some recommended courses fulfill more than one requirement, substituting courses for those listed may make it necessary to take additional courses to meet degree requirements. Students should consult an advisor whenever taking advantage of other options. Information on alternate courses (where allowable) to fulfill general education requirements (in communications, arts and humanities, behavioral and social sciences, biological and physical sciences, mathematics, and interdisciplinary issues) may be found on p. 8.

Information Systems Management
Degree Courses Credits

First Courses *(to be taken within the first 18 credits)*
Note: Placement tests are required for math and writing courses.

EDCP 100	Principles and Strategies of Successful Learning *(strongly recommended as first course)*	3
LIBS 150	Information Literacy and Research Methods	1
WRTG 101/101X	Introduction to Writing	3
MATH 106	Finite Mathematics *or a higher-level math course*	3

Introductory Courses *(to be taken within the first 30 credits)*

IFSM 201	Introduction to Computer-Based Systems *(prerequisite to later courses)*	3
CMIS 102	Introduction to Problem Solving and Algorithm Design	3
or CMIS 102A	Fundamentals of Programming I *(fulfills the interdisciplinary issues/computing requirement: prerequisite to later courses)*	
PHIL 140	Contemporary Moral Issues	3
or ENGL 240	Introduction to Fiction, Poetry, and Drama *or other ARTH, ARTT, HIST, HUMN, MUSC, PHIL, THET, dance, literature, or foreign language course to fulfill the arts and humanities requirement*	
Both BIOL 101	Concepts of Biology	3
and BIOL 102	Laboratory in Biology	1
or BIOL 103	Introduction to Biology *or other course(s) to fulfill the biological and physical sciences lecture and laboratory requirement*	
WRTG 291	Expository and Research Writing *or other course to fulfill the communications/ writing requirement*	3
GVPT 170	American Government *or other ANTH, BEHS, ECON, GEOG, GVPT, PSYC, SOCY, or eligible AASP, CCJS, GERO, or WMST course to fulfill the first behavioral and social sciences requirement*	3

Foundation Courses *(to be taken within the first 60 credits)*

STAT 200	Introduction to Statistics *(related requirement for the major)*	3
◆ CMIS 141	Introductory Programming	3
or CMIS 141A	Fundamentals of Programming II *or other programming course*	
PSYC 100	Introduction to Psychology	3
or SOCY 100	Introduction to Sociology *or other course to fulfill the second behavioral and social sciences requirement (discipline must differ from first)*	
NSCI 100	Introduction to Physical Science	3
or ASTR 100	Introduction to Astronomy *or other course to fulfill the biological and physical sciences lecture requirement*	

HIST 142	Western Civilization II	3
or HIST 157	History of the United States Since 1865 *or other ARTH or HIST course to fulfill the arts and humanities requirement in historical perspective (discipline must differ from other humanities course)*	
◆ IFSM 300	Information Systems in Organizations	3
ANTH 344	Cultural Anthropology and Linguistics	3
or a foreign language course	*(recommended elective)*	
SPCH 100	Foundations of Speech Communication	3
or WRTG 390	Writing for Managers *or other course to fulfill the communications/ writing or speech requirement*	
IFSM 304	Ethics in the Information Age *(recommended elective)*	3

Additional Required Courses *(to be taken after introductory and foundation courses)*

WRTG 393/393X	Technical Writing *or other course to fulfill the communications/ upper-level intensive writing requirement*	3
◆ IFSM 310	Software and Hardware Concepts	3
◆ IFSM 410	Database Concepts	3
◆ IFSM 461	Systems Analysis and Design	3
◆ IFSM 303	Human Factors in Information Systems *or other core course for the major*	3
◆ IFSM 430	Information Systems and Security *or other core course for the major*	3
◆ IFSM 438	Project Management *or other core course for the major*	3
◆ IFSM 433	Information Security Needs Assessment and Planning *or other supplemental major course*	3
◆ IFSM 450	Telecommunication Systems in Management *or other supplemental major course*	3

Minor and/or Elective Courses *(to be taken in the last 60 credits along with required major courses)* 37

Recommended Minors
Computing, business administration, psychology, or marketing
Recommended Elective

MATH 140	Calculus I *(for students who plan to go on to graduate school)*	

Total credits for BS in information systems management 120

International Business Management

Students may seek an academic minor in international business management.

Minor in International Business Management

The international business management minor complements the skills the student gains in his or her major discipline by presenting the basic concepts, theories, policies, and practices that support the institutional, environmental, functional, and strategic framework for conducting global business transactions.

Objectives

The student who graduates with a minor in international business management will be able to

- Identify, define, and comprehend key concepts, theories, and issues associated with global business transactions.
- Assess the impact of national social systems on international business and the dynamic interrelationships between the domestic and international environments.
- Demonstrate an understanding of the roles of government, multinational corporations, global institutions, and regional organizations in international business transactions, including trade, foreign investment, and economic development.
- Identify and analyze global strategic issues and decisions based on case analysis.
- Demonstrate critical-thinking, analytic, and effective communication and writing skills through case analyses, research, and presentations.
- Apply skills to conduct research on topics of relevant interest using appropriate resources that enhance information literacy and technical competency.

Requirements for the Minor

A minor in international business management requires the completion of 15 credits of coursework in international business management.

Students must take one of the following courses:

BMGT 392	Global Business Management
BMGT 454	The Global Manager and Public Policy
BMGT 456	Multinational Management

Students may choose remaining courses from those listed above and the following:

BMGT 407	Global Commerce
BMGT 437	International Business Law
FINC 460	International Finance
MRKT 454	Global Marketing

Courses may not duplicate those used to satisfy requirements for the major. At least 9 credits must be earned in upper-level courses (numbered 300 or above). Prerequisites apply for all courses.

For a listing of all the requirements for the bachelor's degree, students should refer to their major and pp. 8–9.

Investigative Forensics

Students may seek an academic major in investigative forensics. A related minor is available in forensics (p. 47).

Major in Investigative Forensics

The major in investigative forensics provides a thorough foundation in the knowledge and skills necessary to process and report on physical evidence at a crime scene or in connection with an investigation of civil liability. The curriculum, based on national guidelines, provides students with a basic foundation in investigative, scientific, and laboratory-based forensics, and introduces students to the various disciplines that make up the forensic collaborative workgroup. The major prepares students for career opportunities focused on the investigatory aspects of forensics.

Objectives

The student who graduates with a major in investigative forensics will be able to

- Identify the various types of evidence obtained during a crime scene investigation.
- Identify typical forensic laboratory tests, such as trace evidence, impressions, firearms, questioned documents, and forensic biology and anthropology.
- Explain the role and the impact of investigative forensics within the criminal justice system.
- Identify the different roles within the collaborative workgroup during an investigation.
- Apply analytical and problem-solving skills in all three stages of crime scene investigation (scene documentation, evidence collection, and scene reconstruction).
- Apply analytical and quantitative reasoning to select applicable forensic tests within a set budget.

- Explain the various types of crime scene searches and crime scene documentations.
- Explain the various laws pertaining to crime scene searches.
- Articulate the values and ethics that guide the forensic profession.
- Use effective written communication skills to clearly report analyses and findings.
- Explain the integration of physical and testimonial evidence within the investigative process.
- Use effective oral communication skills to articulate analyses and findings.
- Utilize Web-based sources to find information about crime and forensic science.

Degree Requirements

A degree with a major in investigative forensics requires the successful completion of 120 credits of coursework, including 30 credits for the major; 41 credits in general education requirements; and 49 credits in the minor, electives, and other degree requirements. At least 15 credits in the major must be earned in upper-level courses (numbered 300 or above).

REQUIREMENTS FOR THE INVESTIGATIVE FORENSICS MAJOR

Coursework for a major in investigative forensics includes the following:

- Required foundation courses (9 credits): CCJS 100, 234, and 320

- Required criminal/forensic psychology course (3 credits): CCJS 461 or PSYC 370

- Required core courses (9 credits): CCJS 420 and 421 and FSCN 306

- Forensic laboratory science courses (6 credits): Chosen from ANTH 351, CCJS 425, 486A, and 486B and any courses designated as forensic lab science

- Supplemental major course (3 credits): Chosen from ANTH 351, BIOL 320, 350, and 356; FSCN 414; and any chemistry, forensic science, or physics courses

- Required related courses (6 credits), which may be applied anywhere in the degree: STAT 200 and WRTG 393

RECOMMENDED SEQUENCE

The following course sequence will fulfill all the requirements for the BS in investigative forensics. Coursework for the major is indicated by ◆. Since some recommended courses fulfill more than one requirement, substituting courses for those listed may make it necessary to take additional courses to meet degree requirements. Students should consult an advisor whenever taking advantage of other options. Information on alternate courses (where allowable) to fulfill general education requirements (in communications, arts and humanities, behavioral and social sciences, biological and physical sciences, mathematics, and interdisciplinary issues) may be found on p. 8.

Investigative Forensics Degree Courses		Credits
First Courses *(to be taken within the first 18 credits)*		
Note: Placement tests are required for math and writing courses.		
EDCP 100	Principles and Strategies of Successful Learning *(strongly recommended as first course)*	3
LIBS 150	Information Literacy and Research Methods	1
WRTG 101/101X	Introduction to Writing	3
MATH 106	Finite Mathematics *or a higher-level math course*	3
◆ CCJS 100	Introduction to Criminal Justice	3
Introductory Courses *(to be taken within the first 30 credits)*		
GVPT 170	American Government *or other ANTH, BEHS, ECON, GEOG, GVPT, PSYC, SOCY, or eligible AASP, CCJS, GERO, or WMST course to fulfill the first behavioral and social sciences requirement*	3
Both BIOL 101	Concepts of Biology	3
and BIOL 102	Laboratory in Biology	1
or BIOL 103	Introduction to Biology *or other course(s) to fulfill the biological and physical sciences lecture and laboratory requirement*	
WRTG 291	Expository and Research Writing *or other course to fulfill the communications/ writing requirement*	3
IFSM 201	Introduction to Computer-Based Systems	3
or CMST 303	Advanced Application Software	
◆ CCJS 234	Criminal Procedures and Evidence	3
PHIL 140	Contemporary Moral Issues	3
or a foreign language course	*or other ARTH, ARTT, HIST, HUMN, MUSC, PHIL, THET, dance, or literature course to fulfill the arts and humanities requirement*	
Foundation Courses *(to be taken within the first 60 credits)*		
STAT 200	Introduction to Statistics	3
PSYC 100	Introduction to Psychology	3
or SOCY 100	Introduction to Sociology *or other course to fulfill the second behavioral and social sciences requirement (discipline must differ from first)*	
NSCI 100	Introduction to Physical Science *or other course to fulfill the biological and physical sciences lecture requirement*	3
◆ CCJS 320	Introduction to Criminalistics	3
HIST 142	Western Civilization II	3
or HIST 157	History of the United States Since 1865 *or other ARTH or HIST course to fulfill the arts and humanities requirement in historical perspective (discipline must differ from other humanities course)*	
SPCH 100	Foundations of Speech Communication *or other course to fulfill the communications/ writing or speech requirement*	3

IFSM 304	Ethics in the Information Age *or other course to fulfill the interdisciplinary issues/computing requirement*	3
ANTH 344	Cultural Anthropology and Linguistics *(recommended elective)*	3

Additional Required Courses *(to be taken after introductory and foundation courses)*

WRTG 393/393X	Technical Writing *(related requirement for the major; also fulfills the communications/upper-level intensive writing requirement)*	3
◆ CCJS 461	Psychology of Criminal Behavior	3
or PSYC 370	Foundations of Forensic Psychology	
◆ CCJS 420	Medical and Legal Investigations of Death	3
◆ CCJS 421	Computer Forensics	3
◆ FSCN 306	Fire Investigation and Analysis	3
◆ CCJS 486A	Internship in Criminal Justice Through Co-op *(or other forensic laboratory science course)*	3
◆ CCJS 425	Forensics Lab *(or other forensic laboratory science course)*	3
◆ Supplemental major course		3

Minor and/or Elective Courses *(to be taken in the last 60 credits along with required major courses)*   40

Total credits for BS in investigative forensics	**120**

Journalism

Students may seek an academic minor in journalism.

Minor in Journalism

The journalism minor complements the skills the student gains in his or her major discipline by introducing the fundamental concepts and techniques in public relations and mass media writing for creating effective messages given different audiences and contexts. Students also develop an understanding of the legal and ethical implications of communication.

Objectives

The student who graduates with a minor in journalism will be able to

- Apply communication theories—including both speech communication and mass communication theories—to various situations and contexts.
- Explain the role media and mass communication play in society.
- Identify the legal and ethical implications of communication and produce messages that are ethically and legally responsible.

- Apply fundamental concepts and techniques in public relations and mass media writing to create effective messages to different audiences and within different contexts.
- Use tools and technology to gather information, as well as to develop and deliver messages.
- Critically analyze information for creating effective oral or written messages and evaluating messages.

Requirements for the Minor

A minor in journalism requires the completion of 15 credits of coursework in journalism and communication studies. All JOUR and COMM courses apply. At least 9 credits must be earned in JOUR courses. It is recommended that students take JOUR 201 and 202 first, followed by COMM 300 and 400 (if they have not already applied the courses toward other degree requirements).

Courses may not duplicate those used to satisfy requirements for the major. At least 9 credits must be earned in upper-level courses (numbered 300 or above). Prerequisites apply for all courses.

For a listing of all the requirements for the bachelor's degree, students should refer to their major and pp. 8–9.

Laboratory Management

Students who have completed an Associate of Applied Science degree in a biology- or chemistry-related field from a community college with which UMUC has an articulation agreement for this major may seek an academic major in laboratory management. Students should consult an advisor before electing this major.

The major in laboratory management is based on collaborative arrangement between UMUC and specific Maryland community colleges. Students with a similar degree from another institution may be considered for this program based only on an institutional articulation agreement with UMUC.

Major in Laboratory Management

The major in laboratory management focuses on the management and coordination of the nontechnical activities that contribute to a safe and well-run biochemical laboratory. It provides both in-depth study of scientific concepts and procedures (during associate's degree study at the community college level) and laboratory management skills. The curriculum is designed to prepare students to meet employer needs for scientific technicians trained in both the sciences and the management of laboratory activities.

Objectives

The student who graduates with a major in laboratory management will be able to

- Demonstrate an understanding of basic principles in the natural sciences
- Perform standard laboratory procedures employed in academic, industry, and government laboratories
- Develop comprehensive laboratory management strategies
- Demonstrate skills in critical thinking, problem solving, project management, and team building

Degree Requirements

A degree with a major in laboratory management requires the successful completion of 120 credits of coursework from UMUC and the collaborating community college, including 36 credits for the major; 41 credits in general education requirements; and 43 credits in the minor, electives, and other degree requirements. At least 18 credits in the major must be earned in upper-level courses (numbered 300 or above).

REQUIREMENTS FOR THE MAJOR

Coursework for a major in laboratory management includes the following lower-level coursework taken as part of an appropriate Associate of Applied Science degree program at a collaborating community college:

- Foundation courses (15 credits, at least 12 of which should be in laboratory science coursework): Chosen from biology, biochemistry, biotechnology, chemistry, microbiology, and molecular biology courses

- Additional required related science coursework (14–22 credits), which may be applied anywhere in the bachelor's degree

Coursework for a major in laboratory management also includes the following:

- Required upper-level core courses (12 credits): BIOL 400, BMGT 364, COMM 300, and NSCI 301 (or ENMT 322)

- Supplemental major course (3 credits): Chosen from BMGT 317 and 487; IFSM 300; and SPCH 324, 397, 426, 470, and 482

- Required Co-op internship (6 credits): Courses numbered 486A or 486B in any related discipline

- Required related courses (6 credits), which may be applied anywhere in the degree: STAT 200 and WRTG 393

RECOMMENDED SEQUENCE

The following course sequence will fulfill all the requirements for the BTPS in laboratory management (if the student selects appropriate courses as part of the articulated degree program from the community college). Coursework for the major is indicated by ◆. Since some recommended courses fulfill more than one requirement, substituting courses for those listed may make it necessary to take additional courses to meet degree requirements. Students should consult an advisor whenever taking advantage of other options. Information on alternate courses (where allowable) to fulfill general education requirements

(in communications, arts and humanities, behavioral and social sciences, biological and physical sciences, mathematics, and interdisciplinary issues) may be found on p. 8.

Laboratory Management Degree Courses		Credits
Required Courses from Community College		
◆ Lower-level coursework in biology, biochemistry, biotechnology, chemistry, microbiology, and molecular biology		15
Additional required science coursework *(should also fulfill requirements in biological and physical sciences)*		14–22
First Courses *(to be taken within the first 18 credits at UMUC if not brought in transfer)*		
Note: Placement tests are required for math and writing courses.		
LIBS 150	Information Literacy and Research Methods	1
WRTG 101/101X	Introduction to Writing	3
MATH 106	Finite Mathematics *or a higher-level math course*	3
Introductory and General Education Courses *(to be taken within the first 30 credits)*		
IFSM 201	Introduction to Computer-Based Systems	3
or CMST 303	Advanced Application Software	
WRTG 291	Expository and Research Writing *or other course to fulfill the communications/ writing requirement*	3
GVPT 170	American Government *or other ANTH, BEHS, ECON, GEOG, GVPT, PSYC, SOCY, or eligible AASP, CCJS, GERO, or WMST course to fulfill the first behavioral and social sciences requirement*	3
PHIL 140	Contemporary Moral Issues	3
or a foreign language course	*or other ARTH, ARTT, HIST, HUMN, MUSC, PHIL, THET, dance, or literature course to fulfill the arts and humanities requirement*	
STAT 200	Introduction to Statistics	3
PSYC 100	Introduction to Psychology	3
or SOCY 100	Introduction to Sociology *or other course to fulfill the second behavioral and social sciences requirement (discipline must differ from first)*	
HIST 142	Western Civilization II	3
or HIST 157	History of the United States Since 1865 *or other ARTH or HIST course to fulfill the arts and humanities requirement in historical perspective (discipline must differ from other humanities course)*	
SPCH 100	Foundations of Speech Communication	3
or WRTG 390	Writing for Managers *or other course to fulfill the communications/ writing or speech requirement*	
IFSM 304	Ethics in the Information Age *or other course to fulfill the interdisciplinary issues/computing requirement*	3

| ANTH 344 | Cultural Anthropology and Linguistics | 3 |
| *or* SPCH 482 | Intercultural Communication *(recommended elective)* | |

Required Upper-Level Courses for Major (*to be taken after introductory and foundation courses*)

WRTG 393/393X	Technical Writing *(fulfills the communications/upper-level intensive writing requirement)*	3
◆ BIOL 400	Life Science Seminar	3
◆ BMGT 364	Management and Organization Theory	3
◆ COMM 300	Communication Theory	3
◆ NSCI 301	Laboratory Organization and Management	3
or ENMT 322	Occupational Health and Safety	
◆ BMGT 317	Problem Solving for Managers *or other supplemental major course*	3

Internship for Major (*to be taken in the last 30 credits*)

| ◆ Internship through Cooperative Education | 6 |

Minor and/or Elective Courses (*to be taken in the last 60 credits along with required major courses*) 22–30

| **Total credits for BTPS in laboratory management** | **120** |

Legal Studies

Students may seek an academic major in legal studies.

Major in Legal Studies

The legal studies major prepares students for challenging and responsible paralegal work in various legal settings and focuses on fundamental legal knowledge, skills, and ethical principles. The curriculum addresses the organization, function, and processes of the lawmaking institutions in the American legal system, as well as the role of the paralegal in the legal system and the governing rules of legal ethics. It emphasizes legal analysis, legal writing and drafting, legal research, and computer competence in the legal environment.

Objectives

The student who graduates with a major in legal studies will be able to

- Explain the historical development and the basic constitutional principles of the American legal system.
- Compare and contrast the American legal system with other legal systems.
- Discuss issues relevant to the paralegal profession.
- Recognize and discuss ethical considerations involved in the practice of law.
- Explain substantive concepts in selected areas of legal specialization.
- Describe the procedures for settlement of civil, criminal, and administrative disputes.
- Identify ways that computers assist in the legal environment.
- Analyze facts, law, and legal issues.
- Explain legal topics and analysis.
- Complete book-based and computer-assisted legal research tasks.
- Draft writings typically assigned to paralegals in selected areas of legal practice.
- Perform tasks typically assigned to paralegals in selected areas of legal practice.
- Use selected software to accomplish tasks in the legal environment.

Degree Requirements

A degree with a major in legal studies requires the successful completion of 120 credits of coursework, including 33 credits for the major; 41 credits in general education requirements; and 46 credits in the minor, electives, and other degree requirements. At least 17 credits in the major must be earned in upper-level courses (numbered 300 or above).

REQUIREMENTS FOR THE LEGAL STUDIES MAJOR

Coursework for a major in legal studies includes the following:

- Required foundation courses (12 credits): LGST 101, 200, 201, and 204
- General practice procedure and skills course (3 credits): LGST 320, 322, 325, 400, or 401
- General practice substantive law course (3 credits): LGST 312, 315, 316, 340, or 442
- Procedure and skills courses (6 credits): Chosen from any general practice procedure and skills courses and LGST 327, 330, 360, 363A, 370, 425, 486A, and 486B
- Substantive law courses (6 credits): Chosen from any general practice substantive law courses and LGST 335, 343, 411, 415, 420, 432, 434, 445, and 450
- Supplemental major course (3 credits): Chosen from any LGST courses; CCJS 432 and 453; COMM 400; FSCN 412; and GVPT 399B, 402, and 434

Note: A maximum of 6 credits in 1-credit LGST courses may be applied to the major and used in any category except the foundation and general practice coursework.

RECOMMENDED SEQUENCE

The following course sequence will fulfill all the requirements for the BS in legal studies. Coursework for the major is indicated by ◆. Since some recommended courses fulfill more than one requirement, substituting courses for those listed may make it necessary to take additional courses to meet degree requirements. Students should consult an advisor whenever taking advantage of other options. Information on alternate courses (where allowable) to fulfill general education requirements (in communications, arts and humanities, behavioral and social sciences, biological and physical sciences, mathematics, and interdisciplinary issues) may be found on p. 8.

Legal Studies Degree Courses		Credits

First Courses *(to be taken within the first 18 credits)*
Note: Placement tests are required for math and writing courses.

EDCP 100	Principles and Strategies of Successful Learning *(strongly recommended as first course)*	3
LIBS 150	Information Literacy and Research Methods	1
WRTG 101/101X	Introduction to Writing	3
MATH 106	Finite Mathematics *or a higher-level math course*	3

Introductory Courses *(to be taken within the first 30 credits)*

PHIL 140	Contemporary Moral Issues	3
or a foreign language course		
	or other ARTH, ARTT, HIST, HUMN, MUSC, PHIL, THET, dance, or literature course to fulfill the arts and humanities requirement	
GVPT 170	American Government *or other ANTH, BEHS, ECON, GEOG, GVPT, PSYC, SOCY, or eligible AASP, CCJS, GERO, or WMST course to fulfill the first behavioral and social sciences requirement*	3
Both BIOL 101	Concepts of Biology	3
and BIOL 102	Laboratory in Biology	1
or BIOL 103	Introduction to Biology *or other course(s) to fulfill the biological and physical sciences lecture and laboratory requirement*	
WRTG 291	Expository and Research Writing *or other course to fulfill the communications/ writing requirement*	3
IFSM 201	Introduction to Computer-Based Systems	3
or CMST 303	Advanced Application Software	
CCJS 100	Introduction to Criminal Justice	3
or SOCY 100	Introduction to Sociology *or other course to fulfill the second behavioral and social sciences requirement (discipline must differ from first)*	

Foundation Courses *(to be taken within the first 60 credits)*

HIST 142	Western Civilization II	3
or HIST 157	History of the United States Since 1865 *or other ARTH or HIST course to fulfill the arts and humanities requirement in historical perspective (discipline must differ from other humanities course)*	

NSCI 100	Introduction to Physical Science	3
or ASTR 100	Introduction to Astronomy *or other course to fulfill the biological and physical sciences lecture requirement*	
SPCH 100	Foundations of Speech Communication	3
or WRTG 390	Writing for Managers *or other course to fulfill the communications/ writing or speech requirement*	
◆ LGST 101	Introduction to Law	3
◆ LGST 200	Techniques of Legal Research	3
ANTH 344	Cultural Anthropology and Linguistics *(recommended elective)*	3
◆ LGST 201	Legal Writing	3
◆ LGST 204	Legal Ethics	3
IFSM 304	Ethics in the Information Age *or other course to fulfill the interdisciplinary issues/computing requirement*	3

Additional Required Courses *(to be taken after introductory and foundation courses)*

WRTG 394/394X	Business Writing *or other course to fulfill the communications/ upper-level intensive writing requirement*	3
◆ LGST 320	Criminal Law and Procedures *or other general practice procedure and skills course for the major*	3
◆ LGST 312	Torts *or other general practice substantive law course for the major*	3
◆ LGST 325	Litigation *or other procedure and skills course for the major*	3
◆ LGST 315	Domestic Relations *or other substantive law course for the major*	3
◆ LGST 322	Evidence *or other procedure and skills course for the major*	3
◆ LGST 316	Estates and Probate *or other substantive law course for the major*	3
◆ LGST 486A or 486B Legal Studies Internship Through Co-op *or other supplemental major course*		3

Minor and/or Elective Courses *(to be taken in the last 60 credits along with required major courses)* — 40

Total credits for BS in legal studies	**120**

Management Studies

Students may seek an academic major in management studies.

Major in Management Studies

The management studies major is based on the premise that many for-profit, nonprofit, and governmental organizations require a knowledge of management principles best gained from a holistic approach to decision making. Using a multidisciplinary approach to management and problem solving, the management studies major prepares students for a variety of management-related careers. The curriculum includes a foundation in business, accounting, economics, statistics, communications, and management theory and focuses on analysis and decision making across a wide spectrum of management activities.

Objectives

The student who graduates with a major in management studies will be able to

- Use a multidisciplinary approach in researching organizational problems, issues, and opportunities.
- Analyze information, solve problems, and make decisions from a holistic, global perspective.
- Apply important management concepts and theories from several disciplines.
- Evaluate various strategies and operations for business, not-for-profit, and governmental organizations to determine the best approach.
- Examine the global dimensions involved in managing business, not-for-profit, and governmental organizations.
- Analyze global competition and competitive strategies.
- Assess important trends in international ventures, marketing, financing, and human resource management.
- Integrate the emerging online marketplace into overall organizational strategies.
- Assess the significance of a multicultural, multinational organization.
- Apply appropriate information technology to analyze problems and issues, develop business research, report key data, and recommend management strategy and action plans.
- Describe the history and development of theories and concepts in management and related fields (such as accounting, economics, statistics, finance, marketing, human resource management, business law, and strategic management) and their application to various management situations.

- Develop effective written and oral communication consistent with the management and professional environment.
- Evaluate ethical, social, civic, cultural, and political issues as they relate to organizational management, operations, human resources and human factors, information systems, governmental regulation, and domestic and international ventures.

Degree Requirements

A degree with a major in management studies requires the successful completion of 120 credits of coursework, including 36 credits for the major; 41 credits in general education requirements; and 43 credits in the minor, electives, and other degree requirements. At least 18 credits in the major must be earned in upper-level courses (numbered 300 or above).

REQUIREMENTS FOR THE MANAGEMENT STUDIES MAJOR

Coursework for a major in management studies includes the following:

- Required foundation courses (12 credits): BMGT 110 (or prior business experience and an additional supplemental course), ACCT 220, ECON 201 (or 203), and STAT 230
- Required core courses (6 credits): BMGT 364 and HRMN 302
- Supplemental major courses (18 credits): Any ACCT, BMGT, ENMT, FINC, FSCN, HRMN, MGST, and MRKT courses
- Required related course (3 credits), which may be applied anywhere in the degree: ACCT 326 or IFSM 300

RECOMMENDED SEQUENCE

The following course sequence will fulfill all the requirements for the BS in management studies. Coursework for the major is indicated by ◆. Since some recommended courses fulfill more than one requirement, substituting courses for those listed may make it necessary to take additional courses to meet degree requirements. Students should consult an advisor whenever taking advantage of other options. Information on alternate courses (where allowable) to fulfill general education requirements (in communications, arts and humanities, behavioral and social sciences, biological and physical sciences, mathematics, and interdisciplinary issues) may be found on p. 8.

Management Studies Degree Courses		Credits
First Courses *(to be taken within the first 18 credits)*		
Note: Placement tests are required for math and writing courses.		
EDCP 100	Principles and Strategies of Successful Learning *(strongly recommended as first course)*	3
LIBS 150	Information Literacy and Research Methods	1
WRTG 101/101X	Introduction to Writing	3
MATH 106	Finite Mathematics *or a higher-level math course*	3

◆ BMGT 110   Introduction to Business and Management   3
(students with business experience should substitute a supplemental major course in the last 60 credits of study)

Introductory Courses *(to be taken within the first 30 credits)*

GVPT 170   American Government   3
or other ANTH, BEHS, ECON, GEOG, GVPT, PSYC, SOCY, or eligible AASP, CCJS, GERO, or WMST course to fulfill the first behavioral and social sciences requirement

NSCI 100   Introduction to Physical Science   3
and NSCI 101   Physical Science Laboratory   1
or other course(s) to fulfill the biological and physical sciences lecture and laboratory requirement

◆ ECON 201   Principles of Macroeconomics   3
or ECON 203   Principles of Microeconomics

WRTG 291   Expository and Research Writing   3
or other course to fulfill the communications/ writing requirement

IFSM 201   Introduction to Computer-Based Systems   3
or CMST 303   Advanced Application Software

PHIL 140   Contemporary Moral Issues   3
or a foreign language course
or other ARTH, ARTT, HIST, HUMN, MUSC, PHIL, THET, dance, or literature course to fulfill the arts and humanities requirement

Foundation Courses *(to be taken within the first 60 credits)*

◆ STAT 230   Business Statistics   3
or STAT 200   Introduction to Statistics

◆ ACCT 220   Principles of Accounting I   3

PSYC 100   Introduction to Psychology   3
or SOCY 100   Introduction to Sociology
or other course to fulfill the second behavioral and social sciences requirement (discipline must differ from first)

BIOL 101   Concepts of Biology   3
or ASTR 100   Introduction to Astronomy
or other course to fulfill the biological and physical sciences lecture requirement

HIST 142   Western Civilization II   3
or HIST 157   History of the United States Since 1865
or other ARTH or HIST course to fulfill the arts and humanities requirement in historical perspective (discipline must differ from other humanities course)

SPCH 100   Foundations of Speech Communication   3
or WRTG 390   Writing for Managers
or other course to fulfill the communications/ writing or speech requirement

IFSM 300   Information Systems in Organizations   3
or ACCT 326   Accounting Information Systems
(related requirement for the major; also fulfills the interdisciplinary issues/computing requirement; students should note prerequisites)

◆ BMGT 364   Management and Organization Theory   3

Additional Required Courses *(to be taken after introductory and foundation courses)*

WRTG 394/394X   Business Writing   3
or other course to fulfill the communications/ upper-level intensive writing requirement

◆ HRMN 302   Organizational Communication   3

◆ MRKT 310   Marketing Principles and Organization   3
or other supplemental major course

◆ FINC 330   Business Finance   3
or other supplemental major course

◆ HRMN 300   Human Resource Management   3
or other supplemental major course

◆ BMGT 392   Global Business Management   3
or other supplemental major course

◆ BMGT 496   Business Ethics   3
or other supplemental major course

◆ BMGT 495   Strategic Management   3
or other supplemental major course

Minor and Elective Courses *(to be taken in the last 60 credits along with required major courses)*   40

Total credits for BS in management studies   **120**

Marketing

Students may seek either an academic major or minor in marketing.

Major in Marketing

The marketing major develops well-rounded individuals with the skills required of today's marketing professionals and the business acumen to function in the global business environment. The curriculum provides a balanced course of study that exposes students to a common body of knowledge and leads them to understand marketing processes and situations, think independently, communicate effectively, and appreciate their own and other cultures. Marketing graduates should be well positioned to achieve increasingly higher levels of marketing management in corporations, marketing agencies, or entrepreneurial endeavors.

Objectives

The student who graduates with a major in marketing will be able to

- Critically evaluate marketing situations and make informed marketing decisions.
- Identify information needs critical to the practice of marketing and articulate questions, gain access to relevant resources, evaluate and organize information sources, and integrate new information into the marketing decision-making process.
- Explain the eight universal marketing processes for consumer and organizational markets: (1) environmental scanning and analysis; (2) marketing research and analysis; (3) segmentation, targeting, and positioning; (4) product development and differentiation; (5) valuation and pricing; (6) channel and value-chain management; (7) integrated marketing communication; and (8) relationship building.
- Explain the significance of global markets and the application of the eight universal marketing processes to develop global marketing plans.
- Trace the historic evolution of the marketing discipline and how marketing has contributed to the political, economic, and legal environments of today's global society.
- Develop competency in the technological applications used by the marketing profession to enhance the eight universal marketing processes.
- Describe the complex nature of corporate ethics and the social responsibility of organizations in the conduct of marketing activities, as well as the personal responsibility to understand other cultures and negotiate different perspectives.
- Examine the benefits and consequences of marketing activities on the physical environment and on the lives of others.
- Develop effective written and oral communications consistent with the professional marketing environment.
- Develop the leadership skills necessary to function as a senior staff member in a marketing department or marketing agency.

Degree Requirements

A degree with a major in marketing requires the successful completion of 120 credits of coursework, including 36 credits for the major; 41 credits in general education requirements; and 43 credits in the minor, electives, and other degree requirements. At least 18 credits in the major must be earned in upper-level courses (numbered 300 or above).

REQUIREMENTS FOR THE MARKETING MAJOR

Coursework for a major in marketing includes the following:

- Required business courses (15 credits): ACCT 221 (or 301); BMGT 364, 380, and 496; and STAT 230
- Required marketing courses (12 credits): MRKT 310, 410, 412, and 454
- Supplemental major courses (6 credits): Any MRKT courses
- Required capstone course (3 credits): MRKT 495
- Required related courses (9 credits), which may be applied anywhere in the degree: ACCT 326 (or IFSM 300) and ECON 201 and 203

RECOMMENDED SEQUENCE

The following course sequence will fulfill all the requirements for the BS in marketing. Coursework for the major is indicated by ◆. Since some recommended courses fulfill more than one requirement, substituting courses for those listed may make it necessary to take additional courses to meet degree requirements. Students should consult an advisor whenever taking advantage of other options. Information on alternate courses (where allowable) to fulfill general education requirements (in communications, arts and humanities, behavioral and social sciences, biological and physical sciences, mathematics, and interdisciplinary issues) may be found on p. 8.

Marketing Degree Courses		Credits
First Courses *(to be taken within the first 18 credits)*		
Note: Placement tests are required for math and writing courses.		
EDCP 100	Principles and Strategies of Successful Learning *(strongly recommended as first course)*	3
LIBS 150	Information Literacy and Research Methods	1
WRTG 101/101X	Introduction to Writing	3
MATH 106	Finite Mathematics *or a higher-level math course*	3
BMGT 110	Introduction to Business and Management *(strongly recommended elective for students with no prior business experience)*	3

Introductory Courses *(to be taken within the first 30 credits)*

ECON 201	Principles of Macroeconomics *(related requirement for the major; also fulfills the first behavioral and social sciences requirement)*	3
NSCI 100	Introduction to Physical Science	3
and NSCI 101	Physical Science Laboratory *or other course(s) to fulfill the biological and physical sciences lecture and laboratory requirement*	1
WRTG 291	Expository and Research Writing *or other course to fulfill the communications/ writing requirement*	3
IFSM 201	Introduction to Computer-Based Systems	3
or CMST 303	Advanced Application Software	
◆ STAT 230	Business Statistics	3
PHIL 140	Contemporary Moral Issues	3
or a foreign language course	*or other ARTH, ARTT, HIST, HUMN, MUSC, PHIL, THET, dance, or literature course to fulfill the arts and humanities requirement*	

Foundation Courses *(to be taken within the first 60 credits)*

PSYC 100	Introduction to Psychology	3
or SOCY 100	Introduction to Sociology *or other course to fulfill the second behavioral and social sciences requirement (discipline must differ from first)*	
BIOL 101	Concepts of Biology	3
or ASTR 100	Introduction to Astronomy *or other course to fulfill the biological and physical sciences lecture requirement*	
HIST 142	Western Civilization II	3
or HIST 157	History of the United States Since 1865 *or other ARTH or HIST course to fulfill the arts and humanities requirement in historical perspective (discipline must differ from other humanities course)*	
ECON 203	Principles of Microeconomics *(related requirement for the major)*	3
◆ ACCT 301	Accounting for Nonaccounting Majors	3
or ACCT 221	Principles of Accounting II *(students should note prerequisite)*	
SPCH 100	Foundations of Speech Communication	3
or WRTG 390	Writing for Managers *or other course to fulfill the communications/ writing or speech requirement*	
◆ BMGT 364	Management and Organization Theory	3
IFSM 300	Information Systems in Organizations	3
or ACCT 326	Accounting Information Systems *(related requirement for the major; fulfills the interdisciplinary issues/computing requirement; students should note prerequisite)*	
◆ MRKT 310	Marketing Principles and Organization	3

Additional Required Courses *(to be taken after introductory and foundation courses)*

WRTG 394/394X	Business Writing *or other course to fulfill the communications/ upper-level intensive writing requirement*	3
◆ BMGT 380	Business Law I	3
◆ MRKT 395	Customer Relationship Management *or other supplemental major course*	3
◆ MRKT 354	Integrated Marketing Communications *or other supplemental major course*	3
◆ MRKT 410	Consumer Behavior	3
◆ MRKT 454	Global Marketing	3
◆ MRKT 412	Marketing Research Applications	3
◆ BMGT 496	Business Ethics	3

Capstone Course for Major *(to be taken in the last 15 credits)*

◆ MRKT 495	Marketing Policies and Strategies	3

Minor and/or Elective Courses *(to be taken in the last 60 credits along with required major courses)* — 34

Total credits for BS in marketing	**120**

Minor in Marketing

The marketing minor complements the skills the student gains in his or her major discipline by enhancing the knowledge and skills related to marketing situations and processes and the emerging global marketplace.

Objectives

The student who graduates with a minor in marketing will be able to

- Explain the eight universal marketing processes for consumer and organizational markets: (1) environmental scanning and analysis; (2) marketing research and analysis; (3) segmentation, targeting, and positioning; (4) product development and differentiation; (5) valuation and pricing; (6) channel and value-chain management; (7) integrated marketing communication; and (8) relationship building.
- Describe the complexities of global markets and how the eight universal marketing processes apply to global marketing.
- Develop basic skills in identifying, gaining access to, and evaluating relevant resources and integrating new information into the marketing decision-making process.
- Develop basic skills in the technological applications used by the marketing profession to enhance the eight universal marketing processes.
- Develop effective written and oral communications consistent with the professional marketing environment.

Requirements for the Minor

A minor in marketing requires the completion of 15 credits of coursework in marketing. All MRKT courses apply. It is recommended that students take MRKT 310 as the first course in the minor (if they have not already applied the course toward other degree requirements).

Courses may not duplicate those used to satisfy requirements for the major. At least 9 credits must be earned in upper-level courses (numbered 300 or above). Prerequisites apply for all courses.

For a listing of all the requirements for the bachelor's degree, students should refer to their major and pp. 8–9.

Mathematical Sciences

Students may seek an academic minor in mathematical sciences.

Minor in Mathematical Sciences

The mathematical sciences minor complements the skills the student gains in his or her major discipline by developing skills in solving mathematical problems and addressing complex and technical materials and by providing a mathematical background to support study in other areas, such as business and management, computer and information technology, and the biological and social sciences.

Objectives

The student who graduates with a minor in mathematical sciences will be able to
- Understand and analyze problems that need mathematical analysis.
- Use appropriate tools and software in the formulation and generation of solutions to problems.
- Demonstrate knowledge of content in diverse areas of mathematics and related fields.
- Translate real-world problems into mathematical models and demonstrate the application of mathematics in solving those problems.
- Demonstrate proficiency in written assignments and oral presentations.

Requirements for the Minor

A minor in mathematical sciences requires the completion of 17 credits of coursework in mathematics. All MATH courses numbered 130 or above apply. Courses may not duplicate those used to satisfy requirements for the major. At least 6 credits must

be earned in upper-level courses (numbered 300 or above). Prerequisites apply for all courses.

For a listing of all the requirements for the bachelor's degree, students should refer to their major and pp. 8–9.

Microbiology

Students may seek an academic minor in microbiology.

Minor in Microbiology

The microbiology minor complements the skills the student gains in his or her major discipline by providing a laboratory-based approach to the study of microorganisms, with applications to biotechnology, molecular and cellular biology, research and development, and public health.

Objectives

The student who graduates with a minor in microbiology will be able to
- Explain the basic taxonomy, structure, physiology, and ecology of bacteria, fungi, and viruses.
- Explain the defenses provided by the immune system against infection.
- Perform standard laboratory procedures employed in medical, industrial, and research work with microorganisms.
- Apply basic knowledge of microorganisms to problems encountered in medicine, public health, and biotechnology.

Requirements for the Minor

A minor in microbiology requires the completion of 15 credits of coursework in microbiology, drawn from various disciplines as appropriate.

Students must take one course from the following:

BIOL 230	General Microbiology
BIOL 331	Concepts in Microbiology
BIOL 430–439	Advanced microbiology series

Students may choose the remaining courses from those above and the following:

BIOL 220	Human Genetics
BIOL 222	Principles of Genetics
BIOL 301	Human Health and Disease
BIOL 305	The Biology of AIDS
BIOL 320	Forensic Biology
BIOL 330–339	Applied microbiology series
BIOL 350	Molecular and Cellular Biology

BIOL 356   Molecular Biology Laboratory
BIOL 400   Life Science Seminar
BIOL 486A or 486B   Internship in Life Science Through Co-op

Courses may not duplicate those used to satisfy requirements for the major. At least 9 credits must be earned in upper-level courses (numbered 300 or above). Prerequisites apply for all courses.

For a listing of all the requirements for the bachelor's degree, students should refer to their major and pp. 8–9.

Natural Science

Students may seek an academic minor in natural science.

Minor in Natural Science

The natural science minor complements the skills the student gains in his or her major by providing an underlying scientific basis upon which to build a career in natural science, life science, physical science, and the allied health fields, as well as bioinformatics, environmental management, science journalism, and science education.

Objectives

The student who graduates with a minor in natural science will be able to
- Understand and articulate basic scientific principles and concepts.
- Perform standard laboratory procedures appropriate to selected scientific fields.
- Apply basic scientific knowledge to problems encountered in medicine, public health, and other science-related fields.

Requirements for the Minor

A minor in natural science requires the completion of 17 credits of coursework in natural science, chosen from any courses in astronomy, biology, chemistry, geology, natural science, and physics. Courses may not duplicate those used to satisfy requirements for the major. At least 9 credits must be earned in upper-level courses (numbered 300 or above). Prerequisites apply for all courses.

For a listing of all the requirements for the bachelor's degree, students should refer to their major and pp. 8–9.

Philosophy

Students may seek an academic minor in philosophy.

Minor in Philosophy

The philosophy minor complements the skills the student gains in his or her major discipline by providing a study of the relationships between personal opinions and real-world issues faced by members of a pluralistic, open society.

Objectives

The student who graduates with a minor in philosophy will be able to
- Demonstrate practical skills in critical thinking.
- Apply analytical skills to academic areas or real-life or professional activities.
- Explain the relationship between thought, belief, and action as an individual and as a member of society.
- Demonstrate familiarity with the history of philosophy and selected areas of philosophy.

Requirements for the Minor

A minor in philosophy requires the completion of 15 credits of coursework in philosophy. All PHIL courses apply. It is recommended that students take PHIL 140 and a course in critical thinking or logic, such as PHIL 110 or 170 (if they have not already applied the courses toward other degree requirements).

Courses may not duplicate those used to satisfy requirements for the major. At least 9 credits must be earned in upper-level courses (numbered 300 or above). Prerequisites apply for all courses.

For a listing of all the requirements for the bachelor's degree, students should refer to their major and pp. 8–9.

Political Science

Students may seek an academic major or minor in political science.

Major in Political Science

The major in political science offers systematic study of politics, including the way people are governed and govern themselves in a wide variety of settings. The curriculum focuses on fundamental principles, enduring issues of politics, forms of government, public policy, public law, and public administration from both domestic and international perspectives. It explores political, cultural, and philosophical influences on public policy and policy making. By enabling students to understand the role of government at local, state, and national levels in domestic and foreign settings, the program prepares graduates to become more effective global citizens as well as preparing them to enter or advance careers in government service, private corporations, nonprofit organizations, or advanced study in law, business, journalism, or graduate school.

Objectives

The student who graduates with a major in political science will be able to

- Explain political theories and the forms and structures of government and discuss their impact upon the political process, policy development, and comparative and international politics.
- Discuss how public policy shapes a society's approach to such issues as national security, health, education, wealth distribution, and the environment.
- Compare and contrast public decision making and its implementation in domestic and foreign settings.
- Describe how various governmental and nongovernmental organizations contribute to global politics.
- Analyze recurrent patterns of international political conflict, identify underlying political issues, and suggest alternative resolutions.
- Identify techniques of conflict resolution (including negotiation, compromise, and accommodation) that are appropriate at various points along the policy continuum.
- Apply critical-thinking and analytic and effective communication skills (oral and written) in discussing and resolving political issues.
- Apply effectively a variety of approaches and methodologies to the analysis of political, administrative, and policy problems.
- Utilize information technology effectively for the research of political literature.

Degree Requirements

A degree with a major in political science requires the successful completion of 120 credits of coursework, including 30 credits for the major; 41 credits in general education requirements; and 49 credits in the minor, electives, and other degree requirements. At least 15 credits in the major must be earned in upper-level courses (numbered 300 or above).

REQUIREMENTS FOR THE POLITICAL SCIENCE MAJOR

Coursework for a major in political science includes the following:

- Required foundation course (3 credits): GVPT 100
- Core courses (15 credits): GVPT 101 (or 444), 170 (or 475), 200 (or 401), and 280 and STAT 200 (Note minimum requirements for upper-level coursework.)
- Supplemental major courses (12 credits): Any upper-level GVPT courses

RECOMMENDED SEQUENCE

The following course sequence will fulfill all the requirements for the BS in political science. Coursework for the major is indicated by ◆. Since some recommended courses fulfill more than one requirement, substituting courses for those listed may make it necessary to take additional courses to meet degree requirements. Students should consult an advisor whenever taking advantage of other options. Information on alternate courses (where allowable) to fulfill general education requirements (in communications, arts and humanities, behavioral and social sciences, biological and physical sciences, mathematics, and interdisciplinary issues) may be found on p. 8.

Political Science Degree Courses		Credits
First Courses *(to be taken within the first 18 credits)*		
Note: Placement tests are required for math and writing courses.		
EDCP 100	Principles and Strategies of Successful Learning *(strongly recommended as first course)*	3
LIBS 150	Information Literacy and Research Methods	1
WRTG 101/101X	Introduction to Writing	3
MATH 106	Finite Mathematics *or a higher-level math course*	3
◆ GVPT 100	Introduction to Political Science	3
Introductory Courses *(to be taken within the first 30 credits)*		
SOCY 100	Introduction to Sociology *or other ANTH, BEHS, ECON, GEOG, GVPT, PSYC, SOCY, or eligible AASP, CCJS, GERO, or WMST course to fulfill the first behavioral and social sciences requirement*	3
Both BIOL 101	Concepts of Biology	3
and BIOL 102	Laboratory in Biology	1
or BIOL 103	Introduction to Biology *or other course(s) to fulfill the biological and physical sciences lecture and laboratory requirement*	

WRTG 291	Expository and Research Writing	3
	or other course to fulfill the communications/ writing requirement	
IFSM 201	Introduction to Computer-Based Systems	3
or CMST 303	Advanced Application Software	
PHIL 140	Contemporary Moral Issues	3
or a foreign language course		
	or other ARTH, ARTT, HIST, HUMN, MUSC, PHIL, THET, dance, or literature course to fulfill the arts and humanities requirement	
◆ GVPT 280	Comparative Politics and Government	3

Foundation Courses *(to be taken within the first 60 credits)*

HIST 142	Western Civilization II	3
or HIST 157	History of the United States Since 1865	
	or other ARTH or HIST course to fulfill the arts and humanities requirement in historical perspective (discipline must differ from other humanities course)	
◆ GVPT 101	Introduction to Political Theory	3
or GVPT 444	American Political Theory	
PSYC 100	Introduction to Psychology	3
	or other course to fulfill the second behavioral and social sciences requirement (discipline must differ from first)	
NSCI 100	Introduction to Physical Science	3
or ASTR 100	Introduction to Astronomy	
	or other course to fulfill the biological and physical sciences lecture requirement	
◆ GVPT 200	International Political Relations	3
or GVPT 401	Problems of World Politics	
SPCH 100	Foundations of Speech Communication	3
or COMM 380	Language in Social Contexts	
	or other course to fulfill the communications/ writing or speech requirement	
◆ STAT 200	Introduction to Statistics	3
IFSM 304	Ethics in the Information Age	3
	or other course to fulfill the interdisciplinary issues/computing requirement	

Additional Required Courses *(to be taken after introductory and foundation courses)*

WRTG 391/391X	Advanced Expository and Research Writing	3
	or other course to fulfill the communications/ upper-level intensive writing requirement	
◆ GVPT 475	The Presidency and the Executive Branch	3
or GVPT 170	American Government	
◆ Any upper-level GVPT course		3
	(supplemental major course)	
◆ A supplemental major course		3
◆ A supplemental major course		3
◆ A supplemental major course		3

Minor and/or Elective Courses *(to be taken in the last 60 credits along with required major courses)* 46

| **Total credits for BS in political science** | **120** |

Minor in Political Science

The political science minor complements the skills the student gains in his or her major discipline by providing systematic study of politics and government. It exposes the student to the basic concepts, theories, policies, and the role of government at local, state, and national levels in domestic and foreign settings.

Objectives

The student who graduates with a minor in political science will be able to

- Explain the scope and concepts of political science, political theories, the forms and structure of government, and their impact on the political process from a comparative and international perspective.
- Analyze recurrent patterns of international political conflict, identify underlying foreign policy issues, and suggest alternative resolutions.
- Identify techniques of conflict resolution (including negotiation, compromise, and accommodation) that are appropriate at various points along the policy continuum.
- Demonstrate competency in the application of social justice through effective political participation.
- Apply critical-thinking and analytic and effective communication skills in oral and written work when discussing and resolving political issues.

Requirements for the Minor

A minor in political science requires the completion of 15 credits of coursework in government and politics. All GVPT courses apply. It is recommended that students take GVPT 100, 101, or 170 as the first course in the minor (if they have not already applied the course toward other degree requirements).

Courses may not duplicate those used to satisfy requirements for the major. At least 9 credits must be earned in upper-level courses (numbered 300 or above). Prerequisites apply for all courses.

For a list of all the requirements for the bachelor's degree, students should refer to their major and pp. 8–9.

Psychology

Students may seek either an academic major or minor in psychology.

Major in Psychology

The psychology major produces graduates with a knowledge base of theory and research in the psychological sciences and the ability to use the principles of psychology to help improve human, animal, and environmental welfare. The curriculum applies psychological knowledge to nonscientific fields and the workplace and promotes multicultural and multinational awareness. This major also introduces students to the basis of collaborative and professional relationships within psychology and identifies the foundations and delivery systems of the mental health profession.

Objectives

The student who graduates with a major in psychology will be able to

- Recognize how knowledge of psychology can facilitate career advancement and help people improve their interpersonal relationships across cultural and national boundaries.
- Examine psychology in a broad context of interdisciplinary approaches that cover cultural diversity, historical and political perspectives, and current issues.
- Practice critical observation, experimentation, and empirical reasoning in psychology theory and research.
- Apply theory and research in psychology to practical situations and problems.
- Effectively communicate psychological concepts and critical thinking in oral and written form (such as research presentations and papers).
- Conduct scientific research, including accessing technical information, writing papers and presenting research, and using computers in psychology.

Degree Requirements

A degree with a major in psychology requires the successful completion of 120 credits of coursework, including 33 credits for the major; 41 credits in general education requirements; and 46 credits in the minor, electives, and other degree requirements. At least 17 credits in the major must be earned in upper-level courses (numbered 300 or above).

REQUIREMENTS FOR THE PSYCHOLOGY MAJOR

Coursework for a major in psychology includes the following:

- Required foundation courses (9 credits): PSYC 100 and 305 and STAT 225
- Natural science psychology courses (6 credits): Chosen from BIOL 362 and PSYC 301, 310, 315, 341, 391, and 441
- Social science psychology courses (6 credits): Chosen from PSYC 321, 345, 351, 354, 355, 357, 361, and 424
- Clinical science psychology courses (6 credits): Chosen from PSYC 353, 432, 435, 436, and 437
- Supplemental major courses (6 credits): Any PSYC courses (but no more than three 1-credit courses)

RECOMMENDED SEQUENCE

The following course sequence will fulfill all the requirements for the BS in psychology. Coursework for the major is indicated by ◆. Since some recommended courses fulfill more than one requirement, substituting courses for those listed may make it necessary to take additional courses to meet degree requirements. Students should consult an advisor whenever taking advantage of other options. Information on alternate courses (where allowable) to fulfill general education requirements (in communications, arts and humanities, behavioral and social sciences, biological and physical sciences, mathematics, and interdisciplinary issues) may be found on p. 8.

Psychology Degree Courses		Credits

First Courses *(to be taken within the first 18 credits)*
Note: Placement tests are required for math and writing courses.

EDCP 100	Principles and Strategies of Successful Learning *(strongly recommended as first course)*	3
LIBS 150	Information Literacy and Research Methods	1
WRTG 101/101X	Introduction to Writing	3
MATH 106	Finite Mathematics *or a higher-level math course*	3

Introductory Courses *(to be taken within the first 30 credits)*

PHIL 140	Contemporary Moral Issues	3
or a foreign language course		
	or other ARTH, ARTT, HIST, HUMN, MUSC, PHIL, THET, dance, or literature course to fulfill the arts and humanities requirement	
Both BIOL 101	Concepts of Biology	3
and BIOL 102	Laboratory in Biology	1
or BIOL 103	Introduction to Biology *or other course(s) to fulfill the biological and physical sciences lecture and laboratory requirement*	
WRTG 291	Expository and Research Writing *or other course to fulfill the communications/ writing requirement*	3
◆ PSYC 100	Introduction to Psychology	3
IFSM 201	Introduction to Computer-Based Systems	3
or CMST 303	Advanced Application Software	

SOCY 100	Introduction to Sociology	3
	or other ANTH, BEHS, ECON, GEOG,	
	GVPT, PSYC, SOCY, or eligible AASP, CCJS,	
	GERO, or WMST course to fulfill the first	
	behavioral and social sciences requirement	
◆ STAT 225	Introduction to Statistical Methods	
	in Psychology	3
or STAT 200	Introduction to Statistics	

Foundation Courses *(to be taken within the first 60 credits)*

GVPT 170	American Government	3
or GERO 100	Introduction to Gerontology	
	or other course to fulfill the second behavioral	
	and social sciences requirement (discipline	
	must differ from first)	
NSCI 100	Introduction to Physical Science	3
or ASTR 100	Introduction to Astronomy	
	or other course to fulfill the biological and	
	physical sciences lecture requirement	
HIST 142	Western Civilization II	3
or HIST 157	History of the United States Since 1865	
	or other ARTH or HIST course to fulfill the arts	
	and humanities requirement in historical perspective	
	(discipline must differ from other humanities course)	
IFSM 304	Ethics in the Information Age	3
	or other course to fulfill the interdisciplinary	
	issues/computing requirement	
ANTH 344	Cultural Anthropology and Linguistics	3
	(recommended elective)	
SPCH 100	Foundations of Speech Communication	3
or COMM 380	Language in Social Contexts	
	or other course to fulfill the communications/	
	writing or speech requirement	
◆ PSYC 305	Research Methods in Psychology	3

Additional Required Courses *(to be taken after introductory and foundation courses)*

WRTG 391/391X	Advanced Expository and Research Writing	3
	or other course to fulfill the communications/	
	upper-level intensive writing requirement	
◆ PSYC 321	Social Psychology	3
	or other social science psychology	
	course for the major	
◆ PSYC 301	Biological Basis of Behavior	3
	or other natural science psychology	
	course for the major	
◆ PSYC 353	Adult Psychopathology	3
	or other clinical science psychology	
	course for the major	
◆ PSYC 354	Cross-Cultural Psychology	3
	or other social science psychology	
	course for the major	
◆ PSYC 310	Sensation and Perception	3
	or other natural science psychology	
	course for the major	

◆ PSYC 432	Introduction to Counseling Psychology	3
	or other clinical science psychology	
	course for the major	
◆ PSYC 355	Child Psychology	3
	or other supplemental major course	
◆ PSYC 341	Introduction to Memory and Cognition	3
	or other supplemental major course	

Minor and/or Elective Courses *(to be taken in the last 60 credits along with required major courses)* 40

Recommended Electives

PSYC 415	History of Psychology	
	(for students who plan to go on to graduate school)	
PSYC 451	Principles of Psychological Assessment	

Total credits for BS in psychology **120**

Minor in Psychology

The psychology minor complements the skills the student gains in his or her major discipline by investigating the nature of mind and behavior, including the biological basis of behavior, perception, memory and cognition, the influence of environmental and social forces on the individual, personality, lifespan development and adjustment, research methods, and statistical analysis.

Objectives

A student who graduates with a minor in psychology will be able to

- Recognize how knowledge of psychology can facilitate career advancement and help people improve their interpersonal relationships across cultural and national boundaries.
- Demonstrate knowledge of the origins and development of the discipline of psychology and explain some of the issues of world diversity in behavioral research.
- Use critical observation, experimentation, empirical reasoning, and appropriate information technology and information resources.
- Apply psychological theory and research to practical situations and problems.
- Think critically and communicate an understanding of psychology.
- Access databases for psychological literature and identify psychological resources online.

Requirements for the Minor

A minor in psychology requires the completion of 15 credits of coursework in psychology.

Students must choose one of the following foundation courses:

PSYC 100	Introduction to Psychology
PSYC 305	Research Methods in Psychology
STAT 225	Introduction to Statistical Methods in Psychology

They must also choose one natural science psychology course, one social science psychology course, and one clinical science psychology course from those listed under the requirements for the major. The remaining course may be chosen from any PSYC course.

Courses may not duplicate those used to satisfy requirements for the major. At least 9 credits must be earned in upper-level courses (numbered 300 or above). Prerequisites apply for all courses.

For a listing of all the requirements for the bachelor's degree, students should refer to their major and pp. 8–9.

Social Science

Students may seek an academic major in social science.

Major in Social Science

The social science major is interdisciplinary and provides breadth of knowledge through coursework in such areas as gerontology, government and politics, and sociology. It also offers depth by giving students the opportunity to select core courses from one of these social science areas.

Objectives

The student who graduates with a major in social science will be able to

- Formulate a description of the roles of the different social science disciplines in understanding social reality, addressing social issues, and enhancing human welfare.
- Identify similarities and differences among the social science disciplines.
- Formulate an integrated analysis of social issues and/or social reality by synthesizing concepts and research methods from the different social science disciplines that relate to the particular social reality or social issue under investigation.
- Communicate social science concepts and terminology effectively.
- Apply micro and macro levels of analysis and an integrated, interdisciplinary perspective to an investigation of problems in the social sciences.

- Critically analyze social science issues within larger historical and global contexts.
- Articulate the policy implications of social science research and theory for policy and programs.
- Use information technology to access and retrieve social science literature.

Degree Requirements

A degree with a major in social science requires the successful completion of 120 credits of coursework, including 30 credits for the major; 41 credits in general education requirements; and 49 credits in the minor, electives, and other degree requirements. At least 15 credits in the major must be earned in upper-level courses (numbered 300 or above).

REQUIREMENTS FOR THE SOCIAL SCIENCE MAJOR

Coursework for a major in social science includes the following:

- Required statistics course (3 credits): STAT 230 (or 200 or 225)
- Required introductory courses (6 credits): BEHS 210 and SOCY 100
- Foundation course (3 credits): Chosen from CCJS 105, ECON 201 and 203, GEOG 100 and 110, GERO 100, GVPT 100, and PSYC 100
- Core courses (9 credits *in a single area*): Chosen from applicable CCJS courses (350, 360, 454, and 461); any ANTH and SOCY courses; any GVPT courses; any GERO courses; or any PSYC courses (**Note:** Anthropology and sociology are considered to constitute a single area; in all other cases, courses must be chosen from a single discipline.)
- Supplemental major courses (9 credits): Chosen from any ANTH, BEHS, ECON, GERO, GVPT, PSYC, and SOCY courses and CCJS 350, 360, 454, and 461

RECOMMENDED SEQUENCE

The following course sequence will fulfill all the requirements for the BS in social science. Coursework for the major is indicated by ◆. Since some recommended courses fulfill more than one requirement, substituting courses for those listed may make it necessary to take additional courses to meet degree requirements. Students should consult an advisor whenever taking advantage of other options. Information on alternate courses (where allowable) to fulfill general education requirements (in communications, arts and humanities, behavioral and social sciences, biological and physical sciences, mathematics, and interdisciplinary issues) may be found on p. 8.

Social Science Degree Courses		Credits
First Courses *(to be taken within the first 18 credits)*		
Note: Placement tests are required for math and writing courses.		
EDCP 100	Principles and Strategies of Successful Learning *(strongly recommended as first course)*	3
LIBS 150	Information Literacy and Research Methods	1
WRTG 101/101X	Introduction to Writing	3
MATH 106	Finite Mathematics *or a higher-level math course*	3

Introductory Courses *(to be taken within the first 30 credits)*

Note: General education courses may not be applied to major requirements.

GVPT 170	American Government *or other ANTH, BEHS, ECON, GEOG, GVPT, PSYC, SOCY, or eligible AASP, CCJS, GERO, or WMST course to fulfill the first behavioral and social sciences requirement*	3
Both BIOL 101	Concepts of Biology	3
and BIOL 102	Laboratory in Biology	1
or BIOL 103	Introduction to Biology *or other course(s) to fulfill the biological and physical sciences lecture and laboratory requirement*	
WRTG 291	Expository and Research Writing *or other course to fulfill the communications/ writing requirement*	3
IFSM 201	Introduction to Computer-Based Systems	3
or CMST 303	Advanced Application Software	
PHIL 140	Contemporary Moral Issues	3
or a foreign language course	*or other ARTH, ARTT, HIST, HUMN, MUSC, PHIL, THET, dance, or literature course to fulfill the arts and humanities requirement*	
PSYC 100	Introduction to Psychology *or other course to fulfill the second behavioral and social sciences requirement (discipline must differ from first)*	3
◆ BEHS 210	Introduction to Social and Behavioral Science	3

Foundation Courses *(to be taken within the first 60 credits)*

◆ STAT 230	Business Statistics	3
or STAT 200	Introduction to Statistics	
NSCI 100	Introduction to Physical Science	3
or ASTR 100	Introduction to Astronomy *or other course to fulfill the biological and physical sciences lecture requirement*	
◆ SOCY 100	Introduction to Sociology	3
HIST 142	Western Civilization II	3
or HIST 157	History of the United States Since 1865 *or other ARTH or HIST course to fulfill the arts and humanities requirement in historical perspective (discipline must differ from other humanities course)*	
SPCH 100	Foundations of Speech Communication	3
or COMM 380	Language in Social Contexts *or other course to fulfill the communications/ writing or speech requirement*	
◆ GERO 100	Introduction to Gerontology	3
or ECON 203	Principles of Microeconomics *or other foundation course for the major*	
IFSM 304	Ethics in the Information Age *or other course to fulfill the interdisciplinary issues/computing requirement*	3
ANTH 344	Cultural Anthropology and Linguistics *(recommended elective)*	3

Additional Required Courses *(to be taken after introductory and foundation courses)*

WRTG 391/391X	Advanced Expository and Research Writing *or other course to fulfill the communications/ upper-level intensive writing requirement*	3
◆ A first core course for the major		3
◆ A second core course for the major *(in the same discipline as the first)*		3
◆ A third core course for the major *(in the same discipline as the first and second)*		3
◆ Any ANTH, BEHS, ECON, GERO, GVPT, PSYC, or SOCY course or qualifying CCJS course *(supplemental major course)*		3
◆ A supplemental major course		3
◆ A supplemental major course		3

Minor and/or Elective Courses *(to be taken in the last 60 credits along with required major courses)* — 43

Total credits for BS in social science	**120**

Sociology

Students may seek an academic minor in sociology.

Minor in Sociology

The sociology minor complements the skills the student gains in his or her major discipline by providing a study of contemporary sociological theory and research and applying it to social issues, including globalization, social inequality, diversity, health care, education, family, work, and religion.

Objectives

The student who graduates with a minor in sociology will be able to

- Discuss the role of sociology in understanding societal reality and social issues.
- Critically analyze theoretical orientations in sociology.
- Apply sociological theory and research to define and present alternatives for solving contemporary social problems.
- Communicate sociological concepts and terminology effectively.
- Discuss the relationship between the individual and society from a sociological perspective.
- Discuss micro and macro levels of sociological analysis and their roles in examining social reality.

- Use information technology to access and retrieve sociological literature.
- Apply sociological concepts to understand diversity in American society and the place of American society within a larger global context.

Requirements for the Minor

A minor in sociology requires the completion of 15 credits of coursework in sociology. All SOCY courses apply. Students should take SOCY 100 as the first course in the minor (if they have not already applied the course toward other degree requirements).

Courses may not duplicate those used to satisfy requirements for the major. At least 9 credits must be earned in upper-level courses (numbered 300 or above). Prerequisites apply for all courses.

For a listing of all the requirements for the bachelor's degree, students should refer to their major and pp. 8–9.

Speech Communication

Students may seek an academic minor in speech communication.

Minor in Speech Communication

The minor in speech communication complements the skills the student gains in his or her major discipline by developing communication skills, particularly oral communication, as well as providing a greater understanding of human interaction in a variety of personal and professional contexts.

Objectives

The student who graduates with a minor in speech communication will be able to

- Apply communication theories—including both speech communication and mass communication theories—to various situations and contexts.
- Describe and use effective interaction styles in communication with others.
- Identify and apply effective strategies for creating, editing, and presenting effective messages to different audiences and within different contexts.
- Use tools and technology to gather information, as well as to develop and deliver messages.
- Critically analyze information for creating effective oral or written messages and for evaluating messages.

Requirements for the Minor

A minor in speech communication requires the completion of 15 credits of coursework in speech communication. All SPCH and COMM courses apply, but at least 9 credits must be earned in SPCH courses. It is recommended that students take COMM 300 and SPCH 100 as the first courses for the minor (if they have not already applied the courses toward other degree requirements).

Courses may not duplicate those used to satisfy requirements for the major. At least 9 credits must be earned in upper-level courses (numbered 300 or above). Prerequisites apply for all courses.

Note: Students should have taken SPCH 100 or have comparable public speaking experience before enrolling in courses for the speech communication minor.

For a listing of all the requirements for the bachelor's degree, students should refer to their major and pp. 8–9.

Strategic and Entrepreneurial Management

Students may seek an academic minor in strategic and entrepreneurial management.

Minor in Strategic and Entrepreneurial Management

The strategic and entrepreneurial management minor complements the skills the student gains in his or her major discipline by providing a study of current issues in the effective use of information, the globalization of business, and strategic management and by exploring the mind-set of an innovator and an entrepreneur.

Objectives

The student who graduates with a minor in strategic and entrepreneurial management will be able to

- Apply key concepts and theories in strategic and entrepreneurial management areas.
- Demonstrate knowledge of domestic and global issues that affect the business environment.
- Discuss the major internal and external influences that should be considered in the development of organizational strategy.

- Develop and evaluate the financial resources, promotional activities, and employee recruitment and training programs necessary in beginning a new venture.
- Create a business plan for the new venture or business unit.
- Demonstrate competence in the use of databases, the World Wide Web, and other library resources to retrieve information related to strategic and general management issues.
- Develop effective written and oral communication skills appropriate for the workplace.

Requirements for the Minor

A minor in strategic and entrepreneurial management requires the completion of 15 credits of coursework in strategic and entrepreneurial management, chosen from the following courses:

BMGT 339	Government and Business Contracting
BMGT 364	Management and Organization Theory
BMGT 365	Organizational Leadership
BMGT 392	Global Business Management
BMGT 464	Organizational Behavior
BMGT 495	Strategic Management
BMGT 496	Business Ethics
FINC 310	Entrepreneurship and New Venture Planning
FINC 311	Managing New Ventures
HRMN 302	Organizational Communication

Students are recommended to take BMGT 364 as the first course for the minor (if they have not already applied the course toward other degree requirements).

Courses may not duplicate those used to satisfy requirements for the major. At least 9 credits must be earned in upper-level courses (numbered 300 or above). Prerequisites apply for all courses.

For a listing of all the requirements for the bachelor's degree, students should refer to their major and pp. 8–9.

Women's Studies

Students may seek an academic minor in women's studies.

Minor in Women's Studies

The women's studies minor complements the skills the student gains in his or her major discipline by providing an interdisciplinary study of the history, status, and experiences of women.

Objectives

The student who graduates with a minor in women's studies will be able to

- Examine historical and contemporary contributions by women and existing data about women.
- Discuss some of the scholarly methodologies used in the study of women, gender, and human societies.
- Explain aspects of scholarship and theory on the history, status, contributions, and experiences of women in diverse cultural communities and the significance of gender as a social construct and an analytical category.

Requirements for the Minor

A minor in women's studies requires the completion of 15 credits of coursework in women's studies, chosen from the following courses:

WMST	Any courses
BEHS 220	Diversity Awareness
BEHS 343	Parenting Today
BEHS 453	Domestic Violence
BMGT 312	Women in Business
BMGT 313	Women as Entrepreneurs
BMGT 314	Women as Leaders
ENGL 354	American Women Writers Since 1900
ENGL 358	British Women Writers Since 1900
GERO 311	Women and Aging
GVPT 436	The Legal Status of Women
HIST 375	Modern European Women's History
HIST 376	Women and the Family in America to 1870
HIST 377	Women in America Since 1870
HUMN 442	Contemporary Sexual Ethics
PHIL 343	Sexual Morality
PSYC 334	Psychology of Interpersonal Relationships
PSYC 338	Psychology of Gender
SOCY 325	The Sociology of Gender
SOCY 443	The Family and Society
SOCY 462	Women in the Military
SPCH 324	Communication and Gender

Students are recommended to take WMST 200 as the first course for the minor (if they have not already applied the course toward other degree requirements).

Courses may not duplicate those used to satisfy requirements for the major. At least 9 credits must be earned in upper-level courses (numbered 300 or above). Prerequisites apply for all courses.

For a listing of all the requirements for the bachelor's degree, students should refer to their major and pp. 8–9.

ASSOCIATE OF ARTS DEGREE

The curricula and courses listed below are available only to active-duty military personnel and certain others who conform to special stipulations.

The Associate of Arts degree (AA) requires the completion of a minimum of 60 credits, at least 15 of which must be taken through UMUC. Of these 60 credits, 32 credits must be earned in courses that fulfill the general education requirements listed below. The remaining 28 credits must satisfy the requirements of the curriculum the student has selected.

A grade point average of 2.0 or higher in all courses taken through UMUC is required. A student should complete one associate's degree before applying for another.

General Education Requirements (32 s.h.)

The general education requirements for the associate's degree generally correspond to those for the bachelor's degree (listed on p. 8), with the following exceptions:

• An upper-level intensive writing course is not required for the associate's degree.
• Only the 1-credit course in information literacy and research methods is required to fulfill the interdisciplinary or emerging issues requirement for the associate's degree.

All associate's degree curricula, except for the computer studies curriculum, require students to complete IFSM 201 or CMST 303 (which will be applied to the general education requirement in interdisciplinary or emerging issues/computing for students who continue to the bachelor's degree). MATH 106 or a higher-level mathematics course is required to fulfill the general education requirement in mathematics for the specialized curricula in accounting and business and management.

Curriculum Requirements (28 s.h.)

In addition to the general education requirements, students must take 28 credits of coursework related to their educational goals. They may choose a general curriculum (described at right) or a specialized curriculum with its own particular requirements (detailed on the following pages). Students must earn a grade of C or higher in all core or core-related curriculum courses. For the specialized curricula, at least 9 credits of coursework taken through UMUC must be earned in core or core-related courses for the chosen curriculum. Students who anticipate seeking a bachelor's degree should select courses that will advance that goal.

General Curriculum

The Associate of Arts general curriculum is for adult students who wish to pursue their own educational goals.

REQUIREMENTS FOR THE GENERAL CURRICULUM

In addition to IFSM 201 or CMST 303 (required), students may choose related courses from several disciplines, explore several interests at once, or choose a variety of courses from UMUC's offerings. Students in this program accept responsibility for developing a curriculum that meets their specific objectives. They are encouraged to seek assistance from academic advisors in arranging their curriculum as appropriate to their personal interests and future educational plans.

RECOMMENDED SEQUENCE

The following course sequence will fulfill all the requirements for the AA in general studies. Coursework for the curriculum is indicated by ◆. Since some recommended courses fulfill more than one requirement, substituting courses for those listed may make it necessary to take additional courses to meet degree requirements. Students should consult an advisor whenever taking advantage of other options. Information on alternate courses (where allowable) to fulfill general education requirements (in communications, arts and humanities, behavioral and social sciences, biological and physical sciences, mathematics, and interdisciplinary issues) may be found on p. 8.

General Curriculum Courses		Credits
First Courses *(to be taken within the first 18 credits)*		
Note: Placement tests are required for math and writing courses.		
LIBS 150	Information Literacy and Research Methods	1
WRTG 101/101X	Introduction to Writing	3
MATH 106	Finite Mathematics *or a higher-level math course*	3
Introductory Courses *(to be taken within the first 30 credits)*		
HIST 142	Western Civilization II	3
or HIST 157	History of the United States Since 1865 *or other ARTH or HIST course to fulfill the arts and humanities requirement in historical perspective*	
Both BIOL 101	Concepts of Biology	3
and BIOL 102	Laboratory in Biology	1
or BIOL 103	Introduction to Biology *or other course(s) to fulfill the biological and physical sciences lecture and laboratory requirement*	
WRTG 291	Expository and Research Writing *or other course to fulfill the communications/ writing requirement*	3

GVPT 170	American Government	3
	or other ANTH, BEHS, ECON, GEOG,	
	GVPT, PSYC, SOCY, or eligible AASP, CCJS,	
	GERO, or WMST course to fulfill the first	
	behavioral and social sciences requirement	
◆ IFSM 201	Introduction to Computer-Based Systems	3
or CMST 303	Advanced Application Software	
◆ Curriculum course *(to be selected based on educational and career goals)*		3

Additional Required Courses *(to be taken after first and introductory courses)*

PSYC 100	Introduction to Psychology	3
or SOCY 100	Introduction to Sociology	
	or other course to fulfill the second behavioral	
	and social sciences requirement (discipline	
	must differ from first)	
NSCI 100	Introduction to Physical Science	3
or ASTR 100	Introduction to Astronomy	
	or other course to fulfill the biological and	
	physical sciences lecture requirement	
PHIL 140	Contemporary Moral Issues	3
or a foreign language course		
	or other ARTH, ARTT, HIST, HUMN, MUSC,	
	PHIL, THET, dance, or literature course to fulfill	
	the arts and humanities requirement (discipline	
	must differ from other humanities course)	
SPCH 100	Foundations of Speech Communication	3
or JOUR 201	Writing for the Mass Media	
	or other course to fulfill the communications/	
	writing or speech requirement	
◆ Curriculum course *(to be selected based on educational and career goals)*		3
◆ Curriculum course *(to be selected based on educational and career goals)*		3
◆ Curriculum course *(to be selected based on educational and career goals)*		3

| **Elective Courses** *(to be chosen from any courses to complete the 60 credits for the degree)* | | **13** |

| **Total credits for AA with general curriculum** | | **60** |

Specialized Curricula

The Associate of Arts specialized curricula are for adult students who wish to pursue a specific career or educational goal, often as a basis for further study toward the bachelor's degree. Each of the specialized curricula has its own requirements. In the following curricula, coursework for the individual curriculum is indicated by ◆. Students should take careful note of course prerequisites and recommended course sequences. Curricula may be available only in limited geographic areas.

Accounting Curriculum

REQUIREMENTS FOR THE ACCOUNTING CURRICULUM

Coursework for the accounting curriculum includes the following (students should note prerequisites and other sequencing requirements):

- Required core courses (6 credits): ACCT 220 and 221
- Additional core courses (9 credits): Any ACCT, BMGT, FINC, or MGST courses in accounting or finance (except MGST 140)
- Required computing course (3 credits): IFSM 201 or CMST 303
- Accounting-related courses (9 credits): Chosen from any ACCT and FINC courses; BMGT 110, 364, 380, 381, and 496; CMIS 102A; CMST 340; ECON 201 and 203; IFSM 300; MRKT 310; and STAT 200 (or 230)
- Elective (1 credit): Any course related to interests and goals

RECOMMENDED SEQUENCE

The following course sequence will fulfill all the requirements for the AA in accounting. Since some recommended courses fulfill more than one requirement, substituting courses for those listed may make it necessary to take additional courses to meet degree requirements. Students should consult an advisor whenever taking advantage of other options. Information on alternate courses (where allowable) to fulfill general education requirements (in communications, arts and humanities, behavioral and social sciences, biological and physical sciences, mathematics, and interdisciplinary issues) may be found on p. 8.

Accounting Curriculum Courses		**Credits**

First Courses *(to be taken within the first 18 credits)*
Note: Placement tests are required for math and writing courses.

LIBS 150	Information Literacy and Research Methods	1
WRTG 101/101X	Introduction to Writing	3
MATH 106	Finite Mathematics	3
	or a higher-level math course	
◆ BMGT 110	Introduction to Business and Management	3
	(recommended accounting-related course for	
	the curriculum for students with no prior	
	business experience)	
◆ ACCT 220	Principles of Accounting I	3

Introductory Courses *(to be taken within the first 30 credits)*

◆ ACCT 221	Principles of Accounting II	3
ECON 201	Principles of Macroeconomics	3
or ECON 203	Principles of Microeconomics	
	(required for BS in accounting)	
	or other ANTH, BEHS, ECON, GEOG,	
	GVPT, PSYC, SOCY, or eligible GERO	
	or CCJS course to fulfill the first behavioral	
	and social sciences requirement	

Both BIOL 101	Concepts of Biology	3
and BIOL 102	Laboratory in Biology	1
or BIOL 103	Introduction to Biology *or other course(s) to fulfill the biological and physical sciences lecture and laboratory requirement*	
WRTG 291	Expository and Research Writing *or other course to fulfill the communications/ writing requirement*	3
◆ IFSM 201	Introduction to Computer-Based Systems	3
or CMST 303	Advanced Application Software *(required computing course for the curriculum)*	

Additional Required Courses *(to be taken after first and introductory courses)*

PHIL 140	Contemporary Moral Issues	3
or a foreign language course		
	or other ARTH, ARTT, HIST, HUMN, MUSC, PHIL, THET, dance, or literature course to fulfill the arts and humanities requirement	
PSYC 100	Introduction to Psychology	3
or SOCY 100	Introduction to Sociology *or other course to fulfill the second behavioral and social sciences requirement (discipline must differ from first)*	
NSCI 100	Introduction to Physical Science	3
or ASTR 100	Introduction to Astronomy *or other course to fulfill the biological and physical sciences lecture requirement*	
◆ A core course for the curriculum		3
HIST 142	Western Civilization II	3
or HIST 157	History of the United States Since 1865 *or other ARTH or HIST course to fulfill the arts and humanities requirement in historical perspective (discipline must differ from other humanities course)*	
SPCH 100	Foundations of Speech Communication	3
or WRTG 390	Writing for Managers *or other course to fulfill the communications/ writing or speech requirement*	
◆ BMGT 380	Business Law I	3
or STAT 230	Business Statistics *or other accounting-related course for the curriculum*	
◆ BMGT 364	Management and Organization Theory *or other accounting-related course for the curriculum*	3
◆ A core course for the curriculum		3
◆ A core course for the curriculum		3

Elective Course *(to be chosen from any course to complete the 60 credits for the degree)* — 1

Total credits for AA with accounting specialization — **60**

Business and Management Curriculum

REQUIREMENTS FOR THE BUSINESS AND MANAGEMENT CURRICULUM

Coursework for the business and management curriculum includes the following:

- Core courses (15 credits): Chosen from BMGT 110 (required for students with no previous business experience), ACCT 220 and 221, ECON 201 and 203, and STAT 230 (or 200)
- Required computing course (3 credits): IFSM 201 or CMST 303
- Management-related courses (6 credits): Chosen from any ACCT, BMGT, CMIS, ECON, FINC, IFSM, and MGST courses; any 3-credit CMST courses; GVPT 210; HRMN 300; MRKT 310; PSYC 321 and 361; and SOCY 461
- Electives (4 credits): Any courses related to interests and goals

RECOMMENDED SEQUENCE

The following course sequence will fulfill all the requirements for the AA in business and management. Since some recommended courses fulfill more than one requirement, substituting courses for those listed may make it necessary to take additional courses to meet degree requirements. Students should consult an advisor whenever taking advantage of other options. Information on alternate courses (where allowable) to fulfill general education requirements (in communications, arts and humanities, behavioral and social sciences, biological and physical sciences, mathematics, and interdisciplinary issues) may be found on p. 8.

Business and Management Curriculum Courses		Credits
First Courses *(to be taken within the first 18 credits)*		
Note: Placement tests are required for math and writing courses.		
LIBS 150	Information Literacy and Research Methods	1
WRTG 101/101X	Introduction to Writing	3
MATH 106	Finite Mathematics *or a higher-level math course*	3
◆ BMGT 110	Introduction to Business and Management *(required core course for the curriculum for students with no prior business experience; also required for BS in business administration)*	3
Introductory Courses *(to be taken within the first 30 credits)*		
ECON 201	Principles of Macroeconomics *(required for BS in business administration; strongly recommended)* *or other ANTH, BEHS, ECON, GEOG, GVPT, PSYC, SOCY, or eligible AASP, CCJS, GERO, or WMST course to fulfill the first behavioral and social sciences requirement*	3

Both BIOL 101	Concepts of Biology	3
and BIOL 102	Laboratory in Biology	1
or BIOL 103	Introduction to Biology	
	or other course(s) to fulfill the biological and physical sciences lecture and laboratory requirement	
WRTG 291	Expository and Research Writing	3
	or other course to fulfill the communications/ writing requirement	
◆ IFSM 201	Introduction to Computer-Based Systems	3
or CMST 303	Advanced Application Software	
◆ ACCT 220	Principles of Accounting I	3
	(core course for the curriculum)	
PHIL 140	Contemporary Moral Issues	3
or a foreign language course		
	or other ARTH, ARTT, HIST, HUMN, MUSC, PHIL, THET, dance, or literature course to fulfill the arts and humanities requirement	

Additional Required Courses *(to be taken after first and introductory courses)*

◆ STAT 230	Business Statistics	3
	(core course for the curriculum)	
PSYC 100	Introduction to Psychology	3
or SOCY 100	Introduction to Sociology	
	or other course to fulfill the second behavioral and social sciences requirement (discipline must differ from first)	
◆ ACCT 221	Principles of Accounting II	3
	(core course for the curriculum)	
NSCI 100	Introduction to Physical Science	3
or ASTR 100	Introduction to Astronomy	
	or other course to fulfill the biological and physical sciences lecture requirement	
◆ ECON 203	Introduction to Microeconomics	3
	(core course for the curriculum)	
HIST 142	Western Civilization II	3
or HIST 157	History of the United States Since 1865	
	or other ARTH or HIST course to fulfill the arts and humanities requirement in historical perspective (discipline must differ from other humanities course)	
SPCH 100	Foundations of Speech Communication	3
or WRTG 390	Writing for Managers	
	or other course to fulfill the communications/ writing or speech requirement	
◆ Management-related course for the curriculum		3
	(course required for BS in business administration is recommended)	
◆ Management-related course for the curriculum		3
	(course required for BS in business administration is recommended)	

Elective Courses *(to be chosen from any courses to complete the 60 credits for the degree—courses applicable to the BS in business administration are recommended)* 4

Total credits for AA with business and management specialization		**60**

Computer Studies Curriculum

REQUIREMENTS FOR THE COMPUTER STUDIES CURRICULUM

Coursework for the computer studies curriculum includes the following:

- Required core courses (6 credits): CMIS 102/102A (or IFSM 201) and CMIS 141/141A (or other appropriate programming language course)
- Additional core courses (6 credits): Chosen from CMIS 241 and 310, IFSM 300, and any CMST courses (up to 3 credits)
- Computer studies–related course (3 credits): Any CMIS, CMST, CMIT, CMSC, or IFSM course
- Electives (13 credits): Any courses related to interests and goals

RECOMMENDED SEQUENCE

The following course sequence will fulfill all the requirements for the AA in computer studies. Since some recommended courses fulfill more than one requirement, substituting courses for those listed may make it necessary to take additional courses to meet degree requirements. Students should consult an advisor whenever taking advantage of other options. Information on alternate courses (where allowable) to fulfill general education requirements (in communications, arts and humanities, behavioral and social sciences, biological and physical sciences, mathematics, and interdisciplinary issues) may be found on p. 8.

Computer Studies Curriculum Courses		Credits

First Courses *(to be taken within the first 18 credits)*
Note: Placement tests are required for math and writing courses.

LIBS 150	Information Literacy and Research Methods	1
WRTG 101/101X	Introduction to Writing	3
MATH 106	Finite Mathematics	3
	or a higher-level math course	

Introductory Courses *(to be taken within the first 30 credits)*

◆ CMIS 102	Introduction to Problem Solving and Algorithm Design	3
or CMIS 102A	Fundamentals of Programming I *(required for BS in computer studies; first required core course for the curriculum)*	
◆ CMIS 141	Introductory Programming	3
or CMIS 141A	Fundamentals of Programming II *(required core course for the curriculum)*	
PHIL 140	Contemporary Moral Issues	3
or a foreign language course		
	or other ARTH, ARTT, HIST, HUMN, MUSC, PHIL, THET, dance, or literature course to fulfill the arts and humanities requirement	
Both BIOL 101	Concepts of Biology	3
and BIOL 102	Laboratory in Biology	1
or BIOL 103	Introduction to Biology	
	or other course(s) to fulfill the biological and physical sciences lecture and laboratory requirement	

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◆ CMIS 241	Data Structures and Abstraction *(required for BS in computer studies) or other core course for the curriculum*	3
WRTG 291	Expository and Research Writing *or other course to fulfill the communications/ writing requirement*	3
GVPT 170	American Government *or other ANTH, BEHS, ECON, GEOG, GVPT, PSYC, SOCY, or eligible AASP, CCJS, GERO, or WMST course to fulfill the first behavioral and social sciences requirement*	3

Additional Required Courses *(to be taken after first and introductory courses)*

◆ IFSM 201	Introduction to Computer-Based Systems	3
or CMST 303	Advanced Application Software *(required for BS in computer studies) or other computer studies–related course for the curriculum*	
PSYC 100	Introduction to Psychology	3
or SOCY 100	Introduction to Sociology *or other course to fulfill the second behavioral and social sciences requirement (discipline must differ from first)*	
NSCI 100	Introduction to Physical Science	3
or ASTR 100	Introduction to Astronomy *or other course to fulfill the biological and physical sciences lecture requirement*	
HIST 142	Western Civilization II	3
or HIST 157	History of the United States Since 1865 *or other ARTH or HIST course to fulfill the arts and humanities requirement in historical perspective (discipline must differ from other humanities course)*	
SPCH 100	Foundations of Speech Communication	3
or WRTG 390	Writing for Managers *or other course to fulfill the communications/ writing or speech requirement*	
◆ Additional core course for the curriculum		3

Elective Courses *(chosen from any courses to complete 60 credits for the degree—CMIS, CMST, or IFSM courses that may be applied to the BS in computer studies are recommended)* — 13

Total credits for AA with computer studies specialization — **60**

Criminal Justice Curriculum

REQUIREMENTS FOR THE CRIMINAL JUSTICE CURRICULUM

Coursework for the criminal justice curriculum includes the following:

- Core courses (12 credits): Any CCJS courses
- Required computing course (3 credits): IFSM 201 or CMST 303
- Electives (13 credits): Any courses related to interests and goals

RECOMMENDED SEQUENCE

The following course sequence will fulfill all the requirements for the AA in criminal justice. Since some recommended courses fulfill more than one requirement, substituting courses for those listed may make it necessary to take additional courses to meet degree requirements. Students should consult an advisor whenever taking advantage of other options. Information on alternate courses (where allowable) to fulfill general education requirements (in communications, arts and humanities, behavioral and social sciences, biological and physical sciences, mathematics, and interdisciplinary issues) may be found on p. 8.

Criminal Justice Curriculum Courses		Credits

First Courses *(to be taken within the first 18 credits)*
Note: Placement tests are required for math and writing courses.

LIBS 150	Information Literacy and Research Methods	1
WRTG 101/101X	Introduction to Writing	3
MATH 106	Finite Mathematics *or a higher-level math course*	3
◆ CCJS 100	Introduction to Criminal Justice	3
or CCJS 105	Introduction to Criminology *or other core course for the curriculum*	

Introductory Courses *(to be taken within the first 30 credits)*

GVPT 170	American Government *or other ANTH, BEHS, ECON, GEOG, GVPT, PSYC, SOCY, or eligible AASP, CCJS, GERO, or WMST course to fulfill the first behavioral and social sciences requirement*	3
Both BIOL 101	Concepts of Biology	3
and BIOL 102	Laboratory in Biology	1
or BIOL 103	Introduction to Biology *or other course(s) to fulfill the biological and physical sciences lecture and laboratory requirement*	
WRTG 291	Expository and Research Writing *or other course to fulfill the communications/ writing requirement*	3
◆ IFSM 201	Introduction to Computer-Based Systems	3
or CMST 303	Advanced Application Software *(required computing course for the curriculum)*	
◆ CCJS 230	Criminal Law in Action *or other core course for the curriculum*	3
PHIL 140	Contemporary Moral Issues	3
or a foreign language course		
	or other ARTH, ARTT, HIST, HUMN, MUSC, PHIL, THET, dance, or literature course to fulfill the arts and humanities requirement	

Additional Required Courses *(to be taken after first and introductory courses)*

| PSYC 100 | Introduction to Psychology | 3 |
| or SOCY 100 | Introduction to Sociology *or other course to fulfill the second behavioral and social sciences requirement (discipline must differ from first)* | |

NSCI 100	Introduction to Physical Science	3
or ASTR 100	Introduction to Astronomy *or other course to fulfill the biological and* *physical sciences lecture requirement*	
HIST 142	Western Civilization II	3
or HIST 157	History of the United States Since 1865 *or other ARTH or HIST course to fulfill the arts* *and humanities requirement in historical perspective* *(discipline must differ from other humanities course*	
SPCH 100	Foundations of Speech Communication	3
or COMM 380	Language in Social Contexts *or other course to fulfill the communications/* *writing or speech requirement*	
◆ CCJS 320	Introduction to Criminalistics *or other core course for the curriculum*	3
◆ CCJS 350	Juvenile Delinquency *or other core course for the curriculum*	3

Elective Courses *(chosen from any courses to complete*
60 credits for the degree—courses that may be applied to the
BS in criminal justice are recommended)   **13**

Total credits for AA with criminal justice specialization   **60**

Foreign Language Area Studies Curriculum

REQUIREMENTS FOR THE FOREIGN LANGUAGE AREA STUDIES CURRICULUM

Coursework for the foreign language area studies curriculum includes the following (see also the specific requirements for each language area):

- Language core courses (12 credits): Sequential courses in a single language, usually numbered 111–112 and 114–115 (or 211–212)

- Related area studies courses (12 credits): Any courses in the culture, history, language, literature, or government and politics of the area (see specific courses for each language area)

- Required computing course (3 credits): IFSM 201 or CMST 303

- Elective (1 credit): Any courses related to interests and goals

RECOMMENDED SEQUENCE

The following course sequence will fulfill all the requirements for the AA in foreign language area studies if the appropriate core and related courses for the specific language area are selected. Since some recommended courses fulfill more than one requirement, substituting courses for those listed may make it necessary to take additional courses to meet degree requirements. Students should consult an advisor whenever taking advantage of other options. Information on alternate courses (where allowable) to fulfill general education requirements (in communications, arts and humanities, behavioral and social sciences, biological and physical sciences, mathematics, and interdisciplinary issues) may be found on p. 8.

Foreign Language Area Studies
Curriculum Courses   **Credits**

First Courses *(to be taken within the first 18 credits)*
Note: Placement tests are required for math and writing courses.

LIBS 150	Information Literacy and Research Methods	1
WRTG 101/101X	Introduction to Writing	3
MATH 106	Finite Mathematics *or a higher-level math course*	3
◆ Language core course (numbered 111) for the curriculum		3

Introductory Courses *(to be taken within the first 30 credits)*

Both BIOL 101	Concepts of Biology	3
and BIOL 102	Laboratory in Biology	1
or BIOL 103	Introduction to Biology *or other course(s) to fulfill the biological and physical sciences lecture and laboratory requirement*	
WRTG 291	Expository and Research Writing *or other course to fulfill the communications/* *writing requirement*	3
HIST 142	Western Civilization II	3
or HIST 157	History of the United States Since 1865 *or other ARTH or HIST course to fulfill the arts* *and humanities requirement in historical perspective*	
◆ Language core course (numbered 112) for the curriculum		3
◆ Language core course (numbered 114) for the curriculum		3
GVPT 200	International Political Relations *or other ANTH, BEHS, ECON, GEOG,* *GVPT, PSYC, SOCY, or eligible AASP, CCJS,* *GERO, or WMST course to fulfill the first* *behavioral and social sciences requirement*	3
◆ Language core course (numbered 115) for the curriculum		3

Additional Required Courses *(to be taken after first and introductory courses)*

◆ Related area studies course for the curriculum		3
IFSM 201	Introduction to Computer-Based Systems	3
or CMST 303	Advanced Application Software *(required computing course for the curriculum)*	
◆ Related area studies course for the curriculum		3
NSCI 100	Introduction to Physical Science	3
or ASTR 100	Introduction to Astronomy *or other course to fulfill the biological* *and physical sciences lecture requirement*	
ANTH 102	Introduction to Anthropology: Cultural Anthropology and Linguistics *or other course to fulfill the second behavioral* *and social sciences requirement (discipline* *must differ from first)*	3
◆ Related area studies course for the curriculum		3
PHIL 140	Contemporary Moral Issues *or other ARTH, ARTT, HIST, HUMN, MUSC,* *PHIL, THET, dance, literature, or foreign language* *course to fulfill the arts and humanities requirement* *(discipline must differ from other humanities course)*	3

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SPCH 100	Foundations of Speech Communication *or other course to fulfill the communications/ writing or speech requirement*	3
◆ Related area studies course for the curriculum		3

Elective Course *(to be chosen from any courses to complete the 60 credits for the degree)* — 1

Total credits for AA with foreign language area studies specialization — **60**

Legal Studies Curriculum

REQUIREMENTS FOR THE LEGAL STUDIES CURRICULUM

Coursework for the legal studies curriculum includes the following:

- Required core courses (12 credits): LGST 101, 200, 201, and 204
- Legal studies–related courses (6 credits): Any LGST courses
- Required computing course (3 credits): IFSM 201 or CMST 303
- Electives (7 credits): Any courses related to interests and goals

RECOMMENDED SEQUENCE

The following course sequence will fulfill all the requirements for the AA in legal studies. Since some recommended courses fulfill more than one requirement, substituting courses for those listed may make it necessary to take additional courses to meet degree requirements. Students should consult an advisor whenever taking advantage of other options. Information on alternate courses (where allowable) to fulfill general education requirements (in communications, arts and humanities, behavioral and social sciences, biological and physical sciences, mathematics, and interdisciplinary issues) may be found on p. 8.

Legal Studies Curriculum Courses		Credits

First Courses *(to be taken within the first 18 credits)*
Note: Placement tests are required for math and writing courses.

LIBS 150	Information Literacy and Research Methods	1
WRTG 101/101X	Introduction to Writing	3
MATH 106	Finite Mathematics *or a higher-level math course*	3

Introductory Courses *(to be taken within the first 30 credits)*

PHIL 140	Contemporary Moral Issues	3
or a foreign language course		
	or other ARTH, ARTT, HIST, HUMN, MUSC, PHIL, THET, dance, or literature course to fulfill the arts and humanities requirement	
GVPT 170	American Government *or other ANTH, BEHS, ECON, GEOG, GVPT, PSYC, SOCY, or eligible AASP, CCJS, GERO, or WMST course to fulfill the first behavioral and social sciences requirement*	3

Both BIOL 101	Concepts of Biology	3
and BIOL 102	Laboratory in Biology	1
or BIOL 103	Introduction to Biology *or other course(s) to fulfill the biological and physical sciences lecture and laboratory requirement*	
WRTG 291	Expository and Research Writing *or other course to fulfill the communications/ writing requirement*	3
◆ IFSM 201	Introduction to Computer-Based Systems	3
or CMST 303	Advanced Application Software *(required computing course for the curriculum)*	
CCJS 100	Introduction to Criminal Justice	3
or SOCY 100	Introduction to Sociology *or other course to fulfill the second behavioral and social sciences requirement (discipline must differ from first)*	

Additional Required Courses *(to be taken after first and introductory courses)*

HIST 142	Western Civilization II	3
or HIST 157	History of the United States Since 1865 *or other ARTH or HIST course to fulfill the arts and humanities requirement in historical perspective (discipline must differ from other humanities course)*	
NSCI 100	Introduction to Physical Science	3
or ASTR 100	Introduction to Astronomy *or other course to fulfill the biological and physical sciences lecture requirement*	
SPCH 100	Foundations of Speech Communication	3
or WRTG 390	Writing for Managers *or other course to fulfill the communications/ writing or speech requirement*	
◆ LGST 101	Introduction to Law *(required core course for the curriculum)*	3
◆ LGST 200	Techniques of Legal Research *(required core course for the curriculum)*	3
◆ LGST 201	Legal Writing *(required core course for the curriculum)*	3
◆ LGST 204	Legal Ethics *(required core course for the curriculum)*	3
◆ LGST 320	Criminal Law and Procedures *(or other legal studies–related course for the curriculum)*	3
◆ LGST 312	Torts *(or other legal studies–related course for the curriculum)*	3

Elective Courses *(to be chosen from any courses to complete 60 credits for the degree—courses that may be applied to the BS in legal studies are recommended)* — 7

Total credits for AA with legal studies specialization — **60**

Management Studies Curriculum

REQUIREMENTS FOR THE MANAGEMENT STUDIES CURRICULUM

Coursework for the management studies curriculum includes the following:

- Management-related courses (15 credits): Chosen from any ACCT, BMGT, CMIS, CMST, ECON, FINC, IFSM, and MGST courses; WRTG 390; GVPT 210; PSYC 321 and 361; SOCY 461; and STAT 230 (or 200)
- Required computing course (3 credits): IFSM 201 or CMST 303
- Electives (10 credits): Any courses related to interests and goals

RECOMMENDED SEQUENCE

The following course sequence will fulfill all the requirements for the AA in management studies. Since some recommended courses fulfill more than one requirement, substituting courses for those listed may make it necessary to take additional courses to meet degree requirements. Students should consult an advisor whenever taking advantage of other options. Information on alternate courses (where allowable) to fulfill general education requirements (in communications, arts and humanities, behavioral and social sciences, biological and physical sciences, mathematics, and interdisciplinary issues) may be found on p. 8.

Management Studies Curriculum Courses		Credits
First Courses *(to be taken within the first 18 credits)*		
Note: Placement tests are required for math and writing courses.		
LIBS 150	Information Literacy and Research Methods	1
WRTG 101/101X	Introduction to Writing	3
MATH 106	Finite Mathematics	3
	or a higher-level math course	
◆ BMGT 110	Introduction to Business and Management	3
	(recommended management-related course for the curriculum for students with no prior business experience; also required for BS in business administration)	
Introductory Courses *(to be taken within the first 30 credits)*		
GVPT 170	American Government	3
	or other ANTH, BEHS, ECON, GEOG, GVPT, PSYC, SOCY, or eligible AASP, CCJS, GERO, or WMST course to fulfill the first behavioral and social sciences requirement	
Both BIOL 101	Concepts of Biology	3
and BIOL 102	Laboratory in Biology	1
or BIOL 103	Introduction to Biology	
	or other course(s) to fulfill the biological and physical sciences lecture and laboratory requirement	
ECON 201	Principles of Macroeconomics	3
or ECON 203	Principles of Microeconomics	
	(required for BS in management studies) or other course to fulfill the second behavioral and social sciences requirement (discipline must differ from first)	

WRTG 291	Expository and Research Writing	3
	or other course to fulfill the communications/ writing requirement	
◆ IFSM 201	Introduction to Computer-Based Systems	3
or CMST 303	Advanced Application Software	
	(required computing course for the curriculum)	
PHIL 140	Contemporary Moral Issues	3
or a foreign language course		
	or other ARTH, ARTT, HIST, HUMN, MUSC, PHIL, THET, dance, or literature course to fulfill the arts and humanities requirement	
Additional Required Courses *(to be taken after first and introductory courses)*		
◆ STAT 230	Business Statistics	3
	(recommended management-related course for the curriculum; required for BS in management studies)	
NSCI 100	Introduction to Physical Science	3
or ASTR 100	Introduction to Astronomy	
	or other course to fulfill the biological and physical sciences lecture requirement	
HIST 142	Western Civilization II	3
or HIST 157	History of the United States Since 1865	
	or other ARTH or HIST course to fulfill the arts and humanities requirement in historical perspective (discipline must differ from other humanities course)	
SPCH 100	Foundations of Speech Communication	3
or WRTG 394/394X	Business Writing	
	or other course to fulfill the communications/ writing or speech requirement	
◆ BMGT 364	Management and Organization Theory	3
or MGST 160	Principles of Supervision	
	or other management-related course for the curriculum	
◆ Management-related course for the curriculum		3
	(course that may be applied to BS in management studies is recommended)	
◆ Management-related course for the curriculum		3
	(course that may be applied to BS in management studies is recommended)	
Elective Courses *(chosen from any courses to complete 60 credits for the degree—courses that may be applied to BS in management studies are recommended)*		10
Total credits for AA with management studies specialization		**60**

ASSOCIATE OF ARTS DEGREE

Mathematics Curriculum

REQUIREMENTS FOR THE MATHEMATICS CURRICULUM

Coursework for the mathematics curriculum includes the following:

- Required mathematics core courses (18–20 credits): MATH 130, 131, and 132 (or 140 and 141); 240 (or 246); 241; and STAT 230 (or 200)

- Mathematics-related course (3 credits): Chosen from any ACCT or FINC courses; CHEM 103 and 113; CMIS 102A, 141A, 160 (or 170 or CMSC 150), and 241 (or 242); ECON 201, 203, 430, and 440; and PHYS 111 or higher

- Required computing course (3 credits): IFSM 201 or CMST 303

- Electives (2–4 credit): Any courses related to interests and goals

RECOMMENDED SEQUENCE

The following course sequence will fulfill all the requirements for the AA in mathematics. Since some recommended courses fulfill more than one requirement, substituting courses for those listed may make it necessary to take additional courses to meet degree requirements. Students should consult an advisor whenever taking advantage of other options. Information on alternate courses (where allowable) to fulfill general education requirements (in communications, arts and humanities, behavioral and social sciences, biological and physical sciences, mathematics, and interdisciplinary issues) may be found on p. 8.

Mathematics Curriculum Courses		Credits
First Courses *(to be taken within the first 18 credits)*		
Note: Placement tests are required for math and writing courses.		
LIBS 150	Information Literacy and Research Methods	1
WRTG 101/101X	Introduction to Writing	3
MATH 107	College Algebra *(fulfills general education requirement in mathematics) or a higher-level math course*	3
Note: Courses applied to general education requirements may not be applied to the major.		
MATH 108	Trigonometry and Analytical Geometry *(prerequisite for later courses)*	3
Introductory Courses *(to be taken within the first 30 credits)*		
HIST 142	Western Civilization II	3
or HIST 157	History of the United States Since 1865 *or other ARTH or HIST course to fulfill the arts and humanities requirement in historical perspective*	
NSCI 100	Introduction to Physical Science	3
and NSCI 101	Physical Science Laboratory *or other course(s) to fulfill the biological and physical sciences lecture and laboratory requirement*	1
WRTG 291	Expository and Research Writing *or other course to fulfill the communications/ writing requirement*	3

ECON 201	Principles of Macroeconomics	3
or ECON 203	Principles of Microeconomics *or other ANTH, BEHS, ECON, GEOG, GVPT, PSYC, SOCY, or eligible AASP, CCJS, GERO, or WMST course to fulfill the first behavioral and social sciences requirement*	
◆ MATH 130	Calculus A *(required core course for the curriculum)*	3
◆ MATH 131	Calculus B *(required core course for the curriculum)*	3
◆ MATH 132	Calculus C *(required core course for the curriculum)*	3
Additional Required Courses *(to be taken after first and introductory courses)*		
BIOL 101	Concepts of Biology	3
or ASTR 100	Introduction to Astronomy *or other course to fulfill the biological and physical sciences lecture requirement*	
PSYC 100	Introduction to Psychology	3
or SOCY 100	Introduction to Sociology *or other course to fulfill the second behavioral and social sciences requirement (discipline must differ from first)*	
PHIL 140	Contemporary Moral Issues	3
or a foreign language course		
	or other ARTH, ARTT, HIST, HUMN, MUSC, PHIL, THET, dance, or literature course to fulfill the arts and humanities requirement (discipline must differ from other humanities course)	
SPCH 100	Foundations of Speech Communication *or other course to fulfill the communications/ writing or speech requirement*	3
◆ MATH 241	Calculus III *(required core course for the curriculum)*	4
◆ MATH 240	Introduction to Linear Algebra	3–4
or MATH 246	Differential Equations *(required core course for the curriculum)*	
◆ STAT 230	Business Statistics	3
or STAT 200	Introduction to Statistics *(required core course for the curriculum)*	
◆ IFSM 201	Introduction to Computer-Based Studies	3
or CMST 303	Advanced Application Software *(required computing course for the curriculum)*	
◆ A mathematics-related course for the curriculum		3
Total credits for AA with mathematics specialization		**60**

Women's Studies Curriculum

REQUIREMENTS FOR THE WOMEN'S STUDIES CURRICULUM

Coursework for the women's studies curriculum includes the following:

- Required core course (3 credits): WMST 200

- Women's studies–related courses (15 credits): Chosen from ARTH 199U and 478, BEHS 220, HUMN 120, and related women's studies and special topics courses (with prior approval)

- Required computing course (3 credits): IFSM 201 or CMST 303

- Electives (7 credits): Any courses related to interests and goals

RECOMMENDED SEQUENCE

The following course sequence will fulfill all the requirements for the AA in women's studies. Since some recommended courses fulfill more than one requirement, substituting courses for those listed may make it necessary to take additional courses to meet degree requirements. Students should consult an advisor whenever taking advantage of other options. Information on alternate courses (where allowable) to fulfill general education requirements (in communications, arts and humanities, behavioral and social sciences, biological and physical sciences, mathematics, and interdisciplinary issues) may be found on p. 8.

Women's Studies Curriculum Courses		Credits
First Courses *(to be taken within the first 18 credits)*		
Note: Placement tests are required for math and writing courses.		
LIBS 150	Information Literacy and Research Methods	1
WRTG 101/101X	Introduction to Writing	3
MATH 106	Finite Mathematics	3
	or a higher-level math course	
◆ WMST 200	Introduction to Women's Studies:	
	Women and Society	3
	(required core course for the curriculum)	
Introductory Courses *(to be taken within the first 30 credits)*		
Both BIOL 101	Concepts of Biology	3
and BIOL 102	Laboratory in Biology	1
or BIOL 103	Introduction to Biology	
	or other course(s) to fulfill the biological and physical sciences lecture and laboratory requirement	
WRTG 291	Expository and Research Writing	3
	or other course to fulfill the communications/ writing requirement	
HIST 141	Western Civilization I	3
or HIST 142	Western Civilization II	
	or other ARTH or HIST course to fulfill the arts and humanities requirement in historical perspective	
◆ IFSM 201	Introduction to Computer-Based Systems	3
or CMST 303	Advanced Application Software	
	(required computing course for the curriculum)	

◆ HUMN 120	America in Perspective	3
	or other women's studies–related course for the curriculum	
GVPT 200	International Political Relations	3
	or other ANTH, BEHS, ECON, GEOG, GVPT, PSYC, SOCY, or eligible AASP, CCJS, GERO, or WMST course to fulfill the first behavioral and social sciences requirement	
◆ Women's studies–related course for the curriculum		3
Additional Required Courses *(to be taken after first and introductory courses)*		
SPCH 100	Foundations of Speech Communication	3
	or other course to fulfill the communications/ writing or speech requirement	
◆ Women's studies–related course for the curriculum		3
NSCI 100	Introduction to Physical Science	3
or ASTR 100	Introduction to Astronomy	
	or other course to fulfill the biological and physical sciences lecture requirement	
ANTH 102	Introduction to Anthropology:	
	Cultural Anthropology	3
	or other course to fulfill the second behavioral and social sciences requirement (discipline must differ from first)	
PHIL 140	Contemporary Moral Issues	3
	or other ARTH, ARTT, HIST, HUMN, MUSC, PHIL, THET, dance, or literature course to fulfill the arts and humanities requirement (discipline must differ from other humanities course)	
◆ Women's studies–related course for the curriculum		3
◆ Women's studies–related course for the curriculum		3
Electives Courses *(chosen from any courses to complete 60 credits for the degree)*		7
Total credits for AA with women's studies specialization		**60**

CERTIFICATE PROGRAMS

To help nontraditional students meet their educational goals, UMUC offers a full range of certificate programs that respond to current trends in today's demanding job market. Certificate programs offer working adults a convenient, flexible way to earn credentials for career advancement. Many programs are available online.

The undergraduate certificate programs generally require 16 to 21 credits (except for the certificate in Paralegal Studies, which requires 60 credits). All courses for the certificate programs carry college credit and may be applied toward a degree.

CURRICULA

In addition to the certificates listed below, some certificates are available only to active-duty military personnel and certain others who conform to special stipulations.

Accounting—Introductory
Accounting—Advanced
Applied Behavioral and Social Sciences
Biosecurity
Business Project Management
Clinical Mental Health Care
Computer Applications
Computer Graphics and Design
Computer Networking
Correctional Administration
Criminal Justice Intelligence
Database Design and Implementation
Database Management
Desktop Publishing
Diversity Awareness
E-Commerce in Small Business
E-Commerce Management
Environmental and Occupational Health and Safety Management
Financial Management
Game Development
Health Issues for the Aging Adult
Human Development
Human Resource Management
Information Assurance
Information Management
Internet Technologies

Laboratory Management
Management Foundations
Marketing Communications
Marketing Management
Negotiation and Conflict Management
Object-Oriented Design and Programming
Object-Oriented Programming Using Java
Paralegal Studies
Project Management for IT Professionals
Public Fire-Protection Management and Administration
Security Management
Software Engineering
Systems Approach to Fire Safety
Technology and Management
Terrorism and Institutions: Prevention and Response
UNIX System Administration
Visual Basic Programming
Web Design
Web Programming
Women in Business
Workplace Communications
Workplace Spanish

REQUIREMENTS

- Students pursuing certificate programs must be admitted as UMUC students.
- Students are responsible for notifying UMUC of their intention to complete certificate work before completion of their last course. (The application is available at *https://my.umuc.edu.)*
- Students may pursue a degree and certificate simultaneously or pursue a degree after completing the certificate, but the application for any certificate completed while in progress toward the bachelor's degree must be submitted before award of the bachelor's degree.
- Students may not use the same course toward completion of more than one certificate. In cases where the same course is required for two certificates, the student must replace that course with an approved substitute for the second certificate.
- No more than half of the total credits for any certificate may be earned through credit by examination, prior-learning portfolio credit, internship/cooperative education credit, or transfer credit from other schools.

- Certificates consisting primarily of upper-level coursework may assume prior study in that area. Students should check prerequisites for certificate courses. Prerequisites for certificate courses may be satisfied by coursework, credit by examination, or prior-learning portfolio credit, under current policies for such credit.
- At least half of the total credits for any certificate must be earned through graded coursework.
- Students must complete all required coursework for the certificate with a minimum grade of C in all courses. Certificate courses may not be taken pass/fail.

The individual certificate coursework requirements specified in the following section are applicable to students enrolling on or after August 1, 2008. However, should certificate requirements change, students must either complete these requirements within two years of the change or fulfill the new requirements.

Students should check prerequisites for certificate courses. Most certificates are upper level and assume prior coursework before starting certificate courses. Unless otherwise specified, course sequences for each certificate suggest but do not require that courses be taken in a prescribed order.

Accounting—Introductory

The introductory accounting certificate is designed to meet the needs of nonaccounting personnel and managers who feel they require knowledge of accounting to advance in their professions. It can also be used by individuals who are interested in pursuing new careers in accounting and need to learn the major elements. Students without a background in economics, basic mathematics, and statistics are encouraged to take courses in those subjects before starting the certificate program. With appropriate choice of courses, this certificate may be completed while pursuing the Bachelor of Science in accounting.

Accounting—Introductory
Certificate Requirements — **Credits**

Five required courses:

ACCT	220	Principles of Accounting I	3
ACCT	221	Principles of Accounting II	3
ACCT	321	Cost Accounting	3
ACCT	323	Taxation of Individuals	3
ACCT	328	Accounting Software	3

One supporting elective chosen from the following:			3
ACCT	326	Accounting Information Systems	
ACCT	411	Ethics and Professionalism in Accounting	
ACCT	417	Taxation of Corporations and Other Entities	
ACCT	422	Auditing Theory and Practice	
ACCT	425	International Accounting	
FINC	330	Business Finance	
FINC	331	Finance for the Nonfinancial Manager	

Total credits for certificate in Accounting—Introductory — **18**

Accounting—Advanced

The advanced accounting certificate is designed to meet the needs of accounting professionals who want to enhance their accounting skills. In addition to course prerequisites, students are encouraged to take courses in economics, basic mathematics, and statistics before starting the certificate program. With appropriate choice of courses, this certificate may be completed while pursuing the Bachelor of Science in accounting.

Accounting—Advanced
Certificate Requirements — **Credits**

Four required courses:

ACCT	310	Intermediate Accounting I	3
ACCT	311	Intermediate Accounting II	3
ACCT	417	Taxation of Corporations and Other Entities	3
ACCT	422	Auditing Theory and Practice	3

A supporting elective chosen from the following:			3
ACCT	321	Cost Accounting	
ACCT	323	Taxation of Individuals	
ACCT	326	Accounting Information Systems	
ACCT	410	Accounting for Government and Not-for-Profit Organizations	
ACCT	411	Ethics and Professionalism in Accounting	
ACCT	424	Advanced Accounting	
ACCT	425	International Accounting	
ACCT	426	Advanced Cost Accounting	
ACCT	436	Internal Auditing	
FINC	330	Business Finance	

| A second supporting elective chosen from the above list | | | 3 |

Total credits for certificate in Accounting—Advanced — **18**

Applied Behavioral and Social Sciences

The certificate in applied behavioral and social sciences is designed to provide a range of skills and knowledge in the behavioral and social sciences. The key ideas and methods of various disciplines within the behavioral and social sciences are explored to gain an understanding of contemporary social and cultural issues. Focus is on practical applications. The certificate is useful for students seeking career opportunities and/or graduate study in social work, human services, and public health. With appropriate selection of courses, this certificate may be completed while pursuing the Bachelor of Science in social science.

Applied Behavioral and Social Sciences Requirements

			Credits
Three required courses:			
PSYC	100	Introduction to Psychology	3
BIOL	160	Human Biology	3
PSYC	351	Lifespan Development Psychology	3
A statistics course chosen from the following:			3
STAT	200	Introduction to Statistics	
STAT	225	Introduction to Statistical Methods in Psychology	
STAT	230	Business Statistics	
A supporting elective chosen from the following:			3
ANTH	350	Medical Anthropology	
BEHS	320	Disability Studies	
BEHS	343	Parenting Today	
BEHS	364	Alcohol in U.S. Society	
BEHS	453	Domestic Violence	
GERO	306	Programs, Services, and Policies	
PSYC	305	Research Methods in Psychology	
PSYC	432	Introduction to Counseling Psychology	
A Cooperative Education internship in the social sciences (ANTH, BEHS, GERO, PSYC, or SOCY 486A)			
A second supporting elective chosen from the above list			3
Total credits for certificate in Applied Behavioral and Social Sciences			**18**

Biosecurity

The biosecurity certificate provides a foundation in the basic scientific and managerial principles required to deal with infectious outbreaks and contamination in the context of terrorist acts. It is useful for public health and safety administrators and officers, epidemiologists, emergency management personnel, and biological surveillance and decontamination professionals in today's society. Students acquire scientific knowledge of the structure, function, and infectious nature of microorganisms; the ability of microorganisms to be genetically manipulated; and the factors contributing to the re-emergence of once eradicated infectious agents. Students also gain an understanding of the institutional and emergency management, investigative, and communication principles associated with effective preparation for and response to bioterrorism incidents. With appropriate choice of major and elective courses, this certificate may be completed while pursuing the Bachelor of Technical and Professional Studies in biotechnology.

Biosecurity Certificate Requirements

			Credits
A course in microbiology chosen from the following:			3
BIOL	302	Bacteria, Viruses, and Health	
BIOL	331	Concepts in Microbiology	
Three required courses:			
BIOL	422	Epidemiology of Emerging Infections	3
BMGT	364	Management and Organization Theory	3
HMLS	302	Introduction to Homeland Security	3
A supporting elective chosen from the following:			3
BIOL	320	Forensic Biology	
BIOL	334	Vaccines and Society	
BIOL	350	Molecular Biology	
BIOL	357	Bioinformatics	
EMGT	302	Concepts of Emergency Management	
ENMT	305	Hazardous Materials Toxicology	
ENMT	321	Environmental Health	
ENMT	322	Occupational Health and Safety	
ENMT	340	Environmental Technology	
HMLS	408	Infrastructure Security Issues	
A second supporting elective chosen from the above list			3
Total credits for certificate in Biosecurity			**18**

Business Project Management

The business project management certificate prepares students for supervisory and midlevel management positions involving project management and team management. It enables project managers, project team members, and other employees assigned to project teams within a private- or public-sector organization to upgrade their skills with the theory and practical knowledge needed to advance to a higher level.

Business Project Management
Certificate Requirements | | | **Credits**

Three required courses:

BMGT	364	Management and Organization Theory	3
BMGT	487	Project Management I	3
BMGT	488	Project Management II	3

A supporting elective chosen from the following: | | | 3

	ACCT	220	Principles of Accounting I	
	ACCT	221	Principles of Accounting II	
	BMGT	304	Managing E-Commerce in Organizations	
	BMGT	317	Problem Solving for Managers	
	BMGT	339	Government and Business Contracting	
	BMGT	366	Managing in the Public Sector	
	FINC	330	Business Finance	
	FINC	351	Risk Management	
	HRMN	363	Negotiation Strategies	
	WRTG	494	Grant and Proposal Writing	

A second supporting elective chosen from the above list | 3

A third supporting elective chosen from the above list | 3

Total credits for certificate in Business Project Management   18

Clinical Mental Health Care

The clinical mental health care certificate is designed to meet the needs of individuals who currently work or desire to work in mental health care settings. The program focuses on mental health disorders, diagnostic procedures, and treatment protocols. It is designed to better prepare students to work in clinical settings (such as hospitals, outpatient clinics, and nonprofit outreach programs) under the supervision of a licensed psychologist or medical doctor. With appropriate choice of courses, the certificate may be completed while pursuing the Bachelor of Science in psychology.

Clinical Mental Health Care
Certificate Requirements | | | **Credits**

Five required courses:

PSYC	100	Introduction to Psychology	3
PSYC	353	Adult Psychopathology	3
PSYC	435	Personality Theories	3
PSYC	436	Introduction to Clinical Psychology	3
PSYC	451	Principles of Psychological Assessment	3

A supporting elective or electives totaling 3 credits chosen from the following: | | | 3

	PSYC	301	Biological Basis of Behavior	
	PSYC	307X	Substance Abuse: An Introduction	
	PSYC	309C	Psychology of Eating Disorders	
	PSYC	309X	Ethics in Mental Health and Psychological Treatment	
	PSYC	310	Sensation and Perception	
	PSYC	405	Principles of Behavior Modification	

Total credits for certificate in Clinical Mental Health Care   18

Computer Applications

The certificate in computer applications is designed for entry-level students and nontechnical professionals who are seeking to acquire an array of microcomputer application skills, such as word processing, spreadsheet development and maintenance, database development and maintenance, and presentation. With appropriate choice of major and elective courses, this certificate may be completed while pursuing the Bachelor of Science in computer studies.

Computer Applications Certificate Requirements			Credits
Four required courses:			
CMST	103	Application Software	3
IFSM	201	Introduction to Computer-Based Systems	3
CMST	303	Advanced Application Software	3
CMST	340	Computer Applications in Management	3
A supporting elective chosen from the following:			3
IFSM	300	Information Systems in Organizations	
IFSM	302	Workplace Productivity	
IFSM	303	Human Factors in Information Systems	
IFSM	320	Office Automation	
A second supporting elective chosen from the above list			3
Total credits for certificate in Computer Applications			**18**

Computer Graphics and Design

The computer graphics and design certificate is for students who seek to develop design and composition skills in a computer environment. Emphasis is on integrating effective design principles with Internet applications and mixed media.

Computer Graphics and Design Certificate Requirements			Credits
Four required courses:			
ARTT	250	Elements of Commercial Design	3
ARTT	354	Elements of Computer Graphics	3
ARTT	479	Advanced Computer Graphics	3
CMST	386	Advanced Internet and Web Design	3

A supporting elective chosen from the following:			3
CMST	310	Electronic Publishing	
CMST	311	Advanced Electronic Publishing	
CMST	450	Web Design with XML	
COMM	493	Strategies for Visual Communication	
A second supporting elective chosen from the above list			3
Total credits for certificate in Computer Graphics and Design			**18**

Computer Networking

The computer networking certificate is appropriate for students who want to work as network administrators for a business, government agency, or nonprofit organization. The program provides hands-on training in state-of-the art computer technology. With appropriate choice of courses, this certificate may be completed while pursuing the Bachelor of Science in computer information technology.

Computer Networking Certificate Requirements			Credits
Four required courses:			
CMIT	265	Networking Essentials	3
CMIT	368	Windows Server 2003	3
CMIT	376	Windows Network Infrastructure	3
CMIT	377	Windows Directory Services Infrastructure	3
A supporting elective chosen from the following:			3
CMIT	320	Network Security	
CMIT	331	Wireless Network Administration	
CMIT	350	Interconnecting Cisco Devices	
CMIT	480	Designing Security for a Windows Network	
A second supporting elective chosen from the above list			3
Total credits for certificate in Computer Networking			**18**

Correctional Administration

The certificate in correctional administration is designed to prepare students to work in adult, juvenile, and community corrections. The program considers emerging legal and ethical issues relating to offenders and correctional staff and emerging best practices for maintaining constitutionally sound environments. With appropriate choice of major and elective courses, this certificate may be completed while pursuing the Bachelor of Science in criminal justice.

Correctional Administration
Certificate Requirements **Credits**

Three required courses:

CCJS	105	Introduction to Criminology	3
CCJS	497	Correctional Administration	3
CCJS	431	Legal and Ethical Issues in Corrections	3

A supporting elective chosen from the following: 3

CCJS	350	Juvenile Delinquency
CCJS	432	Law of Corrections
CCJS	433	Communicating in the Correctional Culture
CCJS	461	Psychology of Criminal Behavior
CCJS	486A	Internship in Criminal Justice Through Co-op

A second supporting elective chosen from the above list 3

A third supporting elective chosen from the above list 3

Total credits for certificate in Correctional Administration **18**

Criminal Justice Intelligence

The criminal justice intelligence certificate prepares students for work in high-intensity drug trafficking areas nationwide. Students learn about the importance of interagency communication and cooperation among officers and personnel in this area, the history of the intelligence community and the political underpinnings for its current structure and processes, and the current intelligence cycle. Legal and ethical issues are presented within given scenarios. The program also provides experience with the decision-making process and reviews possible outcomes in common situations. With appropriate choice of major and elective courses, this certificate may be completed while pursuing the Bachelor of Science in criminal justice.

Criminal Justice Intelligence
Certificate Requirements **Credits**

Six required courses:

CCJS	341	Criminal Investigation	3
CCJS	411	History of Intelligence and the U.S. National Intelligence Community	3
CCJS	412	The Intelligence Cycle	3
CCJS	413	Legal and Ethical Issues for Analysts	3
CCJS	414	Intelligence Analysis	3
CCJS	415	Advanced Intelligence Analysis	3

Total credits for certificate in Criminal Justice Intelligence **18**

CERTIFICATE PROGRAMS

Database Design and Implementation

The certificate in database design and implementation is appropriate for technical professionals who want to work as advanced users or database designers or administrators. Students are taught Structured Query Language (SQL) and learn about issues in database design and implementation. With appropriate choice of major and elective courses, this certificate may be completed while pursuing the Bachelor of Science in computer studies or in computer and information science.

Database Design and Implementation Certificate Requirements			Credits
Four required courses:			
CMIS	160	Discrete Mathematics for Computing	3
CMIS	320	Relational Databases	3
CMIS	420	Advanced Relational Databases	3
CMIS	485	Web Database Development	3
A supporting elective chosen from the following:			3
CMIS	355	Database Forms	
CMIS	375	Programming in Perl	
CMST	385	Internet and Web Design	
A second supporting elective chosen from the above list			3
Total credits for certificate in Database Design and Implementation			**18**

Database Management

The database management certificate offers an introduction to the design and management of database systems in a business environment. In-depth practice in the use of Structured Query Language (SQL) is provided in the context of business-related case studies. The program covers advanced database concepts, including database administration, database technology, and selection and acquisition of database management systems. Supporting elective courses include database mining and the systems analysis required to begin developing the information technology (IT) infrastructure in a business environment. With appropriate choice of courses, this certificate may be completed while pursuing the Bachelor of Science in computer studies.

Database Management Certificate Requirements			Credits
An introductory computing course chosen from the following:			3
CMIS	102	Introduction to Problem Solving and Algorithm Design	
CMIS	102A	Fundamentals of Programming I	
CMST	306	Introduction to Visual Basic Programming *or previous workplace experience with C, C++, Visual Basic, Ada, COBOL, or another high-level language plus an additional supporting elective from the list below*	
Three required courses:			
IFSM	410	Database Concepts	3
IFSM	411	SQL	3
IFSM	420	Advanced Database Concepts	3
A supporting elective chosen from the following:			3
CMIS	485	Web Database Development	
CMIT	361	Developing PL/SQL Applications	
IFSM	304	Ethics in the Information Age	
IFSM	461	Systems Analysis and Design	
A second supporting elective chosen from the above list			3
Total credits for certificate in Database Management			**18**

Desktop Publishing

The desktop publishing certificate is designed for entry-level personnel whose goal is to become proficient using popular software programs in desktop publishing. It includes study of both desktop publishing techniques and design elements.

Desktop Publishing
Certificate Requirements **Credits**

Four required courses:

CMST	310	Electronic Publishing	3
ARTT	354	Elements of Computer Graphics	3
COMM	493	Strategies for Visual Communications	3
CMST	311	Advanced Electronic Publishing	3

A supporting elective chosen from the following: 3

CMST	103	Application Software
IFSM	201	Introduction to Computer-Based Systems
WRTG	289	Introduction to Principles of Text Editing
WRTG	489	Advanced Technical Editing

A second supporting elective chosen from the above list 3

Total credits for certificate in Desktop Publishing **18**

Diversity Awareness

The diversity awareness certificate provides an interdisciplinary perspective on diversity in contemporary society, geared toward practical application in the workplace. The program is based in the social sciences and grounded in sociological concepts. Focus is on applying social science concepts to foster an awareness and sensitivity to the diverse groups that an individual is likely to encounter in today's workplace. It provides students with the requisite concepts to adapt, think flexibly, and appreciate the interrelatedness of different groups and perspectives in the workplace. The certificate allows those currently working in human resource, personnel, and management sectors to update and expand their knowledge, understanding, and awareness of contemporary diversity issues. It is appropriate for students pursuing degrees in business administration, communication studies, criminal justice, gerontology, global business and public policy, humanities, human resource management, legal studies, management studies, political science, or psychology. With appropriate choice of courses, this certificate may be completed while pursuing the Bachelor of Science in social science.

Diversity Awareness
Certificate Requirements **Credits**

Two required foundation courses:

BEHS	220	Diversity Awareness	3
SOCY	100	Introduction to Sociology	3

A course in anthropology chosen from the following: 3

ANTH	102	Introduction to Anthropology: Cultural Anthropology
ANTH	344	Cultural Anthropology and Linguistics

A course in cultural/racial aspects of diversity chosen from the following: 3

PSYC	354	Cross-Cultural Psychology
SOCY	423	Ethnic Minorities
SOCY	424	Sociology of Race Relations
SPCH	482	Intercultural Communication

A course in gender- and age-related aspects of diversity chosen from the following: 3

BMGT	314	Women as Leaders
GERO	311	Women and Aging
GERO	327	Ethnicity and Aging
PSYC	338	Psychology of Gender
PSYC	357	Psychology of Adulthood and Aging
SOCY	325	The Sociology of Gender
SPCH	324	Communication and Gender

A course in specialized aspects of diversity chosen from the following: 3

BEHS	320	Disability Studies
HUMN	311	Workplace Ethics
HUMN	351	Myth and Culture
SOCY	426	Sociology of Religion
SOCY	432	Social Movements

Total credits for certificate in Diversity Awareness **18**

E-Commerce in Small Business

The e-commerce in small business certificate prepares entrepreneurs and managers of small businesses to utilize e-commerce for entrepreneurial ventures. It helps them consider the implementation issues associated with strategy, planning, organizational structure, supportive organizational culture, operations, hardware and software, control systems, customer service infrastructure, and administrative support systems. It enables entrepreneurs, small-business owners, non-IT managers, and others in small business to upgrade their skills with the theory and practical knowledge necessary for organizing an e-commerce effort within a small business.

E-Commerce in Small Business
Certificate Requirements — **Credits**

Six required courses:

BMGT	304	Managing E-Commerce in Organizations	3
FINC	310	Entrepreneurship and New Venture Planning	3
IFSM	300	Information Systems in Organizations	3
MRKT	310	Marketing Principles and Organization	3
MRKT	395	Customer Relationship Management	3
MRKT	457	E-Marketing	3

Total credits for certificate in E-Commerce in Small Business — **18**

E-Commerce Management

The e-commerce management certificate prepares managers to develop strategy, planning, organizational structure, supportive organizational culture, control systems, customer service infrastructure, and management of task teams for implementation of e-commerce. It enables non-IT managers, project team members, and other employees assigned to work on e-commerce projects to upgrade their skills with the theory and practical knowledge necessary for organizing the e-commerce effort within the firm. With appropriate choice of major and elective courses, this certificate may be completed while pursuing the Bachelor of Science in management studies.

E-Commerce Management
Certificate Requirements — **Credits**

Six required courses:

IFSM	300	Information Systems in Organizations	3
BMGT	304	Managing E-Commerce in Organizations	3
BMGT	487	Project Management I	3
BMGT	491	Exploring the Future	3
MRKT	395	Customer Relationship Management	3
MRKT	457	E-Marketing	3

Total credits for certificate in E-Commerce Management — **18**

Environmental and Occupational Health and Safety Management

The certificate in environmental and occupational health and safety management provides environmental and business personnel the education they need to manage health and safety issues effectively. Students learn to recognize and appreciate the characteristics of hazardous materials; address the health and safety issues in a cost-effective way; understand and apply federal, state, and local health and safety regulations; and communicate risk and be prepared for emergencies. With appropriate choice of courses, this certificate may be completed while pursuing the Bachelor of Science in environmental management.

Environmental and Occupational
Health and Safety Management
Certificate Requirements — **Credits**

Six required courses:

ENMT	303	Environmental Regulations and Policy	3
ENMT	305	Hazardous Materials Toxicology	3
ENMT	310	Emergency Planning and Operations Management	3
ENMT	321	Environmental Health	3
ENMT	322	Occupational Health and Safety	3
ENMT	340	Environmental Technology	3

Total credits for certificate in Environmental and Occupational Health and Safety Management — **18**

Financial Management

The financial management certificate is designed to meet the needs of new financial managers, other managers who feel they require greater knowledge of finance to advance in their professions, individuals interested in pursuing new careers in financial management, and financial management professionals who want to upgrade their skills. With appropriate choice of courses, this certificate may be completed while pursuing the Bachelor of Science in finance.

Financial Management Certificate Requirements			Credits
A finance course chosen from the following:			3
FINC	330	Business Finance	
FINC	331	Finance for the Nonfinancial Manager	
Four required courses:			
FINC	340	Investments	3
FINC	351	Risk Management	3
FINC	430	Financial Management	3
FINC	460	International Finance	3
A supporting elective chosen from the following:			3
ACCT	301	Accounting for Nonaccounting Managers	
FINC	321	Fundamentals of Building Wealth	
FINC	350	Property and Liability Insurance	
FINC	352	Life Insurance	
FINC	440	Security Analysis and Valuation	
FINC	441	Futures Contracts and Options	
FINC	450	Commercial Bank Management	
Total credits for certificate in Financial Management			**18**

Game Development

The game development certificate prepares students for entry-level programming positions in the gaming industry. Through a hands-on, project-based approach, students are able to create their own video games and become familiar with the core programming language skills necessary for game development. The certificate also helps them become proficient in the areas of mathematics common to most game projects. To gain a thorough understanding of the main concepts involved in real-time 3D graphics programming, students are given the opportunity to work with an industry-standard gaming engine. With appropriate choice of major and elective courses, students may complete this certificate while pursuing the Bachelor of Science in computer science.

Game Development Certificate Requirements			Credits
Four required courses:			
CMSC	230	Computer Science II	3
CMSC	335	Object-Oriented and Concurrent Programming	3
CMSC	325	Game Design and Development	3
CMSC	425	Building Applications for Mobile Devices	3
A supporting elective chosen from the following courses:			3
CMIS	445	Distributed Systems	
CMSC	480	Advanced Programming in Java	
CMST	270	Integrative Video Game Design and Technology	
MATH	240	Introduction to Linear Algebra	
A second supporting elective chosen from the above list			3
Total credits for certificate in Game Development			**18**

CERTIFICATE PROGRAMS

Health Issues for the Aging Adult

The certificate in health issues for the aging adult is designed for students who seek the knowledge and skills necessary to effectively work with older adults in a variety of roles. The certificate integrates gerontological knowledge and skills from the fields of health/biology, sociology, psychology, and policy/services and provides the opportunity to apply these skills to work with older adults. Coursework may help students seeking a bachelor's degree in a variety of areas to integrate gerontology knowledge with their major area of academic study or prepare students who are vocationally oriented and not seeking a higher education degree to improve work skills. Through a practicum or Co-op experience, students work with professionals to apply knowledge acquired through coursework to practical experience with aging individuals or aging issues in different settings that address the needs of older adults (e.g., assisted living centers, retirement communities, nursing homes, hospitals, senior centers, companies producing products and services for seniors, or area agencies on aging).

Health Issues for the Aging Adult
Certificate Requirements   **Credits**

A required course:

| GERO | 100 | Introduction to Gerontology | 3 |

A course on the sociocultural aspects of aging chosen from the following: 3

| GERO | 331 | Sociology of Aging |
| GERO | 410 | Cross-Cultural Perspectives of Aging |

A psychology course chosen from the following: 3

| GERO | 220 | Psychological Aspects of Aging |
| PSYC | 357 | Psychology of Adulthood and Aging |

A life health and science course or courses totaling 3 credits chosen from the following: 3

BIOL	307	The Biology of Aging
GERO	302	Health and Aging
GERO	355	Nutritional Concerns of Aging
GERO	495D	Adaptation to Sensory Changes and Aging
GERO	495H	Illness and Aging
GERO	495K	Geriatric Nutrition

A required practicum experience: 3

| GERO | 486A | Internship in Gerontology Through Co-op |

A course specific to the student's academic goals chosen from the following: 3

GERO	306	Programs, Services, and Policies
GERO	380	End of Life: Issues and Perspectives
GERO	443	Making Gerontology Relevant to Other Disciplines

Total credits for certificate in Health Issues for the Aging Adult   18

Human Development

The human development certificate is designed to meet the needs of individuals who work in health care settings that require a thorough background in human development from birth to an advanced age. It enables students to understand and recognize developmental milestones across the lifespan and examines age-specific related topics. The program is particularly useful for individuals either currently working or desiring to work in settings such as childcare, adult care, boys' and girls' clubs, and other community-related settings. With appropriate choice of courses, this certificate may be completed while pursuing the Bachelor of Science in psychology.

Human Development Certificate Requirements

Five required courses:

PSYC	100	Introduction to Psychology	3
PSYC	351	Lifespan Development Psychology	3
PSYC	355	Child Psychology	3
PSYC	356	Psychology of Adolescence	3
PSYC	357	Psychology of Adulthood and Aging	3

A supporting elective chosen from the following: 3

PSYC	332	Psychology of Human Sexuality
PSYC	334	Psychology of Interpersonal Relationships
PSYC	338	Psychology of Gender

Total credits for certificate in Human Development   18

Human Resource Management

The human resource management certificate prepares students for supervisory and midlevel management positions in human resource management and enables employees in public- and private-sector organizations to upgrade their skills with the theory and practical knowledge necessary to advance to a higher level. The certificate prepares the student for the Professional in Human Resources (PHR) and Senior Professional in Human Resources (SPHR) certification examinations. With appropriate choice of major and elective courses, this certificate may be completed while pursuing the Bachelor of Science in human resource management.

Human Resource Management Certificate Requirements			Credits
Three required courses:			
BMGT	364	Management and Organization Theory	3
HRMN	300	Human Resource Management	3
HRMN	400	Human Resource Management: Analysis and Problems	3
A labor management course chosen from the following:			3
HRMN	362	Labor Relations	
HRMN	365	Conflict Management in Organizations	
A supporting elective chosen from the following:			3
BMGT	391	Motivation, Performance, and Productivity	
BMGT	464	Organizational Behavior	
BMGT	465	Organization Development and Change	
BMGT	484	Managing Teams in Organizations	
HRMN	367	Organizational Culture	
HRMN	395	The Total Awards Approach to Compensation Management	
HRMN	406	Employee Training and Development	
HRMN	463	Public-Sector Labor Relations	
HRMN	495	Contemporary Issues in Human Resource Management Practice	
A second supporting elective chosen from the above list			3
Total credits for certificate in Human Resource Management			**18**

Information Assurance

The information assurance certificate supports those who wish to acquire or improve information security knowledge in response to the national imperative for maintaining the security of the technology and information infrastructure of government and industry. Students gain specific skills and are instructed in areas of policy formation, needs assessment, security applications, and disaster prevention and recovery. Laboratories employing both state-of-the-art and industry-standard tools are used. With appropriate choice of major and elective courses, this certificate may be completed while pursuing the Bachelor of Science in information systems management.

Information Assurance Certificate Requirements			Credits
Two required courses:			
IFSM	430	Information Systems and Security	3
IFSM	450	Telecommunication Systems in Management	3
A supporting elective chosen from the following:			3
CMIT	320	Network Security	
IFSM	431	Policy Planning for Security Architects	
IFSM	432	Disaster Recovery Planning	
IFSM	433	Information Security Needs Assessment and Planning	
IFSM	454	Information System Security Mechanisms	
IFSM	457	Cyberterrorism	
IFSM	459	Security Issues and Emerging Technologies	
A second supporting elective chosen from the above list			3
A third supporting elective chosen from the above list			3
A fourth supporting elective chosen from the above list			3
Total credits for certificate in Information Assurance			**18**

CERTIFICATE PROGRAMS

Information Management

The information management certificate offers an overview of information systems, their role in organizations, and the relation of information systems to the objectives and structure of an organization. An introduction to the design and management of database systems in a business environment is provided. A study of the methods used in analyzing information needs and specifying application system requirements is complemented with a study of the concepts and techniques used in specifying the physical design of the targeted system. With appropriate choice of courses, this certificate may be completed while pursuing the Bachelor of Science in information systems management.

Information Management
Certificate Requirements   **Credits**

An introductory computing course chosen from the following: 3

CMIS	102	Introduction to Problem Solving and Algorithm Design
CMIS	102A	Fundamentals of Programming I
CMST	306	Introduction to Visual Basic Programming *or previous workplace experience with C, C++, Visual Basic, Ada, COBOL, or another high-level language plus an additional supporting elective from the lists below*

Three required courses:

IFSM	300	Information Systems in Organizations	3
IFSM	410	Database Concepts	3
IFSM	461	Systems Analysis and Design	3

A 300-level supporting elective course chosen from the following: 3

IFSM	302	Workplace Productivity
IFSM	303	Human Factors in Information Systems
IFSM	304	Ethics in the Information Age

A 400-level supporting elective course chosen from the following: 3

IFSM	411	SQL
IFSM	430	Information Systems and Security
IFSM	438	Project Management

Total credits for certificate in Information Management   18

Internet Technologies

The Internet technologies certificate is designed to provide an introduction to Internet applications and their design and development. Hands-on experience is provided in Web site management and design, with an emphasis on subject-related projects.

Internet Technologies
Certificate Requirements   **Credits**

Four required courses:

CMST	385	Internet and Web Design	3
CMST	386	Advanced Internet and Web Design	3
CMST	430	Web Site Management	3
CMST	450	Web Design with XML	3

A supporting elective chosen from the following: 3

CMIS	241	Data Structures and Abstraction
CMIS	340	Programming in Java
CMIS	345	Object-Oriented Design and Programming
CMIS	375	Programming in Perl
CMSC	480	Advanced Programming in Java
CMST	460	Web Application Development Using ColdFusion

A second supporting elective chosen from the above list 3

Total credits for certificate in Internet Technologies   18

Laboratory Management

The laboratory management certificate helps prepare science professionals for roles as managers in research and development laboratories in the basic sciences. It focuses on management and communication skills appropriate for the lab setting. With appropriate choice of courses, this certificate may be completed while pursuing the Bachelor of Technical and Professional Studies in laboratory management.

Laboratory Management
Certificate Requirements **Credits**

Five required courses:

NSCI	301	Laboratory Organization and Management	3
WRTG	393/393X	Technical Writing	3
IFSM	300	Information Systems in Organizations	3
BMGT	487	Project Management I	3
BMGT	488	Project Management II	3

A supporting elective chosen from the following: 1

BEHS	398L	Introduction to Mediation
BMGT	305	Knowledge Management
HRMN	363	Negotiation Strategies
PSYC	308E	Cultivating Executive Skills
PSYC	308H	Psychology of Motivating People at Work
PSYC	309K	Managing Interpersonal Stress and Conflict
SPCH	426	Negotiation and Conflict Management
SPCH	482	Intercultural Communication

Total credits for certificate in Laboratory Management **16**

Management Foundations

The management foundations certificate prepares students for supervisory and midlevel management positions and enables employees in public- and private-sector organizations to upgrade their skills with the theory and practical knowledge necessary to advance to a higher level. With appropriate choice of courses, this certificate may be completed while pursuing the Bachelor of Science in business administration.

Management Foundations
Certificate Requirements **Credits**

Four required courses:

IFSM	300	Information Systems in Organizations	3
BMGT	364	Management and Organization Theory	3
MRKT	310	Marketing Principles and Organization	3
HRMN	300	Human Resource Management	3

A finance course chosen from the following: 3

FINC	330	Business Finance
FINC	331	Finance for the Nonfinancial Manager

A supporting elective chosen from the following: 3

BMGT	365	Organizational Leadership
BMGT	380	Business Law I
BMGT	464	Organizational Behavior
BMGT	496	Business Ethics

Total credits for certificate in Management Foundations **18**

Marketing Communications

The certificate in marketing communications combines courses in communications and customer service with technological skills to prepare students for careers with management potential in such technology-related marketing areas as testing, planning, training, and customer assistance. Emphasis is on applying continuous improvement principles to communication between the customer and the organization and on honing the ability to communicate technical information to nontechnical audiences.

Note: Courses assume some basic knowledge of computers and business. Students without previous computer experience should first take CMST 103 Application Software or IFSM 201 Introduction to Computer-Based Systems. Students with no work experience should take BMGT 110 Introduction to Business and Management.

Marketing Communications
Certificate Requirements **Credits**

Six required courses:

IFSM	303	Human Factors in Information Systems	3
MRKT	310	Marketing Principles and Organization	3
MRKT	354	Integrated Marketing Communications	3
MRKT	395	Customer Relationship Management	3
MRKT	457	E-Marketing	3
WRTG	393/393X	Technical Writing	3

Total credits for certificate in Marketing Communications **18**

CERTIFICATE PROGRAMS

Marketing Management

The marketing management certificate prepares students for supervisory and midlevel management positions in customer service and customer relations. It provides both e-commerce and team-management skills. The program allows customer service/customer relations employees working in public- and private-sector organizations to upgrade their knowledge and skills in relation to key organizational, management, and customer issues.

Marketing Management Certificate Requirements			Credits
Five required courses:			
BMGT	364	Management and Organization Theory	3
MRKT	310	Marketing Principles and Organization	3
MRKT	354	Integrated Marketing Communications	3
MRKT	395	Customer Relationship Management	3
MRKT	410	Consumer Behavior	3
A supporting elective chosen from the following:			3
BMGT	317	Problem Solving for Managers	
HRMN	363	Negotiation Strategies	
HRMN	365	Conflict Management in Organizations	
MRKT	457	E-Marketing	
Total credits for certificate in Marketing Management			**18**

Negotiation and Conflict Management

The certificate in negotiation and conflict management provides an interdisciplinary perspective on group dynamics, problem solving, team building, and communication strategies that can lead to the effective resolution of conflicts. Grounded primarily in communication theory, the program allows students to emphasize aspects related to psychology, human resources, or business management. The certificate provides knowledge and skills that are relevant to careers in criminal justice, social services, and education, as well as human resource management (especially for trainers and facilitators in team building and organizational development). The certificate in negotiation and conflict management is therefore appropriate for students in business, human resource management, criminal justice, social science, psychology, education, communication studies, government relations, political science, and related fields.

Negotiation and Conflict Management Certificate Requirements			Credits
One required courses			
SPCH	426	Negotiation and Conflict Management	3
A course in conflict and negotiation chosen from the following:			3
BMGT	317	Problem Solving for Managers	
HRMN	362	Labor Relations	
HRMN	363	Negotiation Strategies	
LGST	327	Alternative Dispute Resolution	
A course in group dynamics and organizational behavior chosen from the following:			3
BMGT	464	Organizational Behavior	
BMGT	484	Managing Teams in Organizations	
HRMN	302	Organizational Communication	
HRMN	365	Conflict Management in Organizations	
PSYC	334	Psychology of Interpersonal Relationships	
PSYC	345	Group Dynamics	
PSYC	354	Cross-Cultural Psychology	
SPCH	420	Small-Group Communication	
A course in communication chosen from the following:			3
COMM	300	Communication Theory	
SPCH	324	Communication and Gender	
SPCH	470	Listening	
SPCH	482	Intercultural Communication	
A supporting elective chosen from the above lists			3
A second supporting elective chosen from the above lists			3
Total credits for certificate in Negotiation and Conflict Management			**18**

Object-Oriented Design and Programming

The certificate in object-oriented design and programming is appropriate for technical professionals who will be working as programmer/analysts or application developers. Students are taught introductory and advanced features of object-oriented languages, as well as program design concepts. Students should check course descriptions to ensure that they have taken all prerequisites for each course. With appropriate choice of major and elective courses, this certificate may be completed while pursuing the Bachelor of Science in computer and information science.

Object-Oriented Design and Programming
Certificate Requirements   **Credits**

Three required courses:

CMIS	141	Introductory Programming	3
CMIS	241	Data Structures and Abstraction	3
CMIS	345	Object-Oriented Design and Programming	3

A supporting elective chosen from the following: 3

CMIS	330	Software Engineering Principles and Techniques	
CMIS	340	Programming in Java	
CMIS	440	Advanced Programming in Java	
CMIS	455	Requirements Development	
CMIS	460	Software Design and Development	
CMIS	465	Software Verification and Validation	

A second supporting elective chosen from the above list   3

A third supporting elective chosen from the above list   3

Total credits for certificate in Object-Oriented
Design and Programming   **18**

Object-Oriented Programming Using Java

The certificate in object-oriented programming using Java is designed for technically oriented professionals who need a deep understanding of how to develop and write programs in the Java programming language. With appropriate choice of courses, this certificate may be completed while pursuing the Bachelor of Science in computer science.

Object-Oriented Programming Using Java
Certificate Requirements   **Credits**

Six required courses:

CMSC	130	Computer Science I	3
CMSC	150	Introduction to Discrete Structures	3
CMSC	230	Computer Science II	3
CMSC	335	Object-Oriented and Concurrent Programming	3
CMSC	420	Advanced Data Structures and Analysis	3
CMSC	480	Advanced Programming in Java	3

Total credits for certificate in Object-Oriented
Programming Using Java   **18**

Paralegal Studies

The paralegal studies certificate focuses on the legal concepts, procedures, and skills used in a wide variety of legal environments. The program addresses the organization, functions, and processes of institutions in the U.S. legal system, roles and issues in the paralegal field, legal ethics, and selected specialty areas. The curriculum emphasizes important skills, including legal analysis, communication, legal research, computer competence, legal drafting, investigation, organization, and specialized legal skills. With appropriate choice of courses, this certificate may be completed while pursuing the Bachelor of Science in legal studies. (However, students may not pursue the paralegal studies certificate within the associate of arts curriculum in legal studies.) No more than 12 credits in certificate courses may be earned through transfer or prior-learning credit.

Paralegal Studies Certificate Requirements			**Credits**
General education and other college coursework			36

This requirement may be fulfilled through transfer credit, and up to 30 credits may be earned through credit by examination or prior-learning portfolio credit. Total must include 18 credits in general education courses (described on p. 8) covering at least three different disciplines and WRTG 101/101X (unless the student already has earned an associate's or bachelor's degree before taking the first legal studies course). No more than six 1-credit courses may be applied toward this certificate.

Four required legal studies courses:

LGST	101	Introduction to Law	3
LGST	200	Techniques of Legal Research	3
LGST	201	Legal Writing	3
LGST	204	Legal Ethics	3

A general practice procedure and legal skills elective chosen from the following: 3

LGST	320	Criminal Law and Procedures
LGST	322	Evidence
LGST	325	Litigation
LGST	400	Advanced Legal Research and Analysis
LGST	401	Advanced Legal Writing

A general practice substantive law elective chosen from the following: 3

LGST	312	Torts
LGST	315	Domestic Relations
LGST	316	Estates and Probate
LGST	340	Contract Law
LGST	442	Business Organizations

A supporting elective or electives totaling 3 credits chosen from any LGST course	3
A supporting elective or electives totaling 3 credits chosen from any LGST course	3

Total credits for certificate in Paralegal Studies	**60**

Project Management for IT Professionals

The certificate in project management for IT professionals offers an overview of information systems, their role in organizations, and the relationship of information systems to the objectives and structure of an organization. The planning, scheduling, and controlling of a system project during its life cycle is explored. A survey of techniques for improving the productivity of workplace practices and procedures is included. With appropriate choice of courses, this certificate may be completed while pursuing the Bachelor of Science in information systems management.

Project Management for IT Professionals Certificate Requirements			**Credits**
Four required courses:			
IFSM	201	Introduction to Computer-Based Systems	3
IFSM	300	Information Systems in Organizations	3
IFSM	438	Project Management	3
IFSM	461	Systems Analysis and Design	3

A supporting elective chosen from the following: 3

IFSM	302	Workplace Productivity
IFSM	303	Human Factors in Information Systems
IFSM	304	Ethics in the Information Age
IFSM	430	Information Systems and Security
IFSM	450	Telecommunication Systems in Management

A second supporting elective chosen from the above list	3

Total credits for certificate in Project Management for IT Professionals	**18**

Public Fire-Protection Management and Administration

The public fire-protection management and administration certificate prepares students for supervisory and midlevel positions in public fire-service management. It also enables employees in public fire-protection organizations to enhance their skills with the administrative, management, planning, and legal knowledge necessary to advance to a higher level. With appropriate choice of courses, this certificate may be completed while pursuing the Bachelor of Science in fire science.

Public Fire-Protection Management and Administration Certificate Requirements — **Credits**

Six required courses:

FSCN	302	Fire and Emergency Services Administration	3
FSCN	304	Personnel Management for Fire and Emergency Services	3
FSCN	305	Fire Prevention Organization and Management	3
FSCN	401	Disaster and Fire Defense Planning	3
FSCN	412	Political and Legal Foundations of Fire Protection	3
FSCN	413	The Community and Fire Threat	3

Total credits for certificate in Public Fire-Protection Management and Administration — **18**

Security Management

The security management certificate provides management training relevant to modern security organizations. It focuses on administrative, legal, and management issues related to security.

Security Management Certificate Requirements — **Credits**

Five required courses:

CCJS	345	Introduction to Security Management	3
CCJS	357	Industrial and Retail Security Administration	3
CCJS	430	Legal and Ethical Issues in Security Management	3
CCJS	462	Protection of Business Assets	3
CCJS	496	Computer Crime and Security	3

One of the following courses: 3

CCJS	486A	Internship in Criminal Justice Through Co-op	
CCJS	341	Criminal Investigation	

Total credits for certificate in Security Management — **18**

Software Engineering

The software engineering certificate is intended for professionals who will be working in a team environment while developing large-scale software projects. Students learn about the methods used in the systematic design, development, testing, and maintenance of software products. They study models used to specify requirements, strategies used in software development, and methods of testing and formal verification. (Two semesters of Java or C++ programming are prerequisites to the certificate coursework.)

Software Engineering Certificate Requirements — **Credits**

Six required courses:

CMIS	330	Software Engineering Principles and Techniques	3
CMIS	335	Software Safety	3
CMIS	345	Object-Oriented Design and Programming	3
CMIS	455	Requirements Development	3
CMIS	460	Software Design and Development	3
CMIS	465	Software Verification and Validation	3

Total credits for certificate in Software Engineering — **18**

CERTIFICATE PROGRAMS

Systems Approach to Fire Safety

The systems approach to fire safety certificate prepares students for supervisory and midlevel management positions in fire safety. It also enables individuals in public- and private-sector fire safety organizations to upgrade their skills with the theory and practical knowledge necessary to advance to a higher level. With appropriate choice of major and elective courses, this certificate may be completed while pursuing the Bachelor of Science in fire science.

Systems Approach to Fire Safety
Certificate Requirements — Credits

Six required courses:

FSCN	303	Analytic Approaches to Public Fire Protection	3
FSCN	306	Fire Investigation and Analysis	3
FSCN	402	Fire-Related Human Behavior	3
FSCN	411	Fire-Protection Structure and Systems	3
FSCN	414	Fire Dynamics	3
FSCN	415	Application of Fire Research	3

Total credits for certificate in Systems Approach to Fire Safety   18

Technology and Management

The technology and management certificate prepares students for supervisory and midlevel management positions in technology fields and enables employees in public- and private-sector organizations to upgrade their skills with the theory and practical knowledge necessary to advance to a higher level.

Technology and Management
Certificate Requirements — Credits

Four required courses:

BMGT	317	Problem Solving for Managers	3
BMGT	487	Project Management I	3
BMGT	488	Project Management II	3
CMST	385	Internet and Web Design	3

A supporting elective chosen from the following: 3

CMST	340	Computer Applications in Management	
CMST	386	Advanced Internet and Web Design	
IFSM	461	Systems Analysis and Design	

A second supporting elective chosen from the above list   3

Total credits for certificate in Technology and Management   18

Terrorism and Institutions: Prevention and Response

The certificate in terrorism and institutions explores how institutions confront terrorism and the aftermath of terrorist acts. Institutions examined include government agencies, private security organizations, schools, and commercial enterprises. The certificate addresses emerging terrorist threats and the institutional response to terrorist acts. It can benefit security individuals who are in charge of protecting government facilities, private security agency employees, police officers, detective agents, public health and public safety administrators and officers, counterterrorism professionals, and the general public.

Terrorism and Institutions: Prevention and Response
Certificate Requirements — Credits

Three required courses:

CCJS	491	Institutional Security	3
GVPT	406	Global Terrorism	3
GVPT	409	Terrorism, Antiterrorism, and Homeland Security	3

An institutional response elective chosen from the following: 3

GVPT	240	Political Ideologies	
GVPT	407	State Terrorism	
GVPT	408	Counterterrorism	
HIST	319A	History of Terrorism	
PSYC	386	Psychology of Stress	

A specialized supporting elective chosen from the following: 3

CCJS	462	Protection of Business Assets
CCJS	463	Security: A Management Perspective
CCJS	496	Computer Crime and Security
CMIS	335	Software Safety
ENMT	305	Hazardous Materials Toxicology
ENMT	310	Emergency Planning and Operations Management
FSCN	306	Fire Investigation and Analysis
FSCN	401	Disaster and Fire Defense Planning
IFSM	432	Disaster Recovery Planning

A second specialized supporting elective chosen from the above list 3

Total credits for certificate in Terrorism and Institutions: Prevention and Response **18**

UNIX System Administration

The UNIX system administration certificate is designed to provide an understanding of the UNIX operating system, its maintenance and security, and related theory and implementation issues.

**UNIX System Administration
Certificate Requirements** **Credits**

Six required courses:

CMIS	141	Introductory Programming	3
CMIS	325	UNIX with Shell Programming	3
CMIS	375	Programming in Perl	3
CMIS	415	Advanced UNIX and C	3
CMIT	391	UNIX/Linux System Administration	3
CMIT	491	Advanced UNIX/Linux System Administration	3

Total credits for certificate in UNIX System Administration **18**

Visual Basic Programming

The Visual Basic programming certificate is designed for students seeking entry-level programming positions. Hands-on experience using Visual Basic software is provided. With appropriate choice of major and elective courses, this certificate may be completed while pursuing the Bachelor of Science in computer studies.

**Visual Basic Programming
Certificate Requirements** **Credits**

One of the following introductory courses: 3

| CMIS | 102 | Introduction to Problem Solving and Algorithm Design |
| CMIS | 102A | Fundamentals of Programming I |

Two required courses:

| CMST | 306 | Introduction to Visual Basic Programming | 3 |
| CMST | 416 | Advanced Visual Basic Programming | 3 |

A computer systems course chosen from the following: 3

| CMIS | 310 | Computer Systems and Architecture |
| IFSM | 310 | Software and Hardware Concepts |

A supporting elective chosen from the following: 3

CMIS	241	Data Structures and Abstraction
CMIS	340	Programming in Java
CMIS	345	Object-Oriented Design and Programming
CMSC	480	Advanced Programming in Java
CMST	385	Internet and Web Design
CMST	386	Advanced Internet and Web Design
IFSM	410	Database Concepts
IFSM	420	Advanced Database Concepts

A second supporting elective chosen from the above list 3

Total credits for certificate in Visual Basic Programming **18**

CERTIFICATE PROGRAMS

Web Design

The Web design certificate prepares students to use Internet applications and design principles to produce effective Web pages. The program is appropriate for nontechnical employees who wish to advance within their organizations and who want to learn how to establish, develop, and maintain a Web site.

Web Design Certificate Requirements			Credits
Five required courses:			
CMST	385	Internet and Web Design	3
ARTT	250	Elements of Commercial Design	3
CMST	386	Advanced Internet and Web Design	3
ARTT	354	Elements of Computer Graphics	3
CMST	450	Web Design with XML	3
A supporting elective chosen from the following:			3
	ARTT	479	Advanced Computer Graphics
	CMIS	375	Programming in Perl
	CMSC	480	Advanced Programming in Java
	CMST	460	Web Application Development Using ColdFusion
A second supporting elective chosen from the above list			3
Total credits for certificate in Web Design			**21**

Web Programming

The Web programming certificate is designed for technical professionals who want to learn some of the important tools used in Web programming. Students are taught introductory and advanced features of Perl and Common Gateway Interface (CGI) programming, as well as skills in databases, UNIX, and JavaScript or Web site management and design. Students should check the course descriptions to ensure that they have taken all prerequisites for each course.

Web Programming Certificate Requirements			Credits
Three required courses:			
CMIS	141	Introductory Programming	3
CMIS	375	Programming in Perl	3
CMIS	485	Web Database Development	3
A supporting elective chosen from the following:			3
	CMIS	320	Relational Databases
	CMIS	325	UNIX with Shell Programming
	CMIS	440	Advanced Programming in Java
	CMST	385	Internet and Web Design
	CMST	386	Advanced Internet and Web Design
	CMST	430	Web Site Management
	CMST	450	Web Design with XML
A second supporting elective chosen from the above list			3
A third supporting elective chosen from the above list			3
Total credits for certificate in Web Programming			**18**

Women in Business

The women in business certificate prepares students (female and male) for supervisory midlevel and senior management positions in a variety of organizational settings. The certificate focuses on business and management issues related to gender in organizations. Students with less than two years of business experience are encouraged to take BMGT 110 Introduction to Business and Management in addition to the courses listed below.

Women in Business Certificate Requirements		Credits
Four required courses:		
BMGT 364	Management and Organization Theory	3
BMGT 312	Women in Business	3
BMGT 313	Women as Entrepreneurs	3
BMGT 314	Women as Leaders	3
A supporting elective chosen from the following:		3
BMGT 365	Organizational Leadership	
BMGT 464	Organizational Behavior	
BMGT 484	Managing Teams in Organizations	
FINC 310	Entrepreneurship and New Venture Planning	
HRMN 367	Organizational Culture	
HRMN 406	Employee Training and Development	
HRMN 495	Contemporary Issues in Human Resource Management Practice	
SPCH 324	Communication and Gender	
A second supporting elective chosen from the above list		3
Total credits for certificate in Women in Business		**18**

Workplace Communications

The workplace communications certificate is designed to prepare students in the basics of communication vehicles and modes in the modern workplace. It introduces them to the vocabulary of the field and to the tools and techniques used to create workplace documents. With appropriate choice of major and elective courses, this certificate may be completed while pursuing the Bachelor of Arts in communication studies.

Workplace Communications Certificate Requirements		Credits
Four required courses:		
WRTG 101/101X	Introduction to Writing	3
IFSM 201	Introduction to Computer-Based Systems	3
CMST 310	Electronic Publishing	3
COMM 495	Seminar in Workplace Communication	3
A writing course chosen from the following:		3
WRTG 393/393X	Technical Writing	
WRTG 394/394X	Business Writing	
An editing course chosen from the following:		3
WRTG 289	Introduction to Principles of Text Editing	
WRTG 489	Advanced Technical Editing	
Total credits for certificate in Workplace Communications		**18**

Workplace Spanish

The workplace Spanish certificate combines language and professional study to give students a language foundation that will prepare them to work and communicate in a Spanish-speaking environment.

Workplace Spanish Certificate Requirements		Credits
Five required courses:		
SPAN 111	Elementary Spanish I	3
SPAN 112	Elementary Spanish II	3
SPAN 211	Intermediate Spanish I	3
SPAN 212	Intermediate Spanish II	3
SPAN 318	Commercial and Workplace Spanish	4
Total credits for certificate in Workplace Spanish		**16**

INFORMATION ON COURSES

THE UNIT OF CREDIT

The unit of credit defines the amount of university-level credit to be awarded for course completion, transfer of coursework from another institution, or evaluation of college-level prior learning. One credit is awarded on the basis of either of two sets of criteria, as follows:

- At least 15 hours (50 minutes each) of actual class meeting or the equivalent in guided learning activity (exclusive of registration and study days, holidays, and final examinations);
- At least 30 hours (50 minutes each) of supervised laboratory or studio work (exclusive of registration and study days, holidays, and final examinations).

PREREQUISITES

Prerequisites, normally stated in terms of numbered courses, represent the level of knowledge a student should have acquired before enrolling in a given course. It is each student's personal responsibility to make certain he or she is academically prepared to take a course. Faculty members are not expected to repeat material listed as being prerequisite.

Students may be barred from enrolling in courses for which they do not have the necessary prerequisites. Students who have not taken prerequisite courses recently should consult advisors or teachers and follow their recommendations. A teacher's approval may be required. Faculty members are always available to discuss whether a student has the preparation necessary to perform well in a given course.

WRTG 101 Introduction to Writing is prerequisite to any higher-level course in English, communication studies, or writing. MATH 107 College Algebra is prerequisite to any higher-level course in mathematics. (Further guidance is in the section describing courses in mathematics.)

Students who have not successfully completed the equivalent of an introductory collegiate course in writing (WRTG 101) at UMUC will be tested for placement. Placement testing is also required for certain courses in mathematics (p. 210). The current undergraduate *Schedule of Classes* gives times and locations of testing. More information may be obtained by calling 800-888-UMUC.

Another way to fulfill prerequisites is to obtain credit by course-challenge examination (described on p. 245). Advisors can explain the procedures. The goal is for students to earn college credit in areas in which they can demonstrate prior learning by successfully completing comprehensive tests of material normally covered in a term-long course. These examinations are specifically prepared for the required level of knowledge in a given subject. Students may not take course-challenge examinations for lower-level courses that are prerequisite to courses for which they have already received credit.

KEY TO COURSE DESCRIPTIONS

Undergraduate courses that have been (or may be) offered by UMUC are listed on the following pages. They are arranged alphabetically by academic discipline or subject. The number of credits is shown by an arabic numeral in parentheses—e.g., (3)—after the title of the course.

Course numbers are designated as follows:

000–099	Noncredit and institutional credit courses (which do not count toward any degree or certificate)
100–199	Primarily freshman courses
200–299	Primarily sophomore courses
300–399	Junior and senior courses unacceptable for credit toward a graduate degree
400–499	Junior and senior courses acceptable for credit toward some graduate degrees

UMUC may offer courses listed in the catalogs of other institutions of the University System of Maryland if demand warrants and the academic department concerned approves.

Subject	Catalog Number	Course Title	Number of Credits
BMGT	394	Real Estate Principles II	(3)

(Designed to fulfill the requirements for the Maryland licensing examination to sell real estate.)[1] Prerequisite: BMGT 393.[2] A continuation of the study of real estate. Topics include principles, definitions, professional issues and problems, construction and ownership problems, and other major aspects of real estate sales.[3] Students may receive credit for only one of the following courses: BMGT 394 or BMGT 398H.[4]

[1] Explanatory material, if needed, may

  Explain course sequence, purpose, or audience.

  Identify courses fulfilling general education requirements (listed on p. 8).

  Identify courses requiring a special fee, equipment, or materials.

[2] Prerequisites represent the level of knowledge a student should have acquired before enrolling in this course. A prerequisite is usually stated as a specific numbered course; sometimes the prerequisite calls for a specific course "or equivalent experience."

[3] The course description describes the focus and level of the course.

[4] Statements beginning "Students may receive credit for only one of the following courses" are designed to avoid course duplication and, therefore, loss of credit. The courses listed are courses that duplicate or significantly overlap the content of this course. If a course in the list is not described elsewhere in the catalog, that means that the course has changed designator or number over the years or that the course is not offered at all UMUC locations.

INDEX TO COURSE DESCRIPTIONS

The courses summarized in the following pages are listed alphabetically by discipline or subject, as follows. The discipline designators that precede the course numbers are listed in parentheses.

Students should check the course descriptions carefully to avoid duplicating previous coursework. UMUC will not award credit for courses that repeat material the student has already been credited with learning.

* Only a limited number of courses are available each term in this discipline.

INFORMATION ON COURSES

The following entries describe courses offered through University of Maryland University College. Requirements pertain only to degrees conferred at UMUC. To use these courses toward degrees offered by other institutions in the University System of Maryland, students should refer to the catalogs of those institutions for restrictions that may apply. In transferring to UMUC—particularly from a community college—students should be careful not to enroll in courses that duplicate their previous studies.

Accounting

Courses in accounting (designated ACCT) may be applied as appropriate (according to individual program requirements) toward

- a major in accounting, business administration, finance, global business and public policy, human resource management, management studies, or marketing;

- a minor in accounting, business administration, customer service management, human resource management, management studies, marketing, or strategic and entrepreneurial management;

- a certificate in Introductory Accounting, Advanced Accounting, or a number of other business-related areas;

- certain UMUC graduate degree programs, where recognized as equivalent coursework (specific equivalencies are detailed in the UMUC graduate catalog); and

- electives.

A description of the curriculum for the accounting major and minor begins on p. 13. Descriptions of related curricula may be found on the following pages: business administration (p. 21), business supply chain management (p. 23), customer service management (p. 35), finance (p. 43), global business and public policy (p. 50), human resource management (p. 58), management studies (p. 70), marketing (p. 72), and strategic and entrepreneurial management (p. 82).

ACCT 220 Principles of Accounting I (3)

An introduction to the basic theory and techniques of contemporary financial accounting. Topics include the accounting cycle and the preparation of financial statements for single-owner business organizations that operate as service companies or merchandisers. Students may receive credit for only one of the following courses: ACCT 220 or BMGT 220.

ACCT 221 Principles of Accounting II (3)

Prerequisite: ACCT 220. Continuation of the study of financial accounting (emphasizing accounting for liabilities, equity, and corporate forms of ownership), followed by an introduction to managerial accounting. Topics include responsibility accounting, budgets, cost control, and standard costing procedures and variances. Emphasis is on management reporting. Students may receive credit for only one of the following courses: ACCT 221, ACCT 301, BMGT 221, MGMT 301, or MGST 301.

ACCT 301 Accounting for Nonaccounting Managers (3)

(May not be applied toward a major or minor in accounting.) A survey of principles of accounting relevant in making managerial decisions on the basis of accounting information. Topics include internal controls, financial planning and reporting, analysis of financial statements, and elements of managerial cost accounting and budgeting. Students may receive credit for only one of the following courses: ACCT 221, ACCT 301, BMGT 221, MGMT 301, or MGST 301.

ACCT 310 Intermediate Accounting I (3)

(Students should be cautious about enrolling in ACCT 310 or ACCT 311. These are professional courses requiring intensive study and analysis and are not to be undertaken casually. Students who have not taken ACCT 221 within the last two years may have difficulty.) Prerequisites: BMGT 110 (or at least two years of business or management experience) and ACCT 221. A comprehensive analysis of financial accounting topics involved in preparing financial statements and in external reporting. Students may receive credit for only one of the following courses: ACCT 310 or BMGT 310.

ACCT 311 Intermediate Accounting II (3)

(A continuation of ACCT 310. Students should be cautious about enrolling in ACCT 310 or ACCT 311. These are professional courses requiring intensive study and analysis and are not to be undertaken casually. Students who have not taken ACCT 310 within the last two years may have difficulty.) Prerequisite: ACCT 310. A comprehensive analysis of financial accounting topics, including preparation of financial statements and external reports. Students may receive credit for only one of the following courses: ACCT 311 or BMGT 311.

ACCT 321 Cost Accounting (3)

Prerequisites: BMGT 110 (or at least two years of business or management experience) and ACCT 221. A study of the basic concepts of determining, setting, and analyzing costs for purposes of managerial planning and control. Emphasis is on the role of the accountant in the management of organizations and in the analysis of cost behavior, standard costing, budgeting, responsibility accounting, and costs that are relevant for making decisions. Various techniques are used to study cost and managerial accounting concepts; these may include the use of problem sets, case studies, computer applications, and other materials. Students may receive credit for only one of the following courses: ACCT 321 or BMGT 321.

ACCT 323 Taxation of Individuals (3)

Prerequisite: ACCT 220. An introduction to federal taxation of the income of individuals. Examples and problems illustrate tax laws. Computer applications may be used to analyze specific examples. Students may receive credit for only one of the following courses: ACCT 323 or BMGT 323.

ACCT 326 Accounting Information Systems (3)

Prerequisite: ACCT 221. A study of the control aspects of accounting systems. Topics include setting standards; defining and imposing administrative, operational, and security controls; and judging cost-effectiveness of systems. Various techniques are used to study accounting information-systems concepts; these may include the use of problem sets, case studies, computer applications, and other materials. Students may receive credit for only one of the following courses: ACCT 326, BMGT 320, or BMGT 326.

ACCT 328 Accounting Software (3)

Prerequisite: ACCT 221. An introduction to accounting software, focusing on evaluation of the benefits, costs, and risks of specific programs. Topics include payroll, inventory, accounts payable, accounts receivable, job cost, and point-of-sale applications. Popular software packages in the areas of tax and financial statement preparation are introduced. Projects and assignments integrate the principles of accounting information systems with the evaluation of accounting software. Students may receive credit for only one of the following courses: ACCT 328 or ACCT 398A.

ACCT 410 Accounting for Government and Not-for-Profit Organizations (3)

Prerequisite: ACCT 310. An introduction to the theory and practice of accounting and auditing as applied to governmental entities and not-for-profit organizations. Various techniques are used to study fund accounting concepts; these may include the use of problem sets, case studies, computer applications, and other materials. Students may receive credit for only one of the following courses: ACCT 410 or BMGT 410.

ACCT 411 Ethics and Professionalism in Accounting (3)

Prerequisite: ACCT 311. Analysis and discussion of issues relating to ethics and professionalism in accounting. The AICPA Code of Professional Conduct and the reasoning, philosophy, and application of that code are examined.

ACCT 417 Taxation of Corporations and Other Entities (3)

Prerequisites: ACCT 311 and 323. Examination of the federal taxation of corporations, partnerships, fiduciaries, and gifts, with information on the tools and techniques of tax research for compliance and planning. Various techniques are used to study tax concepts; these may include the use of problem sets, case studies, computer applications, and other materials. Students may receive credit for only one of the following courses: ACCT 417 or BMGT 417.

ACCT 422 Auditing Theory and Practice (3)

Prerequisite: ACCT 311. Recommended: ACCT 326. A study of the independent accountant's attest function. Topics include generally accepted auditing standards, tests of controls and substantive tests, and report forms and opinions. Various techniques are used to study auditing concepts and practices; these may include the use of problem sets, case studies, computer applications, and other materials. Students may receive credit for only one of the following courses: ACCT 422 or BMGT 422.

ACCT 424 Advanced Accounting (3)

Prerequisite: ACCT 311. Recommended: ACCT 326. A study of advanced accounting theory, applied to specialized topics and contemporary problems. Emphasis is on consolidated statements and partnership accounting. Various techniques are used to study accounting theory and practice; these may include the use of problem sets, case studies, computer applications, and other materials. Students may receive credit for only one of the following courses: ACCT 424 or BMGT 424.

ACCT 425 International Accounting (3)

Prerequisite: ACCT 311. A study of accounting in a multi-national context. Topics include evolving international accounting and reporting standards, problems of foreign exchange and taxation, intercompany transfer pricing, and emerging issues in international accounting. Students may receive credit for only one of the following courses: ACCT 425 or ACCT 498A.

ACCT 426 Advanced Cost Accounting (3)

Prerequisite: ACCT 321. A study of advanced cost accounting that emphasizes the managerial aspects of internal systems of recordkeeping, performance management, and control. Various techniques are used to study cost and managerial accounting practices and problems; these may include the use of problem sets, case studies, computer applications, and other materials. Students may receive credit for only one of the following courses: ACCT 426 or BMGT 426.

ACCT 427 Advanced Auditing (3)

Prerequisite: ACCT 422. An examination and a thorough study of special auditing topics. Topics include statistical sampling, information systems auditing, attestation standards, assurance services, and SEC accounting. Various techniques are used to study auditing theory and practice; these may include the use of problem sets, case studies, computer applications, and other materials. Students may receive credit for only one of the following courses: ACCT 427 or BMGT 427.

ACCT 436 Internal Auditing (3)

Prerequisite: ACCT 311. An introduction to internal auditing, its rapid growth, and its role in the modern corporation. Topics include internal auditing standards, scope, responsibilities, ethics, controls, techniques, and reporting practices. Consideration is given to the material included in the Certified Internal Auditor examination. Various techniques are used to study internal auditing theory and practice; these may include the use of problem sets, case studies, computer applications, and other materials. Students may receive credit for only one of the following courses: ACCT 436, ACCT 498E, or BMGT 498E.

ACCT 486A Internship in Accounting Through Co-op (3)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 246). An opportunity to combine academic theory with new, career-related experience in accounting. At least 12 hours per week must be devoted to new tasks for a minimum of 180 hours during the Co-op session; four new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to accounting and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

ACCT 486B Internship in Accounting Through Co-op (6)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 246). An opportunity to combine academic theory with new, career-related experience in accounting. At least 20 hours per week must be devoted to new tasks for a total of 300 hours during the Co-op session; five to eight new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to accounting and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

ACCT 495 Contemporary Issues in Accounting Practice (3)

(Intended as a final, capstone course to be taken in a student's last 15 credits.) Prerequisites: ACCT 311, 321, and 422 and BMGT 364. A study of accounting that integrates knowledge gained through previous coursework and experience and builds on that conceptual foundation through integrative analysis, practical application, and critical thinking. Emerging issues in accounting, business transactions, and financing are considered. Web accounting and business technology, accounting theory, and management techniques are used to research and analyze developing issues in the workplace. Topics include e-commerce, financial derivatives, balanced scorecards, and the changing nature of financial reporting and risk management. Students may receive credit for only one of the following courses: ACCT 495 or ACCT 498C.

African American Studies

Courses in African American studies (designated AASP) may be applied as appropriate (according to individual program requirements) toward

- a minor in African American studies; and

- electives.

UMUC offers only a limited number of courses each term in this discipline.

A description of the curriculum for the African American studies minor begins on p. 15.

AASP 201 Introduction to African American Studies (3)

(Fulfills the general education requirement in behavioral and social sciences.) An interdisciplinary study of significant aspects of African American history and culture, emphasizing the development of African American communities from the Middle Passage to the present. Topics include definitions of African American identity, influences, and achievements within American culture, and issues confronting African Americans. Students may receive credit for only one of the following courses: AASP 100 or AASP 201.

Anthropology

Courses in anthropology (designated ANTH) may be applied as appropriate (according to individual program requirements) toward

- the general education requirement in the behavioral and social sciences;

- a major in social science;

- a major or minor in Asian studies;

- a certificate in Diversity Awareness; and

- electives.

Descriptions of related curricula may be found on the following pages: Asian studies (p. 17) and social science (p. 80).

ANTH 101 Introduction to Anthropology: Archaeology and Physical Anthropology (3)

A survey of general patterns in the development of human culture, addressing the biological and morphological aspects of humans viewed in their cultural setting. Students who complete both ANTH 101 and 102 may not receive credit for ANTH 340, BEHS 340, or BEHS 341.

ANTH 102 Introduction to Anthropology: Cultural Anthropology (3)

A survey of social and cultural principles inherent in ethnographic descriptions. Students who complete both ANTH 101 and 102 may not receive credit for ANTH 340, BEHS 340, or BEHS 341.

ANTH 298 Special Topics in Anthropology (1-3)

A presentation of anthropological perspectives on selected topics of broad general interest. May be repeated to a maximum of 6 credits when topics differ.

ANTH 343 Physical Anthropology and Archaeology (3)

An interdisciplinary, intermediate-level exploration of contemporary and applied issues in physical anthropology and archaeology. Discussion covers evolution, human biological variation, primate studies, and archaeological frameworks and challenges. Focus is on theory and its application in dealing with concerns in our global society. Students may receive credit for only one of the following courses: ANTH 340, ANTH 343, or BEHS 340.

ANTH 344 Cultural Anthropology and Linguistics (3)

An interdisciplinary, intermediate-level exploration of contemporary issues in cultural anthropology and linguistics. Discussion covers variation in human social organization, ethnographic field methods, world views, and relationships amongst cultures, as well as cultural dimensions of language. Focus is on theory and its application in dealing with concerns in our global society. Students may receive credit for only one of the following courses: ANTH 340, ANTH 344, or BEHS 340.

ANTH 350 Medical Anthropology (3)

Recommended: ANTH 102 or ANTH 344. A global survey of health, illness, and healing. Discussion covers the interactions between health, culture, and disease, as well as Western and non-Western biomedical traditions and biocultural approaches to health. Emphasis is on application of anthropological research methods (e.g., observational, qualitative, and ethnographic approaches) to the study of health and disease.

ANTH 351 Introduction to Forensic Anthropology (3)

Recommended: BIOL 160 or BIOL 201. An introduction to the study of forensic anthropology, designed to provide a basic understanding of the analysis of human skeletal remains and how forensic anthropologists work as part of the medical forensic team. Topics include the investigative methods used in forensic anthropology; the standards for forensic anthropological investigations; and methods for determining sex, ancestry, time since death, and personal identification of human remains. Specific examples of forensic anthropology cases are reviewed.

ANTH 398 Intermediate Special Topics in Anthropology (1-3)

A presentation of anthropological perspectives on selected topics of broad general interest. May be repeated to a maximum of 6 credits when topics differ.

ANTH 486A Internship in Anthropology Through Co-op (3)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 246). An opportunity to combine academic theory with new, career-related experience in anthropology. At least 12 hours per week must be devoted to new tasks for a minimum of 180 hours during the Co-op session; four new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to anthropology and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

ANTH 486B Internship in Anthropology Through Co-op (6)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 246). An opportunity to combine academic theory with new, career-related experience in anthropology. At least 20 hours per week must be devoted to new tasks for a total of 300 hours during the Co-op session; five to eight new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to anthropology and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

Arabic

Courses in Arabic (designated ARAB) may be applied as appropriate (according to individual program requirements) toward

- the general education requirement in the arts and humanities;
- a major or minor in humanities; and
- electives.

UMUC offers a limited number of foreign language courses each term.

A description of the curriculum for the humanities major and minor begins on p. 56.

ARAB 111 Elementary Arabic I (3)

(Not open to native speakers of Arabic; assumes no prior knowledge of Arabic.) An elementary study of modern standard Arabic. Emphasis is on oral communication skills as a foundation for building balanced proficiency in the four communication skills of listening, speaking, reading, and writing. Topics include basic structures, vocabulary, pronunciation, and writing, as well as elements of culture, history, and geography. Authentic text from native speakers is used as much as possible.

ARAB 112 Elementary Arabic II (3)

(Not open to native speakers of Arabic.) Prerequisite: ARAB 111. Continued basic study of modern standard Arabic, emphasizing oral communication as a foundation for building a balanced development of proficiency in the four communication skills of listening, speaking, reading, and writing. Basic structures, vocabulary, pronunciation, and writing are practiced. Topics include basic structures, vocabulary, pronunciation, and writing, as well as further elements of culture, history, and geography. Oral and written authentic text from native speakers is used as much as possible.

ARAB 114 Elementary Arabic III (3)

(Not open to native speakers of Arabic.) Prerequisite: ARAB 112. Further development of skills in listening, speaking, reading, and writing in Arabic. Arabic culture, history, current events, and geography provide the context for instruction in grammatical structures, vocabulary, pronunciation, and composition. Focus is on acquiring the skills necessary to communicate with native Arabic speakers orally and in writing at an advanced elementary level. Oral and written authentic text is used as much as possible.

ARAB 115 Elementary Arabic IV (3)

(Not open to native speakers of Arabic.) Prerequisite: ARAB 114. Improvement of skills in listening, speaking, reading, and writing in Arabic. Arabic culture, history, current events, and geography provide the context for instruction in grammatical structures, vocabulary, pronunciation, and composition. Focus is on acquiring the skills necessary to communicate with native Arabic speakers orally and in writing at a basic intermediate level. Oral and written authentic text is used as much as possible.

Art

Courses in art (designated ARTT) may be applied as appropriate (according to individual program requirements) toward

- the general education requirement in the arts and humanities;
- a minor in art;
- a major or minor in humanities;
- a certificate in Computer Graphics and Design, Desktop Publishing, or Web Design; and
- electives.

A description of the curriculum for the art minor begins on p. 16. A description of the curriculum for the humanities major and minor begins on p. 56.

ARTT 110 Elements of Drawing I (3)

An introduction to various media and related techniques. Problems for study are based on the figure, still life, and nature.

ARTT 210 Elements of Drawing II (3)

Prerequisite: ARTT 100 or ARTT 110. Drawing taught with an emphasis on understanding organic form as related to study of the human figure and pictorial composition. Students may receive credit for only one of the following courses: ARTS 210 or ARTT 210.

INFORMATION ON COURSES

ARTT 250 Elements of Commercial Design (3)

A study of essential design concepts focusing on the creative skills needed to better solve internal corporate and external advertising/marketing problems in visual media. Theoretical and practical applications include corporate/institutional identity programs, collateral corporate and marketing materials, and advertising campaigns. Discussion also covers the primary relationship between word and image communications. Emphasis is on creative problem solving in media communications. An exploration of symbolism and its relationship to image addresses visual structure, continuity, and coherence. Psychological and sociocultural questions are also examined as they relate to ethical standards and practices.

ARTT 320 Elements of Painting (3)

Prerequisite: ARTT 110. Practice in the basic tools and vocabulary of painting. Oil and/or water-based paints are used.

ARTT 354 Elements of Computer Graphics (3)

Recommended: One lower-level ARTT course (or equivalent experience in graphic design) and experience in art fundamentals, Microsoft Office applications, and Windows. An introduction to computer graphics programs and basic concepts in electronic design. Focus is on creating artwork in various formats, including print and the Web. Projects require six hours of computer work per week, some of which must be completed independently.

ARTT 418 Drawing (3)

Prerequisite: ARTT 210. Creation of original compositions based on the figure and nature, supplemented by problems of personal and expressive drawing. May be repeated to a maximum of 12 credits.

ARTT 428 Painting (3)

Prerequisite: ARTT 320. Creation of original compositions based on the figure, nature, and still life, as well as expressive painting. Emphasis is on the development of personal directions. May be repeated to a maximum of 12 credits.

ARTT 458 Graphic Design and Illustration (3)

An introduction to the basic elements of design. Projects focus on problems central to the commercial arts. Basic skills with a variety of media and techniques are developed.

ARTT 470 Watercolor (3)

An opportunity for further development of painting in watercolors at beginning or advanced levels. May be repeated to a maximum of 6 combined credits in ARTT 470 and ARTT 489B.

ARTT 479 Advanced Computer Graphics (3)

Prerequisite: ARTT 354. A study of advanced techniques in and the theory behind computer imaging, graphics, illustration, and mixed media. Projects require six hours of computer work per week, some of which must be completed independently.

ARTT 486A Internship in Art Through Co-op (3)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 246). An opportunity to combine academic theory with new, career-related experience in art. At least 12 hours per week must be devoted to new tasks for a minimum of 180 hours during the Co-op session; four new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to art and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

ARTT 486B Internship in Art Through Co-op (6)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 246). An opportunity to combine academic theory with new, career-related experience in art. At least 20 hours per week must be devoted to new tasks for a total of 300 hours during the Co-op session; five to eight new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to art and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

Art History

Courses in art history (designated ARTH) may be applied as appropriate (according to individual program requirements) toward

- the general education requirements in the arts and humanities;
- a minor in art history;
- a major or minor in humanities; and
- electives.

UMUC offers a limited number of ARTH courses each session. To complete a minor, students may need to take courses at other institutions in the University System of Maryland or extend the time spent fulfilling the degree requirements. Students are advised to consult an advisor before selecting this discipline.

A description of the curriculum for the art history minor begins on p. 16. A description of the curriculum for a major or minor in humanities begins on p. 56.

ARTH 370 History of World Art I (3)

A survey of the development of world visual art in its various forms, examining and comparing the expression of cultural and aesthetic values in different parts of the world from prehistory to 1400, when the European Age of Exploration began and world cultures came into contact.

ARTH 371 History of World Art II (3)

A survey of the development of world visual art in its various forms, examining and comparing the expression of cultural and aesthetic values in different parts of the world from 1400, when the European Age of Exploration began, to modern day. The effects of contact among world cultures on both the form and content of artistic expression is examined.

ARTH 380 Masterpieces of Painting (3)

Analysis of selected masterworks of painting, intended to reveal the creative process, the personality of the artist, and the cultural context. Students may receive credit for only one of the following courses: ARTH 320 or ARTH 380.

ARTH 486A Internship in Art History Through Co-op (3)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 246). An opportunity to combine academic theory with new, career-related experience in art history. At least 12 hours per week must be devoted to new tasks for a minimum of 180 hours during the Co-op session; four new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to art history and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

ARTH 486B Internship in Art History Through Co-op (6)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 246). An opportunity to combine academic theory with new, career-related experience in art history. At least 20 hours per week must be devoted to new tasks for a total of 300 hours during the Co-op session; five to eight new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to art history and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

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Asian Studies

Courses in Asian studies (designated ASTD) may be applied as appropriate (according to individual program requirements) toward

- the general education requirements in the arts and humanities or the behavioral and social sciences (based on course content);
- a major or minor in Asian studies or humanities; and
- electives.

UMUC offers a limited number of courses each term in this discipline. To complete a major or minor, students may need to take courses at other institutions in the University System of Maryland or extend the time spent fulfilling the degree requirements. Students are advised to consult an advisor before selecting this discipline.

A description of the curriculum for the Asian studies major and minor begins on p. 17. A description of the curriculum for the humanities major and minor begins on p. 56.

ASTD 150 Introduction to Asian Studies I (3)

(The first course in the two-course sequence ASTD 150–160. Fulfills the general education requirements in the arts and humanities or the social sciences.) An interdisciplinary examination of the classical Asian tradition, encompassing a general survey of the region.

ASTD 160 Introduction to Asian Studies II (3)

The second course in the two-course sequence ASTD 150–160. Fulfills the general education requirements in the arts and humanities or the social sciences.) Recommended: ASTD 150. An interdisciplinary examination of the modern period in Asian history, beginning approximately with the 17th century.

ASTD 198 Special Topics in Asian Studies (3)

An investigation of a special topic, problem, or issue of particular relevance to countries or peoples of the Pacific Rim or Indian Ocean. Typical investigations include historical or contemporary subjects focusing on cultural, economic, military, or political issues.

ASTD 309 Business in Asia (3)

(Fulfills the general education requirement in the social sciences.) An integrative study of business conditions and practices in the Asian/Pacific region, from perspective of contemporary history, economics, government, and cross-cultural interests.

ASTD 380 American Relations with China and Japan: 1740 to Present (3)

(Fulfills the general education requirement in the social sciences.) A study of American political, economic, and cultural relations with China and Japan from the American colonial era to modern times. Topics include diplomacy and power politics; Christian missions; immigration and exclusion; overseas education; art and literature; and trade, investment, and technology.

ASTD 398 Advanced Special Topics in Asian Studies (3)

An investigation of a special topic, problem, or issue of particular relevance to countries or peoples of the Pacific Rim or Indian Ocean. Typical investigations include historical or contemporary subjects focusing on cultural, economic, military, or political issues. Assignments include advanced reading and research.

ASTD 438 Japanese Literature in Translation (3)

(Formerly JAPN 418. Conducted in English. Fulfills the general education requirement in the arts and humanities.) A study of representative works of Japanese literature in English translation. May be repeated for a total of 6 credits when course content differs.

ASTD 485 Great Issues in Asian Studies (3)

(Intended as a final, capstone course to be taken in a student's last 15 credits. Fulfills the general education requirement in the arts and humanities.) Prerequisites: ASTD 150 and 160. A study of Asian issues that integrates knowledge gained through previous coursework and experience and builds on that conceptual foundation through integrative analysis, practical application, and critical thinking. Emerging issues in Asian studies are considered. Focus is on the broad issue of modernization in Asian nations.

Astronomy

Courses in astronomy (designated ASTR) may be applied as appropriate (according to individual program requirements) toward

- the general education requirement in the biological and physical sciences;

- a minor in natural science; and

- electives.

UMUC offers only a limited number of courses each term in this discipline.

A description of the curriculum for the natural science minor begins on p. 75.

ASTR 100 Introduction to Astronomy (3)

(Not open to students who have taken or are taking any astronomy course numbered 250 or higher. For students not majoring or minoring in a science.) Prerequisite: MATH 012 or higher. A discussion of the major areas of astronomy. Topics include the solar system, stars and stellar evolution, and galaxies. Current topics in astronomy are also discussed. Students may receive credit for only one of the following courses: ASTR 100, ASTR 101, ASTR 120, or GNSC 125.

ASTR 399 Independent Study in Astronomy (1–6)

Prerequisite: 6 credits in ASTR courses and agreement of faculty member to act as supervisor. Directed independent study of topics of special interest not covered by regularly scheduled courses in astronomy. May be repeated to a maximum of 6 credits when topics differ.

Behavioral and Social Sciences

Courses in behavioral and social sciences (designated BEHS) may be applied as appropriate (according to individual program requirements) toward

- the general education requirement in the behavioral and social sciences;

- a major in social science;

- a minor in women's studies;

- a certificate in Applied Behavioral and Social Sciences or Diversity Awareness; and

- electives.

A description of the curriculum for the social science major begins on p. 80. A description of the curriculum for the women's studies minor may be found on p. 83.

BEHS 210 Introduction to Social and Behavioral Science (3)

An interdisciplinary introduction to the study of society that addresses the issues of what it is to be a social scientist from a variety of social science perspectives. Empirical and theoretical contributions of the different social science disciplines are used to better understand the nature of society. Survey covers culture, geography, the individual, family, education, stratification in society, government and politics, and economics. Topics also include the scientific method and research methods in the social science disciplines and the current relationships among the different social science disciplines. A historical overview of the development of the social sciences is provided, and an analysis of social phenomena that integrates insights from the social sciences is presented. Students may receive credit for only one of the following courses: BEHS 201 or BEHS 210.

BEHS 220 Diversity Awareness (3)

An interdisciplinary study of diversity issues designed to encourage critical thinking about their impact in today's world. Emphasis is on consciousness of diversity and awareness that each individual lives within a diverse environment. Topics include issues related to age, disability, race, creed, gender, sexual orientation, national origin, and socioeconomic status, as well as current issues in diversity studies.

BEHS 320 Disability Studies (3)

An interdisciplinary study of disability issues that focuses on understanding and evaluating traditional and current interpretations of the meaning of disability. Topics include the construction of images of people with disabilities by people without disabilities; attitudes and actions toward those with disabilities by those without disabilities; approaches taken by major social institutions (e.g., law, education, religion, the arts) toward disability; distinctions between a sociocultural approach to disability and the medical model; and current issues in disability studies.

BEHS 343 Parenting Today (3)

An overview of critical issues of parenthood in the United States today. Topics include characteristics of effective parenting styles and capable parents, the role of nontraditional parenting techniques, and the social forces that cause changes in parent/child relationships and give rise to varying styles of parenting as developed in the United States. Some cross-cultural comparisons are included.

BEHS 364 Alcohol in U.S. Society (3)

An interdisciplinary examination of the use and abuse of alcoholic beverages from the perspectives of psychology, physiology, sociology, medicine, and public health. The effects of alcohol on all age groups throughout the lifespan are explored in relation to gender, families, race, the workplace, and public safety. Analysis covers current research and trends in the treatment of alcoholism, including prevention, assessment, and intervention, as well as legal aspects.

BEHS 453 Domestic Violence (3)

An examination of the complex phenomenon of domestic violence from a systems perspective that integrates individual, social, political, cultural/ethnic, economic, legal, and medical viewpoints from the past and present. Topics include the physical, emotional, and sexual abuse of children, partners, and the elderly. Discussion also covers response systems and mechanisms to prevent and treat violence. Students may receive credit for only one of the following courses: BEHS 453 or BEHS 454.

BEHS 486A Internship in Behavioral Science Through Co-op (3)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 246). An opportunity to combine academic theory with new, career-related experience in behavioral and social sciences. At least 12 hours per week must be devoted to new tasks for a minimum of 180 hours during the Co-op session; four new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to behavioral and social sciences and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

BEHS 486B Internship in Behavioral Science Through Co-op (6)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 246). An opportunity to combine academic theory with new, career-related experience in behavioral and social sciences. At least 20 hours per week must be devoted to new tasks for a total of 300 hours during the Co-op session; five to eight new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to behavioral and social sciences and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

Biology

Courses in biology (designated BIOL) may be applied as appropriate (according to individual program requirements) toward

- the general education requirement in the biological and physical sciences;

- a major in biotechnology, homeland security, investigative forensics, or laboratory management;

- a minor in biology, forensics, microbiology, or natural science;

- a certificate in Biosecurity; and

- electives (including related requirements for the environmental management major).

A description of the curriculum for the biology minor begins on p. 19. Descriptions of related curricula may be found on the following pages: biotechnology (p. 19), environmental management (p. 40), forensics (p. 47), homeland security (p. 54), investigative forensics (p. 64), laboratory management (p. 66), microbiology (p. 74), and natural science (p. 75).

BIOL 101 Concepts of Biology (3)

(For students not majoring in a science.) An introduction to living things in light of knowledge of physical, chemical, and biological principles. The organization, processes, interdependence, and variety of living organisms are explored. Emphasis is on understanding the impact of biological knowledge on human societies. Current events that involve biological systems are considered. Students may receive credit for only one of the following courses: BIOL 101, BIOL 105, or BSCI 105.

BIOL 102 Laboratory in Biology (1)

(For students not majoring in a science. Fulfills the laboratory science requirement only with previous or concurrent credit for BIOL 101.) Prerequisite or corequisite: BIOL 101. A laboratory study of the concepts underlying the structure and functioning of living organisms. Laboratory exercises emphasize the scientific method and explore topics such as the chemical foundations of living organisms, pH, cell structure and function, metabolism, DNA structure and function, mechanisms and patterns of inheritance, evolution, classification, and population biology and ecosystems. Students may receive credit for only one of the following courses: BIOL 102, BIOL 105, or BSCI 105.

BIOL 103 Introduction to Biology (4)

(Not open to students who have completed BIOL 101 or BIOL 102. For students not majoring in a science. Fulfills the laboratory science requirement.) An introduction to the concepts underlying the structure and function of living organisms. The organization, chemical foundations, metabolism, genetics, evolution, ecosystems, and interdependence of living organisms are explored. Laboratory activities emphasize the scientific method in exploring these topics. Students may receive credit for only one of the following courses: BIOL 101, BIOL 102, BIOL 103, BIOL 105, or BSCI 105.

BIOL 160 Human Biology (3)

(Science background not required.) A general introduction to human structure, functions, genetics, evolution, and ecology. The human organism is examined from the basic cellular level and genetics, through organ systems, to interaction with the outside world. Pertinent health topics are also discussed. Students may receive credit for only one of the following courses: BIOL 160 or GNSC 160.

BIOL 181 Life in the Oceans (3)

A study of the major groups of plants and animals in various marine environments, as well as their interactions with each other and the nonliving components of the ocean. The impact of human activity on life in the ocean and the potential uses and misuses of the ocean are discussed. Students may receive credit for only one of the following courses: BIOL 181 or ZOOL 181.

BIOL 211 Environmental Science (3)

A survey of ecological principles as they apply to the interrelated dilemmas of sustainability. Topics include overpopulation, pollution, over-consumption of natural resources, and the ethics of land use. Students may receive credit for only one of the following courses: BIOL 211, BOTN 211, or PBIO 235.

BIOL 215 Population Biology and General Ecology (3)

A general introduction to population and community biology. Topics include evolution, population genetics, population growth and steady states, age structure of populations, multi-species dependencies, and ecosystem energetics. Illustrations are drawn from both natural and human populations. Students may receive credit for only one of the following courses: BIOL 215 or ZOOL 270.

BIOL 220 Human Genetics (3)

(For students not majoring in a science.) An introduction to genetics, focusing on the human organism. Topics include transmission and biochemical genetics, mutation, the behavior of genes in populations, and genetic engineering. The roles of recent discoveries in the treatment of genetic diseases, cancer, and organ transplantation are examined. Students may receive credit for only one of the following courses: BIOL 220, BIOL 346, ZOOL 146, or ZOOL 346.

BIOL 222 Principles of Genetics (3)

Prerequisite: BIOL 101, BIOL 103, or BIOL 105. Recommended: CHEM 103. A study of the principles and mechanisms of heredity and gene expression. Plant, animal, and microbial organisms are considered. Students may receive credit for only one of the following courses: BIOL 220, BIOL 222, or BSCI 222.

BIOL 226 Evolution (3)

Prerequisite: BIOL 101, BIOL 103, BIOL 105, or BIOL 161. An introduction to biological evolution, its principles, and their application to understanding the history of life on Earth. Discussion covers the history and evidence for modern evolutionary concepts and mechanisms, the origin of life, the molecular mechanisms of evolution, the evolution of plants, the evolution of animals (including man), the relationship between ontogeny and phylogeny, and the reciprocal relationships of evolution to the environment (including human culture).

BIOL 301 Human Health and Disease (3)

(For students majoring in both science and nonscience disciplines.) A survey of the mechanisms of disease and their expression in major organ systems of the human body. Topics include infections, cancer, heart disease, lung disease, diabetes, stroke, malnutrition, poisoning by environmental toxins, stress, inflammation, disorders of the immune system, and aging. Emphasis is on prevention of disease through control of risk factors and early detection. Students may receive credit for only one of the following courses: BIOL 301 or BIOL 398H.

BIOL 302 Bacteria, Viruses, and Health (3)

(For students majoring in both science and nonscience disciplines.) An introductory study of the basic structure, genetic and regulatory systems, and life cycles of bacteria and viruses. Students may receive credit for only one of the following courses: BIOL 398G, BSCI 223, MICB 200, or MICB 388A.

BIOL 304 The Biology of Cancer (3)

(For students majoring in both science and nonscience disciplines.) An overview of the biological basis of cancer. The development and progression of cancer are considered at the level of cell structure and function. The roles of genes and proteins are also examined. Students may receive credit for only one of the following courses: BIOL 304 or GNSC 398C.

BIOL 305 The Biology of AIDS (3)

(For students majoring in both science and nonscience disciplines.) An overview of Acquired Immune Deficiency Syndrome (AIDS) from a biological perspective. The development and treatment of AIDS and human immunodeficiency virus (HIV) infection are considered with respect to cells, viruses, genes, and proteins.

BIOL 307 The Biology of Aging (3)

(For students majoring in both science and nonscience disciplines.) An overview of the biological basis of aging. Topics include typical changes that occur in cells, molecules, metabolism, and structure during the aging process. The development and progression of several diseases associated with aging (including cancer, neurodegenerative diseases such as Alzheimer's and Parkinson's disease, osteoporosis, and loss of visual acuity and memory) are discussed with respect to the role of genes, proteins, and environmental influences. Students may receive credit for only one of the following courses: BIOL 307 or BIOL 398V.

BIOL 320 Forensic Biology (3)

An introduction to the basic principles of biology as applied to the field of forensic science. Topics include the biological features and characteristics of various types of evidentiary materials, as well as the basic principles of chemistry, cell biology, microbiology, and genetics that underlie various types of forensic analysis.

BIOL 331 Concepts in Microbiology (4)

(Fulfills the laboratory science requirement.) Prerequisite: BIOL 102, BIOL 103, or BIOL 105. An examination of the morphology, genetics, ecology, physiology, immunology, and pathogenesis of microorganisms. The use of microorganisms in the fields of medicine, food design and safety, and biotechnology are also explored. Students may receive credit for only one of the following courses: BIOL 230, BIOL 331, BIOL 398G, BSCI 223, or MICB 200.

BIOL 334 Vaccines and Society (3)

(For students majoring in both science and nonscience disciplines.) An overview of the development and testing of vaccines, the prevention of disease by vaccines, and the role of vaccines in society. The scientific, clinical, and practical aspects of vaccines and vaccination are considered with regard to the immune system. Vaccine development is considered from a historical perspective, as well as in the context of current vaccine research. Students may receive credit for only one of the following courses: BIOL 334, BIOL 335, BIOL 398R, GNSC 398H, or MICB 388D.

BIOL 350 Molecular and Cellular Biology (3)

Prerequisite: BIOL 101, BIOL 103, BIOL 105, or BIOL 230. An introduction to the basic structure and function of cells, with an emphasis on eukaryotic cell biology. Topics include cell-cycle growth and death; protein structure and metabolism; gene replication, repair, recombination, and expression; RNA processing and metabolism; and molecular transport, traffic, and signaling. The principles and uses of recombinant DNA and genetic engineering technology are also discussed. Students may receive credit for only one of the following courses: BIOL 350 or BIOL 398S.

BIOL 356 Molecular Biology Laboratory (4)

(For students majoring or minoring in a science. Fulfills the laboratory science requirement.) Prerequisite: BIOL 222, BIOL 230, or BIOL 350. A laboratory study of current molecular biology and genetic engineering procedures, including the isolation of DNA, RNA, and proteins; electrophoresis; the use of restriction enzymes; cloning procedures; polymerase chain reaction (PCR) analysis; and gene expression analysis. Students may receive credit for only one of the following courses: BIOL 355 or BIOL 356.

BIOL 357 Bioinformatics (3)

Recommended: Some background in either computer science or introductory biology. An introduction to the use of computers in the analysis of DNA and protein sequences and the significance of these analyses. Topics include genome analysis, evolutionary relationships, structure-function identification, pattern recognition, database searches and structures, and algorithms. Students may receive credit for only one of the following courses: BIOL 357 or BIOL 398U.

BIOL 360 Developmental Biology (3)

Prerequisite: BIOL 101, BIOL 103, or BIOL 105. An overview of animal development, with an emphasis on the underlying cellular and molecular mechanisms that guide it. Topics include fertilization, embryonic cleavage, gastrulations, early vertebrate morphogenesis, neural development, fate determination by cytoplasm specification and cell-cell interactions, transcriptional and post-transcriptional gene regulation mechanisms that mediate developmental processes, homeobox gene families, protein gradients, pattern formation, and sex determination and gametogenesis. Students may receive credit for only one of the following courses: BIOL 360 or BIOL 398T.

BIOL 362 Neurobiology (3)

(For students majoring or minoring in a natural science or psychology.) Prerequisite: BIOL 101, BIOL 103, or BIOL 105. An in-depth discussion of the biology and development of the nervous system. Topics include neuronal structure and function, communication at the synapse, membrane receptors and intra- and intercellular signaling systems, gene regulation, gross organization of the brain and spinal cord, the processing of sensory information, the programming of motor responses, and higher functions such as learning, memory, cognition, and speech.

BIOL 398A Human Evolution and Ecology (1)

An examination of the varied biological evidence for the theory of evolution, including fossil records, DNA analysis, and geological and biogeographical changes. The struggle for existence, the survival of the fittest, and adaptation to the environment are discussed. Topics include Darwinian medicine, the evolution of disease, and the role of evolution in the human ecosystem.

BIOL 398C Regulation of Gene Expression (1)

Prerequisite: BIOL 101, BIOL 103, or BIOL 105. An analysis of the mechanisms by which gene expression is regulated. Topics include the role of DNA sequence and structure, transcription factors, and cell signaling in gene expression. Regulation is also considered in the context of development, environmental influences, and human diseases.

BIOL 398J The Role of Nutrition in Cancer and Heart Disease (1)

A study of the relationship between diet and the development of cancer and heart disease at the level of molecules, cells, and genes. Topics include the scientific and epidemiological evidence supporting the roles of various foods, nutrients, antioxidants, fiber, fats, and genetics in the progression or prevention of these two major causes of mortality. Students may receive credit for only one of the following courses: BIOL 398J or GNSC 398F.

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BIOL 398K Stem Cells in Society (1)

An introduction to the biological principles that govern the origin, development, and utility of stem cells. Topics include the features of stem cells, their various sources, and potential uses in medicine, agriculture, and industry. The risks and legal and ethical issues associated with stem cell technologies are also examined.

BIOL 398P Pesticides and the Environment (1)

A survey of the history of pesticides, their importance in America's environmental "awakening," and their significance as contaminants. The evolution of pesticide usage, from overdependence to attempts at reduction, is also covered.

BIOL 399 Independent Study in Life Science (1–6)

Prerequisite: 6 credits in upper-level BIOL courses and agreement of faculty member to act as supervisor. Directed independent study of topics of special interest not covered by regularly scheduled courses in life sciences. May be repeated to a maximum of 6 credits when topics differ.

BIOL 400 Life Science Seminar (3)

(For students majoring or minoring in a science.) Prerequisite: BIOL 101, BIOL 103, BIOL 105, or BSCI 105. An examination of current topics in the life sciences through seminars and discussions based on representative publications in the recent and primary literature.

BIOL 422 Epidemiology of Emerging Infections (3)

Prerequisite: BIOL 230, BIOL 302, BIOL 398G, or BSCI 223. An investigation of factors contributing to the emergence of new infectious diseases and the resurgence of diseases once thought to have been controlled. Disease symptoms, patterns of spread, and possible control measures are examined for new infectious diseases (such as Lyme disease and AIDS and those caused by E. coli 0157, the Ebola virus, hantaviruses, and cryptosporidia). Resurgent diseases (such as small pox, anthrax, botulism, bubonic plague, dengue, influenza, tuberculosis, cholera, and malaria) and those caused by flesh-eating bacteria are also discussed. Students may receive credit for only one of the following courses: BIOL 422 or MICB 388E.

BIOL 430 Microbial Physiology (3)

Prerequisite: BIOL 230, BIOL 240, or BIOL 302. An investigation of the processes of growth in microbial cells and populations. Processes studied include the metabolism of fermentation, the physiology of anaerobiosis, and the conservation and transformation of energy in bacterial membranes. Exploration covers the efficiency with which energy is used for growth and the structure and transport of membranes. Topics also include bacterial chemotaxis and the regulation of replication in bacterial chromosomes, the connections between RNA and protein synthesis, and the control of metabolic pathways. Students may receive credit for only one of the following courses: BIOL 430 or MICB 470.

BIOL 431 Microbial Ecology (3)

Prerequisite: BIOL 230 or BIOL 302. A study of the interaction of microorganisms with the environment, with other microorganisms, and with higher organisms. Exploration covers the roles of microorganisms in the biosphere and the relation of microorganisms to current environmental problems. Students may receive credit for only one of the following courses: BIOL 431 or MICB 480.

BIOL 434 General Virology (3)

(Students seeking to satisfy the laboratory science requirement should take BIOL 435). Prerequisite: BIOL 230. A broad investigation of viruses. Topics include the physical and chemical nature of viruses, methods of cultivation and assay, modes of replication, characteristics of the major viral groups, and the types of viral diseases. Emphasis is on viral genetics and the oncogenic viruses. Students may receive credit for only one of the following courses: BIOL 434, BIOL 435, MICB 460, or MICB 461.

BIOL 435 General Virology with Laboratory (4)

(Fulfills the laboratory science requirement.) Prerequisite: BIOL 230 or BIOL 302. Comprehensive survey of viruses and techniques for their investigation. Topics include the physical and chemical nature of viruses, methods of cultivation and assay, modes of replication, characteristics of the major viral groups, and the types of viral diseases. Emphasis is on viral genetics and the oncogenic viruses. Students may receive credit for only one of the following courses: BIOL 434, BIOL 435, MICB 460, or MICB 461.

BIOL 438 Immunology (4)

(Fulfills the laboratory science requirement.) Prerequisite: BIOL 230, BIOL 302, or BSCI 223. An exposition of the principles of immunity and hypersensitivity. The fundamental techniques of immunology are presented. Students may receive credit for only one of the following courses: BIOL 438 or MICB 450.

BIOL 486A Internship in Life Science Through Co-op (3)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 246). An opportunity to combine academic theory with new, career-related experience in the life sciences. At least 12 hours per week must be devoted to new tasks for a minimum of 180 hours during the Co-op session; four new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to biology and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

BIOL 486B Internship in Life Science Through Co-op (6)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 246). An opportunity to combine academic theory with new, career-related experience in the life sciences. At least 20 hours per week must be devoted to new tasks for a total of 300 hours during the Co-op session; five to eight new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to biology and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

Business and Management

Courses in business and management (designated BMGT) may be applied as appropriate (according to individual program requirements) toward

- a major in business administration, emergency management, finance, global business and public policy, homeland security, human resource management, laboratory management, management studies, or marketing;

- a minor in business administration, business law and public policy, business supply chain management, customer service management, finance, human resource management, international business management, management studies, marketing, or strategic and entrepreneurial management;

- a certificate in various business-related areas; and

- electives.

A description of the curriculum for the business administration major and minor begins on p. 21. Descriptions of related curricula may be found on the following pages: business law and public policy (p. 23), business supply chain management (p. 23), customer service management (p. 35), finance (p. 43), global business and public policy (p. 50), homeland security (p. 54), human resource management (p. 58), international business management (p. 64), laboratory management (p. 66), management studies (p. 70), marketing (p. 72), and strategic and entrepreneurial management (p. 82).

BMGT 110 Introduction to Business and Management (3)

(For students with little or no business background. Recommended preparation for many other BMGT courses.) A survey of the field of business management. Topics include human relations, technology in business, ethical behavior, the environment, global and economic forces, organization, quality, products and services, functional management, and current issues and developments.

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BMGT 304 Managing E-Commerce in Organizations (3)

An introduction to the history and design of Internet-based business models (i.e., e-commerce) in organizations. Topics include e-commerce management principles, management of different types of organizations, integration of human and information technology resources, training and development, and use of information systems. Investigation also covers knowledge management strategies; the management of business units to implement technological marketing (or e-marketing); the creation of new roles and responsibilities for managers in the e-commerce environment of organizations; relationships among the Internet, government, and society; and future prospects of e-commerce. Students may receive credit for only one of the following courses: BMGT 304 or BMGT 388M.

BMGT 305 Knowledge Management (3)

An introduction to the ways in which organizations create, identify, capture, process, and distribute knowledge. Topics include knowledge generation and coordination, knowledge markets, knowledge transfer and skills, and knowledge management principles. Discussion also covers new organizations and intellectual capital; the integration of human resources, training and development, information systems and security, and business units to implement knowledge management strategies; and new roles and responsibilities for knowledge workers. Students may receive credit for only one of the following courses: BMGT 305 or BMGT 388C.

BMGT 309 Operations Research for Management Decisions (3)

Prerequisite: MATH 220 or STAT 230. A survey of the philosophy and techniques of operations research and how they relate to managerial decision making. Techniques covered include linear programming, transportation and assignment models, Markov processes, and inventory and queuing models. Emphasis is on formulating and solving decision problems in the functional areas of management. Students may receive credit for only one of the following courses: BMGT 309 or BMGT 332.

BMGT 312 Women in Business (3)

Prerequisite: BMGT 110 or at least two years of business and management experience. An examination of women's evolving roles in the business world and the forces that have created change and opportunities. Discussion explores how organizational theory, human resource practices, industrialization, and information technology have created new paths for professional growth. Students may receive credit for only one of the following courses: BMGT 312, BMGT 398I, or MGMT 398I.

BMGT 313 Women as Entrepreneurs (3)

A study of the qualities that help women excel in business. Topics include the rapid increase in female-owned companies, especially small businesses, and ways women have overcome the barriers they face in starting a business. Discussion also covers the reasons for female exclusion from traditional financing alternatives and current funding options for women. Inspirational real-life examples of women who have achieved success are presented. Students may receive credit for only one of the following courses: BMGT 313 or BMGT 388H.

BMGT 314 Women as Leaders (3)

A study of the opportunities and challenges for women in leadership positions. Focus is on increasing awareness of the unique talents and skills of women and identifying ways to help women change historically self-limiting beliefs. Topics include personal perceptions, traditional stereotypes of femininity, and the evaluation of leadership and coaching skills. Success stories of leading women managers illustrate the key principles. Students may receive credit for only one of the following courses: BMGT 314 or BMGT 388J.

BMGT 315 Gender Relations in Business (3)

An exploration of how gender differences affect the way that women and men interact at work, receive and perceive workplace information, and make workplace decisions. Discussion is based on the premise that men and women are different and that those differences profoundly influence their productivity in the modern business workplace. Situations that can result in gender-based misunderstanding, miscommunication, conflict, and organizational ineffectiveness are examined. The goal is to use understanding of gender differences to improve harmony and collaboration among staff members.

BMGT 317 Problem Solving for Managers (3)

Presentation of the theoretical and practical aspects of strategies used in solving problems, an activity that takes up much of the manager's day. Approaches evaluated include holistic thinking, the use of analogy, internal brainstorming and other methods of creative thinking, the development of an ability to shift perspectives, the scientific method, the analysis of language, systems analysis, and graphic representations. Case studies illustrate the definition of the problem, the formulation of hypotheses, the collection and analysis of data, and application to improve quality. Students may receive credit for only one of the following courses: BMGT 317 or TMGT 310.

BMGT 324 Introduction to Entrepreneurship: Starting a Small Business (1)

An introduction to entrepreneurship and the concept of starting a small business. Topics include the costs and benefits of operating a small business venture and types of small businesses that can be successfully operated from the home. Special considerations and laws that apply to small business operations are also covered. Students may receive credit for only one of the following courses: BMGT 324, BMGT 398F, MGMT 324, MGMT 398B, or SBUS 398B.

BMGT 325 The Small-Business Plan (1)

An introduction to the preparation of a business plan for entry into small business. Topics include locating and using primary and secondary research to prepare a business plan, assessing formats for presenting it, finding sources of assistance in preparing it, writing it, and identifying who should prepare it. Students may receive credit for only one of the following courses: BMGT 325, BMGT 398G, MGMT 325, MGMT 330, MGMT 398C, SBUS 200, or SBUS 398C.

BMGT 339 Government and Business Contracting (3)

(Designed for entrepreneurs in the public and private sectors involved in evaluating contracting and grant opportunities in domestic and global environments.) An investigation of the opportunities available for new business development and government and business contracting, as well as the problems involved. Topics include various methods governments and businesses use in determining requirements, choosing the procurement method, evaluating contractors and grant proposals, setting terms and conditions for contracts, awarding contracts, and administering contracts. Both theory and practice are examined with respect to procurement; purchasing procedures; types of contracts; cost and price analysis; and methods of writing proposals, obtaining helpful information, and establishing and maintaining internal controls. Students may receive credit for only one of the following courses: BMGT 339, MGMT 220, or MGMT 339.

BMGT 361 Health Management (3)

Conceptual and functional analysis and application of management principles and theories for effective leadership in the health care services environment. Focus is on relevant theories of organization and management, leadership, communication, motivation, and decision making; organizational change and strategic planning; human resource administration; and management control systems. Discussion covers the structure of health systems in the United States and in other countries, current policy issues, and advocacy for public health and health care reform. Students may receive credit for only one of the following courses: BMGT 361 or HMGT 320.

BMGT 364 Management and Organization Theory (3)

Prerequisite: BMGT 110 or at least two years of business and management experience. A study of the development of theories about management and organizations. Processes and functions of management discussed include the communication process, the role of the manager as an organizer and director, the determination of goals, and the allocation of responsibilities. Students may receive credit for only one of the following courses: BMGT 364, TEMN 202, TEMN 300, TMGT 301, or TMGT 302.

BMGT 365 Organizational Leadership (3)

Prerequisite: BMGT 364. An exploration of the challenges to effective leadership and management that the contemporary manager faces in a rapidly changing environment. Focus is on leadership styles and motivational techniques conducive to high performance in various organizational settings with a very diverse workforce. Topics include issues in the design of organizations, the corporate/organizational culture, the design and enrichment of jobs, and communication within organizations. Students may receive credit for only one of the following courses: BMGT 365, MGMT 300, MGST 310, or TEMN 310.

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BMGT 366 Managing in the Public Sector (3)

Conceptual and functional analysis and application of management principles and strategies encompassing not-for-profit, state, and nonstate institutional and organizational actors, such as intergovernmental and nongovernmental organizations (IGOs and NGOs), in the domestic and global environments. Focus is on the nature and scope of public management. Topics include theoretical, administrative, ethical, and policy models of decision making and accountability; the dynamics of organizational behavior, bureaucratic structures, and processes; core functionalities, strategies, and issues involving public-sector management, planning, leadership, human resources, collective bargaining, communications, and e-government; marketing; public finance; international development projects; and governance. Students may receive credit for only one of the following courses: BMGT 366 or TMGT 305.

BMGT 369 Health Practice Management (3)

Prerequisite: BMGT 361. Examination and application of health care practice theories and concepts in the management of medicine, health, and dental group services. Topics include both managed care and fee-for-service payment arrangements and the influence of insurance. Group practices examined include preferred provider organizations, physician hospital organizations, independent practice associations, management service organizations, and dental group practice networks. Analysis covers applied issues such as structuring compensation packages for professionals; negotiating contractual arrangements with insurance companies; and implementing regulatory guidelines for medical equipment, pharmaceutical storage, and dispensing. Discussion also reviews policy issues relevant to managed care, public financing, insurance, the employment of health care professionals, and legislative politics that affect health care management and practice. Students may receive credit for only one of the following courses: BMGT 369 or HMGT 498E.

BMGT 372 Supply Chain Management (3)

Prerequisite BMGT 364. An examination of supply chain management systems with a focus on maximizing the value generated by a company. Topics include supply chain management strategy, planning, designing and operations; the role of information technology, and financial factors that influence decisions. Discussion also covers the trade-offs between cost and service and between the purchase and supply of raw materials; the warehousing and control of inventory; transportation; facilities and handling; in-formation; and the distribution of finished goods to customers required to minimize costs, maximize profits, or increase customer service levels.

BMGT 375 Procurement Management (3)

Prerequisite: BMGT 364. An overview of the procurement process in industry and its strategic importance in the global marketplace. Topics include the purchasing process, requirements planning, pricing analysis, global competition, distribution, and value analysis. Students may receive credit for only one of the following courses: BMGT 375, MGMT 347, MGMT 375, or TEMN 360.

BMGT 378 Legal Environment of Business (3)

(For students with little or no legal background.) An overview of fundamental legal concepts and principles that affect business in the relevant functional and regulatory environments in domestic and global settings. Emphasis is on the definition and application of legal principles and concepts through illustrative examples and cases. Topics include the interplay among business, ethics, and law; legal reasoning and research; the judicial system and conflict resolution; and torts and business crimes. Key concepts relating to transactional aspects of business are defined; these include contracts and business organizations, property, and government regulations in the human resource, marketing, and financial dimensions of business. Assignments include conducting relevant research using computer databases and networks (such as Lexis and the Web) as well as other methods for accessing information. Students may receive credit for only one of the following courses: BMGT 378 or BMGT 480.

BMGT 380 Business Law I (3)

(Strongly recommended for students seeking careers as CPAs, lawyers, or managers.) A conceptual and functional analysis and application of legal principles relevant to the conduct and understanding of commercial business transactions in the domestic and global environment. Topics include the legal, ethical, and social environment of business; agencies, partnerships, and other forms of business organizations; and contracts and sales agreements.

BMGT 381 Business Law II (3)

(Strongly recommended for students seeking careers as CPAs, lawyers, or managers.) Prerequisite: BMGT 380. Further conceptual and functional analysis and application of legal principles relevant to the conduct and understanding of commercial business transactions in the domestic and global environment. Topics include personal and real property, government regulations affecting employment and marketing, negotiable instruments, debtor/creditor relationships, and bankruptcy and reorganization.

BMGT 388G Effective Business Presentations (1)

An overview of the process of creating and delivering effective business presentations. Focus is on the importance of effective communication in business. Topics include audience analysis, presentation planning, outline development, style alternatives, presentation structure (i.e., the beginning, body, ending, and questions and answers), visual aids, and delivery techniques.

BMGT 391 Motivation, Performance, and Productivity (3)

Prerequisite: BMGT 364. An examination of the challenges of motivating employees. Topics include effective principles for job design, theories and practices of successful leadership, the setting of goals and objectives, the development of reward systems, and the attributes of effective managerial communication. The causes and impact of performance problems and methods for measuring management practices are explored. Students may receive credit for only one of the following courses: BMGT 391, BMGT 398S, or HRMN 394.

BMGT 392 Global Business Management (3)

Prerequisite: BMGT 110 or at least two years of business and management experience. Examination and analysis of global business in its historical, theoretical, environmental, and functional dimensions. Focus is on understanding the growing economic interdependence of nations and its impact on managerial and corporate policy decisions that transcend national boundaries. Topics include the nature and scope of international business; the institutional, sociocultural, political, legal, ethical, and economic environments; trade, foreign investment, and development; transnational management (including global operations), strategic planning, human resources, marketing, and finance; and international business diplomacy and conflict resolution. Students may receive credit for only one of the following courses: BMGT 392, MGMT 305, or TMGT 390.

BMGT 393 Real Estate Principles I (3)

(Designed to fulfill the requirements for the Maryland licensing examination to sell real estate.) Recommended: ECON 203. A survey of the principles, definitions, and uses of real estate. Topics include real estate as a business, problems of construction and home ownership, city planning, and public control and ownership of real estate.

BMGT 394 Real Estate Principles II (3)

(Designed to fulfill the requirements for the Maryland licensing examination to sell real estate.) Prerequisite: BMGT 393. A continuation of the study of real estate. Topics include principles, definitions, professional issues and problems, construction and ownership problems, and other major aspects of real estate sales. Students may receive credit for only one of the following courses: BMGT 394 or BMGT 398H.

BMGT 398 Special Topics in Business and Management (1–3)

Intensive inquiry into special topics in business and management that reflect the changing needs and interests of students and faculty.

BMGT 405 Environmental Management and Business (3)

(Formerly BMGT 498F.) Examination and analysis of salient environmental issues and their impact on business management and institutional policies and strategies in both domestic and global settings. Topics include air- and water-quality controls, toxic substances, hazardous waste, energy and natural resources, deforestation, biological diversity, global warming, and ozone depletion. These issues are examined from the perspectives of ecology, ethics, the law, and public policy. The implications of sociopolitical and economic issues (e.g., population, poverty, trade, business growth, sustainable development, and competitiveness) on the environment are also discussed. Students may receive credit for only one of the following courses: BMGT 405, BMGT 498F or MGMT 498F.

BMGT 407 Global Commerce (3)

(Formerly BMGT 498S.) An examination and analysis of global commerce involving the flow of goods and services among nations and the use of e-commerce in the transactional process. Topics include international trade policy and structure; export-import strategies; documentary sales transactions and standard international commercial terms; commercial financing, letters of credit, and transnational banking; technology transfer; transportation logistics; global e-commerce; and current policy issues. Students may receive credit for only one of the following courses: BMGT 407 or BMGT 498S.

BMGT 411 Business Performance (3)

Presentation of analytical approaches to comprehend and solve business performance problems. Focus is on powerful techniques for solving problems of managing people and for understanding their behavior in organizations. Topics include how to recognize, pinpoint, analyze, develop, and make decisions. Complex real-world situations that confront managers and supervisors in a business environment or organization are considered. Discussion covers techniques for identifying and choosing among goals and strategies, resolving operational and structural difficulties, and making decisions based on knowns and unknowns and pros and cons using a practical approach toward problems. The techniques provided are applicable to knowledge-, manufacturing-, service-, or government-based organizations. Students may receive credit for only one of the following courses: BMGT 411 or TMGT 411.

BMGT 412 Managing for Organizational Effectiveness (3)

An overview of management techniques and methodologies that are used to develop and adapt business processes for competitive advantage in dynamic and rapidly changing environments. Assessment tools for achieving desired organizational capabilities, such as the Baldrige Criteria for Performance Excellence, ISO 9000, and CMMI (Capability Maturity Model Integration), are examined. Discussion also covers specific approaches—such as customer relationship management, supply chain management, Six Sigma methodology, and other process improvement tools—that contribute to high performance and organizational effectiveness. Successful applications of these strategies and approaches are illustrated. Students may receive credit for only one of the following courses: BMGT 412 or TMGT 412.

BMGT 428 Legal Aspects of Technology Management (3)

(Formerly BMGT 498J.) An examination and analysis of legal and policy issues involving the development, acquisition, application, and use of technology and their impact on business and management in the domestic and global environments. Topics include intellectual property issues encompassing patent, copyright, and trademark protections in information and biotechnology; privacy and security concerns; domain names; government regulation and antitrust; software licensing; tort and computer crimes; and consumer protection. The role of global institutions is also explored. Students may receive credit for only one of the following courses: BMGT 428 or BMGT 498J.

BMGT 437 International Business Law (3)

(Formerly BMGT 498P.) Prerequisite: BMGT 380. A conceptual and functional analysis and application of transnational legal principles relevant to the conduct and understanding of global business and economic transactions. Topics include the international legal environment and process; transactional dimensions, including business forms and foreign investments; international and regional organizations; international contracts and sales; the regulation of international trade; national and international economic controls; legal aspects of management, marketing, and finance that focus on global issues related to employment, the environment, technology transfer, and trade financing; and dispute resolution. Students may receive credit for only one of the following courses: BMGT 437 or BMGT 498P.

BMGT 454 The Global Manager and Public Policy (3)

(Formerly BMGT 498O.) Prerequisite: BMGT 392. Examination and analysis of the institutional dimensions of public policy in the international arena and their strategic impact on the decisions of the global manager. Focus is on the conceptual and functional definition and application of global public policy, including the role of nongovernmental organizations (NGOs) in the context of leadership and ethical responsibilities across national borders and cultures and the transnational policy implications of global regimes spanning the relevant areas of business and global governance. Students may receive credit for only one of the following courses: BMGT 454, BMGT 498O, or MGMT 498O.

BMGT 456 Multinational Management (3)

(Formerly BMGT 498R.) An examination and analysis of multinational management functions and processes (including planning, organizing, leading, and controlling) across national cultures and borders and in globally diverse transnational environments and organizations. Topics include cross-cultural strategic planning; organizational design and structures; cross-cultural leadership, decision making, motivation, communication, and business practices; headquarters-subsidiary control relationships; international staffing, employee relations, and human resource management; and cross-national ethics and social responsibility. Students may receive credit for only one of the following courses: BMGT 456 or BMGT 498R.

BMGT 464 Organizational Behavior (3)

Prerequisites: BMGT 110 (or at least two years of business and management experience) and 364. An examination of research and theory on the forces underlying the way members of an organization behave. Topics include the behavior of work groups and supervisors, intergroup relations, employees' goals and attitudes, problems in communication, the circumstances of change in an organization, and the goals and design of an organization.

BMGT 465 Organization Development and Change (3)

Prerequisite: BMGT 364. An introduction to a method of making organizations and individuals more adaptive and productive. The objective is to help organizations cope with change. Techniques of intervention (such as team building, process consultation, feedback, and conflict resolution) are introduced and explained. Students may receive credit for only one of the following courses: BMGT 465, MGMT 398K, MGMT 465, or TMGT 350.

BMGT 482 Business and Government (3)

Prerequisite: BMGT 110 (or at least two years of business and management experience). A study of the role of government in the modern economy and the intricate relationships between the public and private sectors in the domestic and global environments. Emphasis is on the regulatory and public policy dimensions of government intervention, the promotion of business, corporate responses to government action, and social responsibility and governance issues in the changing domestic and global marketplaces. Students may receive credit for only one of the following courses: BMGT 482 or TMGT 340.

BMGT 484 Managing Teams in Organizations (3)

Prerequisite: BMGT 364. An examination of how and why team development can be effective in organizations and when it is appropriate. Topics include group dynamics, stages of group development, team-building techniques, team goals and leadership, and interpersonal and individual skills to foster cohesion and effective performance. Students may receive credit for only one of the following courses: BMGT 484, BMGT 498H, or MGMT 498H.

BMGT 486A Internship in Business and Management Through Co-op (3)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 246). An opportunity to combine academic theory with new, career-related experience in business and management. At least 12 hours per week must be devoted to new tasks for a minimum of 180 hours during the Co-op session; four new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to business and management and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

BMGT 486B Internship in Business and Management Through Co-op (6)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 246). An opportunity to combine academic theory with new, career-related experience in business and management. At least 20 hours per week must be devoted to new tasks for a total of 300 hours during the Co-op session; five to eight new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to business and management and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

BMGT 487 Project Management I (3)

(The first course in the two-course series BMGT 487–488.) Prerequisite: BMGT 364. An introduction to project management principles, concepts, and software applications and an exploration of project management applications in introductory project situations. Project management is examined in terms of practical applications and practices. Appropriate organizational structures, such as collegial and matrix types, are described and assessed. Discussion also covers the practical considerations of designing a project management system. Students may receive credit for only one of the following courses: BMGT 487, IFSM 438, or TMGT 430.

BMGT 488 Project Management II (3)

(The second course in the two-course series BMGT 487–488.) Prerequisite: BMGT 487. An exploration of project management applications beyond introductory projects. Emphasis is on the application of project management concepts and software applications. Assignments include designing a project management system from beginning to end. Projects depict real-world situations such as production in research, high-technology manufacturing, and engineering firms; information systems implementations; service business and e-commerce projects; and consulting practices. Students may receive credit for only one of the following courses: BMGT 488 or TMGT 430.

BMGT 491 Exploring the Future (3)

Prerequisite: BMGT 364. An examination of how to analyze and develop alternate ways of seeing the future. The interactions of population, technology, political and economic systems, values, and leadership are investigated. Discussion covers techniques futurists use, including scenario construction, trend analysis, the futures wheel, and environmental scanning. Techniques are applied in societal, professional, and personal settings. Students may receive credit for only one of the following courses: BEHS 480, BMGT 491, MGMT 398H, TMGT 401, or TMGT 480.

BMGT 495 Strategic Management (3)

(Intended as a final, capstone course to be taken in a student's last 15 credits.) Prerequisites: FINC 330 (or BMGT 340), BMGT 364, and MRKT 310. A study of strategic management that integrates knowledge gained through previous coursework and experience and builds on that conceptual foundation through integrative analysis, practical application, and critical thinking. Emerging issues in business management are considered. Focus is on the continuous, systematic process of managerial planning, including environmental scanning and the development of plans and strategies to gain competitive advantage. Tactical and strategic management issues are highlighted by means of case studies, projects, and discussion. Access to spreadsheet software is recommended to analyze case studies and develop strategic planning information, charts, and graphs. Students may receive credit for only one of the following courses: BMGT 495, HMGT 430, MGMT 495, or TMGT 380.

BMGT 496 Business Ethics (3)

A study of the relationship of business ethics and social responsibility in both domestic and global settings. Ethical and moral considerations of corporate conduct, social responsibilities, policies, and strategies are explored. Emphasis is on the definition, scope, application, and analysis of ethical values as they relate to issues of public consequence in the context of the functional areas of business at both the domestic and global levels.

Career Planning

Courses in career planning (designated CAPL) may be applied toward

- electives.

UMUC offers only a limited number of courses each term in this discipline.

CAPL 398A Career Planning Management (1)

A survey of strategies for managing career change. Strategies focus on identifying and evaluating skills, self-marketing, and tapping into the hidden job market. Topics include résumé development, informational interviewing, salary negotiation, tips for career success, and the complicated federal hiring process.

Chinese

Courses in Chinese (designated CHIN) may be applied as appropriate (according to individual program requirements) toward

- the general education requirement in the arts and humanities;
- a major or minor in humanities; and
- electives.

UMUC offers a limited number of foreign language courses each term.

A description of the curriculum for the humanities major and minor begins on p. 56.

CHIN 111 Elementary Chinese I (3)

(Not open to native speakers of Chinese; assumes no prior knowledge of Chinese.) An elementary study of Mandarin Chinese. Emphasis is on oral communication skills as a foundation for building balanced proficiency in the four communication skills of listening, speaking, reading, and writing. Topics include basic structures, vocabulary, pronunciation, and writing, as well as elements of culture, history, and geography. Authentic text from native speakers is used as much as possible.

CHIN 112 Elementary Chinese II (3)

(Not open to native speakers of Chinese.) Prerequisite: CHIN 111. Continued basic study of Mandarin Chinese, emphasizing oral communication as a foundation for building a balanced development of proficiency in the four communication skills of listening, speaking, reading, and writing. Basic structures, vocabulary, pronunciation, and writing are practiced. Topics include basic structures, vocabulary, pronunciation, and writing, as well as further elements of culture, history, and geography. Oral and written authentic text from native speakers is used as much as possible.

CHIN 114 Elementary Chinese III (3)

(Not open to native speakers of Chinese.) Prerequisite: CHIN 112. Further development of skills in listening, speaking, reading, and writing in Chinese. Chinese culture, history, current events, and geography provide the context for instruction in grammatical structures, vocabulary, pronunciation, character recognition and writing, and composition. Focus is on acquiring the skills necessary to communicate with native Chinese speakers orally and in writing at an advanced elementary level. Oral and written authentic text is used as much as possible.

CHIN 115 Elementary Chinese IV (3)

(Not open to native speakers of Chinese.) Prerequisite: CHIN 114. Improvement of skills in listening, speaking, reading, and writing in Chinese. Chinese culture, history, current events, and geography provide the context for instruction in grammatical structures, vocabulary, pronunciation, character recognition and writing, and composition. Focus is on acquiring the skills necessary to communicate with native Chinese speakers orally and in writing at a basic intermediate level. Oral and written authentic text is used as much as possible.

Communication Studies

Courses in communication studies (designated COMM) may be applied as appropriate (according to individual program requirements) toward

- the general education requirement in communications;
- a major in communication studies;
- a minor in communication studies, journalism, or speech communication; and
- electives.

A description of the curriculum for the communication studies major and minor begins on p. 24. Descriptions of related curricula may be found on the following pages: journalism (p. 66) and speech communication (p. 82).

COMM 300 Communication Theory (3)

(Fulfills the general education requirement in communications, but is not a writing course.) Prerequisite: WRTG 101/101X or ENGL 101/101X. An introduction to the study of communication theory. The basic theories of human communication, mass communication, and new media and technology are explored. Focus is on the relationships among communication theory, research, and practice. General themes include intra- and interpersonal communication, public communication, mass media, and contemporary issues associated with mediated communication.

COMM 319A Designing and Delivering Effective Presentations (1)

A simulation of a presentation project from conception, through creation and selection of visual aids, to delivery and evaluation. Focus is on conducting an audience analysis, developing a presentation plan, building a presentation using traditional or multimedia resources, delivering the presentation, and evaluating the results.

COMM 379A Critical Perspectives in Mass Communications (3)

(Fulfills the general education requirement in communications, but is not a writing course.) Prerequisite: WRTG 101/101X or ENGL 101/101X. An in-depth examination of mass communications theory. Topics include media uses, interaction and impact, and ethical issues surrounding the development and dissemination of mass media. The roles, behavior, messages, and control of mass media producers are examined. Emphasis is on critical thinking and analysis of vital aspects of pervasive elements of popular culture, such as news, advertising, children's entertainment, and a free press.

INFORMATION ON COURSES

COMM 380 Language in Social Contexts (3)

(Fulfills the general education requirement in communications, but is not a writing course.) Prerequisite: WRTG 101/101X or ENGL 101/101X. An examination of the linguistic components of languages, with special emphasis on the English language, its origins, continued development, and use in speaking and writing. Categories of speech and methods of written communication are examined from the perspective of regional and social variation. Discussion covers cultural, gender, and racial variations as well as underlying perspectives and assumptions.

COMM 400 Communication and the Law (3)

(No previous study of law required. Fulfills the general education requirement in communications, but is not a writing course.) Prerequisite: JOUR 201 or a 300-level COMM course. An examination of the important legal issues that affect professional communicators. Topics include copyright, intellectual property, fair use, privacy, freedom of information, freedom of speech, and freedom of the press, as well as issues raised by the growth of the Internet, the use of digital technologies, and the creation of media content. Students may receive credit for only one of the following courses: COMM 400 or JOUR 400.

COMM 486A Internship in Communication Studies Through Co-op (3)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 246). An opportunity to combine academic theory with new, career-related experience in communication studies. At least 12 hours per week must be devoted to new tasks for a minimum of 180 hours during the Co-op session; four new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to communication studies and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

COMM 486B Internship in Communication Studies Through Co-op (6)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 246). An opportunity to combine academic theory with new, career-related experience in communication studies. At least 20 hours per week must be devoted to new tasks for a total of 300 hours during the Co-op session; five to eight new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to communication studies and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

COMM 493 Strategies for Visual Communications (3)

(Fulfills the general education requirement in communications, but is not a writing course. While using desktop publishing programs is necessary to the course, instruction on the software is not provided.) Prerequisite: WRTG 101/ 101X or ENGL 101/101X. Recommended: A course in desktop publishing. An introduction to graphic design theory that explores the integration of text and graphics in formal and practical design. Topics include organizing information, developing strategic design solutions to enhance communication and applying critical and creative processes to produce and evaluate design.

COMM 495 Seminar in Workplace Communication (3)

(Intended as a final, capstone course to be taken in a student's last 15 credits. Primarily for students planning careers as communication professionals, but useful for managers and other professionals. Fulfills the general education requirement in communications.) Prerequisites: COMM 300 and either WRTG 393, WRTG 394, COMM 393 or COMM 394. Recommended: JOUR 201. A study of workplace communication that integrates knowledge gained through previous coursework and experience and builds on that conceptual foundation through integrative analysis, practical application, and critical thinking. Emerging issues in public relations are considered. Emphasis is on enhancing advanced-level writing skills and developing flexibility in changing writing tone from piece to piece. Topics include how to produce various communications (such as press releases, feature stories, fact sheets, and executive speeches) and the elements of document design.

Computer and Information Science

Courses in computer and information science (designated CMIS) may be applied as appropriate (according to individual program requirements) toward

- the general education requirement in computing;
- a major in computer and information science, computer information technology, or computer studies;
- a minor in computing;
- a certificate in Database Design and Development, Game Development, Object-Oriented Design and Programming, Software Engineering, UNIX System Administration, or Web Programming; and
- electives.

Students without recent experience in problem solving with computers must take CMIS 102. It is recommended that for the first two terms students should not take two (or more) courses that involve programming. The suggested sequence of courses (for students who already have the prerequisite knowledge for CMIS 140) is CMIS 140 and 160 in the first term followed by CMIS 240 and 310 in the second.

A description of the curriculum for the computer and information science major begins on p. 26. Descriptions of other computer-related curricula may be found on the following pages: computer information technology (p. 28), computer science (p. 30), computer studies (p. 31), computing (p. 33), information assurance (p. 60), and information systems management (p. 62).

CMIS 102 Introduction to Problem Solving and Algorithm Design (3)

A study of techniques for finding solutions to problems through structured programming and step-wise refinement. Topics include principles of programming, the logic of constructing a computer program, and the practical aspects of integrating program modules into a cohesive whole. Algorithms are used to demonstrate programming as an approach to problem solving, and basic features of a modern object-oriented language are illustrated. Students may receive credit for only one of the following courses: CMIS 102, CMIS 102A, or CMSC 101.

CMIS 141 Introductory Programming (3)

(Not open to students who have taken CMIS 340. The first in a sequence of courses in Java.) Prerequisite: CMIS 102 or prior programming experience. Recommended: MATH 107. A study of structured and object-oriented programming using the Java language. Discussion covers the discipline, methodologies, and techniques of software development. Algorithms and simple data structures are developed and implemented in Java; object-oriented concepts are applied. Students may receive credit for only one of the following courses: CMIS 141 or CMIS 141A.

CMIS 160 Discrete Mathematics for Computing (3)

(Not open to students who have completed CMSC 150.) Recommended: MATH 107. An introduction to discrete mathematical techniques for solving problems in the field of computing. Basic principles from areas such as sets, relations and functions, logic, proof methods, and recursion are examined. Topics are selected on the basis of their applicability to typical problems in computer languages and systems, databases, networking, and software engineering.

CMIS 170 Introduction to XML (3)

Prerequisite: CMIS 102. A study of the principles and use of Extensible Markup Language (XML). Discussion covers the structure, transformation, presentation, and implementation of XML technologies, including document type definitions (DTDs), Extensible Style Language for Transformation (XSLT), and schemas. Hands-on projects and exercises are provided.

CMIS 241 Data Structures and Abstraction (3)

Prerequisite: CMIS 141 or CMIS 141A. A study of program design and the implementation of abstract data types in Java. Topics include data structures such as stacks, queues, lists, and trees and algorithms used for sorting and searching.

CMIS 242 Intermediate Programming (3)

Prerequisite: CMIS 141 or CMIS 141A. Further study of the Java programming language. Topics include inheritance, interfaces such as graphical user interfaces), exceptions, arrays, and collections. Emphasis is on using existing Java classes to build and document applications.

CMIS 310 Computer Systems and Architecture (3)

(Not open to students who have completed CMSC 311.) Prerequisite: CMIS 102 or CMIS 102A. A study of the fundamental concepts of computer architecture and factors that influence the performance of a system. Topics include data representation and the design and analysis of combinational and sequential circuits. Focus is on how basic hardware components (multiplexers, decoders, memories, arithmetic-logic units, etc.) are built. Discussion covers hard-wired and microprogrammed design of control units and concepts such as pipelining and memory hierarchy. Students may receive credit for only one of the following courses: CMIS 270, CMIS 310, CMSC 311, or IFSM 310.

CMIS 315 Programming and Application in C++ (3)

Prerequisite: CMIS 102 or CMIS 102A. A one-semester study of the important features of the C++ programming language. Programming projects in C++ are included. Students may receive credit for only one of the following courses: CMIS 240 or CMIS 315.

CMIS 320 Relational Databases (3)

Prerequisite: CMIS 102 or CMIS 102A. A study of the functions and underlying concepts of relationally organized database systems. Discussion covers data models and their application to database systems. The entity/relationship (E/R) model and Codd's relational theory—including relational algebra, normalization and integrity constraints, and the Structured Query Language (SQL)—are emphasized. Physical design and data administration issues are addressed. Projects include hands-on work with E/R and relational models (using industry-standard database software). Students may receive credit for only one of the following courses: CMIS 320 or IFSM 410.

CMIS 325 UNIX with Shell Programming (3)

Prerequisite: CMIS 102 or CMIS 102A. A study of the UNIX operating system. Topics include file structures, editors, pattern-matching facilities, shell commands, and shell scripts. Shell programming is presented and practiced to interrelate system components. Projects give practical experience with the system.

CMIS 330 Software Engineering Principles and Techniques (3)

Prerequisite: CMIS 141, CMIS 141A, CMIS 315, or CMIS 340. A study of the process of software engineering from initial concept through design, development testing, and maintenance to retirement of the product. Development life-cycle models are presented. Topics include issues in configuration management, integration and testing, software quality, quality assurance, security, fault tolerance, project economics, operations, human factors, and organizational structures. Students may receive credit for only one of the following courses: CMIS 330 or CMIS 388A.

CMIS 335 Software Safety (3)

Prerequisite: CMIS 330. An examination of software safety problems (including specification errors, design/coding flaws, or lack of generic safety-critical requirements) that can contribute to or cause a system failure. The objective is to provide management and engineering guidelines to achieve a reasonable level of assurance that software will execute with an acceptable level of safety risk. Potential system hazards are analyzed as functional or generic and traced to either the software or the environment in which the software is used. Guidance on developing a process that can identify, analyze, and then prove, eliminate, or mitigate such potential system hazards according to priority is provided. Students may receive credit for only one of the following courses: CMIS 335 or CMIS 398S.

CMIS 340 Programming in Java (3)

Prerequisite: CMIS 102 or CMIS 102A. A one-semester study of the important features of the Java programming language. Topics include an introduction to Java syntax, class libraries, graphical user interfaces, input and output, threads, and applet programming. Programming projects in Java are included. Not open to students who have taken CMIS 141, CMIS 241, or CMIS 242.

CMIS 345 Object-Oriented Design and Programming (3)

Prerequisite: CMIS 241, CMIS 242, or CMIS 340. An examination of the principles, practices, and applications of programming in an object-oriented environment. Assignments include programming projects in Java that implement techniques of object-oriented design.

CMIS 355 Database Forms (3)

(Formerly CMIS 398F.) Prerequisite: CMIS 320. A comprehensive study of the design and development of graphical user interface forms for modern relational databases in the client/server environment. Focus is on developing a hierarchy of form applications using both Microsoft Access and Oracle. Topics include the construction of simple forms using drop-and-drag components and advanced features of vendor form-building products. Some Visual Basic and PL/SQL programming is used to provide robust functionality to the forms. Accurate display and processing of data and user friendliness are stressed. Students may receive credit for only one of the following courses: CMIS 355 or CMIS 398F.

CMIS 370 Data Communications (3)

Prerequisite: CMIS 310. Investigation of the effects of communication technology on information systems. Topics include components of communication systems, architectures and protocols of networks, security measures, regulatory issues, and the design of network systems. Discussion also covers issues and applications in local area networks and communication services. Students may receive credit for only one of the following courses: CMIS 370, CMSC 370, or IFSM 450.

CMIS 375 Programming in Perl (3)

Prerequisite: CMIS 102 or CMIS 102A. An introduction to the Perl scripting language. Focus is on the basic features of Perl (including data and variable types, operators, statements, regular expressions, functions, and input/output). Topics include object-oriented programming and Common Gateway Interface (CGI) programming. Assignments include writing Perl scripts. Students may receive credit for only one of the following courses: CMIS 375 or CMIS 398P.

CMIS 398A Programming in C# (3)

Prerequisite: CMIS 240, CMIS 241, CMIS 242, CMIS 340, or CMIS 315. An examination of the features of the C# programming language. Topics include design of classes, class libraries, exception handling, input and output, and Windows forms and Web forms programming. Assignments include programming in C#.

CMIS 415 Advanced UNIX and C (3)

Prerequisites: CMIS 141 (or CMIS 141A, CMIS 315, or CMIS 340) and 325. An investigation of the interaction between the UNIX operating system and the C programming language. The features of UNIX that support C (including library and system calls, UNIX utilities, debuggers, graphics, and file structure) are presented. Assignments include programming projects in C that implement UNIX command features.

CMIS 420 Advanced Relational Databases (3)

Prerequisite: CMIS 320. A study of advanced logical and physical design features and techniques of relational databases appropriate to the advanced end user, database designer, or database administrator. Topics include object-relational concepts, data modeling, challenge areas, physical design in relation to performance, and relational algebra as a basis of optimizer strategies. Future trends, advanced concurrency control mechanisms, and maintenance issues such as schema restructuring are addressed. Projects include hands-on work (using industry-standard database software) in designing and implementing a small database, creating triggers, loading through forms and utility, querying through interactive and embedded Structured Query Language (SQL), restructuring schema, and analyzing performance. Students may receive credit for only one of the following courses: CMIS 420, IFSM 411, or IFSM 498I.

CMIS 435 Computer Networking (3)

Prerequisite: CMIS 370. An overview of communications topics such as signaling conventions, encoding schemes, and error detection and correction. Emphasis is on routing protocols for messages within various kinds of networks, as well as on methods that network entities use to learn the status of the entire network. Students may receive credit for only one of the following courses: CMIS 435 or CMSC 440.

CMIS 440 Advanced Programming in Java (3)

Prerequisite: CMIS 241, CMIS 242, or CMIS 340. An exploration of advanced Java Enterprise applications. Topics include Java server pages, servlets, Java database connectivity, and Enterprise JavaBeans. Students may receive credit for only one of the following courses: CMIS 440 or CMIS 498A.

CMIS 445 Distributed Systems (3)

Prerequisites: CMIS 141, CMIS 141A, CMIS 315, or CMIS 340. Recommended: CMIS 325. An examination of the concepts and design principles of distributed computer systems. Topics include communications, operating systems, interprocess communications, distributed objects, simple object access protocol (SOAP), Web services, distributed file systems, name services, time services, distributed multimedia systems, security, transactions, and replication (as they relate to the distributed system environment). Discussion also covers standards for distributed object-oriented programming. A distributed programming project in Java illustrates many of the concepts. Students may receive credit for only one of the following courses: CMIS 445 or CMSC 445.

CMIS 455 Requirements Development (3)

Prerequisite: CMIS 330. A study of concepts and techniques for planning and developing high-quality software products. Fundamentals of specification (including formal models and representations, documents, and standards) are examined. Discussion also covers methods of specifying and developing requirements for generating software. Projects using these techniques are included. Students may receive credit only once under this course number.

CMIS 460 Software Design and Development (3)

Prerequisite: CMIS 330. An in-depth treatment of the concepts and techniques for designing and developing software for large projects. Discussion covers design strategies, principles, methodologies, and paradigms, as well as evaluation and representation. Topics also include architectural models and idioms, development tools and environments, implementation guidelines and documentation, and organization of design and development functions. Issues of program quality, program correctness, and system integration are addressed. Project work incorporates principles and techniques of software design and development.

CMIS 465 Software Verification and Validation (3)

Prerequisite: CMIS 330. A study of tools, methods, and current practices for assessing the quality and correctness of software. Topics include the roles of testing and formal verification, fundamentals and formal models of program verification, planning and documentation for quality assurance, methods of performing technical reviews, strategies of system testing and integration planning, and principles and practices used in conducting tests.

CMIS 485 Web Database Development (3)

(Formerly CMIS 498B.) Prerequisite: CMIS 320, knowledge of relational database design and SQL, and programming language experience. Recommended: CMIS 340 or CMIS 241. An exploration of an assortment of current Web technologies and programming language options used to interface a relational database to a Web server. Technologies such as CGI/Perl, Active Server Pages, and Java are utilized in the lab. The three-tiered architecture is studied in depth via a number of hands-on activities and projects. Students may receive credit for only one of the following courses: CMIS 485 or CMIS 398B.

CMIS 486A Internship in Computer Information Science Through Co-op (3)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 246). An opportunity to combine academic theory with new, career-related experience in computer and information science. At least 12 hours per week must be devoted to new tasks for a total of 180 hours during the Co-op session; four new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to computer and information science and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

CMIS 486B Internship in Computer Information Science Through Co-op (6)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 246). An opportunity to combine academic theory with new, career-related experience in computer and information science. At least 20 hours per week must be devoted to new tasks for a total of 300 hours during the Co-op session; five to eight new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to computer and information science and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

CMIS 498 Special Topics in Computer and Information Science (3)

Prerequisites: Vary according to topic. A seminar on topics in computer and information science. May be repeated to a maximum of 6 credits when topics differ.

Computer Information Technology

Courses in computer information technology (designated CMIT) may be applied as appropriate (according to individual program requirements) toward

- the general education requirement in computing;
- a major in computer information technology, computer and information science, or computer studies;
- a minor in computing;
- a certificate in Computer Networking or UNIX System Administration; and
- electives.

A description of the curriculum for the computer information technology major begins on p. 28. Descriptions of other computer-related curricula may be found on the following pages: computer and information science (p. 26), computer science (p. 30), computer studies (p. 31), computing (p. 33), information assurance (p. 60), and information systems management (p. 62).

CMIT 261 Introduction to Oracle (3)

(Formerly CMIT 261O.) An introduction to Oracle and Structured Query Language (SQL). The syntax and function of the American National Standards Institute's standard SQL are examined. SQL's data definition language is used to create tables, including constraints, and SQL's data manipulation language is used to insert, update, and delete data. Emphasis is on learning queries, ranging from the simple to the complex. Additional database objects (such as views, sequences, synonyms, aliases, and indexes) and SQL built-in functions are explored. Topics also include using the Oracle SQL command editor and the local system editor and creating simple reports with SQL Loader and SQL Plus. Students may receive credit for only one of the following courses: CMIT 261 or CMIT 261O.

CMIT 265 Networking Essentials (3)

An introduction to networking technologies for individual workstations, local area networks, wide area networks, and the Internet, with emphasis on the OSI (open system connectivity) model, security, and networking protocols. A general review of several industry-standard network operating systems is provided. Topics covered should be useful in preparing for the Network+ certification exam. Students may receive credit for only one of the following courses: CMIT 265 or CMIT 265M.

CMIT 320 Network Security (3)

Prerequisite: CMIT 265 with grade of C or better or CompTIA Network+ certification. A study of the fundamental concepts of computer network security and their implementation. Topics include authentication, remote access, Web security, intrusion detection, basic cryptography, physical security, and disaster recovery. Opportunities for hands-on exercises are provided. Course material relates to topics covered on the vendor-neutral CompTIA Security+ Certification examination, which is recognized worldwide as the standard of competency for entry-level network security professionals.

CMIT 331 Wireless Network Administration (3)

(Formerly CMIT 499W.) Prerequisite: CMIT 265. A comprehensive review of available options in transmissions over wireless technologies. Emphasis is on design and implementation of wireless networks. Topics include FDMA, TDMA, and CDMA (frequency-, time-, and code-division multiple access) and other third-generation (3G) concepts. The benefits of wireless technologies and wireless security are explored using real-world challenges and solutions. Students may receive credit for only one of the following courses: CMIT 331 and CMIT 499W.

CMIT 350 Interconnecting Cisco Devices (3)

(Designed to help students prepare for the Cisco Certified Network Associate Examination 640-802.) Prerequisite or co-requisite: CMIT 265. Presentation of and practice in the concepts and commands required to configure Cisco switches and routers in multiprotocol internetworks. Routing and switching concepts (Layer 2 and Layer 3 technologies) using Cisco switches and Cisco routers are covered. Focus is on developing the skills necessary to install, configure, and operate Cisco routers and switches within LAN and WAN environments including VoIP and wireless networks. Projects include configuring various protocols including IP, RIP, IGRP, EIGRP, OSPF, RSTP and Frame Relay. Students may receive credit for only one of the following courses: CAPP 498E, CMIT 350, or CMIT 499D.

CMIT 361 Developing PL/SQL Applications (3)

Prerequisite: CMIT 261. An in-depth study of the use of PL/SQL to develop enterprise-level database applications in industry. Topics include application programs and standard third-generation language (3GL) programming constructs (such as if-then-else statements, loops, record-at-a-time processing, and error handling). Students may receive credit for only one of the following courses: CMIT 361 or IFSM 498O.

CMIT 364 Windows XP Professional (3)

Prerequisite: CMIT 265. An introduction to Windows XP Professional. Focus is on developing the skills necessary to install, configure, and support Windows XP Professional as a desktop operating system in a generic operating environment. Topics include review of operating systems, administration, security, transmission control protocol/Internet protocol, and troubleshooting Windows XP Professional. Hands-on exercises are included. Students may receive credit for only one of the following courses: CMIT 364 or CMIT 499X.

CMIT 368 Windows Server 2003 (3)

Prerequisite: CMIT 265. A study of Windows Server 2003 installation and administration. Focus is on developing the skills necessary to install and configure Windows Server 2003. Topics include support, connectivity, creation and management of user accounts, management of access to resources, the NT file system, and configuration and management of disks. Hands-on exercises are included.

CMIT 374 Exchange Server (3)

(Formerly CMIT 499M.) Prerequisite: CMIT 368. Development of the knowledge and skills needed to update and support a reliable, secure infrastructure for creating, storing, and sharing information using Microsoft Exchange Server in a medium to large (250 to 5,000 seats) electronic messaging environment. Hands-on practice is provided. Students may receive credit for only one of the following courses: CMIT 374 or CMIT 499M.

CMIT 376 Windows Network Infrastructure (3)

(Formerly CMIT 376M.) Prerequisite: CMIT 368. The development of the knowledge and skills necessary to install, configure, manage, and support the Windows network infrastructure. Topics include automating Internet protocol address assignment using dynamic host configuration protocol, implementing name resolution using domain name service and Windows Internet naming service, setting up and supporting remote access to a network, configuring network security using public key infrastructure, integrating network services, and deploying Windows 2000 Professional using remote installation services. Hands-on exercises are included. Students may receive credit for only one of the following courses: CMIT 376 or CMIT 376M.

CMIT 377 Windows Directory Services Infrastructure (3)

Prerequisite: CMIT 368. The development of the knowledge and skills necessary to install, configure, manage, and support the Windows Active Directory service. Topics include understanding the logical and physical structure of Active Directory, configuring the domain name service to support Active Directory, creating and administering user accounts and group resources, controlling Active Directory objects, implementing and using group policy, managing replication of Active Directory, and maintaining and restoring the Active Directory database. Hands-on exercises are included. Students may receive credit for only one of the following courses: CMIT 377 or CMIT 377M.

CMIT 381 Oracle Database Administration (3)

Prerequisite: CMIT 261. A foundation in basic database administration tasks. Focus is on gaining a conceptual understanding of the Oracle9i database architecture and how the architectural structures work and interact with one another. Topics include how to create an operational database and properly manage the various structures in an effective and efficient manner. Hands-on exercises include configuring network parameters so that database clients and tools can communicate with an Oracle database server. Backup and recovery techniques are introduced, and various backup, failure, and restoration and recovery scenarios are examined. Students may receive credit for only one of the following courses: CMIT 381 or CMIT 381O.

CMIT 391 UNIX/Linux System Administration (3)

Prerequisite: CMIS 325. A study of the UNIX/Linux operating system, combining theory and lab work. Discussion covers document processing, file system administration, and the boot-up/shutdown process. Topics include disk partitioning schemes, software RAID (redundant array of independent disks), and LVM (logical volume manager) configuration. Review also covers user administration, disk quotas, group restrictions, and password aging. Process management and automation are examined through "cron" and "at" commands. Practice in configuring the X Window System and client networking is provided. Network security is addressed through the use of IP tables to construct firewall rules. Students may receive credit for only one of the following courses: CMIS 390, CMIT 391, or CMIS 398U.

CMIT 392 Designing and Implementing Databases with SQL Server (3)

(Assumes prior understanding of relational database concepts.) The development of the knowledge and skills necessary to design and implement databases with SQL Server. Topics include developing a logical data model, deriving the physical design, devising data services, creating and executing stored procedures, and constructing and maintaining a physical database. Hands-on exercises are included. Students may receive credit for only one of the following courses: CMIT 392 or CMIT 392M.

CMIT 394 Data Warehousing Using SQL Server (3)

(Assumes prior understanding of relational database concepts.) A study of design and implementation of data warehouse solutions using SQL Server. Topics include defining the technical architecture for a data warehouse solution, developing the logical design, deriving the physical design, object linking and embedding, open database connectivity, ActiveX Data Objects, file management, data integrity, online analytical processing, monitoring and optimizing performance, and backup and disaster recovery. Hands-on exercises are included. Students may receive credit for only one of the following courses: CMIT 394 or CMIT 394M.

CMIT 398E Ethical Practice of Intrusion Prevention and Detection (3)

Prerequisite: CMIT 265. Development of a structured knowledge base that enables network security professionals to discover vulnerabilities and recommend solutions for tightening network security and protecting data from potential attackers. Focus is on penetration-testing tools and techniques that security testers and ethical hackers use to protect computer networks. Course material should prove useful in preparing for the certified ethical hacker examination.

CMIT 399V Windows Vista (3)

Prerequisite: CMIT 265. An overview of Windows Vista. Focus is on developing the knowledge and skills necessary to perform troubleshooting on client computers within an organization. Topics include the operating system, hardware support, networking, security, and applications. Discussion also covers monitoring and maintaining Windows Vista client computers, as well as system image and application package deployment. Hands-on exercises are provided.

CMIT 450 Designing Cisco Networks (3)

(Designed to help students prepare for the Cisco Certified Design Associate Examination 640-863.) Prerequisite or corequisite: CMIT 350. The development of the knowledge and skills necessary for network design using Cisco Systems technologies. Fundamentals of small- and medium-size network design are introduced. Focus is on developing the skills to identify the Cisco products, local- and wide area network (LAN and WAN) technologies, routing and bridging protocols, and Cisco IOS software features that meet a customer's requirements for performance, capacity, and scalability in small- to medium-sized networks. Projects include designing simple routed LAN, routed WAN, switched LAN, and ATM (asynchronous transfer mode) LAN networks. Students may receive credit for only one of the following courses: CAPP 398C, CMIT 450, or CMIT 499C.

CMIT 480 Designing Security for a Windows Network (3)

Prerequisite: CMIT 320 or CMIT 368. The development of the knowledge and skills necessary to design a security framework for small, medium, and enterprise networks using Windows technologies. Topics include providing secure access to local network users, partners, remote users, and remote offices and between private and public networks. Students may receive credit for only one of the following courses: CMIT 480 or CMIT 480M.

INFORMATION ON COURSES

CMIT 486A Internship in Computer Information Technology Through Co-op (3)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 246). An opportunity to combine academic theory with new, career-related experience in computer information technology. At least 12 hours per week must be devoted to new tasks for a minimum of 180 hours during the Co-op session; four new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to computer information technology and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

CMIT 486B Internship in Computer Information Technology Through Co-op (6)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 246). An opportunity to combine academic theory with new, career-related experience in computer information technology. At least 20 hours per week must be devoted to new tasks for a total of 300 hours during the Co-op session; five to eight new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to computer information technology and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

CMIT 491 Advanced UNIX/Linux System Administration (3)

Prerequisite: CMIT 391. A review of DNS (domain name system) servers and the Apache Web server. An introduction to LDAP (lightweight directory access protocol) directory queries and authentication is provided. The administration and configuration of server-side programming tools (such as CGI, mod_perl, PHP, JSP, Jakarta Tomcat, and Java SDK) are demonstrated via extensive lab work. SAMBA, FTP, Telnet, and SQUID proxy servers are configured. SMTP (simple mail transfer protocol) theory is discussed and implemented via sendmail and postfix e-mail systems. E-mail protocols such as IMAP and POP are configured; spam filtering techniques are discussed. Students may receive credit for only one of the following courses: CMIS 490, CMIT 491, or CMIS 498U.

CMIT 499 Special Topics in Computer Technology (1–5)

An inquiry into special topics in computer information technology that reflect the changing field. May be repeated when topics differ.

CMIT 499B Administering SQL Server (3)

Recommendation: An understanding of relational database concepts. The development of the knowledge and skills necessary to install, configure, and administer a database solution with the client/server database management system Microsoft SQL Server 2000. Hands-on exercises are included.

CMIT 499E Building Scalable Cisco Networks (3)

Prerequisite: CMIT 350. A study of techniques for selecting and configuring Cisco router services in LANs and WANs typically found at medium to large network sites. Focus is on selecting and implementing appropriate Cisco services to build a scalable, routed network. Part of the recommended curriculum for the Cisco Certified Network Professional (CCNP) and Cisco Certified Design Professional (CCDP) certificates is covered.

CMIT 499F Building Cisco Switched Networks (3)

Prerequisite: CMIT 350. A study of concepts and techniques for building networks using multilayer switching technologies over high-speed Ethernet connections. Topics include both routing and switching concepts and cover both Layer 2 and Layer 3 technologies.

CMIT 499G Cisco Remote Access Networks (3)

Prerequisite: CMIT 350. The development of the knowledge and skills necessary to build, configure, and troubleshoot a remote access network to interconnect central sites to branch offices and home offices. Discussion also covers how to control access to the central site, as well as maximize bandwidth utilization over remote links.

CMIT 499S Advanced Network Security (3)

Prerequisites: CompTIA Network+ certification (or CMIT 265 or equivalent knowledge) and CompTIA Security+ certification (or CMIT 320 or equivalent knowledge). A comprehensive study of information security. Course material is based on the vendor-neutral (ISC)[2] Certified Information System Security Professional (CISSP) Certification Exam, which is the capstone standard of competency for experienced security professionals.

Computer Science

Courses in computer science (designated CMSC) may be applied as appropriate (according to individual program requirements) toward

- the general education requirement in computing;
- a major in computer science, computer information technology, or computer studies;
- a minor in computing;
- a certificate in Game Development and Object-Oriented Programming Using Java; and
- electives.

A description of the curriculum for the computer science major begins on p. 30. Descriptions of other computer-related curricula may be found on the following pages: computer and information science (p. 26), computer information technology (p. 28), computer studies (p. 31), computing (p. 33), information assurance (p. 60), and information systems management (p. 62).

CMSC 101 Introductory Computer Science (3)

A study of fundamental programming concepts and constructs within an abstract (language-independent) framework. Topics include basic and structured data types, variables, and the structure of expressions. Pseudocode is used to explore the syntax and semantics of structured programming statements, functions, and the use of parameters. Programming assignments include the creation, compilation, and execution of computer programs in a modern programming language that implements these abstract concepts. The history of computing and computing ethics are also discussed. Students may receive credit for only one of the following courses: CMIS 102, CMIS 102A, or CMSC 101.

CMSC 130 Computer Science I (3)

(For students majoring in computer science. Taking CMSC 130 and 230 in consecutive terms is recommended.) Prerequisite: CMSC 101 or equivalent experience. Recommended: CMSC 150. A study of fundamental concepts that underlie object-oriented programming. Topics include the study and use of primitive and object data types and the process of creating well-designed computer programs to solve specified problems. Programming projects in Java are included.

CMSC 150 Introduction to Discrete Structures (3)

Prerequisite or corequisite: MATH 140. A survey of fundamental mathematical concepts involved in computer science. Functions, relations, finite and infinite sets, and propositional logic are explored. Proof techniques presented are those used for modeling and solving problems in computer science. Combinations, permutations, graphs, and trees are introduced, along with selected applications. Students may receive credit for only one of the following courses: CMSC 150 or CMSC 250.

CMSC 230 Computer Science II (3)

(For students majoring in computer science. Taking CMSC 130 and 230 in consecutive terms is recommended.) Prerequisites: CMSC 130 and 150. A study of the fundamental data structures in computer science. Topics include linked lists, stacks, queues, arrays, dictionaries, vectors, and trees. Algorithms that perform sorting and searching are discussed and analyzed. Programming projects in Java are included.

CMSC 311 Computer Organization (3)

Prerequisite: CMSC 130. A study of the organization of memory, input/output, and central processing units, including instruction sets, register transfer operations, control microprogramming, data representation, and arithmetic algorithms. Assembly language and digital logic circuit design are introduced. Students may receive credit for only one of the following courses: CMIS 270, CMIS 310, CMSC 311, or IFSM 310.

CMSC 325 Game Design and Development (3)

Prerequisite: CMSC 230. A project-driven study of the theory and practice of game design and development. Discussion covers critical mathematical concepts and real-time game physics necessary to build realistic graphical 3-D worlds, animate characters, and add special effects to games. Projects include collaborative development of interactive games.

CMSC 330 Advanced Programming Languages (3)

Prerequisite: CMSC 230 or CMSC 305. A comparative study of programming languages. Topics include the syntax and semantics of programming languages and run-time support required for various programming languages. Programming projects using selected languages are required.

CMSC 335 Object-Oriented and Concurrent Programming (3)

Prerequisite: CMSC 230 or CMSC 305. A study of object-oriented and concurrent programming using features of Java. Concepts of object-oriented programming (such as composition, classification, and polymorphism) are explored. Topics include the principles of concurrent programming (such as task synchronization, race conditions, deadlock, and threads). Programming projects are implemented in Java. Students may receive credit for only one of the following courses: CMSC 300 or CMSC 335.

CMSC 411 Computer System Architecture (3)

Prerequisite: CMSC 311. A discussion of input/output processors and techniques, covering their relation to intrasystem communication, including buses and caches. Discussion covers addressing and memory hierarchies, microprogramming, parallelism, and pipelining.

CMSC 412 Operating Systems (3)

Prerequisite: CMSC 311. A study of the fundamental principles underlying modern operating systems. The essential components of a typical operating system and the interactions among them are described. Methods of managing processes and resources in computer systems are discussed in detail. Programming projects that implement parts of an operating system are required.

CMSC 415 UML and Design Patterns (3)

(Designed for software engineers, systems analysts, designers, and programmers.) Prerequisite: CMSC 335. A comprehensive study of fundamental concepts of object-oriented analysis and design focusing on Unified Modeling Language (UML) and its application to the system architectural design using selected patterns as guiding models. Activities include creation of detailed object models, in conjunction with UML views and design from system requirements, using use-case models and proven patterns to refine analysis and design models. Emphasis is on expansion of the analysis into a design that is ready for implementation, with artifacts that are testable, and that exhibits scalability to easily evolve in response to changes in a given problem domain.

CMSC 420 Advanced Data Structures and Analysis (3)

Prerequisite: CMSC 230. A study of data structures (including lists and trees) in terms of their descriptions, properties, and storage allocations. Algorithms are used to manipulate structures. Applications are drawn from the areas of information retrieval, symbolic manipulation, and operating systems.

CMSC 424 Database Design (3)

Prerequisite: CMSC 130. A study of the applicability of the database approach as a mechanism for modeling the real world. Review covers the three popular data models (hierarchical, relational, and network). Permissible structures, integrity constraints, storage strategies, and query facilities are compared. The theoretical foundations of the logic used in designing a database are presented.

CMSC 425 Building Applications for Mobile Devices (3)

Prerequisites: CMSC 311 (or CMIS 310) and 230 (or CMIS 241 or CMIS 242). A hands-on, project-based introduction to the development of applications for wireless devices such as mobile phones. Integrated development environments and tools from leading companies in the industry are used to design, develop, and test wireless solutions for video gaming, wireless messaging, multimedia, and other business applications.

CMSC 430 Theory of Language Translation (3)

Prerequisites: CMSC 330 and programming experience in C or C++. An examination of the formal translation of programming languages, syntax, and semantics. Highlights include evaluation of finite-state grammars and recognizers; context-free parsing techniques such as recursive descent, precedence, LL(K), LR(K), and SLR(K); and improvement and generation of machine-independent code and syntax-directed translation schema. Programming projects that implement parts of a compiler are required.

CMSC 450 Logic for Computer Science (3)

(Also listed as MATH 450.) Prerequisites: CMSC 150 and MATH 241. Elementary development of propositional logic (including the resolution method) and first-order logic (including Hebrand's unsatisfiability theorem). Discussion covers the concepts of truth and interpretation; validity, provability, and soundness; completeness and incompleteness; and decidability and semidecidability. Students may receive credit for only one of the following courses: CMSC 450, MATH 444, MATH 445, or MATH 450.

CMSC 451 Design and Analysis of Computer Algorithms (3)

Prerequisites: CMSC 150 and 230. Presentation of fundamental techniques for designing and analyzing computer algorithms. Basic methods include divide-and-conquer techniques, search and traversal techniques, dynamic programming, greedy methods, and induction.

CMSC 452 Elementary Theory of Computing (3)

Prerequisite: CMSC 311. Analysis of alternative theoretical models of computation and types of automata. Their relationship to formal grammars and languages is specified.

CMSC 480 Advanced Programming in Java (3)

Prerequisite: CMSC 335. An examination of the principles, techniques, and applications of programming in Java in the Internet environment. Topics include threads, packages, interfaces, and exceptions. Java applets are created and incorporated into Web pages. Visual development tools are reviewed. Students may receive credit for only one of the following courses: CMIS 498J, CMSC 480, or CMSC 498J.

CMSC 486A Internship in Computer Science Through Co-op (3)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 246). An opportunity to combine academic theory with new, career-related experience in computer science. At least 12 hours per week must be devoted to new tasks for a minimum of 180 hours during the Co-op session; four new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to computer science and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

CMSC 486B Internship in Computer Science Through Co-op (6)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 246). An opportunity to combine academic theory with new, career-related experience in computer science. At least 20 hours per week must be devoted to new tasks for a total of 300 hours during the Co-op session; five to eight new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to computer science and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

CMSC 495 Current Trends and Projects in Computer Science (3)

(Intended as a final, capstone course to be taken in a student's last 9 credits.) Prerequisites: CMSC 330 and 335. An overview of computer science with emphasis on integration of concepts, practical application, and critical thinking. Analysis covers innovative and emerging issues in computer science. Projects use techniques and approaches previously studied; they may focus on software design and architecture, systems and application security, mobile applications, database design and implementation, concurrent programming, signal processing, algorithm performance optimization, or current issues. Assignments include working in teams throughout the analysis, design, development, implementation, testing, and documentation phases of the projects.

CMSC 498 Special Topics in Computer Science (1–3)

Prerequisites: Vary according to topic. A seminar on topics in computer science. May be repeated to a maximum of 6 credits when topics differ.

Computer Studies

Courses in computer studies (designated CMST) may be applied as appropriate (according to individual program requirements) toward

- the general education requirement in computing;

- a major in computer studies, computer and information science, computer information technology, or information systems management;

- a minor in computing;

- a certificate in Computer Applications, Game Development, Internet Technologies, Visual Basic Programming, or Web Design; and

- electives.

A description of the curriculum for the computer studies major begins on p. 31. Descriptions of other computer-related curricula may be found on the following pages: computer and information science (p. 26), computer information technology (p. 28), computer science (p. 30), computing (p. 33), information assurance (p. 60), and information systems management (p. 62).

CMST 103 Application Software (3)

An introduction to microcomputers and application (enterprise) software. Hands-on experience with software packages (including word processing, spreadsheets, and databases) is provided. Focus is on concepts, features, and business applications of those facilities. Students who have received credit for CMST 100B, CMST 100F, or CMST 100G may not receive credit for CMST 103. Students may receive credit for only one of the following courses: CAPP 103 or CMST 103.

CMST 270 Integrative Video Game Design and Technology (3)

Prerequisite: CMIS 102 or CMIS 102A. A project-oriented study of the concepts and methods used to design and develop computer games. Topics include the history of games; game design; genres of games; multiplayer games; online games; game development environments and employment opportunities; and ethical, social, and cultural aspects of video gaming.

CMST 303 Advanced Application Software (3)

Prerequisite: CMST 103 or extensive experience with application software, including word processing, spreadsheets, and databases. A presentation of application software packages that includes advanced features of word processing, spreadsheets, database management, and electronic information exchange for business applications. Presentation software is introduced. Students may receive credit for only one of the following courses: CAPP 303 or CMST 303.

CMST 306 Introduction to Visual Basic Programming (3)

Prerequisite: CMIS 102 or CMIS 102A. A structured approach to developing programs using the Visual Basic programming language. Hands-on experience in implementing features of this visual interface for program design is provided. Assignments include programming projects in Visual Basic.

CMST 310 Electronic Publishing (3)

Prerequisite: CMST 103 or IFSM 201. An introduction to concepts and methods of electronic (desktop) publishing. Highlights include the design and layout of a publication, the choice of computer hardware and software, the integration of computer graphics, the drafting and editing of a publication, and methods of interfacing with high-level printing equipment to produce a final document. Students may receive credit for only one of the following courses: CAPP 310, CAPP 398B, or CMST 310.

CMST 311 Advanced Electronic Publishing (3)

Prerequisite: CMST 310. A project-oriented study of the advanced concepts and methods of electronic (desktop) publishing. Emphasis in on effective transfer of electronic files to service bureaus and printers. Features essential to multimedia presentations are integrated with techniques for capturing and editing photos to produce business publications. Topics include publishing printed documents on a Web site. Students may receive credit for only one of the following courses: CAPP 311 or CMST 311.

CMST 340 Computer Applications in Management (3)

Prerequisite: CMIS 102, CMIS 102A, CMST 103, or IFSM 201. An overview of computer-based information-system concepts and operations and how these capabilities are applied by management to improve the work processes of business, government, and academic organizations. Topics include management planning at the strategic, tactical, and operational levels necessary to effect continuous improvements. The interchange of electronic information and the application of various computing tools such as spreadsheet programs are introduced. Students may receive credit for only one of the following courses: CAPP 340, CMIS 350, or CMST 340.

CMST 385 Internet and Web Design (3)

Prerequisite: CMIS 102, CMIS 102A, CMST 103, or IFSM 201. A study of HTML and Web page design, including Internet security measures and social, ethical, and legal issues related to the growth of the Internet. Topics include basic principles and protocols of the Internet, configuration and use of graphical Web browsers, application programs such as e-mail and searching and retrieving information on the World Wide Web, and the use of portals. Assignments include designing and publishing a Web page. Students may receive credit for only one of the following courses: CAPP 385 or CMST 385.

CMST 386 Advanced Internet and Web Design (3)

Prerequisite: CMST 385. A study of modern methods for the design of Web sites. Focus is on Web page design, including features such as cascading style sheets and programming using JavaScript and PHP. Discussion covers the movement toward XML and writing XHTML-compliant Web pages. Assignments include publishing World Wide Web Consortium–validated Web pages. Students may receive credit for only one of the following courses: CAPP 386 or CMST 386.

CMST 416 Advanced Visual Basic Programming (3)

Prerequisite: CMST 306. An investigation of advanced Visual Basic programming concepts, tools, and methods. Emphasis is on application design and development. Practical opportunities to design and develop complete applications integrating multiple features of the Visual Basic programming language are provided.

CMST 430 Web Site Management (3)

Prerequisite: CMST 386. An in-depth survey of Web site maintenance for small businesses. Topics include Web tools, including scripting, servers, editors, image manipulation tools, utilities, and traffic analysis. Focus is on Internet security and e-commerce issues. Students may receive credit for only one of the following courses: CAPP 498C or CMST 430.

CMST 450 Web Design with XML (3)

Prerequisite: CMST 386. An in-depth survey of the design and delivery of professional Web content. Focus is on using comprehensive tools and the latest technologies, such as XML, to enhance the Web presence of a business. Topics include multimedia and interactivity, online commerce, and Internet security issues. Assignments include a comprehensive project. Students may receive credit for only one of the following courses: CAPP 498D or CMST 450.

CMST 460 Web Application Development Using ColdFusion (3)

(Formerly CMST 498F.) Prerequisite: CMST 386. A structured approach to building and maintaining dynamic and interactive Web applications. Emphasis is on application design and development. Hands-on practice in using ColdFusion is provided. Students may receive credit for only one of the following courses: CMST 460 or CMST 498F.

CMST 486A Internship in Computer Studies Through Co-op (3)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 246). An opportunity to combine academic theory with new, career-related experience in computer studies. At least 12 hours per week must be devoted to new tasks for a minimum of 180 hours during the Co-op session; four new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to computer studies and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

CMST 486B Internship in Computer Studies Through Co-op (6)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 246). An opportunity to combine academic theory with new, career-related experience in computer studies. At least 20 hours per week must be devoted to new tasks for a total of 300 hours during the Co-op session; five to eight new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to computer studies and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

CMST 498P Web Development for ASP (3)

The development of the knowledge and skills necessary to create and maintain active server pages (ASP) Web applications in an integrated development environment. Practical experience using Web forms to create data-bound applications with custom controls is provided. Discussion covers data validation, DataGrid usage, and advanced Web form controls. Information security issues are also introduced.

Cooperative Education

Cooperative Education (Co-op) extends education beyond the traditional classroom by integrating career-related work opportunities with the student's field of study.

Cooperative Education courses carry the designator of the appropriate academic discipline and the number 486A or 486B. Co-op courses may not be applied toward any general education requirements or some majors and minors. Students are responsible for consulting their advisor about applying Co-op credit to their degree program.

More details and contact information for Cooperative Education are available on p. 246. Details are also available on the Web at *www.umuc.edu/coop.*

Criminology/ Criminal Justice

Courses in criminology/criminal justice (designated CCJS) may be applied as appropriate (according to individual program requirements) toward

- the general education requirement in the behavioral and social sciences (**Note:** Only CCJS 105, 350, 360, 432, 453, 454, and 461 apply);
- a major in criminal justice, homeland security, investigative forensics, legal studies, or social science;
- a minor in criminal justice, forensics, or sociology;
- a certificate in Correctional Administration, Criminal Justice Intelligence, or Security Management; and
- electives.

Students who previously received credit for courses in the disciplines of criminology (courses designated CRIM) or criminal justice (courses designated CJUS) may not receive credit for comparable courses designated CCJS.

A description of the curriculum for the criminal justice major and minor begins on p. 33. Descriptions of related curricula may be found on the following pages: forensics (p. 47), homeland security (p. 54), investigative forensics (p. 64), legal studies (p. 68), and sociology (p. 81).

CCJS 100 Introduction to Criminal Justice (3)

(Fulfills the general education requirement in behavioral and social sciences.) An introduction to the administration of criminal justice in a democratic society, emphasizing the history and theories of law enforcement. Discussion covers the principles of organization and administration in law enforcement, including specific activities and functions (such as research and planning, public relations, personnel and training, inspection and control, and formulation and direction of policy). Students may receive credit for only one of the following courses: CCJS 100 or CJUS 100.

CCJS 105 Introduction to Criminology (3)

(Fulfills the general education requirement in behavioral and social sciences.) An overview of criminal behavior and the methods of studying it. Topics include causation; typologies of criminal acts and offenders; the practices and effects of punishments, correction, and incapacitation; and the prevention of crime. Students may receive credit for only one of the following courses: CCJS 105 or CRIM 220.

CCJS 230 Criminal Law in Action (3)

Recommended: CCJS 100 or CCJS 105. An exploration of law as a method of social control. The nature, sources, and types of criminal law are studied in relation to its history and theories. Topics include behavioral and legal aspects of criminal acts and the classification and analysis of selected criminal offenses. Students may receive credit for only one of the following courses: CCJS 230 or CJUS 230.

CCJS 234 Criminal Procedure and Evidence (3)

Prerequisite: CCJS 100 or CCJS 105. Recommended: CCJS 230. A study of the general principles and theories of criminal procedure. Topics include due process, arrest, search and seizure, and the evaluation of evidence and proof. Recent developments in the field are discussed. Students may receive credit for only one of the following courses: CCJS 234, CJUS 234, LGST 320, or PLGL 320.

CCJS 320 Introduction to Criminalistics (3)

Prerequisite: CCJS 100 or CCJS 105. An introduction to modern methods used in detecting, investigating, and solving crimes. The practical analysis of evidence in a criminal investigation laboratory is covered. Topics include photography, fingerprints, and other impressions; ballistics, documents and handwriting, glass, and hair; drug analysis; and lie detection. Students may receive credit for only one of the following courses: CCJS 320 or CJUS 320.

CCJS 331 Contemporary Legal Policy Issues (3)

Prerequisite: CCJS 100 or CCJS 105. Thorough examination of selected topics: criminal responsibility, alternative sociolegal policies on deviance, law-enforcement procedures for civil law and similar legal problems, admissibility of evidence, and the indigent's right to counsel. Students may receive credit for only one of the following courses: CCJS 331 or CJUS 330.

CCJS 340 Law-Enforcement Administration (3)

Prerequisite: CCJS 100 or CCJS 105. An introduction to concepts of organization and management as they relate to law enforcement. Topics include principles of structure, process, policy and procedure, communication and authority, division of work and organizational controls, the human element in the organization, and informal interaction in the context of bureaucracy. Students may receive credit for only one of the following courses: CCJS 340 or CJUS 340.

CCJS 341 Criminal Investigation (3)

An introduction to the concepts and methodologies used by criminal investigators to prevent and suppress crime and aid in the apprehension of criminal suspects. Topics include crime scene search and recording; collection and preservation of physical evidence; use of scientific aids, modus operandi, and sources of information; interview and interrogation; follow-up; and case preparation. Emphasis is on leadership and management to enhance investigative efforts.

CCJS 345 Introduction to Security Management (3)

(Formerly CCJS 445.) Recommended: CCJS 100 or CCJS 105. A study of the concepts, principles, and methods of organizing and administering security management and loss-prevention activities in industry, business, and government. Emphasis is on both private and governmental protection of assets, personnel, and facilities. Students may receive credit for only one of the following courses: CCJS 345, CCJS 445, or CCJS 498G.

CCJS 350 Juvenile Delinquency (3)

(Fulfills the general education requirement in behavioral and social sciences.) Prerequisite: CCJS 100 or CCJS 105. An examination of juvenile delinquency in relation to the general problem of crime. Topics include factors underlying juvenile delinquency, prevention of criminal acts by youths, and the treatment of delinquents. Students may receive credit for only one of the following courses: CCJS 350 or CRIM 450.

CCJS 351 Issues in Criminal Justice (6)

Prerequisite: CCJS 100 or CCJS 105. An interdisciplinary exploration of criminal justice. Topics include theories of the causes of crime; requisites of criminal liability; defenses; the rights guaranteed by the Fourth, Fifth, and Sixth Amendments to the U.S. Constitution; undercover investigation; special issues in juvenile justice; and the highly controversial issues of capital punishment and victimization. Students may receive credit for only one of the following courses: BEHS 351 or CCJS 351.

CCJS 352 Drugs and Crime (3)

Prerequisite: CCJS 100 or CCJS 105. An analysis of the role of criminal justice in controlling the use and abuse of drugs. Students may receive credit for only one of the following courses: CCJS 352 or CJUS 352.

CCJS 357 Industrial and Retail Security Administration (3)

Recommended: CCJS 100 or CCJS 105. An exploration of the origins of contemporary private security systems. The organization and management of protective units (industrial and retail) are examined. Students may receive credit for only one of the following courses: CCJS 357 or CJUS 360.

CCJS 360 Victimology (3)

(Fulfills the general education requirement in behavioral and social sciences.) Prerequisite: CCJS 100 or CCJS 105. An overview of the history and theory of victimology in which patterns of victimization are analyzed, with emphasis on types of victims and of crimes. The interaction between victims of crime and the system of criminal justice is considered in terms of the role of the victim and the services that the victim is offered. Students may receive credit for only one of the following courses: CCJS 360 or CRIM 360.

CCJS 370 Race, Crime, and Criminal Justice (3)

Prerequisite: CCJS 100 or CCJS 105. A historical and theoretical study of the role and treatment of racial/ethnic minorities in the criminal justice system.

CCJS 398D The Death Penalty (3)

Prerequisite: CCJS 100 or CCJS 105. An overview of the history of the death penalty as part of the criminal justice system. Topics include the theory and legal foundation behind use of the death penalty, current practices, and its application. Arguments for and against the death penalty in the United States are examined. International law and American exceptionalism are also explored.

CCJS 398P Crisis Management and Decision Making (1)

A study of the activities involved in planning, organizing, and directing immediate aid to the public and victims during emergencies. Focus is on gaining problem-solving skills using real-life situations. Topics include immediate challenges, such as controlling access, establishing and maintaining communications, evacuating residents, providing medical care, protecting crime scenes, and restoring vital community services. Theories from several disciplines are examined.

CCJS 398Q Interagency Communication (1)

An examination of the need for up-to-the-minute, accurate, specific, and reliable information and communication between governmental and private organizations. Focus is on effective organization, dissemination, and management of information and intelligence.

CCJS 398R Strategic Planning and Risk Reduction (1)

A study of threat and risk reduction and management. Topics include planning, budgeting, staffing, and directing first responders and emergency personnel. Focus is on how to create plans that strengthen security, reduce risks, and prevent attacks or minimize loss in daily operations, disasters, and emergencies. Discussion covers theories of crime, human behavior, and business management.

CCJS 400 Criminal Courts (3)

Prerequisite: CCJS 100 or CCJS 105. An examination of criminal courts in the United States at all levels. Topics include the roles of judges, prosecutors, defenders, clerks, and court administrators and the nature of their jobs; problems of administration, as well as those facing courts and prosecutors; and reform. Students may receive credit for only one of the following courses: CCJS 400 or CJUS 400.

CCJS 411 History of Intelligence and the U.S. National Intelligence Community (3)

A study of the role that intelligence gathering has played throughout history. Focus is on U.S. national intelligence agencies and their individual and collective responsibilities with regard to intelligence. Topics include how and why the structure of the intelligence community failed in the days before the terrorist attacks of September 11, 2001, and whether the problems have been fixed.

CCJS 412 The Intelligence Cycle (3)

An exploration of the collection, evaluation, collation, analysis, and dissemination processes in the intelligence cycle. A wide array of intelligence software tools are introduced. Topics include developing intelligence products.

CCJS 413 Legal and Ethical Issues for Analysts (3)

An examination of ethical issues related to intelligence collection, the analytical process, and the use of force. Laws affecting the intelligence field are examined. Discussion also explores the strain of balancing the need for secrecy regarding intelligence activities with the need for oversight and the public's access to information.

CCJS 420 Medical and Legal Investigations of Death (3)

Prerequisite: CCJS 100 or CCJS 105. Recommended: CCJS 320. An intensive look at medical and legal investigations into causes of death. Topics include the difference between the medical (or pathological) and legal (or criminal) components of investigations into causes of death, medical and investigative terminology, and the impact of ethics on prosecutions and convictions. Case studies illustrate practical applications of various forensic styles and parameters.

CCJS 421 Computer Forensics (3)

Prerequisites: CCJS 100 (or CCJS 105) and IFSM 201. A study of the investigation of computer crime from both a legal and technical perspective. Focus is on acquiring the skills to efficiently and effectively collect all of the available data in connection with a computer crime. Topics include developing and executing investigative and data collection plans, collecting data from a variety of computer and network hardware components, conducting appropriate analyses, and writing forensic reports. Intrusion detection techniques are also examined. Case studies are used to develop an understanding of what happens when computer systems are compromised.

CCJS 425 Forensics Lab (3)

Prerequisites: CCJS 100 (or CCJS 105) and 320. A hands-on investigation of the laboratory methods used in detecting, investigating, and solving crimes. The practical analysis of evidence in a criminal investigation laboratory is covered. Topics include fingerprints and other impressions, documents and handwriting, footwear impressions, blood pattern analysis, and forensic anthropology.

CCJS 430 Legal and Ethical Issues in Security Management (3)

Recommended: CCJS 100 (or CCJS 105) and 345 (or CCJS 445). An examination of current problems facing the security professional. Topics include legal liabilities, compliance issues, and ethical standards of organizations. Students may receive credit for only one of the following courses: CCJS 430 or CCJS 498F.

CCJS 431 Legal and Ethical Issues in Corrections (3)

Prerequisite: CCJS 100 or CCJS 105. Recommended: CCJS 497. An examination of problems associated with managing staff and inmates in correctional communities. Topics include constitutional rights of inmates, inmate litigation and case law, workplace ethics and principles, and employee rights and protections.

CCJS 432 Law of Corrections (3)

(Fulfills the general education requirement in behavioral and social sciences.) Prerequisite: CCJS 100 or CCJS 105. Recommended: CCJS 497. A review of the law of criminal corrections, from sentencing to final release or release on parole. Topics include probation, punishments, special treatment for special offenders, parole and pardon, and the prisoner's civil rights. Students may receive credit for only one of the following courses: CCJS 432 or CRIM 432.

CCJS 433 Communicating in the Correctional Culture (3)

Prerequisite: CCJS 100 or CCJS 105. Recommended: CCJS 497. A study of effective management and communicating models applicable to correctional communities. Correctional climate and culture, information flow, inter- and intra-personal relationships are major themes. Topics include formal and informal communication; verbal and nonverbal cues; and dissemination of rules, policies, and procedures.

CCJS 434 Reentry and Transition Issues in Corrections (3)

An examination of current programmatic and offender supervision philosophies within community correction programs, jail and prison reentry programs, parole and probation agencies, and pretrial supervision environments. Discussion covers comprehensive case management approaches intended to assist offenders while being supervised in the community. Topics include the unique reentry characteristics and social service needs of criminal offenders when they are close to release.

CCJS 453 White-Collar and Organized Crime (3)

(Fulfills the general education requirement in behavioral and social sciences.) Prerequisite: CCJS 100 or CCJS 105. An overview of the definition, detection, prosecution, sentencing, and impact of white-collar and organized crime. Special consideration is given to the role of federal law and enforcement practices.

CCJS 454 Contemporary Criminological Theory (3)

(Fulfills the general education requirement in behavioral and social sciences.) Prerequisite: CCJS 100 or CCJS 105. A brief historical overview of criminological theory. Topics include deviance, labeling, and typologies, as well as the most recent research on criminalistic subcultures and on middle-class delinquency. Various recent proposals for decriminalization are discussed. Students may receive credit for only one of the following courses: CCJS 454 or CRIM 454.

CCJS 455 Theory and Principles of Executive Protection (3)

Prerequisite: CCJS 100 or CCJS 105. A study of concepts, principles, and methods of organizing and administering a successful protective security program for corporate executives, professional athletes, entertainment celebrities, and political personalities and families who are vulnerable and at risk for harassment, stalking, assault, kidnapping, or assassination at home, in the work environment, or while traveling. The philosophy and principles of protection and the use of both physical security techniques and electronic countermeasures are examined.

CCJS 461 Psychology of Criminal Behavior (3)

(Fulfills the general education requirement in behavioral and social sciences.) Prerequisite: CCJS 100 or CCJS 105. An overview of the biological, environmental, and psychological factors that underlie criminal behavior. Characteristics of criminal behavior are reviewed. The influence of biophysiology and stress on the commission of various crimes is examined. Topics include patterns of maladjustment, disorders of the personality, psychoses, the connection between aggression and violent crime, sexual deviations and crimes that are sexually motivated, and the abuse of alcohol and drugs. Students may receive credit for only one of the following courses: CCJS 461 or CRIM 455.

CCJS 462 Protection of Business Assets (3)

Recommended: CCJS 100 (or CCJS 105) and 345 (or CCJS 445). An examination of the application of security knowledge and techniques for the protection of business assets. Topics include security planning methods, risk analysis, security surveys, and decision making for the development of security programs and countermeasures. Students may receive credit for only one of the following courses: CCJS 462 or CCJS 498H.

CCJS 463 Security: A Management Perspective (3)

Recommended: CCJS 100 (or CCJS 105) and 345 (or CCJS 445). An examination of concepts, strategies, and skills needed to manage security-related operations and activities. Focus is on employee/employer security. Students may receive credit for only one of the following courses: CCJS 463 or CCJS 498K.

CCJS 470 Leadership and Time Management (4)

(Designed to enhance the skills of mid- to senior-level criminal justice practitioners.) A study of leadership and time management and their application within the criminal justice system. Discussion covers major leadership theories, including trait, behavioral, and situational power/influence (motivation). Topics also include time-management techniques, such as minimizing "time robbers," personal planning, multitasking, holding effective meetings, and delegating responsibility.

CCJS 472 Organizational Problem Solving (4)

A study of human behavior and interactions as they relate to identifying and solving problems of employee efficiency and effectiveness within the criminal justice system. Topics include methods of distinguishing symptoms from problems, prioritizing, implementation and sustainment techniques, ethics, and decision making. Discussion also covers diversity, cynicism, personality traits, teamwork, groupthink, communication, and relationship building.

CCJS 474 Strategic Planning for Managers (4)

A study of strategic planning in the field of criminal justice, including various planning styles and the effect of the dynamic of change on the planning process. Discussion explores how to identify subtle changes with an organization, successfully implement change, and recover from efforts that fail. Topics also include techniques to minimize employee resistance.

CCJS 476 Management Efficiency and Effectiveness (4)

An in-depth analysis of efficiency and effectiveness in criminal justice departments. Emphasis is on sustainment strategies, task alignment, waste and reallocation techniques, and report writing. Topics include reasons why programs fail, methodologies of evaluation, performance management, tracking and measuring, establishing goals and objectives, and distinguishing outputs and outcomes. Discussion also covers how to perform a needs assessment for an organization, develop an implementation plan, and identify resources. Assignments include researching and analyzing examples of efficiency and effectiveness within one's own organization.

CCJS 486A Internship in Criminal Justice Through Co-op (3)

Prerequisites: 12 credits in criminal justice, including CCJS 100 or CCJS 105, and formal admission to the Co-op program (program requirements are listed on p. 246). An opportunity to combine academic theory with new, career-related experience in criminal justice. At least 12 hours per week must be devoted to new tasks for a minimum of 180 hours during the Co-op session; four new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to criminal justice and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

CCJS 486B Internship in Criminal Justice Through Co-op (6)

Prerequisites: 12 credits in criminal justice, including CCJS 100 or CCJS 105, and formal admission to the Co-op program (program requirements are listed on p. 246). An opportunity to combine academic theory with new, career-related experience in criminal justice. At least 20 hours per week must be devoted to new tasks for a total of 300 hours during the Co-op session; five to eight new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to criminal justice and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

CCJS 491 Institutional Security (3)

Recommended: CCJS 100 (or CCJS 105) and 345 (or CCJS 445). A survey of the security needs, methods, and technology of military, medical, academic, and other professional institutions. The integration of security concerns with other aspects of management is examined. Students may receive credit for only one of the following courses: CCJS 491 or CCJS 498E.

CCJS 495 Criminal Trial Issues (3)

Prerequisite: CCJS 230. An intensive study of the latest constitutional developments in the ever-changing areas of search and seizure, confessions, trial procedure, punishment, and appeals. Focus is on past and current trends of the U.S. Supreme Court in applying the Fourth, Fifth, Sixth, Eighth, and Fourteenth Amendments to federal as well as state law-enforcement practices. Supreme Court case decisions and cases pending review and decision provide an opportunity to understand the doctrinal development of controlling principles and to predict future developments. Students may receive credit for only one of the following courses: CCJS 495 or CCJS 498A.

CCJS 496 Computer Crime and Security (3)

Prerequisites: CCJS 100 (or CCJS 105) and IFSM 201. An examination of crimes involving the use of computers. Topics include federal and state laws and investigative and preventive methods used to secure computers. Case studies emphasize security. Students may receive credit for only one of the following courses: CCJS 496 or CCJS 498C.

CCJS 497 Correctional Administration (3)

Prerequisite: CCJS 100 or CCJS 105. An introduction to concepts of organization and management as they relate to the field of corrections. Topics include the history of corrections, institutional structure and classification, policy and procedures, communication and authority, division of work, inmate discipline and due process, organizational culture, security, technology changes, and relationships with other components of the criminal justice system. Students may receive credit for only one of the following courses: CCJS 497 or CCJS 498D.

CCJS 498J Criminal Justice and the Media (1)

An in-depth analysis of the effect of the news media on crime levels and public fear of crime. The relationship between media coverage and public perception is explored as well as the media's role in crime prevention.

Economics

Courses in economics (designated ECON) may be applied as appropriate (according to individual program requirements) toward

- the general education requirement in the behavioral and social sciences;
- a major in finance, global business and public policy, homeland security, or social science;
- a minor in economics;
- related requirements for most business-related majors and minors; and
- electives.

A description of the curriculum for the economics minor begins on p. 36. Descriptions of related majors may be found on the following pages: finance (p. 43), global business and public policy (p. 50), homeland security (p. 54), and social science (p. 80).

ECON 201 Principles of Macroeconomics (3)

An introduction to the problems of unemployment, inflation, and economic growth. Emphasis is on the roles of monetary policy and fiscal policy in determining macroeconomic policy. The efficacy of controlling wages and prices is analyzed. Students may receive credit for only one of the following courses: ECON 201 or ECON 205.

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ECON 203 Principles of Microeconomics (3)

Analysis of the principles underlying the behavior of individual consumers and business firms. Topics include problems of international trade and finance, distribution of income, policies for eliminating poverty and discrimination, problems of environmental pollution, and effects of various market structures on economic activity.

ECON 301 Current Issues in American Economic Policy (3)

Prerequisites: ECON 201 and 203. Analysis of current economic problems and public policies. Topics include market power, federal budget and tax policy, governmental regulation, inflation, unemployment, poverty and distribution of income, and environmental issues.

ECON 305 Intermediate Macroeconomic Theory and Policy (3)

Prerequisite: ECON 201. Analysis of forces that determine a nation's income, employment, and price levels. Topics include consumption, investment, inflation, and governmental fiscal and monetary policy. Students may receive credit for only one of the following courses: ECON 305, ECON 403, or ECON 405.

ECON 306 Intermediate Microeconomic Theory (3)

Prerequisite: ECON 203. Analysis of the principles underlying the behavior of individual consumers and business firms. Theories of marketing systems, distribution, and the roles of externalities are covered. Students may receive credit for only one of the following courses: ECON 306 or ECON 403.

ECON 315 Economic Development of Underdeveloped Areas (3)

Prerequisites: ECON 201 and 203. Analysis of the economic and social characteristics of underdeveloped areas. Recent theories about economic development, obstacles to development, and policies and planning for development are discussed. Students may receive credit for only one of the following courses: ECON 315 or ECON 416.

ECON 380 Comparative Economic Systems (3)

Prerequisites: ECON 201 and 203. A comparative analysis of the theory and practice of various types of economic systems, especially the economic systems of the United States, the former Soviet Union, the People's Republic of China, Western and Eastern Europe, and less-developed countries.

ECON 381 Environmental Economics (3)

Prerequisite: ECON 201. Application of economic theory to problems of environmental quality and management. The theory behind common-property resources, economic externalities, alternative pollution-control measures, and limits to economic growth is discussed.

ECON 422 Quantitative Methods in Economics I (3)

Prerequisites: ECON 201 and 203 and STAT 230. A study of the interaction between problems of economics and the assumptions of statistical theory. Formulation, estimation, and testing of economic models (including theory of identification, techniques of single-variable and multiple-variable regression, and issues of inference) are explained. Assignments include independent work relating the material in the course to an economic problem chosen by the student.

ECON 425 Mathematical Economics (3)

Prerequisites: ECON 201 and 203 and MATH 220. An explanation of the simpler aspects of mathematical economics. The types of calculus and algebra that are required for economic analysis are presented.

ECON 430 Money and Banking (3)

Prerequisites: ECON 201 and 203. An examination of the structure of financial institutions and their role in providing money and near-money. Institutions, processes, and correlations analyzed include the functions of the Federal Reserve System, the techniques of central banks, the control of the supply of financial assets as a mechanism of stabilization policy, and the relationship of money and credit to economic activity and prices. Students may receive credit for only one of the following courses: ECON 430 or ECON 431.

ECON 440 International Economics (3)

Prerequisites: ECON 201 and 203. A description of international trade and an analysis of international transactions, exchange rates, and balance of payments. Policies of protection, devaluation, and exchange-rate stabilization and their consequences are also analyzed. Students may receive credit for only one of the following courses: BEHS 440, ECON 440, or ECON 441.

ECON 450 Introduction to Public-Sector Economics (3)

Prerequisites: ECON 201 and 203. A study of public finance that examines the roles of federal, state, and local governments in meeting the demands of the public. Analysis covers theories of taxation, public expenditures, governmental budgeting, benefit/cost analysis, and redistribution of income, as well as their applications in public policy. Students may receive credit for only one of the following courses: ECON 450 or ECON 454.

ECON 490 Survey of Urban Economic Problems and Policies (3)

Prerequisites: ECON 201 and 203. An introduction to the study of urban economics by means of examining issues in current policy. Topics may include urban renewal, economic development in ghettos, problems concerning transportation, the development of new towns, and problems concerning provision of services (such as education and police protection).

Educational Principles

Courses in educational principles (designated EDCP) do not apply toward teacher-certification requirements.

Lower-level courses are intended to help students learn how to make the most of their college careers. They are recommended for students who have been away from school or who need to improve their academic skills.

EDCP 101/101X and 103/103X do not fulfill the general education requirement in communications; they may be used as elective credit only.

Other courses designed to help students succeed in school or on the job are included under career planning (courses designated CAPL) and library skills and information literacy (courses designated LIBS).

EDCP 100 Principles and Strategies of Successful Learning (3)

An introduction to knowledge and strategies designed to promote success in the university environment. Focus is on developing the study, interpersonal, and self-management skills and attitudes needed to achieve academic objectives. Topics include the university's mission, resources, and requirements. A series of self-assessments serve as tools to identify values and goals for individual life planning and educational success.

EDCP 103 Fundamentals of Writing and Grammar (3)

(Does not fulfill the general education requirement in communications. Recommended as preparation for WRTG 101 or upper-level writing courses.) A review of basic writing skills. Topics include parts of speech; proper use of subordinate clauses, independent clauses, and phrases; the writing process; strategies for developing academic paragraphs and essays; and strategies for developing writing and editing skills in grammar, punctuation, and mechanics. Frequent opportunities to practice and refine skills are provided. Students may receive credit for only one of the following courses: EDCP 103, EDCP 103X, or ENGL 100.

Emergency Management

Courses in emergency management (designated EMGT) may be applied as appropriate (according to individual program requirements) toward

- a major or minor in emergency management;
- a major in homeland security or information assurance; and
- electives.

A description of the curriculum for the emergency management major and minor begins on p. 36. Descriptions of related curricula may be found on the following pages: homeland security (p. 54) and information assurance (p. 60).

EMGT 302 Concepts of Emergency Management (3)

An introduction to emergency management at the global, national, regional, state, and local levels. Topics include preparedness, mitigation, response, and recovery. The history of emergency management is reviewed, and its future in government and industry is discussed.

EMGT 304 Emergency Response Preparedness and Planning (3)

A study of the planning process and format and response procedures for disasters and emergency events. Topics include risk assessment, modeling, hazard analysis, vulnerability assessment, and response capability assessment. Discussion also covers the evaluation of plans and the use of exercises to improve and implement plans.

EMGT 306 Political and Policy Issues in Emergency Management (3)

Prerequisite: EMGT 302 or EMGT 304. An examination of the legal and regulatory principles, policies, and issues that affect emergency management. Emphasis is on how emergency management policy and legislation is developed and maintained on international, national, regional, state, and local levels.

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EMGT 308 Exercise and Evaluation Programs (3)

Prerequisites: EMGT 302 (or EMGT 304) and 306. An examination of the role of disaster exercises in emergency management and business crisis management programs. Focus is on designing, conducting, and evaluating disaster exercises. Topics include the current federal focus on response and intelligence exercises. Best practices are used to understand the application of "lessons learned" and after-action reports to support continuous improvement.

EMGT 310 Continuity of Operations Planning and Implementation (3)

An exploration of the process for developing, implementing, exercising, and evaluating continuity of operations for both government and industry. Emphasis is on being able to continue to supply services to constituents and customers while supporting staff and initiating recovery operations.

EMGT 312 Social Dimensions of Disaster (3)

Prerequisite: EMGT 302 or EMGT 304. An examination of the response of the public and individuals to disaster-related issues such as disaster warnings, evacuations, relocations, civil unrest, loss of family and property, and recovery activities. Emphasis is on preparing the community through effective programs and public information. Discussion also covers the impact of disasters on response organizations and personnel.

EMGT 404 Planning and Response for Catastrophic Disasters (3)

Prerequisites: EMGT 302 (or EMGT 304) and 306. An examination of the preparation for and the response to disasters beyond the capability of the available resources from geographical, international, national, or local perspectives. Recent case studies are used to determine the characteristics of a catastrophic disaster; the special issues of response and recovery; and preparation issues on international, national, and local levels.

EMGT 486A Internship in Emergency Management Through Co-op (3)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 246). An opportunity to combine academic theory with new, career-related experience in emergency management. At least 12 hours per week must be devoted to new tasks for a minimum of 180 hours during the Co-op session; four new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to emergency management and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

EMGT 486B Internship in Emergency Management Through Co-op (6)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 246). An opportunity to combine academic theory with new, career-related experience in emergency management. At least 20 hours per week must be devoted to new tasks for a total of 300 hours during the Co-op session; five to eight new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to emergency management and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

English

Courses in English (designated ENGL) may be applied as appropriate (according to individual program requirements) toward

- the general education requirement in the arts and humanities;
- a major or minor in English or humanities; and
- electives.

A description of the curriculum for the English major and minor begins on p. 38. A description of the curriculum for the humanities major and minor begins on p. 56.

ENGL 201 Western Literature from the Beginnings to the Renaissance (3)

Prerequisite: WRTG 101/101X or ENGL 101/101X. A survey of classic writings from Greek, biblical, Roman, and medieval civilizations. Literary forms and the ways the works reflect the values of their cultures are discussed. Readings may include selections from the Bible and the writings of Homer, Sophocles, Virgil, Dante, and Chaucer. Selections may vary each semester.

ENGL 205 Introduction to Shakespeare (3)

Prerequisite: WRTG 101/101X or ENGL 101/101X. An examination of representative Shakespearean plays from each genre (comedy, history, tragedy, and romance).

ENGL 212 English Literature: 1800 to the Present (3)

Prerequisite: WRTG 101/101X or ENGL 101/101X. A survey of the major literary movements of the 19th and 20th centuries, from Romantic to Victorian to Modern. Authors studied may include Wordsworth, Keats, the Brontes, Tennyson, Browning, Yeats, Joyce, and Woolf.

ENGL 240 Introduction to Fiction, Poetry, and Drama (3)

Prerequisite: WRTG 101/101X or ENGL 101/101X. An introduction to fiction, poetry, drama, film, and the literary essay, with an emphasis on developing critical reading and writing skills. Study may be organized either by genre or by theme. Writers covered vary from term to term. Films may be included. Students may receive credit for only one of the following courses: ENGL 240 or ENGL 340.

ENGL 294 Introduction to Creative Writing (3)

(Fulfills the general education requirements in communications.) Prerequisite: WRTG 101/101X or ENGL 101/101X. An introductory survey and practical study of key areas of creative writing: formal poetry, free verse, creative nonfiction, short story, and drama or screenplay. Emphasis is on reading and thinking critically and analytically from a writer's perspective as a means to better understand the craft. Discussion may cover publishing. Peer review of manuscripts may be included.

ENGL 303 Critical Approaches to Literature (3)

(Designed as a foundation for other upper-level literature courses. Fulfills the general education requirement in communications.) Prerequisite: WRTG 101/101X or ENGL 101/101X. A study of the techniques of literary analysis, emphasizing close reading of texts. The goal is to better understand and appreciate literature and to be able to formulate concepts and express them in well-written, coherent prose.

ENGL 310 Medieval and Renaissance British Literature (3)

Prerequisite: WRTG 101/101X or ENGL 101/101X. An exploration of the cultural attitudes and values that separate the Middle Ages from the Renaissance, highlighting the changing role and purpose of the writer. Major works and authors may include *Beowulf, Sir Gawain and the Green Knight,* Chaucer, Spenser, Marlowe, and Shakespeare.

ENGL 311 17th and 18th Century British Literature (3)

Prerequisite: WRTG 101/101X or ENGL 101/101X. A study of the culture of 17th- and 18th-century Britain seen through detailed study of selected major texts. Readings cover drama, poetry, political writings, and early novels by men and women. Authors may include Donne, Milton, Jonson, Swift, Pope, Montagu, and Wollstonecraft.

ENGL 312 Romantic to Modern British Literature (3)

Prerequisite: WRTG 101/101X or ENGL 101/101X. A study of representative authors and works in British literature from the early 19th century to the present, with emphasis on the novel. Some poetry and drama are also covered. The works of representative writers (such as Jane Austen, Charles Dickens, Thomas Hardy, P. D. James, and others) are explored.

ENGL 345 Modern Poetry (3)

(Not open to students who have already completed ENGL 446.) Prerequisite: WRTG 101/101X or ENGL 101/101X. A survey of British and American poetry from Yeats and Robinson to the present. Special emphasis is on Yeats, Pound, Eliot, Williams, Roethke, and Lowell.

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ENGL 354 American Women Writers Since 1900 (3)

Prerequisite: WRTG 101/101X or ENGL 101/101X. An examination of the contributions of major American women writers since 1900 in the novel, short story, drama, and poetry.

ENGL 358 British Women Writers Since 1900 (3)

Prerequisite: WRTG 101/101X or ENGL 101/101X. An examination of the contributions of major British women writers since 1900 in the novel, short story, drama, and poetry.

ENGL 363 African American Authors to 1900 (3)

Prerequisite: WRTG 101/101X or ENGL 101/101X. An examination of the development, diversity, and quantity of African American literature, focusing on works composed before 1900. A broad range of African American writers is studied through some of their important but lesser-known works. Readings may include the writings of Phillis Wheatley, Frances Harper, Maria W. Stewart, David Walker, Frederick Douglass, William Wells Brown, Charles Chesnutt, and Paul Laurence Dunbar.

ENGL 364 African American Authors Since 1900 (3)

Prerequisite: WRTG 101/WRTG 101X or ENGL 101/101X. An examination of the development and diversity of African American literature since 1900. Readings may include works by James Weldon Johnson, Zora Neale Hurston, Richard Wright, James Baldwin, Ann Petry, Paule Marshall, Toni Morrison, Alice Walker and other African American authors. Students may receive credit for only one of the following courses: ENGL 364 or HUMN 364.

ENGL 389P Introduction of Film as Literature (3)

Prerequisite: WRTG 101/101X or ENGL 101/101X. A study of film as a form of literature. The goal is to acquire an understanding of the particular language and grammar of film and develop a critical perspective. Genres of narrative film (including crime drama, film noir, the musical, reflexive film, science fiction, screwball comedy, war film, and the western) are examined. Discussion also covers a number of critical approaches to film auteurism, myth criticism, and genre criticism.

ENGL 406 Shakespeare: Power and Justice (3)

Prerequisite: WRTG 101/101X or ENGL 101/101X. An intensive study of Shakespeare's dramatic masterpieces as illustrations of the concepts of power and justice both in a historically specific social and cultural context and as timeless concerns reflecting the human condition. Students may receive credit for only one of the following courses: ENGL 406 or HUMN 440.

ENGL 418 Major British Writers Before 1800 (3)

Prerequisite: WRTG 101/101X or ENGL 101/101X. Intensive study of one or two British writers from the period before 1800. Authors studied may include Chaucer, Spenser, Marlowe, Jonson, Milton, Defoe, Richardson, Pope, Swift, or Johnson.

ENGL 419 Major British Writers After 1800 (3)

Prerequisite: WRTG 101/101X or ENGL 101/101X. In-depth study of the lives and works of one or two major British writers from the period after 1800.

ENGL 425 Modern British Literature (3)

Prerequisite: WRTG 101/101X or ENGL 101/101X. An examination of representative authors and works in the development of British literature from the late 19th century to post–World War II, with special emphasis on writers from the 1920s through the 1940s.

ENGL 433 American Literature: 1914 to the Present (3)

Prerequisite: WRTG 101/101X or ENGL 101/101X. A study of representative works—selected from drama, fiction, and poetry—that reflect significant trends in literary techniques and themes as well as shifts in cultural values.

ENGL 439 Major American Writers (3)

Prerequisite: WRTG 101/101X or ENGL 101/101X. In-depth study of one or two major American writers, emphasizing subject matter, themes, and techniques. Representative writers may include Melville, Hawthorne, Dickinson, Whitman, Twain, Wharton, James, Fitzgerald, Hemingway, Faulkner, or Frost. May be repeated to a maximum of 6 credits when topics differ.

ENGL 441 The Novel in America Since 1914 (3)

Prerequisite: WRTG 101/101X or ENGL 101/101X. A survey of the American novel since World War I. Cultural and philosophical contexts and technical developments in the genre are discussed. Authors studied may include Ernest Hemingway, Willa Cather, William Faulkner, Anne Tyler, and Toni Morrison.

ENGL 454 Modern World Drama (3)

Prerequisite: WRTG 101/101X or ENGL 101/101X. An examination of 20th century theatre, with an emphasis on the social, cultural, and historical context of drama. Special attention is given to drama from around the globe. The works of major playwrights, such as Ibsen, Strindberg, Chekhov, Shaw, O'Neill, Miller, Williams, Brecht, Pirandello, Hansberry, Orton, Ionesco, Beckett, Pinter, Fugard, Albee, Stoppard, or Shepard, are studied.

ENGL 466 The Arthurian Legend (3)

Prerequisite: WRTG 101/101X or ENGL 101/101X. A thematic exposition of the development of the Arthurian legend, traced from the fountainhead of the Arthurian romances, Monmouth's *History of the Kings of Britain,* to the greatest 20th-century Arthurian work, T. H. White's *The Once and Future King.* Works frequently included are *Sir Gawain and the Green Knight,* romances by Wolfram von Eschenbach, three medieval tales immortalizing the Lancelot/Guinevere love affair, and romances of Malory and Tennyson. The differences in the interpretations of a legend are explored. Works selected may vary.

ENGL 481 The Art of Narration (3)

Prerequisite: WRTG 101/101X or ENGL 101/101X. An overview of the scope, power, and techniques of narration, the oldest and most versatile form of writing. Topics include the applicability of narration to historic, dramatic, and business purposes. Focus is on identifying, analyzing, and practicing the following skills: freewriting, developing structure, delineating episodes, subdividing steps, improving pacing, writing purposeful sentences, controlling time, creating substance, heightening authenticity with voice, and providing interpretation. Students may receive credit for only one of the following courses: ENGL 479E or ENGL 481.

ENGL 485 Creative Writing: Poetry (3)

(Fulfills the general education requirement in communications.) Prerequisite: WRTG 101/101X or ENGL 101/101X. A presentation of various ideas and techniques for writing poetry. Although professional poetry is discussed, the emphasis is on critiquing students' work. Weekly assignments are given. Students may receive credit for only one of the following courses: ENGL 485 or ENGL 498P.

ENGL 486A Internship in English Through Co-op (3)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 246). An opportunity to combine academic theory with new, career-related experience in English. At least 12 hours per week must be devoted to new tasks for a minimum of 180 hours during the Co-op session; four new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to English and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

ENGL 486B Internship in English Through Co-op (6)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 246). An opportunity to combine academic theory with new, career-related experience in English. At least 20 hours per week must be devoted to new tasks for a total of 300 hours during the Co-op session; five to eight new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to English and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

ENGL 499 Independent Study in English (3)

Prerequisite: 6 credits in upper-level ENGL. Directed independent study of topics of special interest not covered by regularly scheduled courses in English. May be repeated to a maximum of 6 credits when topics differ.

Environmental Management

Courses in environmental management (designated ENMT) may be applied as appropriate (according to individual program requirements) toward

- a major in environmental management, emergency management, homeland security, laboratory management, or management studies;
- a minor in environmental management or management studies;
- a certificate in Biosecurity or Environmental and Occupational Health and Safety Management; and
- electives.

Courses in environmental management require a basic scientific foundation. Before enrolling, students are recommended to complete the related requirements in math and science and should consult an advisor.

A description of the curriculum for the environmental management major and minor begins on p. 40. Descriptions of related curricula may be found on the following pages: emergency management (p. 36), homeland security (p. 54), laboratory management (p. 66) and management studies (p. 70).

ENMT 301 Environment and Ecosystems Management (3)

Prerequisite: NSCI 100. An overview of the scientific principles governing ecosystems, particularly as they relate to the environmental consequences of resource development and industrial processes. Earth's ecosphere, atmosphere, hydrosphere, and lithosphere are examined with special reference to environmental impacts and issues. Discussion covers the current state of the environment and the history of the environmental movement. The historical development of environmental management issues and approaches is introduced. Principles of environmental management at local, regional, and global levels are also covered.

ENMT 303 Environmental Regulations and Policy (3)

(Formerly ENMT 493.) Prerequisite: ENMT 301. An analytical survey of principles of constitutional and administrative law that are fundamental to environmental and health and safety management. Focus is on acquiring basic knowledge of federal legislation (including CWA, CAA, SDWA, RCRA/HSCA, CERCLA/SARA, FIFRA, TSCA, FDA, DOT, and OSHA), and becoming familiar with the use of the *Federal Register* and the *Code of Federal Regulations.* The relationship between regulations and public policy at local, state, and federal levels is discussed. Review also covers the social contract and its sanctions, as expressed in law and litigation at local, state, national, and international levels. Students may receive credit for only one of the following courses: ENMT 303 or ENMT 493.

ENMT 305 Hazardous Materials Toxicology (3)

Prerequisite: ENMT 301. An introduction to the human body, how it functions, and how normal body functions are altered by exposure or contact with hazardous materials. Basic principles of toxicology are used to examine human health effects associated with exposure to hazardous chemicals in the community and in work environments. Topics include the kinetics and dynamics of toxins; dermal, ocular, and systematic toxicology; practical aspects of occupational toxicology; the regulatory agencies (FDA and EPA); the data required to make regulatory decisions; and the process of risk assessment.

ENMT 310 Emergency Planning and Operations Management (3)

Prerequisite: ENMT 301. A review of human-made and natural hazards and emergency-preparedness laws. The relationships between industrial processes and hazardous materials are covered. Focus is on developing the skills needed to work safely in a hazardous environment and prepare hazardous materials for transportation, processing, and disposal. Topics include elements of hazardous materials emergency planning, such as direction and control of emergency response and remediation. Review also covers preparation of emergency plans, methodology of disaster response, and performance of emergency operations. Practical exercises demonstrate how to prepare for and respond to emergencies.

ENMT 315 Environmental Audits and Permits (3)

Prerequisite: ENMT 301. A study of the principles of environmental impact assessment and an in-depth look at various laws, regulations, and methods of performing due diligence audits. Topics include the regulatory requirements of NEPA, EIS reports, types of audits, ISO 14000 environmental systems standards, ASTM audit procedures, Department of Health and Safety audits, common law privileges, and self-regulation and business transfer statutes. Strategies and methodology for obtaining environmental permits and compliance are also reviewed.

ENMT 321 Environmental Health (3)

Prerequisite: ENMT 301. A study of the effects of environmental hazards on human health, particularly those hazards created or influenced by human activities. Topics include chemical pollution of the air, soil, and water and the effects of physical environmental hazards such as radiation and noise pollution on the well-being of humans. Discussion covers the control of environmental health hazards through hazard management.

ENMT 322 Occupational Health and Safety (3)

Prerequisite: ENMT 301. A study of the principles of health and safety management in the workplace. Topics include recognition, evaluation, and control of occupational hazards. The strategies used by industrial hygienists and safety professionals to prevent or minimize exposure to occupational hazards are explored. Discussion also covers the role of regulatory processes in occupational health and safety management.

ENMT 340 Environmental Technology (3)

Prerequisite: ENMT 301. An introduction to technology for multimedia (i.e., air, water, land) environmental management, control, and remediation. Survey covers existing, modified, new, and emerging technologies. Case studies of real-world environmental challenges demonstrate the evaluation and selection of the appropriate technology for specific uses. Factors in making technology application decisions, such as technical integrity, cost effectiveness, and environmental soundness, are explained.

ENMT 360 Introduction to Urban Watersheds (3)

An overview of basic watershed processes and the impact of urbanization. Topics include watershed characterization, hydrologic processes, stream characteristics, and the effects of the development process on watersheds, specifically on the hydrology, physical structure, water quality, and biodiversity of aquatic systems. Discussion also covers tools to manage urban watersheds to reduce the impacts of land development.

ENMT 380 Air Quality Management (3)

Prerequisite: ENMT 301. An overview of air quality management principles and strategy. Discussion covers the atmosphere, pollutants and sources, dispersion, effects, regulations, air pollution control technology and management, indoor air quality pollution, and noise control. Indoor air pollution topics include the study of sick buildings, causes and risk factors, diagnostic protocols, contamination measurement, and problem mitigation.

ENMT 390 Environmental Risk Assessment (3)

An overview of principles and guidelines for performing and using risk assessments. Topics include relevant regulations; the requirements of different government agencies (e.g., EPA, OSHA, FDA, etc.); the pros and cons of different risk assessment methods; and how to plan, perform, report, and communicate environmental risk assessments. Emphasis is on environmental, health and safety, and ecological risk assessments. The use and economic effectiveness of risk assessments are also explored.

ENMT 405 Pollution Prevention Strategies (3)

Prerequisite: ENMT 301. An overview of alternative environmental strategies to minimize, reduce, and prevent pollution. Topics include source reduction, recovery, reuse, recycling, and conservation; material substitution; process modifications; quality assurance, quality control, and good housekeeping; waste minimization; zero discharge; and pollution prevention, processing, treatment, and disposal. Emphasis is on pollution prevention techniques, practices, and case studies. Review also covers economic analysis and regulatory compliance related to these strategies.

ENMT 486A Internship in Environmental Management Through Co-op (3)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 246). An opportunity to combine academic theory with new, career-related experience in environmental management. At least 12 hours per week must be devoted to new tasks for a minimum of 180 hours during the Co-op session; four new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to environmental management and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

ENMT 486B Internship in Environmental Management Through Co-op (6)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 246). An opportunity to combine academic theory with new, career-related experience in environmental management. At least 20 hours per week must be devoted to new tasks for a total of 300 hours during the Co-op session; five to eight new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to environmental management and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

ENMT 495 Global Environmental Management Issues (3)

(Intended as a final, capstone course to be taken in a student's last 15 credits.) Prerequisite: ENMT 301. A study of global environmental management that integrates knowledge gained through previous coursework and experience and builds on that conceptual foundation through integrative analysis, practical application, and critical thinking. Emerging issues in global environmental management are considered. An overview of the fundamental elements of an integrated environmental management program is provided. Topics include economic development and environmental pollution, remediation, and conservation within a multifaceted scientific, legal, political, and global context. Discussion covers national and international events concerning environmental issues. Case studies and an advanced management project apply principles and concepts to environmental perspectives, experiences, research issues, and new paradigms of design.

Experiential Learning

The EXCEL Through Experiential Learning program yields UMUC credit for learning acquired outside the classroom.

The course in experiential learning (designated EXCL), as well as credit earned through the program, may be applied toward

- appropriate majors and minors;
- general education requirements (according to content) as appropriate; and
- electives.

Information about this program is given on p. 247. Details, an application form, and an online orientation are also available on the Web at *www.umuc.edu/priorlearning*.

EXCL 301 Learning Analysis and Planning (3)

Prerequisite: Formal admission to the program. (Students should visit *www.umuc.edu/priorlearning* or contact *priorlearning @umuc.edu* for more information.) Instruction in the preparation of a portfolio documenting college-level learning gained through life experiences. Focus is on defining goals, documenting learning gained through experience and providing an analysis of applied and theoretical understanding of college-level content. Faculty evaluators assess completed portfolios for a possible award of credit.

Finance

Courses in finance (designated FINC) may be applied as appropriate (according to individual program requirements) toward

- a major in finance, business administration, global business and public policy, human resource management, management studies, or marketing;
- a minor in finance, business administration, or strategic and entrepreneurial management;
- a certificate in various business-related areas; and
- electives.

A description of the curriculum for the finance major and minor begins on p. 43. Descriptions of related curricula may be found on the following pages: business administration (p. 21), global business and public policy (p. 50), human resource management (p. 58), management studies (p. 70), marketing (p. 72), and strategic and entrepreneurial management (p. 82).

FINC 310 Entrepreneurship and New Venture Planning (3)

(Formerly BMGT 330.) Recommended: BMGT 364. An overview of entrepreneurship and planning new business ventures for prospective entrepreneurs and managers. Topics include developing entrepreneurial ideas and innovations; strategic planning; marketing research, analysis, and planning; advertising, promotion, and sales; financial planning and financing; operations and services planning; human resources planning and management; analysis of risk; information management strategy and the Internet; legal aspects of new venture formation; and global venturing. Entrepreneurial theory, profiles and roles of entrepreneurs, business life cycles, entrepreneurial behavior, use of computer software to aid in planning, and entrepreneurial management and technology issues are explored. Discussion and group activities focus on development of a business plan, the factors that should be considered, and the entrepreneur's role in developing and operating a new business. Students may receive credit for only one of the following courses: BMGT 330, FINC 310, MGMT 330, or SBUS 200.

FINC 311 Managing New Ventures (3)

(Formerly BMGT 334.) Recommended: FINC 310 or BMGT 330. An exploration of the start-up and development of business ventures using an integrated approach to entrepreneurship, growth, and management. Topics include opportunities at different stages, legal structure, production of goods and services, marketing strategies, access to capital and capital formation, policy formation, and development of a management philosophy. Exploration also covers how entrepreneurs make decisions—on growth of the venture, organizational structure, information systems, software and hardware use, hiring key employees, and building of corporate culture. Problems and pitfalls to avoid, implementation and periodic review of the business plan, global issues, cultural diversity, and the use of new technologies are considered. Students may receive credit for only one of the following courses: BMGT 334, FINC 311, or MGMT 334.

FINC 321 Fundamentals of Building Wealth (3)

(Formerly BMGT 342. For students majoring in both business and nonbusiness disciplines.) A practical overview of personal finance management and creation of wealth that blends financial theory and applications. The development of personal financial management skills (e.g., budgeting income and expenditures and planning for financial security and retirement) is encouraged, while an understanding of elements of the U.S. financial structure (including savings and investment alternatives, financing and credit sources, the role of insurance in protecting income and assets, and federal income-tax issues) is provided. Students may receive credit for only one of the following courses: BMGT 342, BMGT 388N, or FINC 321.

FINC 322 Personal Financial Management (1)

(Formerly BMGT 388F. For students majoring in both business and nonbusiness disciplines.) A practical overview of personal finance management that blends financial theory and applications. The development of personal financial management skills (e.g., budgeting income and expenditures, planning for financial security and retirement) is encouraged, while an understanding of elements of the U.S. financial structure (including savings and investment alternatives, financing and credit sources, the role of insurance in protecting income and assets, and federal income-tax issues) is provided. Students may receive credit for only one of the following courses: BMGT 342, BMGT 388F, BMGT 388N, FINC 321 or FINC 322.

FINC 330 Business Finance (3)

(Formerly BMGT 340.) Prerequisites: ACCT 221 and STAT 230. An overview of the theory, principles, and practices of financial management in a business environment. Topics include financial analysis and financial risk, characteristics and valuations of securities, capital investment analysis and decision making, the capital structure of the firm, financial leverage, and international finance. Emphasis is on the application of financial theory and methods for solving the problems of financial policy that managers face. Students may receive credit for only one of the following courses: BMGT 340, FINC 330, MGMT 398D, or TMGT 320.

FINC 331 Finance for the Nonfinancial Manager (3)

(Formerly BMGT 341. May be used as either a stand-alone survey course in finance or an introduction to higher-level finance courses for those who wish to pursue the subject further. May not be substituted for FINC 330.) An introduction to the financial fundamentals needed by functional experts and upwardly mobile managers in human resources, marketing, production, and general management. Focus is on preparing to assume higher-level corporate positions or undertaking entrepreneurial activities that require a basic knowledge of finance. The world of finance and its argot and operations are presented in a simple, step-by-step manner. Topics include financial statements and forecasting, capital budgeting, project evaluation, working capital management, and international financial management. Emphasis is on practical applications more than theory. Students may receive credit for only one of the following courses: BMGT 341 or FINC 331.

FINC 340 Investments (3)

(Formerly BMGT 343.) Prerequisite: FINC 330 or BMGT 340. An introduction to financial investments. Topics include securities and securities markets; the risks of investments, as well as returns and constraints on investments; portfolio policies; and institutional investment policies. Students may receive credit for only one of the following courses: BMGT 343 or FINC 340.

FINC 350 Property and Liability Insurance (3)

(Formerly BMGT 345.) Prerequisites: ACCT 221 and STAT 230. Analysis of the major types of property and casualty insurance, including fire, indirect loss, crime, automobile, ocean and inland marine, and liability insurance. Discussion covers substandard, residual, and reinsurance markets and current issues. Students may receive credit for only one of the following courses: BMGT 345 or FINC 350.

FINC 351 Risk Management (3)

(Formerly BMGT 346.) Prerequisites: ACCT 221 and STAT 230. A study focusing on recognizing and evaluating the pure risks facing organizations. Guides for risk-management decisions concerning the retention, control, and transfer of risk (including insurance) are discussed. Students may receive credit for only one of the following courses: BMGT 346 or FINC 351.

FINC 352 Life Insurance (3)

(Formerly BMGT 347.) Prerequisite: ACCT 221. A study of the products and principles of life insurance and health insurance in financial planning for businesses. Topics include pension-planning strategies, such as deferred-compensation and profit-sharing plans; use of trusts in business and in planning individual estates; and comprehensive analysis of the effects of income taxes, estate taxes, and gift taxes on life-insurance programming and estate planning. Students may receive credit for only one of the following courses: BMGT 347 or FINC 352.

FINC 410 Managing Entrepreneurial Ventures (3)

(Formerly BMGT 436.) Prerequisite: FINC 310 or BMGT 330. An exploration of entrepreneurial management and strategies in various competitive situations and stages of development. Topics include the development of partnerships, joint ventures, strategic alliances, and licensing. Issues regarding management, financing, marketing, production, administration, human resources, and growth of the business are analyzed. Discussion covers strategies and tactics using environmental scanning, analysis, and planning and decision making (including reviewing relevant options and opportunities, forecasting demand and sales, estimating costs, and developing pro forma financial statements). Potential business opportunities are assessed using exercises, case studies, and research related to new technologies, innovation, competition, economic and social change, governmental regulation and laws, major product and service features, organizational and human resource issues, information management, global issues, financial management, marketing, operations, and customer service. Students may receive credit for only one of the following courses: BMGT 436, BMGT 461, FINC 410, or MGMT 461.

FINC 430 Financial Management (3)

(Formerly BMGT 440.) Prerequisite: FINC 330 or BMGT 340. Analysis and discussion of the financial decisions of national and multinational corporations, based on case studies and reading. Financial principles and concepts are applied to solve financial problems and make financial and corporate policy at the executive level. Topics include assessment of the financial health of the organization, short- and long-term financial management, project and company valuation, cost of capital, risk analysis, investment decisions, and capital markets. Students may receive credit for only one of the following courses: BMGT 440 or FINC 430.

FINC 440 Security Analysis and Valuation (3)

(Formerly BMGT 443.) Prerequisite: FINC 340 or BMGT 343. A study of concepts, methods, models, and empirical findings. Theory is applied to the analysis, valuation, and selection of securities, especially common stock. Students may receive credit for only one of the following courses: BMGT 443 or FINC 440.

FINC 441 Futures Contracts and Options (3)

(Formerly BMGT 444.) Prerequisite: FINC 340 or BMGT 343. A study of institutional features and the economic rationale underlying markets in futures and options. Topics include hedging, speculation, structure of futures prices, interest-rate futures, efficiency in futures markets, and stock and commodity options. Students may receive credit for only one of the following courses: BMGT 444 or FINC 441.

FINC 450 Commercial Bank Management (3)

(Formerly BMGT 445.) Prerequisite: FINC 330 or BMGT 340. An analysis and discussion of cases and readings in commercial bank management. Discussion covers the loan function and the management of liquidity reserves, investments for income, and sources of funds. The objectives, functions, policies, organization, structure, services, and regulations of banks are considered. Students may receive credit for only one of the following courses: BMGT 445 or FINC 450.

FINC 460 International Finance (3)

(Formerly BMGT 446.) Prerequisite: FINC 330 or BMGT 340. Analysis and discussion of financial management issues from the perspective of the multinational firm. Topics include the organization and functions of foreign exchange and international capital markets, international capital budgeting, financing foreign trade, and designing a global financing strategy. Emphasis is on how to manage financial exchange and political risks while maximizing benefits from global opportunities faced by the firm. Students may receive credit for only one of the following courses: BMGT 446 or FINC 460.

FINC 486A Internship in Finance Through Co-op (3)

Prerequisite: Formal admission to the Coop program (program requirements are listed on p. 246). An opportunity to combine academic theory with new, career-related experience in finance. At least 12 hours per week must be devoted to new tasks for a minimum of 180 hours during the Co-op session; four new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to finance and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

FINC 486B Internship in Finance Through Co-op (6)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 246). An opportunity to combine academic theory with new, career-related experience in finance. At least 20 hours per week must be devoted to new tasks for a total of 300 hours during the Co-op session; five to eight new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to finance and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

FINC 495 Contemporary Issues in Finance Practice (3)

Intended as a final capstone course to be taken in the student's last 15 credits.) Prerequisites: FINC 340 (or BMGT 343), 430 (or BMGT 440), and 460 (or BMGT 446). A study of finance that integrates knowledge gained through previous coursework and experience and builds on that conceptual foundation through integrative analysis, academic research, practical application, and critical thinking. Emerging issues in finance and business are considered. Individual and group case studies and research papers are used to integrate key financial knowledge in the areas of financial analysis, investments, business valuation, risk and insurance, and international finance. Advanced quantitative financial software models are introduced. Assignments include a three-week comprehensive group case study designed to demonstrate mastery of key finance knowledge and its application. Students may receive credit for only one of the following courses: BMGT 495 or FINC 495.

Fire Science

Courses in fire science (designated FSCN) may be applied as appropriate (according to individual program requirements) toward

- a major in fire science, investigative forensics, or management studies;
- a minor in fire science, homeland security, or management studies;
- a certificate in Public Fire-Protection Management and Administration or Systems Approach to Fire Safety; and
- electives.

The fire science curriculum is unique and is designed primarily for firefighters. Students should consult an advisor before enrolling in any of the courses.

A description of the curriculum for the fire science major and minor begins on p. 45. A description of related curricula begins on the following pages: homeland security (p. 54), investigative forensics (p. 64), and management studies (p. 70).

FSCN 302 Fire and Emergency Services Administration (3)

A presentation of modern management and planning techniques that apply to organizing a fire department. Procedures explored include those for evaluation and control of budgeting, personnel, communications, and planning. The traditional and evolving roles of the fire department in protection, prevention, and community service are discussed.

FSCN 303 Analytic Approaches to Public Fire Protection (3)

Prerequisite: FSCN 302. A presentation of techniques of operations research and systems analysis as they apply to problems in fire protection. Discussion covers techniques such as cost/benefit analysis, methods for locating fire stations, and the use of statistical analysis. Techniques for collecting data on fires and for managing information are explained.

FSCN 304 Personnel Management for Fire and Emergency Services (3)

Prerequisite: FSCN 302. An examination of personnel practices, management procedures, collective bargaining, binding arbitration, and applicable legislative and administrative procedures. Topics include promotion, personnel development, career and incentive systems, validation of physical requirements, and managerial and supervisory procedures.

FSCN 305 Fire Prevention Organization and Management (3)

An examination of prevention as the primary community-based strategy for fire protection. Topics include community risk reduction, codes and standards, inspections and plans review, incident investigation, fire-prevention research, and the relationship of master planning to fire prevention. The cultural, economic, governmental, nongovernmental, and departmental influences on fire prevention are also explored. Emphasis is on applying the principles studied to anticipate problems and develop strategies for fire prevention.

FSCN 306 Fire Investigation and Analysis (3)

An examination of the technical, investigative, legal and social aspects of fire. Topics include the principles of fire detection and analysis, environmental and psychological factors of arson, legal considerations, intervention, and mitigation strategies.

FSCN 401 Disaster and Fire Defense Planning (3)

Prerequisite: FSCN 302. A study of the concept and principles of assessing community risk and then developing regional and cooperative procedures and plans of response. The relationship of structural, climatic, and topological variables to group fires, conflagrations, and natural disasters is analyzed. Other aspects introduced include pre- and postoccurrence factors, such as organization, communications, planning, coordination, and command and logistics.

FSCN 402 Fire-Related Human Behavior (3)

A study of human behavior in fire and other emergency situations. Discussion examines current and past research on human behavior, systems models, life safety education, and building design in order to determine how these elements interrelate in emergency situations. A best-practice building life-safety system is presented as one that combines knowledge of psychology and sociology with engineering and education to produce the best possible outcomes in terms of human survivability in an emergency.

FSCN 403 Managerial Issues in Hazardous Materials (3)

Prerequisite: FSCN 302. The development of the knowledge and skills necessary to safely and effectively manage a hazardous materials emergency. Topics include health and safety concerns, political issues, regulations, site management and control, hazard and risk evaluation, information management, response objectives, special tactical problems, decontamination, and termination activities. Federal regulations such as OSHA 1910.120 and NFPA 472 (Standard on Professional Competency of Responders to Hazardous Materials Incidents) are addressed.

FSCN 411 Fire Protection Structure and Systems (3)

Presentation of design principles involved in protecting buildings and other structures from fire. Empirical tests and prediction procedures are explained. Practices in designing systems for detecting, controlling, and suppressing fires, as well as the basic hydraulic design of sprinkler and water-spray systems are presented. Recent innovations in the field are reviewed.

FSCN 412 Political and Legal Foundations of Fire Protection (3)

Prerequisite: FSCN 302. A consideration of the legal basis for the police powers of the government in connection with public safety. The responsibility, legal limitations, and liability of fire-prevention organizations and personnel are examined. Judicial decisions are reviewed, with a focus on the implications of product-liability cases in the field of fire prevention.

FSCN 413 The Community and Fire Threat (3)

Prerequisite: FSCN 302. An analysis of the sociological, economic, and political characteristics of communities and their influence on the fire problem. Discussion covers methods of studying community profiles and structures and the economic, geographic, and sociological variables of fire threat. The functional basis of the community is examined, with attention to the diverse social roles of community agencies and the roles of fire service as a complex organization within the community.

FSCN 414 Fire Dynamics (3)

An investigation into the phenomena of fire propagation in the air-regulated phase and the fuel-regulated phase. Variables in the development of pre- and postflashover fire are analyzed. Topics include geometric material; gaseous, fluid-flow, and thermodynamic parameters; and fire models of compartments and buildings.

FSCN 415 Application of Fire Research (3)

Prerequisite: FSCN 303. A practical, up-to-date review of fire research and its application. The transfer of research and its implications for fire prevention and protection programs are addressed. The focus is on both national and international studies and on maintaining awareness of ongoing research developments.

FSCN 416 Emergency Services Training and Education (3)

An examination of the management and administration of training and education in fire and emergency services. Topics include the many systems of training and education available and the concept of professional development on both individual and organizational levels. Focus is on safety, especially understanding and preventing training deaths and injuries. Discussion explores how higher education/training contributes to the professional development of fire-service personnel.

FSCN 486A Internship in Fire Science Through Co-op (3)

Prerequisite: FSCN 302 and formal admission to the Co-op program (program requirements are listed on p. 246). An opportunity to combine academic theory with new, career-related experience in fire science. At least 12 hours per week must be devoted to new tasks for a minimum of 180 hours during the Co-op session; four new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to fire science and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

FSCN 486B Internship in Fire Science Through Co-op (6)

Prerequisite: FSCN 302 and formal admission to the Co-op program (program requirements are listed on p. 246). An opportunity to combine academic theory with new, career-related experience in fire science. At least 20 hours per week must be devoted to new tasks for a total of 300 hours during the Co-op session; five to eight new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to fire science and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

Geography

Courses in geography (designated GEOG) may be applied as appropriate (according to individual program requirements) toward

- the general education requirement in the behavioral and social sciences; and
- electives.

UMUC offers only a limited number of courses each term in this discipline.

GEOG 100 Introduction to Geography (3)

An introduction to the broad field of geography. Emphasis is on concepts relevant to understanding global, regional, and local issues.

Geology

Courses in geology (designated GEOL) may be applied as appropriate (according to individual program requirements) toward

- the general education requirement in the biological and physical sciences; and
- electives.

UMUC offers only a limited number of courses each term in this discipline.

GEOL 100 Physical Geology (3)

A study of the principles of dynamic and structural geology. Survey covers the rocks and minerals composing Earth, the movement within it, and its surface features and the agents that form them. Students may receive credit for only one of the following courses: GEOL 100 or GEOL 101.

German

Courses in German (designated GERM) may be applied as appropriate (according to individual program requirements) toward

- the general education requirements in the arts and humanities;
- a major or minor in humanities; and
- electives.

Students with prior experience in the German language—either through study or living abroad, informal learning from friends or family, or high school or other coursework that did not transfer to UMUC—should take a placement exam before enrolling. Students with oral proficiency in German who wish instruction in written German should also take the placement test.

UMUC offers a limited number of foreign language courses each term.

A description of the curriculum for the humanities major and minor begins on p. 56.

GERM 111 Elementary German I (3)

(Not open to native speakers of German; assumes no prior knowledge of German.) A basic foundation in listening, speaking, reading, and writing in German. German culture, history, current events, and geography provide the context for instruction in grammatical structures, vocabulary, pronunciation, and writing. Focus is on acquiring the skills necessary to communicate with native German speakers orally and in writing at an elementary level. Students may receive credit for only one of the following courses: GERM 101 or GERM 111.

GERM 112 Elementary German II (3)

Prerequisite: GERM 111 or appropriate score on placement test. A continuation of the development of basic skills in listening, speaking, reading, and writing in German. German culture, history, current events, and geography provide the context for instruction in grammatical structures, vocabulary, pronunciation, and writing. Focus is on acquiring the skills necessary to communicate with native German speakers orally and in writing at an advanced elementary level. Much of the class is conducted in German. Students may receive credit for only one of the following courses: GERM 102 or GERM 112.

Gerontology

Courses in gerontology (designated GERO) may be applied as appropriate (according to individual program requirements) toward

- the general education requirement for behavioral and social sciences (except GERO 341, 342, 351, and 353 and 1-credit GERO courses);

- a major in gerontology, psychology, or social science;

- a minor in gerontology or women's studies;

- a certificate in gerontology; and

- electives.

A description of the curriculum for the gerontology major and minor begins on p. 48. Descriptions of related curricula begin on the following pages: psychology (p. 78) and social science (p. 80).

GERO 100 Introduction to Gerontology (3)

An overview of the processes of aging and the way aging is defined chronologically, functionally, biologically, sociologically, and psychologically. The physical, psychological, cultural, and social aspects of aging are examined. Topics include the demography of aging and its implications for society, social structure and processes (such as patterns of family and social roles), work and retirement, health care and housing, and the implications of an aging society for policy. Students may receive credit for only one of the following courses: GERO 100 or GERO 210.

GERO 220 Psychological Aspects of Aging (3)

Prerequisite: GERO 100. A review of normal and pathological changes associated with the process of aging. Topics include sensory, perceptual, and psychomotor processes; mental ability, drives, motives, and emotions; intelligence, memory, and cognitive functions; depression; neurological changes; Alzheimer's disease and related dementias; stress; life review processes; personality and adjustment; suicide; bereavement; and treatment modes. Emphasis is on the normal aging process, pathological changes in the elderly (according to current research), and understanding the difference between the two.

GERO 301 Service/Program Management (3)

An exploration of the managerial aspects of providing health and human services in the field of gerontology through an integrated delivery system. Focus is on the concepts, strategies, and best practices for the management of health and human services. Topics include planning, strategic management, marketing, financing, legal issues and capacity building.

GERO 302 Health and Aging (3)

Prerequisite: GERO 100. An exploration of the physiological processes of aging that covers normal aging and chronic illness. Topics include biological processes and theories of aging, bodily changes normally associated with aging, long-term and health care systems, and related medical terminology. Review also covers substance abuse, environmental factors affecting aging, and ways of promoting health, preventing disease, and assessing health risks.

GERO 306 Programs, Services, and Policies (3)

Prerequisite: GERO 100. An overview of programs and policies designed to enable older adults to obtain necessary services, enhance their health, improve or maintain their economic well-being, and provide support to families of the aging. Trends in aging programs, services, and policies are discussed. Topics include work, retirement, and income maintenance (employment concerns, pensions, Social Security, and Supplementary Security Income); delivery and regulation of health care (long-term care, home care, Medicare, and Medicaid); and social or community services (adult day care, in-home services, senior centers, nutrition and food programs, information and referrals, advocacy, elder abuse protection, and transportation) that promote well-being in older adults. Students may receive credit for only one of the following courses: GERO 304 or GERO 306.

GERO 307 Aging, Religion, and Spirituality (3)

Prerequisite: GERO 100. An examination of aging, religion, and spirituality from the perspectives of the humanities and social science. Focus is on concepts of spiritual or religious development and aging within the major religious traditions (Buddhism, Islam, Judaism, Christianity, and Hinduism). A critical analysis of theoretical and empirical research and clinical perspectives of the role of religion and spirituality in the lives of older adults from different religious traditions are presented. Discussion covers definitions and concepts of religiosity and spirituality in the social science literature. The current and future impact of older adults on religious institutions, the responsibilities of religious institutions to their aging members, and the role of religion and spirituality in the lives of the aging are examined.

INFORMATION ON COURSES

GERO 311 Women and Aging (3)

Recommended: GERO 100. An exploration of issues important to women in midlife and later adulthood. Topics include changes in identity, marriage and family, work, health, social relationships, and economic well-being. The impact of social class and ethnicity or culture on women's well-being in midlife and later adulthood is examined. Discussion also covers the impact of policy and services on women's development and quality of life, as well as life planning for midlife and aging women. Students may receive credit for only one of the following courses: GERO 311 or GERO 497E.

GERO 327 Ethnicity and Aging (3)

Prerequisite: GERO 100. An examination of the increasing heterogeneity of the aging population in the United States. Topics include theory and research related to ethnicity and aging, the resources and needs of older adults in different ethnic groups (Hispanic, African American, Asian, and Native American), the impact of ethnicity and culture on the aging family, social support and caregiving, health, and social relationships. Discussion also covers how social, health care, and government agencies can effectively meet the needs of older adults in ethnic communities.

GERO 331 Sociology of Aging (3)

Prerequisite: GERO 100. An examination of the social forces that impinge on the aging process from a number of theoretical perspectives found in sociology and social gerontology. Topics include the social ramifications of an aging population, sociological and social gerontological explanations of the aging process, interactions between the aging process and the larger social structure, cross-cultural similarities and differences in the aging experience, and current social policies toward aging and their implications for the future.

GERO 336 The Aging Family (3)

Prerequisite: GERO 100. An examination of issues faced by aging families. Topics include the structure of family networks, solidarity and conflict between generations, types and quality of support given to and by the older person, and social roles (including role strain, conflict, and reward). Emphasis is on understanding family caregiving—the experience of caregiving; the caregiver-recipient relationship; and the social, psychological, and economic costs of caregiving. The phenomena of grandparents parenting grandchildren is covered. The changing nature of family relationships is analyzed from the perspective of gender, race or ethnicity, social class, age, and historical context. Discussion also covers implications for social programs and policies to support aging families. Students may receive credit for only one of the following courses: GERO 336 or GERO 496L.

GERO 338 Health Promotion in Older Adults (3)

Prerequisite: GERO 100. An exploration of health promotion issues in an older adult population. The literature on health promotion and health risk behaviors in older adults is analyzed critically. Focus is on the modification of risk behaviors related to the development of cardiovascular disease, cancer, and other illnesses common to older adults through ecological and educational models of health promotion. The impact of social, cultural, political, and economic factors on health behavior and health promotion is also examined.

GERO 341 The Long-Term Care Continuum (3)

(Does not fulfill the general education requirement in behavioral and social sciences.) Prerequisite: GERO 100. A survey of gerontological intervention programs and the care needs of the elderly and their families. The changing needs of aging individuals who have chronic physical and/or mental health impairments are examined. A framework for the continuum of care from community- to institution-based is provided. Focus is on understanding a multidisciplinary approach to community-, home-, and institution-based care. Students may receive credit for only one of the following courses: FMCD 499E, GERO 341, or GERO 496K.

GERO 342 Long-Term Care Administration (3)

(Continuation of GERO 341. Does not fulfill the general education requirement in behavioral and social sciences.) Prerequisite: GERO 100. An overview of the administrative and operational issues of long-term care facilities. The responsibilities of a long-term care administrator, relationships with personnel, and administrative structure are examined. Topics include policy, procedures, and insurance or financing. Discussion also covers the ethical and legal concerns of long-term care.

GERO 350 The Older Learner (3)

Prerequisite: GERO 100. A critical examination of theory and research on education and learning in later life. Philosophical perspectives on education in later life are explored. Topics include educational opportunities and needs in later life; psychological, educational, and social aspects that influence learning in older adults; the impact of ethnicity, gender, age, and socioeconomic status on education and the teaching/learning process; and the development of educational programs, curricula, and teaching/learning strategies used with older adults. The evaluation of educational programs designed for older learners is also covered.

GERO 351 Management of Senior Housing Environments (3)

(Does not fulfill the general education requirement in behavioral and social sciences.) Prerequisite: GERO 100. A framework for training retirement-housing professionals. Topics include regulatory standards and processes for Housing and Urban Development senior housing structures, environmental design, behavioral and environmental interaction, dietary services, continuity of care, differentiation of management needs in various formats of senior housing, personnel, programming, and medical and personal care services.

GERO 353 Financial Management of Retirement Housing (3)

(Does not fulfill the general education requirement in behavioral and social sciences.) Prerequisite: GERO 100. An examination of the operational side of senior housing management. Topics include the housing administrator's role as financial manager; application of accounting principles to senior housing needs; working capital, ratio analysis, and vertical analysis; budgeting in senior housing; purchasing; financing new facilities; payroll; and maintenance issues in senior housing.

GERO 355 Nutritional Concerns of Aging (3)

Prerequisite: GERO 100. A survey of the nutritional concerns of the elderly, including causes, pathophysiology, prevention, and control. Topics include the role of nutrients in the etiology of various illnesses associated with aging (such as anemia, osteoporosis, gastrointestinal tract disorders, cancer, cardiovascular diseases, maturity-onset diabetes, crippling arthritis, stroke, Alzheimer's disease, cataracts, tooth loss, and vision loss). Discussion also covers the effects of aging on appetite, nutrition and exercise, vegetarianism, and food choices. Nutritional assessment, the influence of different cultures on nutrition, and community resources are examined. Students may receive credit for only one of the following courses: GERO 355 or GERO 495K.

GERO 380 End of Life: Issues and Perspectives (3)

Prerequisite: GERO 100. An exploration of death, dying, and bereavement from social, cultural, psychological, biomedical, economic, and historical perspectives. Topics include definitions of death, the meaning of death, psychological needs of the dying person and significant others, care of the dying, suicide, euthanasia, end-of-life decision making, the economics of life-sustaining care, and bereavement and grieving.

GERO 390 Economics of Aging (3)

Prerequisites: GERO 100 and either ECON 201 or ECON 203. A study of the fundamental sources of economic security that older adults receive, the many problems they face in retirement, and the impact of an aging population on the nation's economy. Sources of economic security received by older adults are analyzed according to race or ethnicity, gender, and social class background. Topics include the history, development, and fundamental structure of the Social Security and pension systems; Medicare, Medicaid, private health coverage, and the myriad public assistance programs for which elderly persons are eligible; and the nation's evolving private and public policies on retirement. The relative amounts of income the elderly receive and patterns of spending in older adult households are examined. The major income support programs available to older adults are profiled. Discussion also covers baby boomer retirement, international economics of aging, the financial situation of older women and their poverty, reverse annuity mortgages, "productive aging" (work and volunteering after retirement), and the implications of demographics for our society and its economic structure.

GERO 391 Legal Issues in Aging (3)

Prerequisite: GERO 100. An overview of critical legal issues affecting the elderly. Focus is on potential problems that may require the assistance of attorneys and health care professionals. Topics include the responsibilities of legal representatives, personal autonomy and voluntary and involuntary limitations on autonomy, guardianship and other alternatives, and end-of-life decision making. Regulations and laws designed to protect the elderly against abuse and fraud are also covered.

GERO 410 Cross-Cultural Perspectives of Aging (3)

Prerequisite: GERO 100. An examination of how different cultures interpret aging and the life cycle. Topics include cross-cultural theory and research on aging; research methods; global demographics of aging; cross-cultural perspectives of norms and values regarding work, family, and community roles for older adults; the social and economic status of older adults; intergenerational relationships; caregiving; end-of-life issues; social services; and social policy. Health care for older adults is also covered from a cross-cultural perspective.

GERO 443 Making Gerontology Relevant to Other Disciplines (3)

(Designed to help students in other disciplines integrate gerontology with their major area of academic study.) Prerequisites: GERO 100, 220 (or PSYC 357), 302 (or BIOL 307), and 331. An exploration of fundamental gerontological concepts (adaptation, health, functional ability, family/intergenerational relations, interdependency, activity, and economic security) from a multidisciplinary perspective. Implications for practice are examined from the perspective of the student's academic major. Avenues for fostering interaction among different disciplines, as they pertain to gerontology, are explored. Discussion also covers how new linkages can be forged between scientists and practitioners in gerontology and professionals within individual major areas of study.

GERO 460 Neurocognitive Functioning in the Aging (3)

Prerequisite: GERO 100. An exploration of the relationship between the functioning of the brain and cognitive and functional abilities. Normative age-related and pathological changes in the brain and central nervous system are examined along with the impact of these changes on cognitive and functional abilities in older adults. Discussion covers Alzheimer's and other dementias and their assessment and treatment.

GERO 486A Internship in Gerontology Through Co-op (3)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 246). An opportunity to combine academic theory with new, career-related experience in gerontology. At least 12 hours per week must be devoted to new tasks for a minimum of 180 hours during the Co-op session; four new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to gerontology and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

GERO 486B Internship in Gerontology Through Co-op (6)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 246). An opportunity to combine academic theory with new, career-related experience in gerontology. At least 20 hours per week must be devoted to new tasks for a total of 300 hours during the Co-op session; five to eight new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to gerontology and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

GERO 495 Special Topics in Development and Health (1–3)

Specialized study in gerontology and related topics focusing on issues in development and health. May be repeated to a maximum of 6 credits when topics differ.

GERO 495C Alzheimer's Disease: Current Issues, Perspectives, and Research (1)

A theoretical and practical approach to the study of Alzheimer's disease, covering its etiology and establishing its place among the chronic dementias. Topics include medical ethics, legal issues, caregiving, anticipatory grieving, support groups for both patients and caregivers, and community networks. Students may receive credit for only one of the following courses: GERO 495C or HLTH 498U.

GERO 495D Adaptation to Sensory Changes and Aging (1)

A review of age differences in sensory processes. Topics include physical changes and the social and psychological implications of these sensory impairments, prosthetic devices and other human factors concepts, and strategies to improve communication with family and friends.

GERO 495H Illness and Aging (1)

A broad overview of topics relating to illness and wellness in elderly people. Topics include avoidable illness, principles of drug therapy, unique aspects of illness presentation, aging organ systems, biology of aging, epidemiology, and demographics.

GERO 495K Geriatric Nutrition (1)

An overview of the physiological, social, and psychological changes that affect nutritional status and intake in aging adults. Discussion covers identification of nutritional needs, intervention, and community resources for older adults. Students may receive credit for only one of the following courses: GERO 355 or GERO 495K.

GERO 496 Special Topics in Social and Family Relations (1–3)

Specialized study in gerontology and related topics focusing on social and family relations. May be repeated to a maximum of 6 credits when topics differ.

GERO 496B Issues Affecting Older Workers and Their Employers (1)

An overview of issues affecting older workers and their employers. Topics include descriptive information about older workers and the types of work they perform, policy issues governing older workers and their employers, attitudes about older workers among employers and workers, methods to combat age discrimination, and future issues for older workers in the United States and Europe.

GERO 496C Managing Loss and Grief: Approaches for the Human Services Provider (1)

A discussion of grief and loss based on concepts that have emerged from health care and counseling practices. Focus is on therapeutic interventions that promote personal growth in clients while helping them satisfactorily work through grief.

GERO 496G Elder Abuse and Criminal Victimization (1)

A survey of abusive treatment of older people in the context of violence in families. The typical characteristics of the abusers and the abused, as well as the causes and types of crimes of abuse, are examined. Topics include methodological shortcomings in the conduct of research on cases of abuse, alternative strategies of intervention, and the types of stress that caregivers experience. Students may receive credit for only one of the following courses: GERO 496G or HLTH 498L.

GERO 496I Understanding and Coping with Life Transitions (1)

A study of the transitions of adulthood and aging, such as divorce, career changes, retirement, grandparenthood, illness, and the death of a spouse or loved one. The Transition Coping Model is used to look at factors that make a difference in dealing with change.

GERO 496K Long-Term Care: Options and Alternatives (1)

An overview of resources available for people no longer able to live independently. The continuum from home care to independent living is examined to determine which type of living situation best suits the individual's medical, personal care, and financial needs. A field trip to a nearby long-term care facility is included. Students may receive credit for only one of the following courses: FMCD 499E, GERO 341, or GERO 496K.

GERO 496P Elder Rights: Social Security and Medicare (1)

An overview of the history and evolution of Social Security and Medicare, including an exploration of basic benefits, current conflicts, and implications for the future.

GERO 496R Geriatric Case Management (1)

A review of the concept of geriatric case management, including the needs of older adults and appropriate interventions.

GERO 497 Special Topics in Administration and Planning (1–3)

Specialized study in gerontology and related topics focusing on administration and planning. May be repeated to a maximum of 6 credits when topics differ.

GERO 497D Retirement Planning: Managing Your Estate (1)

(For nonlawyers.) An examination of the principles and strategies used to settle an estate. Topics include administration of wills and estates, ownership and transfer of property, will substitutes, trusts and powers of appointment, strategies for giving charitable gifts, and gift and estate taxes. Students may receive credit for only one of the following courses: FMCD 499D or GERO 497D.

GERO 497K Strategic Planning for Retirement (1)

A discussion of the techniques for achieving financial independence at retirement and the economic, governmental, and business factors that work against reaching this goal. Topics include Social Security and Medicare; pensions and tax-deferred savings plans, including 401(k)s and IRAs; and how much to save for retirement throughout the lifespan.

GERO 497M Managed Health Care Services in Gerontology (1)

A comparative analysis of the delivery of managed health services to retirees and the elderly in the United States. Focus is on the financing of comprehensive benefits and services while considering demographics, employer-sponsored approaches, government-sponsored approaches, indemnity approaches, and self-sponsored approaches. Key concepts examined include employer/retiree cost-sharing coverage, tax-deferred funding options, purchasing cooperatives, health alliances, fiscal management, and capitation.

GERO 497N Vocational Planning in Gerontology (1)

A review of the various vocational pathways in gerontology. Topics include suggested plans of study, professional affiliations, and market demands.

Government and Politics

Courses in government and politics (designated GVPT) may be applied as appropriate (according to individual program requirements) toward

- the general education requirement in the behavioral and social sciences;
- a major in emergency management, homeland security, political science, or social science;
- a minor in African American studies, political science, or social science;
- a certificate in various policy-related areas; and
- electives.

A description of the curriculum for the political science major and minor begins on p. 76. Descriptions of related curricula may be found on the following pages: African American studies (p. 15), criminal justice (p. 33), emergency management (p. 36), homeland security (p. 54), and social science (p. 80).

GVPT 100 Introduction to Political Science (3)

A survey of the basic principles of political science. Topics include the relationship of political science to the other social sciences; the concepts of modern democracy, political ideology, and political socialization; the function of public opinion, mass media, interest groups, and political parties; the basic institutions of government and the separation of powers; and the role of international relations and globalization.

GVPT 101 Introduction to Political Theory (3)

An introduction to political philosophy. Discussion covers the classic contrast between the philosophies of Plato and Machiavelli concerning the problem of justice and power and the philosophical foundations of liberalism, socialism, and conservatism. Other topics include the political ideas of John Locke, Thomas Hobbes, Jean-Jacques Rousseau, John Stuart Mills, Karl Marx, and Edmund Burke.

GVPT 170 American Government (3)

A comprehensive study of government in the United States, including the basic principles of American government and political culture and a cross-cultural examination of institutions, processes, and public policies.

GVPT 200 International Political Relations (3)

A study of the major factors underlying international relations, the methods of conducting foreign relations, the foreign policies of the major powers, and the means of avoiding or alleviating international conflicts. Students may receive credit for only one of the following courses: GVPT 200 or GVPT 300.

GVPT 210 Introduction to Public Administration and Policy (3)

Recommended: GVPT 100. An introduction to the study of the administrative process in the executive branch. The concepts and principles of administration are examined, then placed in the context of their relationship to public policy. Analysis covers organizational structure and theory and the behavior of participants in the administration of policy.

GVPT 240 Political Ideologies (3)

A survey and an analysis of the leading ideologies of the modern world. Topics include anarchism, communism, socialism, fascism, nationalism, and democracy.

GVPT 280 Comparative Politics and Government (3)

An introduction to some of the major theories and issues in the study of comparative politics. Focus is on examining how different political systems (e.g., democratic or authoritarian) operate. The major forms of government in the world are compared.

GVPT 282 The Government and Politics of the Third World (3)

A study of how the internal politics of Third World nations develop. The governmental institutions, processes, and problems of the Third World are evaluated in light of the socioeconomic environments that are common to most of the states of Africa, the Middle East, Asia, and Latin America.

GVPT 306 Global Political Economy (3)

A study of the relationship between political and economic processes in international affairs. Discussion covers the effect of globalization on the global environment, the economy, world peace, the power of the nation-state, and inequality between nation-states.

GVPT 308 Human Rights in the World (3)

Recommended: GVPT 100. A study of the principles and practices governing human rights from the beginning of mankind to the modern international conventions and U.N. Declarations. The present international and national push for human rights and emancipation is analyzed and discussed. Students may receive credit for only one of the following courses: GVPT 308 and GVPT 399Y.

GVPT 399L Japanese Politics in the Modern World (3)

Recommended: GVPT 100. A study of key features of the Japanese political system, focusing on political institutions and processes. Themes include party politics, bureaucratic power, the role of the Diet, the state's role in the economy, and the domestic politics of foreign policy.

GVPT 400 Business and Politics (3)

Recommended: GVPT 100. A study of the inner workings of key political, social, and economic institutions in American society and their effect on individuals, business, and government. Topics include central issues facing contemporary society; the powers of government and business; government regulations affecting business, the consumer, the workplace, and the environment; and business and government in the world economy.

GVPT 401 Problems of World Politics (3)

An examination of the changing face of international affairs in a post–Cold War world and the role of the United States in the evolving international order. Focus is on the roles of key international institutions, states, nonstate actors, and globalization in the evolution of global relations since the collapse of the Soviet Union. Discussion also covers various influences on contemporary affairs, including migration, disease, economic development, and terrorism.

GVPT 402 International Law (3)

Recommended: GVPT 100. A study of the basic character, general principles, and specific rules of international law. Emphasis is on recent and contemporary trends in the field. The relationship of law to other aspects of international affairs is analyzed as well.

GVPT 403 Law, Morality, and War (3)

Recommended: GVPT 100. An exploration of the complex theoretical and practical connections between the existence of law, the conduct of war, and the status of morality regarding the violence of war in international relations and politics. Discussion covers the legal and moral problems posed by contemporary warfare: the meaning of constitutional and international law in the context of the resolution of disputes, the failure of law in mediating conflict, the necessity of military intervention to ameliorate or end conflicts, and the tension between those who would punish war crimes and those who hope to reconcile adversaries.

GVPT 405 Defense Policy and Arms Control (3)

Recommended: GVPT 100. A survey of contemporary issues of military strategy and international security. The processes of formulating defense-related political and economic policy are examined. Topics include nuclear war and conventional (limited) warfare, insurgency by guerrillas, arms control and disarmament, and the possibilities for moderation of war.

GVPT 406 Global Terrorism (3)

(Formerly GVPT 401A.) An examination of the development of global terrorism and its impact on modern civilization, particularly the threat of terrorism upon the international community since the attacks of September 11, 2001. Topics include the definition of terrorism; the historical antecedents of modern terrorism; the motivations, organizations, and support networks of terrorists; and the linkages of state terrorism to global terrorism. Survey covers Europe, Latin America, and the Middle East. Students may receive credit for only one of the following courses: GVPT 401A or GVPT 406.

GVPT 407 State Terrorism (3)

(Formerly GVPT 401B and 401C. Not open to students who have completed GVPT 401B or GVPT 401C.) An examination of the use of terror and political violence by governments, against their own citizenry or against other nations, in the furtherance of national goals. Focus is on regimes that employ terrorism as a means of governance. Topics include the historical antecedents of modern state terrorism beginning with the Reign of Terror; the political climate conducive to state terrorism; the institutionalization of state terror; and the role of rituals, propaganda, and show trials in state terrorism. Survey covers Europe, the Far East, Latin America, and the Middle East.

GVPT 409 Terrorism, Antiterrorism, and Homeland Security (3)

(Formerly GVPT 498X.) An examination of the impact of terrorism upon the homeland security of the United States, especially since the attacks of September 11, 2001. Topics include the antecedents of modern homeland security, the changing face of terrorism in the United States, the threat of weapons of mass destruction and cyberterrorism, the concept of homeland security within a federal system, the establishment of a federal agency for homeland security, the impact of the National Strategy for Homeland Security upon the federal system, civil liberties and the Patriot Act, intelligence and civil rights, and critical infrastructure protection. Students may receive credit for only one of the following courses: GVPT 409 or GVPT 498X.

GVPT 411 Public Personnel Administration (3)

A survey of components of public personnel administration. Topics include the development of the merit civil service, the personnel agency, classification, recruitment, examinations and techniques of administering them, promotion, service ratings, training, discipline, employee relations, and retirement.

GVPT 413 Governmental Organization and Management (3)

Recommended: GVPT 100. A study of the theories of organization and management in U.S. government. New trends, experiments, and reorganization are major topics.

GVPT 414 Administrative Law (3)

Recommended: GVPT 100. A study of the discretion exercised by administrative agencies. Their functions, their powers over persons and property, their procedures, and judicial sanctions and controls are analyzed.

GVPT 431 Introduction to Constitutional Law (3)

A systematic inquiry into the general principles of the constitutional system, using case studies. Topics include the separation of powers, federal/state relations, and other fundamental features of the American Constitution.

GVPT 433 The Judicial Process (3)

An examination of judicial organization in the United States at all levels of government. Emphasis is on legal reasoning, legal research, and court procedures.

GVPT 434 Race Relations and Public Law (3)

A political and legal examination of rights protected by the Constitution as they affect racial minorities. The constitutional powers of the federal courts, the executive branch, and Congress to define, protect, and extend those rights are probed.

GVPT 436 The Legal Status of Women (3)

An examination of judicial interpretation and applications of common, statutory, and constitutional laws as they affect the status of women in American society.

GVPT 443 Contemporary Political Theory (3)

Prerequisite: GVPT 100. A survey of the principal political theories and ideologies from Karl Marx to the present.

GVPT 444 American Political Theory (3)

Recommended: GVPT 100 or GVPT 170. A study of the development and growth of American political concepts from the colonial period to the present.

GVPT 451 Foreign Policy of Russia and Post-Soviet States (3)

An overview of the foreign policy of Russia and several other former Soviet republics. Primary emphasis is on the development of contemporary Russian foreign policy. The impact of the Soviet legacy on other post-Soviet republics and the dynamics of their relations with the outside world are examined.

GVPT 457 American Foreign Relations (3)

Recommended: GVPT 100. A study of the principles and machinery of American foreign relations. Emphasis is on the conduct of the U.S. Department of State and the Foreign Service. Analysis covers the major foreign policies of the United States.

GVPT 460 State and Local Administration (3)

Recommended: GVPT 100 or GVPT 170. A study of the administrative structure, procedures, and policies of state and local governments. Focus is on the state level and on intergovernmental relationships. Illustrations are drawn from Maryland governmental arrangements.

GVPT 473 Legislature and Legislation (3)

Recommended: GVPT 100. A comprehensive study of the organization, procedures, and problems involved in legislation. Opportunities for contact with Congress and with the legislature of Maryland are provided.

GVPT 475 The Presidency and the Executive Branch (3)

Recommended: GVPT 100 or GVPT 170. An examination of the various roles of the president in the political process of the United States. The president's involvement in legislative matters, the president's function in the executive branch, and the president's role in his or her political party are assessed.

GVPT 480 Comparative Political Systems (3)

A study, along functional lines, of major political institutions, such as legislatures, executives, courts, bureaucracies, public organizations, and political parties.

GVPT 484 Government and Politics of Africa (3)

A comparative study of the governmental systems and political processes of selected countries of Africa. Special emphasis is placed on the problems of post-colonial nation-building, political culture, and the nature and role of the military.

GVPT 486A Internship in Government and Politics Through Co-op (3)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 246). Recommended: GVPT 100. An opportunity to combine academic theory with new, career-related experience in government and politics. At least 12 hours per week must be devoted to new tasks for a minimum of 180 hours during the Co-op session; four new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to government and politics and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

GVPT 486B Internship in Government and Politics Through Co-op (6)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 246). Recommended: GVPT 100. An opportunity to combine academic theory with new, career-related experience in government and politics. At least 20 hours per week must be devoted to new tasks for a total of 300 hours during the Co-op session; five to eight new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to government and politics and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

GVPT 487 Government and Politics of Southwest Asia (3)

A comparative examination of the politics of India, Pakistan, and Afghanistan—three nations that share centuries of common history but emerged from a common independence movement to develop along different lines. Discussion addresses religious conflict; colonial experiences; nationalist ideologies; and the consequences of economic, political, and cultural globalization.

GVPT 498 Advanced Topics in Government and Politics (1–3)

Recommended: GVPT 100. In-depth study of topics of specialized interest.

History

Courses in history (designated HIST) may be applied as appropriate (according to individual program requirements) toward

- the general education requirements in the arts and humanities;

- a major or minor in history;

- a minor in African American studies, Asian studies, or women's studies;

- a certificate in various areas; and

- electives.

A description of the curriculum for the history major and minor begins on p. 52. Descriptions of related curricula may be found on the following pages: African American studies (p. 15), Asian studies (p. 17), humanities (p. 56), and women's studies (p. 83).

HIST 115 World History I (3)

A survey of Western and non-Western civilizations and cultures from earliest times to 1500. Emphasis is on the political, social, and cultural developments of the major civilizations and on the interactions between those civilizations.

HIST 116 World History II (3)

A survey of Western and non-Western civilizations and cultures from 1500 to the present. Emphasis is on the political, social, and cultural developments of the major civilizations; the interactions between those civilizations; and the development of a global community since 1500.

HIST 141 Western Civilization I (3)

A survey of the history of Western civilization from antiquity through the Reformation. The political, social, and intellectual developments that formed the values and institutions of the Western world are examined.

HIST 142 Western Civilization II (3)

A survey of the history of Western civilization from the Reformation to modern times.

HIST 156 History of the United States to 1865 (3)

A survey of the United States from colonial times to the end of the Civil War. The establishment and development of national institutions are traced. Students may receive credit for only one of the following courses: HIST 156 or HUMN 119.

HIST 157 History of the United States Since 1865 (3)

A survey of economic, intellectual, political, and social developments since the Civil War. The rise of industry and the emergence of the United States as a world power are emphasized. Students may receive credit for only one of the following courses: HIST 157 or HUMN 120.

HIST 218Q Gettysburg (1)

A study of the major elements of warfare during the American Civil War, focusing on the Gettysburg campaign and its impact. Students may receive credit for only one of the following courses: HIST 218Q or HIST 318Q.

HIST 218R Antietam (1)

A study of the Maryland campaign of the American Civil War. Focus is on the 1862 Battle of Antietam and its impact within the context of the war. Students may receive credit for only one of the following courses: HIST 218R or HIST 318R.

HIST 284 East Asian Civilization I (3)

An interdisciplinary survey of the development of East Asian cultures. All facets of East Asian traditional life are examined from a historical perspective.

HIST 285 East Asian Civilization II (3)

A survey of the historical development of modern Asia since 1700. The efforts of East Asians to preserve traditional cultures while facing Western expansion in the 18th and 19th centuries are presented; the efforts of those cultures to survive as nations in the 20th century are assessed.

HIST 309 Introduction to Historical Writing (3)

Recommended: 12 credits in history. A study of the methods and problems of historical research and presentation. Assignments include a major research paper.

HIST 314D The Darfur Crisis (1)

An examination of the impact of the crisis in Darfur on world peace and the course of international politics. Topics include the inception and the evolution of the problem and the reaction of the Sudanese government to the demands of the local population for autonomy in western Sudan. The definition of genocide and whether it may be applied to the situation in Darfur is debated. Resolutions of the United Nations and other international and regional organizations' resolutions regarding Darfur are introduced. American foreign policy is examined as it relates to Darfur.

HIST 316U Contemporary Political History of Afghanistan: 1919 to Present (1)

An introduction to Afghani history from the end of the "Great Game" (the struggle between Great Britain and Russia for supremacy in Central Asia) in 1919 to the present. Emphasis is on the political and economic history of the independent Afghan state. Topics include the closing period of the "Great Game" and the fragile relations between Afghanistan and Great Britain, the period of stability engendered by the rule of King Zahir Shah, the coup d'état of Sardar Mohammed Daoud, the Soviet invasion of Afghanistan, the downfall of the Communist government of President Mohammed Najibullah, the rise of the Taliban, the American-led invasion, and the reconstruction government of President Hamid Karzai. Assignments include intensive reading, writing, and research.

HIST 319A History of Terrorism (3)

A survey of terrorism in the modern world, investigating the ideology of political violence since 1789. Topics include the organization, aims, arms, financing, and composition of terrorist groups, from the 1880s in Russia to the present day worldwide. Various interpretations of the terrorist phenomenon are discussed. Assignments include advanced reading and research.

HIST 319B History of Violence in America (3)

A survey of violence in the United States, with an emphasis on the late 19th century and the 20th century. Theories of conflict and its causes provide a framework for discussing political violence, both past and present. Racial violence in the 20th century is examined. Topics also include violence and organized crime, domestic terrorism, violent crimes, student protest, and labor violence. Assignments include advanced reading and research.

HIST 319H Civil Rights: Martin Luther King Jr. (1)

A survey of the civil-rights movement from 1954 to 1968 as viewed though the career of Dr. King, its principal leader and spokesman. Assignments include advanced reading and research.

HIST 319L History of Drug Use in America (3)

A survey of the long-standing problem of drugs. Practices of drug use from pre-Columbian times to the present are considered. Emphasis is on the role of the alcoholic in American history and the origins of modern attitudes toward drugs.

HIST 319X Jews Under Nazis (1)

A study of the fate of European Jews under Hitler. How and why the Holocaust occurred are considered. Topics include the history of anti-Semitism in Europe to 1933, the German Jewish community, and Nazi persecution (1933–39) and the Holocaust (1939–45).

HIST 319Y Nuremberg War Trials (1)

A study of the Nuremberg War Trials. Topics include the charges, personalities, verdicts, and issues of this juridical milestone. The long-range implications of the precedents established at Nuremberg, not only for Germany, but for America and the world as well, are also examined.

HIST 319Z Nazism and the Third Reich (1)

An examination of Germany in the 1920s and 1930s, focusing on the emergence and establishment of Nazism. A number of relevant questions are considered: Why did national socialism arise in Germany when it did? Was national socialism specifically German or representative of a more general European phenomenon? Are the origins time-bound or could they occur again?

HIST 324 Classical Greece (3)

A study of the ancient Greeks from Homer to Socrates, from 800 to 400 B.C. Discussion covers the society and religion of the city-state, the Peloponnesian War, the art and literature of Periclean Athens, and the intellectual circle of Socrates.

HIST 325 Alexander the Great and the Hellenistic Age (3)

A study of the history of the Greeks from 400 to 30 B.C. Topics include Alexander and the changes he wrought in the Mediterranean world; the rise of monarchies and leagues; new directions in religion, art, literature, and science; and the Hellenization of the Near East, including the Jews.

HIST 326 The Roman Republic (3)

A study of ancient Rome during the period 753 to 44 B.C., from its founding to the assassination of Julius Caesar. Focus is on Rome's conquest of the Mediterranean world, the social and political pressures that led to that conquest, and the consequent transformation and decline of the republic. Students may receive credit for only one of the following courses: HIST 326 or HIST 421.

HIST 327 The Roman Empire (3)

A study of Roman history from Augustus to Heraclius, from 44 B.C. to A.D. 641. Topics include the imperial court and government, the diversity of culture in the provinces and cities and the progress of Romanization, Roman religion and its transformation in late antiquity, and the Roman army and defense of the frontiers. Students may receive credit for only one of the following courses: HIST 327 or HIST 421.

HIST 333 Europe During the Renaissance and Reformation (3)

A study of the transformation of continental Europe from 1400 to 1648. Topics include changes in modes of Christian piety and the spread of humanistic ideas, the social and intellectual foundations of reformation theology, the 16th-century reform movements, and the causes and impact of the Thirty Years War.

HIST 336 Europe in the 19th Century: 1815 to 1919 (3)

A study of the political, economic, social, and cultural development of Europe from the Congress of Vienna to World War I.

HIST 337 Europe's Bloodiest Century (3)

An investigation of the political, economic, and cultural development of Europe since 1914, with special emphasis on the factors involved in the two world wars and their worldwide effects and significance.

HIST 353 Latin America: From Moctezuma to Bolivar (3)

A survey of Latin America from late pre-Columbian civilizations through European incursion and the wars of independence. Topics include cultural collisions, political formation, and the end of Iberian domination.

HIST 354 Latin America: Revolutions, Caudillos, and Democracy (3)

An overview of the political culture of the republics of Latin America. Topics include nation building, modernization, race relations, economic development, gender, reform and revaluation, and relations between the United States and Latin America. Students may receive credit for only one of the following courses: HIST 251 or HIST 354.

HIST 357 Military History: 1494 to 1815 (3)

A survey of the military history of modern Europe from the dynastic wars of the Valois and Habsburgs to the national wars of the French Revolution and Empire. The economic, financial, strategic, tactical, and technological aspects of the development of military institutions and warfare are examined. Students may receive credit for only one of the following courses: HIST 224 or HIST 357.

HIST 358 Modern Military History: 1815 to Present (3)

A survey of the military history of modern Europe from the Congress of Vienna in 1815 to the present. The economic, financial, strategic, tactical, and technological aspects of the development of military institutions and warfare are examined. Students may receive credit for only one of the following courses: HIST 225 or HIST 358.

HIST 360 America in the Colonial Era: 1600 to 1763 (3)

An investigation of the founding of the English colonies in America. Topics include the European backgrounds of the colonies, the reasons for the instability of colonial society, the emergence of stable societies after 1689, and the development of colonial regionalism. Discussion also covers political institutions, social divisions, the economy, religion, education, and urban and frontier problems in the 18th century.

HIST 361 America in the Revolutionary Era: 1763 to 1815 (3)

A consideration of the background and direction of the American Revolution and the early development of the nation through the War of 1812. Emphasis is on how the Revolution shaped American political and social development, including the creation of a new government under the Constitution and the challenges facing the new nation.

HIST 362 Ante-Bellum America: 1815 to 1861 (3)

An examination of the strong sense of nationalism in the United States after the War of 1812 and its transformation into the sectionalism that led to the Civil War. Issues contributing to North/South antagonism, particularly slavery, are discussed. Topics include Jacksonian democracy; capitalism; racism; immigration; Manifest Destiny; and religious, social, and intellectual movements.

HIST 363 The Civil War and the New Industrial Society in the United States: 1860 to 1900 (3)

A survey of sectional and class conflicts and their effects on American life and institutions from the Civil War through the Gilded Age. The social, economic, and political reconstruction of the Union is analyzed as it affected and was affected by industrialization, urbanization, and technological changes.

HIST 364 Emergence of Modern America: 1900 to 1945 (3)

A study of the emergence of modern American institutions and identities in the years 1900–45. Topics include the presidencies of McKinley, Roosevelt, Taft, and Wilson; the world wars; the Great Depression; and the period of the New Deal. Special consideration is also given to emerging issues such as the role of women and African Americans, corporate enterprises, and the welfare state.

HIST 365 Recent America: 1945 to the Present (3)

A survey of U.S. history from the presidencies of Truman and Eisenhower to the present. Topics include 1960s' radicalism, the Cold War, Vietnam, Watergate, and changes in American society.

HIST 372 Legacy of the Civil Rights Movement (3)

An examination of the civil rights movement in the United States from World War II to the present. Focus is on the era of protest and reform through the 1980s, with analysis of its influence into the present decade. Students may receive credit for only one of the following courses: BEHS 372 or HIST 372.

HIST 375 Modern European Women's History (3)

A social and cultural study of the economic, family, and political roles of European women since the Enlightenment and Industrial Revolution. Emphasis is on contemporary discussions on the role of women, the effects of industrialization on women's work and status, the demographic parameters of women's lives, and women's participation in political events from market riots to suffrage struggles. Students may receive credit for only one of the following courses: HIST 212 or HIST 375.

HIST 376 Women and the Family in America to 1870 (3)

An examination of the diverse experiences of different groups of women from the colonial era through 1870. Three main themes are developed: the impact of race and class on women's lives, changes and continuity in the division of labor on the basis of gender, and the shifting definition of the family. Emphasis is on the relationship between ideals and realities in women's lives and alterations in their status within the family and society at large. Students may receive credit for only one of the following courses: HIST 376 or HUMN 366.

HIST 377 Women in America Since 1870 (3)

An examination of the changing role of women in working-class and middle-class families. Topics include the effects of industrialization on women's economic activities and status and women's involvement in political and social struggles, including those for women's rights, birth control, and civil rights. Students may receive credit for only one of the following courses: HIST 211, HIST 367, or HIST 377.

HIST 381 America in Vietnam (3)

A multidisciplinary interpretation of the complex involvement of the United States in Vietnam. Key themes include foreign policies after World War II that led to the Vietnam War, the political and military objectives of the United States, domestic responses in the United States to military involvement, and the lessons and legacies of the war. Students may receive credit for only one of the following courses: BEHS 337 or HIST 381.

HIST 390 The Rise of Islam to 1300 (3)

A survey of the origins, development, and rapid expansion of Islam into Europe, Asia, and North Africa. Topics include the diversity of early Islamic beliefs; the evolution of social and political institutions and their expansion into Europe, the Arab East, and North Africa; and the importance of Islamic scholarship in the birth of the modern world. Focus is on the period before 1300.

HIST 391 History of the Ottoman Empire (3)

A survey of the Ottoman Turkish Empire from 1300 to its collapse during World War I. Emphasis is on the empire's social and political institutions and its expansion into Europe, the Arab East, and North Africa.

HIST 392 History of the Contemporary Middle East (3)

An exploration of the causes underlying the rise of sovereign nation-states in the Middle East. Topics include modernization, Westernization, and secularization in a traditional society and shifting political and economic power groupings in a regional and worldwide context.

HIST 393 Archival Administration (3)

An examination of the function and administration of archives. Topics include methods of preserving archival material, cataloguing, special problems of oral history archives, and related issues.

HIST 394 Museum Administration (3)

A study of museum administration from a curator's perspective. Topics include acquisition, facility management, and resource development. An overview of governing laws is provided. Both private and public museums in the Washington, D.C., metro area serve as models.

HIST 396A Cultural Heritage Protection: Afghanistan (3)

A study of basic strategies for protecting heritage sites, focusing on those in Afghanistan. Discussion covers both theory and application. Topics include cultural, political, legal, and historical considerations.

HIST 396I Cultural Heritage Protection: Iraq (3)

A study of basic strategies for protecting heritage sites, focusing on those in Iraq. Discussion covers both theory and application. Topics include cultural, political, legal, and historical considerations.

HIST 460 African American Life: 1500 to 1865 (3)

An examination of African American communities in the Western Hemisphere from 1500 to 1865. Topics include the origins of African American communities in the Western Hemisphere and the resulting diversity of experiences and cultures. Emphasis is on African American communities in North America, especially the evolution of those communities and their cultures.

HIST 461 African American Life Since 1865 (3)

An examination of African Americans in the United States since the abolition of slavery. Emphasis is on 20th-century developments, including the migration from farm to city, the growth of the civil rights movement, and the race question as a national problem.

HIST 462 The U.S. Civil War (3)

A study of the U.S. Civil War. Topics include causes of the war; sectional politics and secession; resources and strategies of the Confederacy and the Union; the changing character of the war; emancipation and its consequences; the economic, social, and political conditions of the home front; and the wartime origins of Reconstruction.

HIST 463 U.S. Military History Since 1865 (3)

An examination of the evolution of the U.S. armed forces since the Civil War. Topics include the role of the armed forces in U.S. diplomatic relations, the social and economic impact of war and peace, and the changing image of the military in American culture. Students may receive credit for only one of the following courses: HIST 419N or HIST 463.

HIST 466 The Cold War (3)

An introduction to the history of the Cold War, which divided the world along ideological, economic, political, and military lines for more than 40 years. Focus is on the chronology of the struggle between the United States and the Soviet Union, with the former leading the NATO nations and the latter leading the Warsaw Pact nations. Students may receive credit for only one of the following courses: HIST 320, HIST 419I, or HIST 466.

HIST 476 Historic Preservation (3)

A study of the theory and techniques of historic preservation. Topics include the principles of acquisition, stabilization, restoration, and conversion of structures or sites into interpretive or public facilities. Assignments include field trips and reports.

HIST 477 Editing Historical Documents (3)

Prerequisites: HIST 309 and an upper-level intensive writing course (WRTG 391, WRTG 393, WRTG 394, ENGL 391, COMM 393, or COMM 394). A study of theory and practice in handling manuscripts and documentary artifacts. Topics include how to establish taxonomic criteria, analyze, transcribe, annotate, proof, index, edit, and publish manuscripts. Discussion also covers techniques for establishing databases and catalogs.

HIST 480 History of Traditional China (3)

A study of the history of China from earliest times to 1644. Emphasis is on the development of Chinese institutions that have molded the life of the nation and its people.

HIST 481 History of Modern China (3)

A study of the history of modern China from 1644 to the present. Focus is on the process of change, as China moved from its perceived position of the center of the civilized world to that of a nation-state in a complex international environment.

HIST 482 History of Japan to 1800 (3)

An examination of traditional Japanese civilization from the age of Shinto mythology and the introduction of continental learning to the rule of military families. Topics include transition to a money economy and the creation of a town-based culture. Political, economic, religious, and cultural history is also covered.

HIST 483 History of Japan Since 1800 (3)

A survey of Japan's renewed contact with the Western world and its emergence between 1800 and 1931 as a modern state, an industrial society, and world power. Japan's road to war, the period of occupation, and the era of recovery are covered, from 1931 to the present.

HIST 486A Internship in History Through Co-op (3)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 246). An opportunity to combine academic theory with new, career-related experience in history. At least 12 hours per week must be devoted to new tasks for a minimum of 180 hours during the Co-op session; four new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to history and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

HIST 486B Internship in History Through Co-op (6)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 246). An opportunity to combine academic theory with new, career-related experience in history. At least 20 hours per week must be devoted to new tasks for a total of 300 hours during the Co-op session; five to eight new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to history and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

Homeland Security

Courses in homeland security (designated HMLS) may be applied as appropriate (according to individual program requirements) toward

- a major or minor in homeland security;
- a major in criminal justice, emergency management, or fire science; and
- electives.

A description of the curriculum for the homeland security major and minor begins on p. 54. A description of the curriculum for the emergency management major begins on p. 36.

HMLS 302 Introduction to Homeland Security (3)

An introduction to the public- and private-sector dimensions of the theory and practice of homeland security at national, regional, state, and local levels. An overview of the administrative, legislative, and operational elements of homeland security programs and processes (including a review of homeland security history, policies, and programs) is provided. Topics include the threat of terrorism and countermeasures, including intelligence, investigation, and policy that support U.S. homeland security objectives.

HMLS 304 Strategic Planning in Homeland Security (3)

Prerequisite: HMLS 302. An examination of the fundamentals of strategic planning necessary for the maintenance of domestic security and the operation of the homeland security organization in both the public and private sectors. Topics include organizational priorities, planning documents, policy development, financial operations, and the evaluation process. Discussion also covers the risk management framework that analyzes threat, risk, vulnerability, probability, and impact as parameters for decision making and resource allocation.

HMLS 406 Legal and Political Issues of Homeland Security (3)

Prerequisite: HMLS 302. A study of the legal aspects of current government regulations on intelligence operations, identity management, information dissemination, infrastructure protection, business community security concerns, and ethical issues. The development of public policy in homeland security is examined on local, regional, national, and international levels. Topics include surveillance, personal identity verification, personal privacy and redress, federal legislation passed in the aftermath of the terrorist attacks, the rights of foreign nationals, the rights of U.S. citizens, the governmental infrastructure for decisions concerning legal rights, and the difficulties of prosecuting terrorist suspects (such as jurisdictional issues, rules of evidence, and prosecution strategies).

HMLS 408 Infrastructure Security Issues (3)

An examination of infrastructure protection on international, national, regional, state, and local levels. Topics include what constitutes critical infrastructure, including both cyber and physical infrastructure, and the development of vulnerability assessments in both the public and private sectors. An overview of U.S. homeland security policy as it relates to the protection of critical infrastructures and key assets (including the roles of the federal, state, and local governments and the private sector in the security of these resources) is provided. Focus is on risk reduction and protection of critical infrastructures utilizing available resources and partnerships between the public and private sectors.

HMLS 414 International Security Issues (3)

Prerequisite: HMLS 302. A study of the role of intelligence in international security. Topics include the intelligence process—the collection, analysis, sharing and dissemination of information between governments and between governments and the private sector. Discussion also covers investigative law enforcement techniques, including information case management and prosecution. Emphasis is on evaluating current international intelligence and enforcement efforts. Future challenges and opportunities for international intelligence operations are also examined.

INFORMATION ON COURSES

HMLS 486A Internship in Homeland Security Through Co-op (3)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 246). An opportunity to combine academic theory with new, career-related experience in homeland security. At least 12 hours per week must be devoted to new tasks for a minimum of 180 hours during the Co-op session; four new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to homeland security and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

HMLS 486B Internship in Homeland Security Through Co-op (6)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 246). An opportunity to combine academic theory with new, career-related experience in homeland security. At least 20 hours per week must be devoted to new tasks for a total of 300 hours during the Co-op session; five to eight new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to homeland security and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

HMLS 495 Public Safety Policies and Leadership (3)

(Intended as a final, capstone course to be taken in a student's last 15 credits.) Prerequisites: At least 15 credits in FSCN, EMGT, CCJS, or HMLS courses. A study of leadership theories, skills, and techniques used in the public safety professions. The interdisciplinary perspective—encompassing criminal justice, emergency management, fire science, and homeland security—is designed to support integrated public safety management. A review of current issues and contemporary successful leadership styles in the public safety professions integrates knowledge of principles gained through previous coursework. Case studies and exercises are used to address challenges in strategic planning. Other tools focus on evaluation of personal leadership styles and techniques.

Humanities

Courses in humanities (designated HUMN) may be applied as appropriate (according to individual program requirements) toward

- the general education requirement in the arts and humanities;
- a major or minor in humanities; and
- electives.

A description of the curriculum for the humanities major and minor begins on p. 56.

HUMN 100 Introduction to the Humanities (3)

An introduction to the humanities through a review of some of the major developments in human culture. The goal is to promote analysis of underlying assumptions about the way societies are formed and run and how they express their ideas through art, literature, architecture, music, and philosophy. Tools to critically understand cultural phenomena (such as art, music, drama, philosophy, and religion) are provided. The conceptual tools to understand cultural phenomena critically are also developed.

HUMN 102 Classical Foundations (3)

A study of aspects of the ancient Greco-Roman world (such as myth and religion, war and conquest, government and politics, social organization, and leisure activities) through examination of the words and actions of the protagonists. Original sources of history, philosophy, poetry, and drama are consulted. Focus is on individuals who contributed to the shaping of classical civilization. Students may receive credit for only one of the following courses: CLAS 100 or HUMN 102.

HUMN 105 Introduction to Archaeology (3)

An introduction to the methods used by archaeologists to evacuate and date material and to the ancient cultures of the Near East, Egypt, Greece, and Rome. Students may receive credit for only of the following courses: ARCH 100 or HUMN 105.

HUMN 204 Film and American Culture Studies (3)

Exploration of American film from a historical perspective, illustrating the motion picture's role as an institutional phenomenon, a form of communication, and a source of cross-cultural study. Students may receive credit for only one of the following courses: AMST 204 or HUMN 204.

HUMN 311 Workplace Ethics (3)

Examination and discussion of normative ethical theory; moral reasoning; and the larger economic, social, political, and legal framework of the workplace within which ethical issues arise. Discussion covers workplace issues such as discrimination, harassment, the quality of work life, professional rights and responsibilities, and specific cases exemplifying these issues. Possible examples include cases in the areas of hiring, privacy, intellectual property, whistle-blowing versus loyalty, health care, ethics in advertising, consumerism in relation to product liability, economic globalization, and the common environment. Students may receive credit for only one of the following courses: HUMN 310 or HUMN 311.

HUMN 334 Understanding Movies (3)

An analysis of one of the most important means of artistic expression of the 20th century—film. The goal is to acquire a deeper understanding of the aesthetic qualities of film by considering the stylistic elements of film as it has evolved throughout the century and weighing the special relationship between cinema and literature. Students may receive credit for only one of the following courses: HUMN 334 or HUMN 498D.

HUMN 336 Ideas Shaping the 21st Century (3)

An overview of predominating ideas and philosophies that may govern and alter humanity and this planet in the early 21st century. Ideas and ways of living are evaluated insofar as they reveal the nature of intelligence and determine the uses of this planet. Topics include the rise of science, religions, and technoconsciousness; the development of systems of communication; prevailing perceptions of justice and human relationships; and "quality of life" as expressed in architecture and the arts.

HUMN 348 Religions of the East (3)

An overview and examination of the religions of East Asia. Topics include the religious traditions of India known collectively as Hinduism and Jainism, the development of Buddhism and its spread through Asia, Chinese indigenous beliefs, and the religions of Japan (particularly Shinto and Zen Buddhism). Discussion examines the interrelationships of these religious traditions through their history and main teachings. Students may receive credit for only one of the following courses: HUMN 348 or HUMN 350.

HUMN 349 Religions of the West (3)

An overview and examination of the Abrahamic religions, with special attention to their common ancestry and relationships. Topics include the history and belief structures of Judaism, Christianity, and Islam. Discussion also covers the ethical systems of these religions, as well as their relationship to the cultures in which they developed and exist today. Students may receive credit for only one of the following courses: HUMN 349 or HUMN 350.

HUMN 351 Myth and Culture (3)

A presentation of reflections on the interrelations of myth, religion, and culture in which myths are evaluated as embodiments of ethnic and universal ideas. Religion is analyzed within American and non-American cultures. Ideas and symbols from mythology that provide background for literature, music, and art are introduced.

HUMN 375 Social History of Washington, D.C. (3)

A study of the uniqueness of Washington, D.C., through its artistic, architectural, cultural, social, political, and economic history. Washington is examined as a center of power and decision making, as well as the domicile of some of the nation's least empowered citizens; as a home to monuments, museums, and statuary commemorating visionary leaders, as well as a seedbed of avant-garde artistic movements; and as an urban center built upon limited industrial growth. Students may receive credit for only one of the following courses: HIST 351, HUMN 375, or HUMN 498C.

HUMN 376B Social History of Baltimore (3)

A study of the artistic, architectural, cultural, social, political, and economic history of Baltimore. The fifth largest U.S. port, Baltimore is examined as an urban center historically connected by its harbor to Europe and the world and by canal and railroad to the interior. Topics include the creation of culturally distinct neighborhoods of rural and immigrant groups, early industrial operations in milling and canning, and the effects of fire and the Depression. The complex forces of urban revitalization are studied. Archaeological and preservation sites are toured.

HUMN 486A Internship in Humanities Through Co-op (3)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 246). An opportunity to combine academic theory with new, career-related experience in the humanities. At least 12 hours per week must be devoted to new tasks for a minimum of 180 hours during the Co-op session; four new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to the humanities and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

HUMN 486B Internship in Humanities Through Co-op (6)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 246). An opportunity to combine academic theory with new, career-related experience in the humanities. At least 20 hours per week must be devoted to new tasks for a total of 300 hours during the Co-op session; five to eight new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to the humanities and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

Human Resource Management

Courses in human resource management (designated HRMN) may be applied as appropriate (according to individual program requirements) toward

- a major or minor in human resource management, business administration, global business and public policy, or management studies;

- a certificate in Human Resources Management or Negotiation and Conflict Management; and

- electives.

A description of the curriculum for the human resource management major and minor begins on p. 58. Descriptions of other management-related curricula may be found on the following pages: accounting (p. 13), business administration (p. 21), environmental management (p. 40), fire science (p. 45), global business and public policy (p. 50), management studies (p. 70), and marketing (p. 72).

HRMN 300 Human Resource Management (3)

A basic study of human resource management. Topics include human resource planning and the recruitment, selection, development, compensation, and appraisal of employees. Scientific management and unionism are explored insofar as these historical developments affect the various personnel functions. Students may receive credit for only one of the following courses: BMGT 360, HRMN 300, or TMGT 360.

HRMN 302 Organizational Communication (3)

A study of the structure of communication in organizations. Problems, issues, and techniques of organizational communication are analyzed through case histories, exercises, and projects. The examination of theory and examples is intended to improve managerial effectiveness in communication and negotiation. Students may receive credit for only one of the following courses: BMGT 398N, HRMN 302, MGMT 320, MGST 315, or TEMN 315.

HRMN 362 Labor Relations (3)

A study of the development and methods of organized groups in industry, with reference to the settlement of labor disputes. Labor unions and employer associations involved in arbitration, mediation, and conciliation are analyzed from an economic as well as a legal standpoint. Topics include collective bargaining, trade agreements, strikes, boycotts, lockouts, company unions, employee representation, and injunctions. Students may receive credit for only one of the following courses: BMGT 362 or HRMN 362.

HRMN 363 Negotiation Strategies (3)

An introduction to methods and processes of negotiation and collective bargaining. Negotiating strategies related to selected products, services, and management issues are explored. Students may receive credit for only one of the following courses: BMGT 398W, HRMN 363, or MGMT 398W.

HRMN 365 Conflict Management in Organizations (3)

An introduction to processes observed in and management of conflict within organizations. Topics include general models of conflict, methods of managing conflict, and issues related to disagreements in organizational contexts. Students may receive credit for only one of the following courses: BMGT 398X, HRMN 365, or MGMT 398X.

HRMN 367 Organizational Culture (3)

Prerequisite: BMGT 364. An examination of the nature, definitions, theories, and aspects of organizational culture. Analysis covers patterns of behavior and their relationship to organizational culture, especially the impact of the organization's business on employee behavior and culture. Topics include the role of nationality, gender, and race within organizational culture; implications of addressing organizational challenges; theory versus practice; and the relative roles of the individual, groups, and the organization in a cultural context. Students may receive credit for only one of the following courses: BMGT 398T or HRMN 367.

HRMN 392 Stress Management in Organizations (1)

An exploration of the changing nature of work and stress in organizations, due to a business emphasis on productivity and personal and family demands. Focus is on the causes of stress and methods of managing stress in organizational settings. Topics include interactions, performance objectives, social structure, job characteristics, and other factors causing stress in organizations. Consideration is given to political climate, pressure to achieve, interpersonal conflict, and time pressures. Discussion covers practical approaches to reduce stress at work. Students may receive credit for only one of the following courses: BMGT 398Y, HRMN 392, MGMT 398Y, or MGST 398H.

HRMN 395 The Total Rewards Approach to Compensation Management (3)

Prerequisite: HRMN 300. An exploration of alternative compensation philosophies to define total rewards as everything that employees value in the employment relationship. Topics include building and communicating a total rewards strategy, compensation fundamentals, the analysis and documentation of a job analysis, linking pay to performance, employee motivation and performance appraisal. Strategies such as incentive cash and/or stock compensation programs, employee ownership, benefits and nonmonetary rewards are discussed and evaluated. The inter-relationships among compensation, motivation, performance appraisal and performance within the organization are examined. Nonmonetary rewards will be described and analyzed. Discussion also covers the design and implementation and operation of a total rewards program, including organizational compatibility. Students may receive credit for only one of the following courses: BMGT 388L, HRMN 390, or HRMN 395.

HRMN 400 Human Resource Management: Analysis and Problems (3)

Prerequisite: HRMN 300. A study of the role of human resource management in the strategic planning and operation of organizations, performance appraisal systems, and compensation and labor/management issues. The influence of federal regulations (including equal opportunity, sexual harassment, discrimination, and other employee-related regulations) is analyzed. The critical evaluation of human resource problems is supported with a review of research findings, readings, discussions, case studies, and applicable federal regulations. Students may receive credit for only one of the following courses: BMGT 460, HRMN 400, or TMGT 360.

INFORMATION ON COURSES

HRMN 406 Employee Training and Development (3)

An examination of employee training and human resource development in various organizations. Topics include the development, administration, and evaluation of training programs; employee development; career development; and organizational change. Issues in employee development (including assessment of employee competencies, opportunities for learning and growth, and the roles of managers in employee development) are explored. Students may receive credit for only one of the following courses: BMGT 498I, HRMN 406, or MGMT 498I.

HRMN 408 Employment Law for Business (3)

Recommended: BMGT 380. A conceptual and functional analysis of the legal framework and principles of industrial and employment relations, with special emphasis on discrimination in the workplace in the domestic and global environment. Topics include discrimination based on race, sex, age, and disability; testing and performance appraisal; wrongful discharge; labor/management issues; and employee benefits. Salient transnational employment issues are also explored. Students may receive credit for only one of the following courses: BMGT 468, BMGT 498G, HRMN 408, or MGMT 498G.

HRMN 462 Labor Relations Law (3)

Recommended: BMGT 380. A conceptual and functional analysis and application of legal principles relevant to labor/management relations and the collective bargaining process in the domestic and global industrial and public sectors. Topics include the historical and statutory development of unionization; union organization and unfair labor practices; negotiation and administration of the collective bargaining agreement; economic pressures, including strikes, pickets, boycotts, and lockouts; arbitration and conflict resolution; public-sector regulation; and transnational labor/management issues. Students may receive credit for only one of the following courses: BMGT 462 or HRMN 462.

HRMN 486A Internship in Human Resource Management Through Co-op (3)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 246). An opportunity to combine academic theory with new, career-related experience in human resource management. At least 12 hours per week must be devoted to new tasks for a minimum of 180 hours during the Co-op session; four new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to human resource management and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

HRMN 486B Internship in Human Resource Management Through Co-op (6)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 246). An opportunity to combine academic theory with new, career-related experience in human resource management. At least 20 hours per week must be devoted to new tasks for a total of 300 hours during the Co-op session; five to eight new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to human resource management and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

HRMN 495 Contemporary Issues in Human Resource Management Practice (3)

(Intended as a final, capstone course to be taken in a student's last 15 credits.) Prerequisite: HRMN 400. A study of human resource management that integrates knowledge gained through previous coursework and experience and builds on that conceptual foundation through integrative analysis, practical application, and critical thinking. Emerging issues in human resource management are considered. Students may receive credit for only one of the following courses: BMGT 388K, HRMN 494, or HRMN 495.

Information Systems Management

Courses in information systems management (designated IFSM) may be applied as appropriate (according to individual program requirements) toward

- the general education requirement in computing;

- a major in information assurance, information systems management, computer information technology, computer studies, emergency management, homeland security, laboratory management, or management studies;

- a minor in computing;

- a certificate in Database Management, Information Assurance, Information Management, or Project Management for IT Professionals; and

- electives.

A description of the curriculum for the information systems management major begins on p. 62. Descriptions of other computer-related curricula may be found on the following pages: computer and information science (p. 26), computer information technology (p. 28), computer science (p. 30), computer studies (p. 31), computing (p. 33), and information assurance (p. 60).

IFSM 201 Introduction to Computer-Based Systems (3)

(Course activities require access to a standard office productivity package, i.e., word processing, spreadsheet, database, and presentation software.) An overview of computer information systems in which hardware, software, procedures, systems, and human resources are explored in relation to their integration and application in business and other segments of society. Students may receive credit for only one of the following courses: BMGT 301, CAPP 101, CAPP 300, CMST 300, IFSM 201, or TMGT 201.

IFSM 300 Information Systems in Organizations (3)

(Course activities require access to Microsoft Office Professional.) Prerequisite: IFSM 201 and basic knowledge of office productivity software. An overview of information systems and how they provide value in organizations by supporting organizational (or business) objectives. Discussion covers human aspects of computing, types of computer systems, and general theory of systems and their relationship to the overall organization.

IFSM 302 Workplace Productivity (3)

Recommended: IFSM 201. A survey of techniques for improving the productivity of practices and procedures in the workplace. Teaming (e.g., encouraging employees' participation in group activities, brainstorming, and making meetings more effective) and problem solving (e.g., simplifying work; charting work-flow processes; diagramming causes and effects; and using Pareto analysis, histograms, and total quality management) are the two major approaches emphasized.

IFSM 303 Human Factors in Information Systems (3)

Recommended: IFSM 201. A general survey of the application of human factors to the design and use of information systems. Topics include the history, evolution, and current state of the human/computer interface. The contributions of psychology, engineering, and physiology to the development of ergonomics are described.

IFSM 304 Ethics in the Information Age (3)

Recommended: IFSM 201. An introduction to information systems as used to provide information for decision making in a democratic society. Discussion covers the philosophy, techniques, and ethical considerations involved in evaluating information systems.

IFSM 310 Software and Hardware Concepts (3)

Prerequisite: CMIS 102 or CMIS 102A. A survey of computer systems. Emphasis is on the interrelationships of hardware architecture, system software, and application software. Topics include the architectures of processors and storage systems and implications for system software design. Discussion also covers the effects of the design of hardware and system software on the development of application programs in a business environment. Students may receive credit for only one of the following courses: CMIS 270, CMIS 310, CMSC 311, or IFSM 310.

IFSM 350 Wireless Telecommunications (3)

Prerequisite: IFSM 201. An analysis of technical and managerial perspectives on basic concepts and applications in wireless telecommunication systems. The implications of the regulatory environment and communications standards on transmission of voice and data are examined. Other topics include an overview of second generation (2G), third generation (3G), and global systems of mobile (GSM) wireless communications; code-division multiple access (CDMA); and trends in wireless communication. Students may receive credit for only one of the following courses: IFSM 350 or IFSM 398W.

IFSM 410 Database Concepts (3)

Prerequisites: CMIS 102 (or CMIS 102A) and IFSM 300. An introduction to the design and management of database systems in a business environment. Topics include the role of databases in organizations, the management of information as a critical business resource, types and functions of database management systems, conceptual data modeling and entity/relationship and semantic data models, and the fundamental principles of relational and object-oriented database design. The implementation and maintenance of database management systems and the role of the database administrator are discussed. Students may receive credit for only one of the following courses: CMIS 320 or IFSM 410.

IFSM 411 SQL (3)

Prerequisite: IFSM 410 or CMIS 320. In-depth practice using Structured Query Language (SQL), the most common database manipulation language. Business-related case studies illustrate the various uses of SQL. Discussion covers the underlying theory of relations (including relational operators, keys, and entity and referential integrity). Students may receive credit for only one of the following courses: CMIS 420, IFSM 411, or IFSM 498I.

IFSM 420 Advanced Database Concepts (3)

Prerequisite: IFSM 411 or CMIS 320. Investigation and application of advanced database concepts, including database administration, database technology, and the selection and acquisition of database management systems. An intensive practicum in data modeling and system development in a database environment is provided. An overview of future trends in data management is also included.

IFSM 430 Information Systems and Security (3)

Prerequisite: IFSM 300. A survey covering aspects of establishing and maintaining a practical information security program. The security aspects and implications of databases, telecommunication systems, and software are examined, along with techniques used to assess risks and discover abuses of systems.

IFSM 431 Policy Planning for Security Architects (3)

Prerequisites: IFSM 300 and an upper-level writing course (such as COMM 393 or WRTG 393). A study of various aspects of information assurance (IA) policy planning in an organizational context. Topics include the impact of current legislation and government regulations directing the focus of policy formulation. Key analysis procedures, such as security requirements analysis and risk assessments, are examined to determine their role in policy formation. Projects include generating an information security program for an organization.

IFSM 432 Disaster Recovery Planning (3)

Prerequisite: IFSM 300. Recommended: IFSM 430. A study of disaster recovery and emergency planning as applied to the information-systems function in corporations. Topics include security risk evaluation and management, creation of threat profiles, continuity of operations planning, contingency planning, and incident reporting. A self-directed approach/tool for the conduct of information security risk evaluation is introduced. Projects include developing a security protection strategy and plan. Students may receive credit for only one of the following courses: IFSM 432 or IFSM 498N.

IFSM 433 Information Security Needs Assessment and Planning (3)

Prerequisite: IFSM 300. Recommended: IFSM 430. In-depth practice in gathering security requirements to generate a security plan. Topics include the collection and analysis of functional security requirements, risk analysis, requirements traceability matrices and the collection of metrics, the investigation of physical security, operational procedures and legal issues related to information security, and the identification of education and training requirements. Projects include generating a site security plan based on site-specific or case-study requirements.

IFSM 438 Project Management (3)

Prerequisite: IFSM 300. An exposition of planning, scheduling, and controlling a system project during its life cycle. Topics include the use of project-management techniques such as PERT (Project Evaluation and Review Technique) and Gantt charts and other techniques of planning, scheduling, and controlling projects. Demonstrations and exercises in using project-management software are provided. Students may receive credit for only one of the following courses: IFSM 438 or TMGT 430.

IFSM 450 Telecommunication Systems in Management (3)

Prerequisites: IFSM 300 and 310. An analysis of technical and managerial perspectives on basic concepts and applications in telecommunication systems. An overview of data communication protocols and standards; local area networks, wide area networks, and internetworks; and trends in telecommunications is provided. The implications of the regulatory environment and communications standards on transmission of voice, data, and image are examined. Students may receive credit for only one of the following courses: CMIS 370, CMSC 370, or IFSM 450.

IFSM 454 Information System Security Mechanisms (3)

Prerequisite: IFSM 450. Recommended: IFSM 430. A hands-on technical examination of six areas of security vital to any organization: authentication, authorization and access control, confidentiality, availability, data integrity (encryption), and nonrepudiation. Topics include firewalls, intrusion detection systems (IDSs), vulnerability software, Public-Key Infrastructure (PKI), IP security (IPSec), virtual private networks (VPNs), and Web server lockdown procedures. Review also covers the types of attacks often launched on the Internet and how they are performed. Projects include demonstrations of network software used to gain information about a network, perform attacks, and/or prevent attacks.

IFSM 457 Cyberterrorism (3)

(Formerly IFSM 497C.) Prerequisite: IFSM 300. An overview of the issues surrounding cyberterrorism, including low-level threats (attacks that vandalize Web pages or launch denial of service), middle-tier threats (online fraud and industrial espionage by companies, organized crime, and nation states), and high-end threats from nation states and terrorist groups. Socioeconomic motivations and the "hacker mentality" are explored. Review also covers common network and security loopholes, the concept of social engineering and its impact on IT security, existing government regulations, and the National IT Security Plan. Students may receive credit for only one of the following courses: IFSM 457 or IFSM 497C.

IFSM 459 Security Issues and Emerging Technologies (3)

Prerequisite: IFSM 450. Recommended: IFSM 430. A detailed overview of various emerging network technologies such as wireless networks based on IEEE 802.11 standards, Mobile Ad Hoc Networks (MANET), and wireless packet data networks like GPRS and CDMA 2000. Discussion covers the various applications based on these technologies (such as wireless and mobile Internet access, voice over IP, location-based services, etc.) and the security issues involved in supporting these applications. Existing solutions and mechanisms for addressing the security requirements for these applications are examined, and the impact of the solutions on the quality of service is analyzed. The emerging security standards and best practices for these new technologies are also described, along with their salient strengths and weaknesses.

IFSM 461 Systems Analysis and Design (3)

Prerequisite: IFSM 300. A study of the methods used in analyzing needs for information and in specifying requirements for an application system. Implementation of the operational system, integration of computer technology, and aspects of organizational behavior in the design support system are examined. Topics include the concept of the system life cycle, the iterative nature of the processes of analysis and design, and the methodology for developing a logical specification and physical design for an operational system. Students may receive credit for only one of the following courses: IFSM 436, IFSM 460, or IFSM 461.

IFSM 485 Trends and Projects in Information Assurance (3)

(Intended as a final, capstone course to be taken in a student's last 15 credits.) Prerequisite: IFSM 454. A study of information assurance that integrates knowledge gained through previous coursework and experience and builds on that conceptual foundation through integrative analysis, practical application, and critical thinking. Emerging issues in information assurance are considered.

IFSM 486A Internship in Information Systems Management Through Co-op (3)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 246). An opportunity to combine academic theory with new, career-related experience in information systems management. At least 12 hours per week must be devoted to new tasks for a minimum of 180 hours during the Co-op session; four new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to information systems management and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

IFSM 486B Internship in Information Systems Management Through Co-op (6)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 246). An opportunity to combine academic theory with new, career-related experience in information systems management. At least 20 hours per week must be devoted to new tasks for a total of 300 hours during the Co-op session; five to eight new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to information systems management and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

Japanese

Courses in Japanese (designated JAPN) may be applied as appropriate (according to individual program requirements) toward

- the general education requirement in the arts and humanities;
- a major or minor in humanities and Asian studies; and
- electives.

UMUC offers a limited number of foreign language courses each session.

A description of the curriculum for the humanities major and minor begins on p. 56. A description of the curriculum for the Asian studies major and minor begins on p. 17.

JAPN 111 Elementary Japanese I (3)

(Not open to native speakers of Japanese; assumes no prior knowledge of Japanese.) An elementary study of Japanese. Emphasis is on oral communication skills as a foundation for building balanced proficiency in the four communication skills of listening, speaking, reading, and writing. Topics include basic structures, vocabulary, pronunciation, and writing, as well as elements of culture, history, and geography. Authentic text from native speakers is used as much as possible.

JAPN 112 Elementary Japanese II (3)

(Not open to native speakers of Japanese.) Prerequisite: JAPN 111. Continued basic study of Japanese, emphasizing oral communication as a foundation for building a balanced development of proficiency in the four communication skills of listening, speaking, reading, and writing. Basic structures, vocabulary, pronunciation, and writing are practiced. Topics include basic structures, vocabulary, pronunciation, and writing, as well as further elements of culture, history, and geography. Oral and written authentic text from native speakers is used as much as possible.

JAPN 114 Elementary Japanese III (3)

(Not open to native speakers of Japanese.) Prerequisite: JAPN 112. Further development of skills in listening, speaking, reading, and writing in Japanese. Japanese culture, history, current events, and geography provide the context for instruction in grammatical structures, vocabulary, pronunciation, character recognition and writing, and composition. Focus is on acquiring the skills necessary to communicate with native Japanese speakers orally and in writing at an advanced elementary level. Oral and written authentic text is used as much as possible.

JAPN 115 Elementary Japanese IV (3)

(Not open to native speakers of Japanese.) Prerequisite: JAPN 114. Improvement of skills in listening, speaking, reading, and writing in Japanese. Japanese culture, history, current events, and geography provide the context for instruction in grammatical structures, vocabulary, pronunciation, character recognition and writing, and composition. Focus is on acquiring the skills necessary to communicate with native Japanese speakers orally and in writing at a basic intermediate level. Oral and written authentic text is used as much as possible.

Journalism

Courses in journalism (designated JOUR) may be applied as appropriate (according to individual program requirements) toward

- a major or minor in communication studies;
- a minor in journalism; and
- electives.

JOUR 201 fulfills the general education requirement in communications.

UMUC offers only a limited number of courses each term in this discipline.

A description of the curriculum for the journalism minor begins on p. 66. Descriptions of related curricula may be found on the following pages: communication studies (p. 24) and speech communication (p. 82).

JOUR 201 Writing for the Mass Media (3)

(Fulfills the general education requirement in communications.) Prerequisite: WRTG 101/101X or ENGL 101/101X. An introduction to writing news and feature articles for print, broadcast, and online media. Emphasis is on writing—from mechanics (grammar, spelling, punctuation, and journalism style) to content (accuracy, completeness, audience, and readability)—and reporting.

JOUR 202 Editing for the Mass Media (3)

Prerequisite: JOUR 201. Presentation of the basic editing skills that apply to all mass media. Hands-on practice in copyediting, fact checking, headline writing, photo selection, and page layout is provided. Students may receive credit for only one of the following courses: JOUR 202 or JOUR 310.

JOUR 319B Issues in Online Journalism (1)

A review of the recent history of online journalism that stresses the issues and challenges that writers face in this medium. Online newspapers and journals are reviewed for content and design. The basics of setting up an online newspaper—from getting source material to designing the look of the publication—are examined.

JOUR 330 Public Relations Theory (3)

Prerequisite: JOUR 201. A study of the historical development and contemporary status of public relations in business, government, associations, and other organizations. Communication theory and social science methodology are studied as they apply to the research, planning, communication, and evaluation aspects of the public relations process.

JOUR 331 Public Relations Techniques (3)

Prerequisite: JOUR 330. A review of the techniques of public relations. Emphasis is on news releases, publications and printed materials, speeches, special events, and audiovisual media. Techniques are applied in laboratory and field projects. Students may receive credit for only one of the following courses: BMGT 398U or JOUR 331.

JOUR 350 Photojournalism in the Digital Age (3)

(Students are required to use their own digital camera.) An exploration of techniques and trends in photojournalism. Practice in the fundamentals of photography (exposure, basic lighting techniques, portraiture and composition, and scanning and digitally toning photos using Photoshop) is provided. Assignments include developing a mini portfolio of short photo essays and a final story project to be published on the course Web site. The history of photojournalism is surveyed, focusing on the recent development of webzines and online newspapers.

JOUR 371 Magazine Article and Feature Writing (3)

Prerequisite: JOUR 201. A study of various types of feature articles, particularly in the magazine market. Analysis covers the medium and its specialized audiences. Practice in researching and writing the feature article and in evaluating freelance markets is provided.

JOUR 410 History of Mass Communication (3)

Prerequisite: WRTG 101/101X or ENGL 101/ENGL 101X. Recommended: COMM 300 or a journalism class. A discussion of the development of newspapers, magazines, radio, television, and motion pictures as media of mass communication. The influence of the media on the historical development of the nation is considered.

JOUR 459 Special Topics in Mass Communication (3)

Prerequisite: WRTG101/101X or ENGL 101/101X. Recommended: COMM 300 or a journalism class. An in-depth study of a specific area in journalism or public relations. Topics may focus on areas such as international public relations, crisis communication, newsroom management, environmental journalism, or political campaigns. Assignments include advanced reading and research. May be repeated to a maximum of 6 credits when topics differ.

JOUR 486A Internship in Journalism Through Co-op (3)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 246). An opportunity to combine academic theory with new, career-related experience in journalism. At least 12 hours per week must be devoted to new tasks for a minimum of 180 hours during the Co-op session; four new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to journalism and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

JOUR 486B Internship in Journalism Through Co-op (6)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 246). An opportunity to combine academic theory with new, career-related experience in journalism. At least 20 hours per week must be devoted to new tasks for a total of 300 hours during the Co-op session; five to eight new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to journalism and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

Legal Studies

Courses in legal studies (designated LGST) may be applied as appropriate (according to individual program requirements) toward

- a major in legal studies;
- a certificate in Negotiation and Conflict Management or Paralegal Studies; and
- electives.

LGST 360 and 363A may be applied toward the general education requirement in interdisciplinary issues/computing.

A description of the legal studies major begins on p. 68.

LGST 101 Introduction to Law (3)

A survey of the U.S. legal system and the role of the paralegal in the legal environment. Topics include the organization and powers of federal and state lawmaking institutions, court procedures, and the analysis of statutory provisions and judicial opinions. Students may receive credit for only one of the following courses: LGST 101 or PLGL 101.

LGST 200 Techniques of Legal Research (3)

Prerequisite or corequisite: LGST 101. An introduction to the book-based methods used to locate relevant, mandatory, and current rules and interpretations. Topics include the analysis, publication, and citation of judicial opinions, statutory provisions, and administrative law and the features and use of secondary sources, digests, and citators. Computer-assisted research systems are introduced, but assignments require legal research in a physical library with a hard-copy law collection. Students may receive credit for only one of the following courses: LGST 200 or PLGL 200.

LGST 201 Legal Writing (3)

Prerequisite: LGST 200. An introduction to the principles of writing clearly and effectively in the legal environment. Emphasis is on types of documents that paralegals may be called upon to draft, including intake memos, legal synthesis and office memos, and client letters. Students may receive credit for only one of the following courses: LGST 201 or PLGL 201.

LGST 204 Legal Ethics (3)

A survey of basic principles relating to the ethical practice of law. Rules and guidelines governing the ethical conduct of lawyers and nonlawyers are covered, as are law office management principles relevant to ethical requirements. Students may receive credit for only one of the following courses: LGST 204 or PLGL 204.

LGST 223 Investigative Techniques (3)

An exploration of the techniques for gathering factual information relevant to legal situations. Topics include interviewing and using a wide variety of print and online resources to obtain information related to individuals, businesses, institutions, and organizations. Students may receive credit for only one of the following courses: CCJS 220, LGST 223, or PLGL 223.

LGST 312 Torts (3)

Prerequisite: LGST 201. A study of the causes of action, defenses, and remedies in the major categories of tort law, as well as tort-litigation procedures and writings for which a paralegal may be responsible. Topics include intentional torts, negligence, strict liability, damages, and civil procedures. Assignments include legal research and written analysis. Students may receive credit for only one of the following courses: LGST 312 or PLGL 312.

LGST 314 Workers' Compensation Law (1)

A thorough study of the Maryland Workers' Compensation Act and the practice of workers' compensation law in Maryland. Practical aspects of the workers' compensation system (including jurisdiction, employer/employee relationships, injuries covered by the Act, defenses, compensation benefits, vocational rehabilitation, and appeals) are covered. Students may receive credit for only one of the following courses: LGST 314 or PLGL 398H.

LGST 315 Domestic Relations (3)

Prerequisite: LGST 201. A study of the various legal aspects of family law. Emphasis is on the processes, procedures, and writings a paralegal may handle. Topics include divorce, separation, and annulment; child custody and visitation; and alimony, child support, disposition of property, and legal rights of children. Relevant aspects of civil procedures, enforcement, and the modification of orders and agreements are covered. Assignments include legal research and written analysis. Students may receive credit for only one of the following courses: FMCD 487, LGST 315, or PLGL 315.

LGST 316 Estates and Probate (3)

Prerequisite: LGST 201. A study of the legal concepts entailed in drafting and preparing simple wills and administering estates in Maryland, as well as the processes, procedures, and writings for which a paralegal may be responsible. Topics include preliminary and practical considerations of administering an estate; the appraisal of estate assets and probate inventory; inheritance taxes; claims against the estate; management of debts, accounting, and distribution considerations; the drafting and execution of wills; and guardianships. Assignments include legal research and written analysis. Students may receive credit for only one of the following courses: LGST 316, PLGL 216, or PLGL 316.

LGST 320 Criminal Law and Procedures (3)

Prerequisite: LGST 201. A study of the substantive and procedural aspects of the criminal justice system, particularly those aspects related to the work of a paralegal. Topics include crimes and defenses, penalties, and court procedures. Assignments include legal research and written analysis. Students may receive credit for only one of the following courses: CJUS 234, LGST 320, or PLGL 320.

LGST 322 Evidence (3)

Prerequisite: LGST 201. A study of laws that govern the admissibility of evidence for establishing or controverting facts in trials and administrative proceedings, and the role of the paralegal in gathering evidence and helping attorneys prepare for trial. Assignments include legal research and written analysis. Students may receive credit for only one of the following courses: LGST 322, PLGL 222, or PLGL 322.

LGST 325 Litigation (3)

Prerequisite: LGST 201. An examination of the process of civil litigation and the responsibilities commonly assigned to paralegals. Topics include investigation and interviewing, preparation of pleadings and motions, discovery, the conduct of the trial, and post-trial activity. Assignments include legal research and written analysis. Students may receive credit for only one of the following courses: LGST 325 or PLGL 325.

LGST 327 Alternative Dispute Resolution (3)

An overview of the various processes and techniques to settle disputes without court adjudication. Topics include negotiation, mediation, and arbitration. Students may receive credit for only one of the following courses: LGST 327, PLGL 327, or PLGL 398G.

INFORMATION ON COURSES

LGST 330 Administrative Law (3)

Prerequisite: LGST 201. An overview of the functions and procedures of federal and state administrative agencies, as well as preparation of writings pertinent to administrative law practice. Topics include rulemaking, adjudication, the use and control of agency discretion, and disclosure of information. Assignments include legal research and written analysis. Students may receive credit for only one of the following courses: LGST 330 or PLGL 330.

LGST 335 Elder Law (3)

Prerequisite: LGST 201. An overview of legal issues that are increasingly relevant as the older population increases. Topics include health care, public entitlements, and legal and financial decision making. Emphasis is on the role of the paralegal in those areas. Assignments include legal research and written analysis. Students may receive credit for only one of the following courses: LGST 335, PLGL 335, or PLGL 398E.

LGST 340 Contract Law (3)

Prerequisite: LGST 201. A comprehensive study of the major areas of contract law that paralegals are most likely to encounter. Topics include formation, interpretation and enforcement, discharge, and breach and remedies for breach. Assignments include legal research and written analysis. Students may receive credit for only one of the following courses: LGST 340 or PLGL 340.

LGST 343 Real Estate Transactions (3)

Prerequisite: LGST 201. A study of the essentials of real estate law. Emphasis is on settlement procedures in Maryland, especially the processes, procedures, and writings for which a paralegal may be responsible. Topics include real estate contracts, types and sources of mortgage financing, title work, and closing and settlement. Other topics include easements and covenants and condos, PUDs, and co-ops. Assignments include legal research and written analysis. Students may receive credit for only one of the following courses: LGST 343 or PLGL 343.

LGST 345 Landlord/Tenant Law (1)

A nuts-and-bolts study of landlord/tenant issues. Focus is on the rights and obligations of landlords in rental properties and the rights of tenants and how to assert those rights. Topics include lease provisions and eviction processes and how to defend against eviction. Assignments include legal research and written analysis. Students may receive credit for only one of the following courses: LGST 345 or PLGL 398K.

LGST 350 Sports Law (3)

(Formerly LGST 398A.) Prerequisite: LGST 201. A study of the laws that apply to sports and the role paralegals may play. Topics include the laws that apply to the business of sports and issues such as ethics, contracts, Title IX, representation of athletes, and drug testing. Students may receive credit for only one of the following courses: LGST 350 or LGST 398A.

LGST 360 Computer Application in the Legal Environment (3)

(Course activities require access to a standard office productivity package, i.e., word processing, spreadsheet, database, and presentation software.) Prerequisite: IFSM 201. An overview of uses of computer software in the legal environment. The concepts and theory of computer operations are explained in the context of needs analysis for law firms. Emphasis is on applications such as text processing, database management, electronic spreadsheets, timekeeping, docket control, and litigation support. Students may receive credit for only one of the following courses: CAPP 343, LGST 360, or PLGL 360.

LGST 363A Computer-Assisted Litigation Support (3)

(Course activities require access to a standard office productivity package, i.e., word processing, spreadsheet, database, and presentation software.) Prerequisites: IFSM 201 and LGST 325. A focused study of the use of text processing, database management, and electronic spreadsheets to support litigation. Topics include document discovery; document coding and abstracting; search and retrieval methods; project management; and preparing trial exhibits, presentations, and other visual aids. Students may receive credit for only one of the following courses: LGST 363A or PLGL 363A.

LGST 370 Advanced Legal Analysis (3)

Prerequisite: LGST 201. An advanced study of the legal analysis skills needed by the paralegal to successfully complete a variety of tasks in the legal environment. Skills covered include spotting and framing legal issues, analyzing and applying relevant law to predict and advocate the outcome of legal issues, and using legal rules and interpretations to develop informal and formal discovery plans. Assignments include legal research and written analysis. Students may receive credit for only one of the following courses: LGST 370 or PLGL 370.

LGST 398B Public Housing (1)

A thorough review of federal and state law pertaining to public housing to prepare the paralegal to represent individuals in public housing cases, including admission and eligibility requirements, preferences and admissions, rent computation procedures, lease requirements, repair requirements, security deposits, rent increases, recertification of income, and termination proceedings. Practical aspects, including procedures in formal and informal hearings, are covered.

LGST 398C Social Security Cases (1)

A thorough review of the pertinent Social Security regulations, case law, and procedure for Social Security Disability (SSD) and Supplemental Security Income (SSI) cases to prepare the paralegal to represent individuals at Social Security Administration hearings. Practical aspects—including cross-examining vocational experts, analyzing medical records, preparing witness and client direct examination and opening statements and closing arguments, and evaluating hypothetical client cases—are covered.

LGST 398D Drug and Alcohol Cases in Maryland (1)

A hands-on survey of the statutes, regulations, and case law governing the sentencing, commitment, and treatment of drug and alcohol offenders in Maryland, including those with dual diagnoses. Procedures and forms are discussed and illustrated.

LGST 398F Civil Litigation Filings in Federal Court (1)

A study of the rules and practical aspects of civil trial filings in federal court, specifically the U.S. District Court for the District of Maryland. Topics include review of the federal court system; applicable rules of federal civil procedure, including those pertaining to federal court jurisdiction; determining whether federal or local court rules apply; preparation and filing of complaints, motions, discovery, and other pleadings; and service of process. Focus is on learning how to assist attorneys with preparing and filing pleadings, including complaints, discovery, answers, and motions (such as those for postponement of trial). Discussion covers practical considerations, including location of courts, courthouse etiquette, copy requirements, obtaining copies of documents from court, and organization of trial folders.

LGST 398G Civil Litigation Filings in Maryland State Courts (1)

A study of the rules and practical aspects of civil trial filings in Maryland district and circuit courts. Topics include the applicable Maryland rules of civil procedure, including those pertaining to jurisdiction of district and circuit courts; the filing of complaints, motions, and other pleadings; and service of process. Focus is on learning how to assist attorneys with preparing and filing pleadings, including complaints, discovery, answers, and motions (such as those for postponement of trial). Discussion covers practical considerations, including location of courts, courthouse etiquette, copy requirements, obtaining copies of documents from court, and organization of trial folders.

LGST 398H Immigration Law: Deportation and Removal (1)

(Designed primarily for students with prior experience or study in the area of immigration law.) A hands-on survey of immigration statutes, regulations, and case law as they relate to deportation and removal proceedings. Topics include the types of applications that can be filed to prevent deportation or removal; the procedural rules of the Immigration Courts in Baltimore, Maryland, and Arlington, Virginia; and the types of evidence that can be submitted to defend against deportation or removal. Procedures and forms are illustrated.

LGST 398J Elder Guardianships in Maryland (1)

A thorough review of the statutes and regulations pertaining to elder guardianships in Maryland and the paralegal's role in assisting attorneys in representing elderly clients and/or their families. Topics include the guardianship process, qualifications of the petitioner for guardianship, postpetition procedures, obtaining emergency guardianships, obtaining medical records of those alleged to be disabled, and avoiding guardianships with advance directives. Discussion also covers guardianship of person and property, eligibility for guardianship, appointment of counsel for those alleged to be disabled, and guardian reporting and oversight. Procedure and forms, including petitions and show cause orders, are illustrated.

LGST 398Q Discovery Fundamentals (1)

A thorough study of the rules and practical aspects of preparing and responding to discovery requests in Maryland and federal courts and the paralegal's role in the discovery process. Topics include applicable Maryland and federal rules of procedure; applicable privileges; significance of the discovery process; ethical obligations with regard to discovery responses; and tactical considerations in responding to discovery requests. Focus is on learning how to assist attorneys with the preparation and filing of discovery requests (such as interrogatories, requests for admissions, requests for production of documents, subpoenas, and deposition notices) and on preparing responses to discovery, including initial disclosure obligations under the federal rules. Discussion also covers electronic discovery and practical considerations, such as managing and maintaining discovery files.

LGST 398U Diversity Issues in Dispute Resolution (1)

A study of the influence of race, ethnicity, gender, nationality, religiosity, and other social group designations on approaches to and course of conflict, with focus on legal disputes. Topics include stereotyping, cultural differences in approaches to conflict, and the impact of bigotry and discrimination on the course of conflict. Strategies for effectively dealing with these issues in legal, dispute-resolution, and personal settings are considered.

LGST 398W Domestic Violence Cases in Maryland (1)

A thorough review of statutes and court rules pertaining to domestic violence cases in Maryland. Focus is on acquiring the knowledge to assist attorneys in representing victims in criminal and civil court proceedings. Procedures and forms, including protective order/peace order petitions and motions, are illustrated. Topics include the victim's socioeconomic status, race/ethnicity, gender, and culture and resources outside the court system.

LGST 400 Advanced Legal Research and Analysis (3)

Prerequisite: LGST 200. A focused look at identifying legal issues and supportive primary and secondary legal authority using a variety of tools in Lexis, Westlaw, and the Internet. Students learn to develop research strategies to perform complex legal research and extensive legal analysis. Students may receive credit for only one of the following courses: LGST 400 or PLGL 400.

LGST 401 Advanced Legal Writing (3)

Prerequisites: LGST 201 and 204. A thorough grounding in the principles and techniques of drafting sophisticated legal memoranda that paralegals may be called upon to prepare. Kinds of writings that are covered include complex office and advocacy memoranda, as well as selected parts of appellate briefs. Assignments include legal research. Students may receive credit for only one of the following courses: LGST 401 or PLGL 401.

LGST 411 Consumer Protection Law (3)

Prerequisite: LGST 201. A general overview of consumer protection law and the roles of federal, state, and local agencies. Topics include warranties, the regulation of consumer credit, restrictions on advertising, and credit reporting. Assignments include legal research and written analysis. Students may receive credit for only one of the following courses: LGST 411 or PLGL 411.

LGST 415 Intellectual Property (3)

Prerequisite: LGST 201. An overview of patents, trademarks, and copyright law. Emphasis is on the role of the paralegal in application, maintenance, research, and litigation processes. Assignments include legal research and written analysis. Students may receive credit for only one of the following courses: LGST 415, PLGL 398D, or PLGL 415.

LGST 420 Immigration Law (3)

Prerequisite: LGST 201. An overview of the laws, agencies, and procedures involved in U.S. immigration law and the role of paralegals in immigration practice. Topics include sources and administration of immigration law and research and preparation of various immigration documents. Assignments include legal research and written analysis. Students may receive credit for only one of the following courses: LGST 420, PLGL 398F, or PLGL 420.

LGST 425 Advanced Civil Litigation (3)

Prerequisites: LGST 201 and 325. Recommended: LGST 322. A study of the nuts and bolts of paralegal practice in large-case civil litigation. Topics include discovery and motion practice; pretrial preparation, including the pretrial memorandum; and preparation of the excerpt of record for the appellate court. Assignments include legal research and written analysis. Students may receive credit for only one of the following courses: LGST 425 or PLGL 398N.

LGST 432 Environmental Law (3)

Prerequisite: LGST 201. An exploration of the statutory and regulatory bases of environmental law, for the prospective paralegal. Topics include the role of federal agencies in such undertakings as controlling various types of pollution, assessing and managing risk, and regulating toxic substances. Assignments include legal research and written and oral analysis. Students may receive credit for only one of the following courses: LGST 432, PLGL 332, or PLGL 432.

LGST 442 Business Organizations (3)

Prerequisite: LGST 201. Recommended: LGST 340. An overview of the legal aspects of establishing, organizing, developing, and operating a business enterprise and the processes, procedures, and writings for which a paralegal may be responsible. Assignments include legal research and written analysis. Students may receive credit for only one of the following courses: LGST 442, PLGL 342, or PLGL 442.

LGST 445 Employment Law (3)

Prerequisite: LGST 201. An overview of federal and state laws governing the employment relationship in the public and private sectors. Topics include employee protection from discrimination and harassment, employer obligations toward disabled workers, privacy issues, and employment contract matters. Focus is on the knowledge and practical skills required for a paralegal working in this area. Assignments include legal research and written analysis. Students may receive credit for only one of the following courses: LGST 445 or PLGL 398O.

LGST 450 Bankruptcy Law (3)

Prerequisite: LGST 201. A study of the bankruptcy code, the related rules of procedure, and the role of the paralegal in assisting attorneys in bankruptcy practice. Techniques detailed include how to identify and gather relevant data and how to draft and file appropriate documents. Assignments include legal research and written analysis. Students may receive credit for only one of the following courses: LGST 450 or PLGL 450.

LGST 486A Legal Studies Internship Through Co-op (3)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 246). An opportunity to combine academic theory with new, career-related experience in legal studies. At least 12 hours per week must be devoted to new tasks for a minimum of 180 hours during the Co-op session; four new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to legal studies and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

LGST 486B Legal Studies Internship Through Co-op (6)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 246). An opportunity to combine academic theory with new, career-related experience in legal studies. At least 20 hours per week must be devoted to new tasks for a total of 300 hours during the Co-op session; five to eight new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to legal studies and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

Library Skills and Information Literacy

Courses in library skills (designated LIBS) may be applied toward

- the general education requirement in information literacy; and

- electives.

Degree-seeking students must complete LIBS 150 (or present its equivalent in transfer) during the first 18 credits of enrollment at UMUC.

LIBS 150 Information Literacy and Research Methods (1)

An introduction to the research process and methods for retrieving information in a library or through online sources. Development of a research topic and the creation of effective strategies for finding relevant information are discussed and practiced. The following information literacy skills are emphasized: understanding the research process; selecting appropriate print and electronic sources to answer research questions; effectively using Web search engines and UMUC Information and Library Services' electronic resources to find information; and evaluating, organizing, and correctly citing the information found. Credit for LIBS 150 may not be earned through challenge exam or portfolio credit. Students may receive credit for only one of the following courses: COMP 111, LIBS 100, or LIBS 150.

Marketing

Courses in marketing (designated MRKT) may be applied as appropriate (according to individual program requirements) toward

- a major in marketing, business administration, global business and public policy, or management studies;

- a minor in marketing, business administration, or management studies;

- a certificate in Marketing Communications, Marketing Management, or E-Commerce in Small Business; and

- electives.

A description of the curriculum for the marketing major and minor begins on p. 72. Descriptions of other management-related curricula may be found on the following pages: accounting (p. 13), business administration (p. 21), environmental management (p. 40), fire science (p. 45), global business and public policy (p. 50), human resource management (p. 58), and management studies (p. 70).

MRKT 310 Marketing Principles and Organization (3)

An introduction to the field of marketing, intended to develop a general understanding and appreciation of the forces, institutions, and methods involved in marketing a variety of goods and services. Topics include segmentation, target marketing, positioning, developing new products, pricing, distributing and promoting goods and services, and sales and marketing management. Students may receive credit for only one of the following courses: BMGT 350, MGMT 322, MRKT 310, or TMGT 322.

MRKT 314 Nonprofit Marketing (3)

Prerequisite: MRKT 310. An introduction to key issues in nonprofit marketing. Topics include nonprofit marketing issues related to constituencies, planning, products and services, membership, and promotion, as well as association and social marketing. Students may receive credit for only one of the following courses: BMGT 398B or MRKT 314.

MRKT 354 Integrated Marketing Communications (3)

Prerequisite: MRKT 310. An in-depth study of promotional activities such as advertising, personal selling, sales promotions, and direct marketing (including use of the Internet). Emphasis is on strategic planning of promotional activities to communicate with customers to achieve marketing objectives. The relationship of integrated marketing communications to other elements of promotional activities is also explored. Students may receive credit for only one of the following courses: BMGT 354 or MRKT 354.

MRKT 395 Customer Relationship Management (3)

Prerequisite: MRKT 310. A study of customer services accompanying a core product and service products themselves. Problems and issues related to the service mix, service-level decisions, the formulation of service policies, customer service management, the development of customer service staff, training, and evaluation are analyzed. Discussion covers customer information, customer surveys and suggestions, the handling of complaints and adjustments, techniques for dealing with difficult and angry customers, dissemination of information, credit services, maintenance, technical service, and the development of new programs. Students may receive credit for only one of the following courses: BMGT 395, BMGT 398A, MGMT 395, MGMT 398A, or MRKT 395.

MRKT 410 Consumer Behavior (3)

Prerequisite: MRKT 310. An overview of the increasing importance of American consumers in the marketing system and the importance of understanding them. Discussion covers the foundations of consumer behavior (such as economic, social, psychological, and cultural factors). Consumers are analyzed in marketing situations as buyers and users of products and services and in relation to the various social and marketing factors that affect their behavior. The influence of well-directed communications is also considered. Students may receive credit for only one of the following courses: BMGT 451, CNEC 437, or MRKT 410.

MRKT 412 Marketing Research Applications (3)

Prerequisites: STAT 230 (or BMGT 230) and MRKT 310. A study of the specialized field of marketing research as it is used to identify market needs, profile target markets, test promotional efforts, and measure the effectiveness of marketing plans. Procedures for planning survey projects, designing statistical samples, tabulating data, and preparing reports are covered. Emphasis is on managing the marketing research function. Students may receive credit for only one of the following courses: BMGT 452 or MRKT 412.

MRKT 454 Global Marketing (3)

Prerequisite: MRKT 310. An in-depth study of marketing principles as they relate to the global marketplace. Emphasis is on understanding the influence of internationalization on the U.S. economy, the competitive pressures on the intensifying global markets, and the development of marketing plans tailored to reach international and global markets. Topics include the political, economic, legal, regulatory, and sociocultural trends affecting international marketing; the dynamic environments in which global marketing strategies are formulated; and the challenge of implementing marketing programs leading to competitive advantage.

MRKT 456 Advertising (3)

Prerequisite: MRKT 310. An exploration of the role of advertising in the American economy. Analysis covers the effects of advertising on economic and social life; the methods and techniques that advertising practitioners use; the role of newspapers, magazines, and other media in developing an advertising campaign; modern methods of research to improve the effectiveness of advertising; and the organization of the advertising business. Students may receive credit for only one of the following courses: BMGT 456 or MRKT 456.

MRKT 457 E-Marketing (3)

Prerequisite: MRKT 310. An exploration of how the use of Web-based computer applications and databases can enhance the marketing process and create relationships with customers. Topics include the use of the Internet in developing marketing strategy, conducting market research, and making marketing-mix decisions. Emphasis is on the Internet as a national and global marketing communications tool. Discussion also covers creative Web site design techniques to measure advertising effectiveness. Students may receive credit for only one of the following courses: BMGT 398O, BMGT 398R, MGMT 398O, MGMT 398R, or MRKT 457.

MRKT 475 Sales Management (3)

Prerequisite: MRKT 310. An overview of the role of the sales manager, both at headquarters and in the field, in managing people, resources, and functions of marketing. The problems of organizing, forecasting, planning, communicating, evaluating, and controlling sales are analyzed. Quantitative techniques and pertinent concepts of behavioral science are applied to the management of the sales effort and sales force. Students may receive credit for only one of the following courses: BMGT 455 or MRKT 475.

MRKT 486A Internship in Marketing Through Co-op (3)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 246). An opportunity to combine academic theory with new, career-related experience in marketing. At least 12 hours per week must be devoted to new tasks for a minimum of 180 hours during the Co-op session; four new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to marketing and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

MRKT 486B Internship in Marketing Through Co-op (6)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 246). An opportunity to combine academic theory with new, career-related experience in marketing. At least 20 hours per week must be devoted to new tasks for a total of 300 hours during the Co-op session; five to eight new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to marketing and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

MRKT 495 Marketing Policies and Strategies (3)

(Intended as a final, capstone course to be taken in a student's last 15 credits.) Prerequisites: MRKT 310 and one other marketing course. A study of marketing that integrates knowledge gained through previous coursework and experience and builds on that conceptual foundation through integrative analysis, practical application, and critical thinking. Emerging issues in marketing are considered. Focus is on the use of appropriate decision models and the analysis of consumers and markets. Students may receive credit for only one of the following courses: BMGT 457 or MRKT 495.

Mathematics

Courses in mathematics (designated MATH) may be applied as appropriate (according to individual program requirements) toward

- the general education requirement in mathematics (with the exception of MATH 009 and 012);
- a minor in mathematical sciences;
- a major in computer science;
- a certificate in Game Development; and
- electives.

Students who are planning to major or minor in management, computing, or science-related fields of business administration, computer and information science, or the biological or social sciences should consider courses from sequence I. Students who are planning a major or minor in computer science, mathematical sciences, or the physical and engineering sciences should consider courses from sequence II. Students in other majors or minors should refer to their chosen curriculum for mathematics requirements.

Sequence I

MATH 009	Introductory Algebra
MATH 012	Intermediate Algebra
MATH 107	College Algebra
MATH 220	Elementary Calculus I
MATH 221	Elementary Calculus II

Approved course in statistics

Sequence II

MATH 009	Introductory Algebra
MATH 012	Intermediate Algebra
MATH 115*	Pre-Calculus
MATH 140	Calculus I
MATH 141	Calculus II
MATH 240	Introduction to Linear Algebra
MATH 241	Calculus III

    * or MATH 107–108

Degree-seeking students must complete the general education requirement in mathematics (or present the equivalent in transfer) during their first 18 credits of enrollment at UMUC.

Placement tests are required for enrollment in MATH 012, 106, 107, 108, 115, 140, and 220. Students may either consult the undergraduate *Schedule of Classes* for times and locations of tests or contact Exams and Testing Services by phone at 800-888-UMUC, ext. 5249, or by e-mail at *exams@umuc.edu.*

Students are expected to own and use scientific calculators in all mathematics and statistics courses.

A description of the curriculum for the mathematical sciences minor begins on p. 74. A description of the computer science major begins on p. 30.

MATH 009 Introductory Algebra (3)

(Not open to students who have already successfully completed a higher-level mathematics course. Does not apply toward degree requirements. Yields institutional credit only.) A comprehensive review of fractions, percentages, operations with signed numbers, and geometric formulas. Basic algebraic topics include exponents, polynomials, and linear equations. Students may receive credit for only one of the following courses: MATH 009, MATH 009M, or MATH 100.

MATH 012 Intermediate Algebra (3)

(Not open to students who have already successfully completed a higher-level mathematics course. Does not apply toward degree requirements. Yields institutional credit only.) Prerequisite: MATH 009 or an appropriate result on the placement test. A study of problem-solving techniques in intermediate-level algebra. Emphasis is on numbers and algebraic properties, graphing skills, and applications drawn from a variety of areas (such as statistics, computing, and discrete mathematics). Topics include polynomials; factoring; exponents and their notation; linear, quadratic, and other equations; and inequalities. Students may receive credit for only one of the following courses: MATH 012, MATH 101, MATH 101M, MATH 102, MATH 102M, MATH 199A, or MATH 199M.

MATH 106 Finite Mathematics (3)

(Not intended for students planning to take MATH 107 or higher-numbered mathematics courses.) Prerequisite: MATH 012 or an appropriate result on the placement test. A survey of selected topics from contemporary mathematics to introduce mathematical thinking. Applications and projects of other disciplines are covered. Topics include problem solving, finance, probability and statistics, linear models, set theory, and logic. Other topics may include sequences and series, geometry, and game theory. Students may receive credit for only one of the following courses: MATH 105 or MATH 106.

MATH 107 College Algebra (3)

(The first course in the two-course series MATH 107–108. An alternative to MATH 115 Pre-Calculus.) Prerequisite: MATH 012 or an appropriate result on the placement test. An introduction to equations, inequalities, and absolute values and a study of functions and their properties, including the development of graphing skills with polynomial, rational, exponential, and logarithmic functions. Applications are also covered. Students may receive credit for only one of the following courses: MATH 107 or MATH 115.

MATH 108 Trigonometry and Analytical Geometry (3)

(The second course in the two-course series MATH 107–108. An alternative to MATH 115 Pre-Calculus.) Prerequisite: MATH 107 or an appropriate result on the placement test. An introduction to trigonometric functions, identities, and equations and their applications. Analytical geometry and conic sections are covered. Additional topics may include matrices, determinants, sequences, and series. Students may receive credit for only one of the following courses: MATH 108 or MATH 115.

MATH 115 Pre-Calculus (3)

(Not open to students who have completed MATH 140 or any course for which MATH 140 is a prerequisite.) Prerequisite: MATH 012 or an appropriate result on the placement test. Explication of elementary functions and graphs. Topics include polynomials, rational functions, and exponential and logarithmic functions. Algebraic techniques preparatory for calculus are presented. Students may receive credit for only one of the following: MATH 107–108 or MATH 115.

MATH 140 Calculus I (4)

Prerequisite: MATH 108, MATH 115, or an appropriate result on the placement test. An introduction to calculus. Topics include functions, the sketching of graphs of functions, limits, continuity, derivatives and applications of the derivative, definite and indefinite integrals, and calculation of area. Students may receive credit for only one of the following courses: MATH 130, MATH 131, MATH 140, or MATH 220.

MATH 141 Calculus II (4)

(A continuation of MATH 140.) Prerequisite: MATH 140. A study of integration and functions, with application, and coverage of other topics. Focus is on techniques of integration, improper integrals, and applications of integration (such as volumes, work, arc length, and moments); inverse, exponential, and logarithmic functions; and sequences and series. Students may receive credit for only one of the following courses: MATH 131, MATH 132, MATH 141, or MATH 221.

MATH 220 Elementary Calculus I (3)

Prerequisite: MATH 107, MATH 115, or an appropriate result on the placement test. A presentation of the basic ideas of differential and integral calculus. Emphasis is on elementary techniques of differentiation, as well as applications. Students may receive credit for only one of the following courses: MATH 130, MATH 131, MATH 140, or MATH 220.

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MATH 240 Introduction to Linear Algebra (4)

Prerequisite: MATH 141 or MATH 132. An explanation of the basic concepts of linear algebra. Topics include vector spaces, applications to line and plane geometry, linear equations, and matrices, as well as linear transformations, changes of basis, diagonalization, similar matrices, Jordan canonical forms, eigenvalues, determinants, and quadratic forms. Students may receive credit for only one of the following courses: MATH 240, MATH 400, or MATH 461.

MATH 241 Calculus III (4)

Prerequisite: MATH 141 or MATH 132. An introduction to multivariable calculus. Exposition covers vectors and vector-valued functions; partial derivatives and applications of partial derivatives (such as tangent planes and Lagrangian multipliers); multiple integrals; volume; surface area; and the classical theorems of Green, Stokes, and Gauss.

MATH 246 Differential Equations (3)

Prerequisite: MATH 141 or MATH 132. An introduction to the basic methods of solving differential equations. Separable, exact, and linear differential equations are addressed. The main techniques considered include undetermined coefficients, series solutions, Laplace transforms, and numerical methods. Students may receive credit only once under this course number.

MATH 301 Concepts of Real Analysis I (3)

Prerequisites: MATH 240 and 241. An approach to real analysis. Topics include sequences and series of numbers, continuity and differentiability of real-valued functions of one variable, the Riemann integral, sequences of functions, and power series. Discussion also covers the functions of several variables, including partial derivatives, multiple integrals, line and surface integrals, and the implicit-function theorem. Students may receive credit for only one of the following courses: MATH 301 or MATH 410.

MATH 381 Operations Research (3)

Prerequisite: MATH 240. An exploration of linear programming models and applications, simplex algorithms, sensitivity analysis, integer programming, and network flow models.

MATH 402 Algebraic Structures (3)

Prerequisite: MATH 240. An overview of groups, rings, integral domains, and fields; detailed study of several groups; and exploration of properties of integers and polynomials. Topics may include an introduction to computer algebra and Boolean algebra.

MATH 450 Logic for Computer Science (3)

(Also listed as CMSC 450.) Prerequisites: CMIS 160 (or CMSC 150) and MATH 141 (or MATH 132). Elementary development of propositional logic (including the resolution method) and first-order logic (including Hebrand's unsatisfiability theorem). Discussion covers the concepts of truth and interpretation; validity, provability, and soundness; completeness and incompleteness; and decidability and semidecidability. Students may receive credit for only one of the following courses: CMSC 450, MATH 444, MATH 445, or MATH 450.

MATH 463 Complex Variables (3)

Prerequisite: MATH 241. A survey of analytic functions, mapping properties of the elementary functions, the algebra of complex numbers, and the Cauchy integral formula. Topics include conformal mapping as well as theory of residues and its application to evaluation of integrals.

MATH 466 Numerical Analysis (3)

Prerequisites: MATH 240 and 241. A study of various methods of numerical analysis. Topics include solutions of equations in one variable, interpolation and polynomial approximation, and numerical integration. Discussion also covers direct methods for solving linear systems and applications to finance and actuarial science.

MATH 486A Internship in Mathematics Through Co-op (3)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 246). An opportunity to combine academic theory with new, career-related experience in mathematics. At least 12 hours per week must be devoted to new tasks for a minimum of 180 hours during the Co-op session; four new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to mathematics and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

MATH 486B Internship in Mathematics Through Co-op (6)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 246). An opportunity to combine academic theory with new, career-related experience in mathematics. At least 20 hours per week must be devoted to new tasks for a total of 300 hours during the Co-op session; five to eight new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to mathematics and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

Music

Courses in music (designated MUSC) may be applied as appropriate (according to individual program requirements) toward

- the general education requirement in the arts and humanities;
- a major or minor in humanities; and
- electives.

UMUC offers a limited number of courses each term in this discipline.

A description of the curriculum for the humanities major and minor begins on p. 56.

MUSC 140 Music Fundamentals I (3)

An introduction to music theory. Notation, scales, intervals, triads, rhythm, form, and basic aural skills are covered. Students may receive credit for only one of the following courses: HUMN 140 or MUSC 140.

MUSC 210 The Impact of Music on Life (3)

A study of music as a part of culture. Materials are drawn from traditions throughout the world to illustrate issues of historical and contemporary significance, including the impact of race, class, and gender on the study of music. Students may receive credit for only one of the following courses: HUMN 211 or MUSC 210.

MUSC 436 Jazz: Then and Now (3)

An examination of jazz in America during the past 75 years—its major styles and influential artists. Students may receive credit for only one of the following courses: HUMN 436 or MUSC 436.

Natural Science

Courses in natural science (designated NSCI) may be applied as appropriate (according to individual program requirements) toward

- the general education requirement in the biological and physical sciences;
- a major in laboratory management;
- a minor in natural science; and
- electives.

A description of the curriculum for the natural science minor begins on p. 75. A description of the curriculum for the laboratory management major begins on p. 66.

NSCI 100 Introduction to Physical Science (3)

(For students not majoring in a science.) Prerequisite: MATH 012 or higher. An introduction to the basic principles of physics, chemistry, astronomy, geology, oceanography, and meteorology. Discussion covers the development of scientific thinking, the scientific method, the relationships among the various physical sciences, and the role of the physical sciences in interpreting the natural world. Students may receive credit for only one of the following courses: GNSC 100 or NSCI 100.

NSCI 101 Physical Science Laboratory (1)

(For students not majoring or minoring in a science. Fulfills the laboratory science requirement only with previous or concurrent credit for NSCI 100.) Prerequisite: MATH 012 or higher. Prerequisite or corequisite: NSCI 100. A laboratory study of the basic principles of physics and chemistry that illustrates how they apply to everyday life as well as to the fields of astronomy, geology, oceanography, and meteorology. Assignments include experiments, observations, and exercises.

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NSCI 170 Concepts of Meteorology (3)

(For students not majoring or minoring in a science.) Prerequisite: MATH 012 or higher. An introduction to the basic principles of atmospheric science. Topics include the effect of different weather elements (such as temperature, pressure, winds, and humidity) on weather patterns and climate. Additional topics include weather phenomena such as El Niño, thunderstorms, tornadoes, and hurricanes, as well as the impact of humans on Earth's atmosphere (with respect to global warming, pollution, and the depletion of the ozone layer). Students may receive credit for only one of the following courses: GNSC 170, GNSC 398D, or NSCI 170.

NSCI 171 Laboratory in Meteorology (1)

(For students not majoring or minoring in a science. Fulfills the laboratory science requirement only with previous or concurrent credit for NSCI 170 or GNSC 170.) Prerequisite: MATH 012 or higher. Prerequisite or corequisite: NSCI 170. An introduction to the basic concepts of meteorology. Focus is on the observation, measurement, and analysis of weather data, including the interpretation of weather patterns and conditions found on weather maps, satellite images, radar imagery, and atmosphere diagrams. Students may receive credit for only one of the following courses: GNSC 171 or NSCI 171.

NSCI 301 Laboratory Organization and Management (3)

(Does not fulfill the general education requirement in the biological and physical sciences.) An overview of the day-to-day organization and management of research and development laboratories. Topics include laboratory operating systems, finances and recordkeeping, communication systems, safety procedures, data management, project planning, problem solving, procurement, personnel training, and inventory execution and maintenance. Students may receive credit for only one of the following courses: GNSC 301, MEDT 301, or NSCI 301.

NSCI 362 Environmental Change and Sustainability (3)

A multidisciplinary study of the relationship between the global environment and human adaptations to it. Emphasis is on the concept of sustainability as it applies to human adaptations and interactions with the environment. Current scientific research is used to explore the scientific, social, and global implications of environmental issues such as global warming, population growth, energy resources, biodiversity, and the genetic modification of organisms. Emphasis is on the environment as "global commons" and individual responsibility in environmental sustainability. Students may receive credit for only one of the following courses: BEHS 361, GNSC 361, HUMN 360, NSCI 361, or NSCI 362.

NSCI 363 The Science of Global Warming and Climate Change (3)

(For students not majoring or minoring in a science.) Prerequisite: MATH 012 or higher. A comprehensive introduction to the study of global warming, including the processes of climate change and climate stability. Focus is on the physical and chemical basis of global climate modeling. Topics include the physical and chemical properties of greenhouse gases, the effects of temperature and energy on climate, the carbon cycle, fossil fuels, and the factors involved in forecasting future climate patterns. Past trends and predictions of climate change are also examined.

NSCI 398 Special Topics in Natural Science (3)

A study of topics in the sciences of special interest to students and faculty.

NSCI 398I Astrobiology (3)

(For students not majoring in a science.) An introduction to planetary astronomy with an overview of biology, geology, and chemistry related to the existence of life on Earth and to speculations that affect the search for life elsewhere in the cosmos. Topics include the chemistry of comets, space missions to Mars and Europa in search of life, the relevance of life on Earth in extreme environments (e.g., deep-sea vents and Antarctica), the assembly of prebiotic amino acids into DNA, and the possibility of life elsewhere in the universe. Students may receive credit for only one of the following courses: ASTR 380, GNSC 398I, or NSCI 398I.

NSCI 398J Energy After Petroleum (1)

A broad survey of all the world's energy sources, their utilization, problems, and possible solutions. The basic laws of physics relating to energy are outlined. Discussion covers energy sources such as solar, fossil fuel, alternate fuels, and geothermal. Physical concepts of energy, power, and energy transformations (including the basic laws of thermodynamics applicable to heat engines) are examined. The political-economic realities that surround viable energy policies are also considered.

Philosophy

Courses in philosophy (designated PHIL) may be applied as appropriate (according to individual program requirements) toward

- the general education requirement in the arts and humanities;
- a major or minor in humanities;
- a minor in philosophy; and
- electives.

UMUC offers only a limited number of courses each term in this discipline.

A description of the curriculum for the philosophy minor begins on p. 75. A description of the curriculum for the humanities major and minor begins on p. 56.

PHIL 100 Introduction to Philosophy (3)

An introduction to the literature, problems, and methods of philosophy. The subject is approached either by studying some of the main figures in philosophic thought or by considering some central, recurring problems of philosophy. Students may receive credit for only one of the following courses: HUMN 125 or PHIL 100.

PHIL 110 Thinking for Yourself (3)

An examination of methods for thinking analytically about real-world problems and solving them. Emphasis is on using inductive and deductive reasoning, proper argumentation, accepted methods of analysis, and synthesis of ideas; recognizing informal logical fallacies; and understanding the role of presuppositions and nonlogical factors as they apply to scientific, social, ethical, political, and other contemporary problems.

PHIL 140 Contemporary Moral Issues (3)

An exploration of how philosophical analysis can be a foundation for thinking clearly about moral issues. Problems analyzed include such widely debated issues as abortion, euthanasia, the death penalty, homosexuality, pornography, reverse discrimination, business ethics, sexual equality, and economic equity. Students may receive credit for only one of the following courses: HUMN 300 or PHIL 140.

PHIL 236 Philosophy of Religion (3)

A philosophical study of some of the main problems of religious thought: the nature of religious experience, the justification of religious belief, the conflicting claims of religion and science, and the relation between religion and morality. Students may receive credit for only one of the following courses: HUMN 236 or PHIL 236.

PHIL 245 Political and Social Philosophy (3)

A critical examination of classical political theories. Examples are drawn from the work of Plato, Hobbes, Locke, Rousseau, Mill, and Marx. Contemporary theories (such as those of Hayek, Rawls, and recent Marxist thinkers) are also covered. Students may receive credit for only one of the following courses: HUMN 245, PHIL 245, or PHIL 345.

PHIL 307 Asian Philosophy (3)

An examination of the major philosophical systems of the East and their relation to important ideas of Western thought.

PHIL 331 Philosophy of Art (3)

A study of concepts central to thought about art, including the concept of the fine arts both in its historical development and in its present problematic situation.

Psychology

Courses in psychology (designated PSYC) may be applied as appropriate (according to individual program requirements) toward

- the general education requirement in the behavioral and social sciences;
- a major in psychology, investigative forensics, or social science;
- a minor in psychology or forensics;
- a certificate in various disciplines; and
- electives.

A description of the curriculum for the psychology major and minor begins on p. 78. Descriptions of related curricula may be found on the following pages: forensics (p. 47), investigative forensics (p. 64), and social science (p. 80).

PSYC 100 Introduction to Psychology (3)

A survey of the basic principles, research concepts, and problems in psychological science. The biological, cognitive, and social perspectives of human thought and behavior are addressed. Topics include neuroscience, sensation and perception, learning and conditioning, memory, motivation, language and intelligence, personality and social behavior, and psychopathology and therapy. Applications of psychology are also presented. Students may receive credit for only one of the following courses: BEHS 101 or PSYC 100.

PSYC 101 Psychology of Adjustment (3)

(Formerly PSYC 235.) A study of theory and research on the psychology of personal adjustment in everyday life. Emphasis is on self-concept, emotions, self-control, interpersonal relations, and stress. Students may receive credit for only one of the following courses: PSYC 101 or PSYC 235.

PSYC 301 Biological Basis of Behavior (3)

Prerequisite: PSYC 100. Recommended: STAT 225 or PSYC 200. An introduction to the anatomical structures and physiological processes that determine behavior. Topics include the acquisition and processing of sensory information, the neural control of movement, and the biological bases of complex behaviors (such as sleep, learning, memory, sex, language, and addiction), as well as the basic functioning of the nervous system.

PSYC 305 Research Methods in Psychology (3)

Prerequisites: PSYC 100 and STAT 225 (or PSYC 200). A survey of research methods focusing on the fundamentals of research design and behavior. Topics include scientific writing using APA style, evaluation of research literature, and ethical issues in research. Practice is provided in asking research questions, formulating research hypotheses, designing and conducting a simulated research study, and presenting results.

PSYC 306 Special Topics in Psychology (1–3)

Prerequisite: PSYC 100. Seminar discussion of topics of current interest. Areas explored may extend or augment those covered in more general topical courses. May be repeated to a maximum of 6 credits when topics differ.

PSYC 306A APA Writing Style for Psychology (1)

Prerequisite: PSYC 100. An introduction to the effective use and application of APA style for research projects, technical papers, and expository writing in the psychological and behavioral sciences.

**PSYC 307 Special Topics in Psychology:
Natural Science Theme (1–3)**

Prerequisite: PSYC 100. Seminar discussion of topics of current interest. Areas explored may extend or augment those covered in more general topical courses. May be repeated to a maximum of 6 credits when topics differ.

PSYC 307D Improving Memory and Thinking (1)

(Formerly PSYC 309D.) Prerequisite: PSYC 100. A presentation of methods of improving memory and thinking as outcomes of basic theory and research. Assignments include workshop activities and critical review of relevant research.

PSYC 307G Parapsychology (1)

Prerequisite: PSYC 100. An introduction to parapsychology and experimental methods used in that field. Topics include the history of parapsychology, superstition and science, ESP in the laboratory, evidence for life after death, and reincarnation. Rival explanations for phenomena are considered critically.

PSYC 307H Sleep and Dreams (1)

Prerequisite: PSYC 100. An introduction to the clinical, cultural, and research aspects of sleep and dreams. Topics include historical and theoretical approaches to sleep and dreams, sleep deprivation and disorders, biological rhythms, typical dreams, and dream interpretation.

PSYC 307X Substance Abuse: An Introduction (1)

(Formerly PSYC 309X.) Prerequisite: PSYC 100. An introduction to the study of drug abuse. Topics include the causes, symptoms, and defenses for substance abuse, as well as prevention and treatment. Review covers biology, personality, life style, and relationships with families, peers, and communities. Drug abuse is compared to other social problems, including self-destructive, high-risk, and sabotaging behavior. How different cultures respond to drug abuse is also addressed. Practice exercises, observations, interviews, and media summaries supplement class discussions.

**PSYC 308 Special Topics in Psychology:
Social Science Theme (1–3)**

Prerequisite: PSYC 100. Seminar discussion of topics of current interest. Areas explored may extend or augment those covered in more general topical courses. May be repeated to a maximum of 6 credits when topics differ.

PSYC 308E Cultivating Executive Skills (1)

Prerequisite: PSYC 100. A presentation of relevant behavioral and managerial science theory, research, and real-world applications of leadership training. Focus is on applied executive skills. Issues of workplace diversity, technology, and effective use of human resources are also covered.

PSYC 308H Psychology of Motivating People at Work (1)

(Formerly PSYC 309H.) Prerequisite: PSYC 100. An examination of successful strategies for motivating people in work settings. Basic theories of work motivation are covered. Focus is on identifying managerial and personal motivational strategies in organizations through review of relevant research and case studies.

PSYC 308K Introduction to Black Psychology (1)

Prerequisite: PSYC 100. An introduction to issues and perspectives in the study of the psychological development of Black people, particularly in America, over the past 100 years. Topics include the Afrocentric and Eurocentric ethos; the nature of Black personality as affected by slavery and racism; psychological assessment, treatment, and counseling techniques; and the relationships between psychological research and social policy in American and Western research.

PSYC 308Q Psychology of Religion (1)

(Formerly PSYC 309Q.) Prerequisite: PSYC 100. An examination of the relationship of modern psychology and traditional religion in finding meaning in human reality and providing concepts and techniques for the ordering of the interior life. Topics include attitudes toward anxiety, issues of guilt, existential trust, the nature of suffering and evil, and the image of God and the function of belief.

**PSYC 309 Special Topics in Psychology:
Clinical Science Theme (1–3)**

Prerequisite: PSYC 100. Seminar discussion of topics of current interest. Areas explored may extend or augment those covered in more general topical courses. May be repeated to a maximum of 6 credits when topics differ.

PSYC 309C Psychology of Eating Disorders (1)

Prerequisite: PSYC 100. An introduction to the current research on eating disorders—anorexia nervosa, bulimia nervosa, and obesity. Topics include adolescent eating behavior, theoretical explanations, factors associated with eating disorders, and the general management of disorders.

**PSYC 309H Psychological Consequences of War and
Violent Conflict (1)**

Prerequisite: PSYC 100. A study of the effects of war on various groups of vulnerable people using a case example. Theoretical bases and issues are emphasized in order to better understand the development of disorders, the expression of these disorders, and treatment and rehabilitation.

PSYC 309K Managing Interpersonal Stress and Conflict (1)

Prerequisite: PSYC 100. An exploration of the nature and causes of stress and techniques for its management. Discussion covers psychological processes that cause interpersonal conflict and those that can bring about its reduction, as well as interpersonal and group factors such as cooperation and negotiation.

PSYC 309S Introduction to the Psychology of Parenting (1)

Prerequisite: PSYC 100. An overview of psychological issues relevant to parenting. Key theories and relevant research findings that directly apply to effective and ineffective parenting are presented. Discussion covers practical lessons in grand-, step-, and single-parenting; learning disabilities; the influence of media and technology; and cross-cultural aspects.

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PSYC 309W Professional Psychology (1)

Prerequisite: PSYC 100. An overview of the profession of psychology. Lessons learned in teaching, research, therapy, and organizational consulting are presented. Career goals and aspirations are also addressed.

PSYC 309X Ethics in Mental Health and Psychological Treatment (1)

Prerequisite: PSYC 100. A general introduction to ethical considerations in the diagnosis and treatment of psychologically impaired persons. Topics include confidentiality, dual relationships, credentialing, recordkeeping, informed consent, and legal concerns.

PSYC 309Y Introduction to Hypnosis (1)

Prerequisite: PSYC 100. An introduction to some of the basic concepts and principles of hypnosis for psychological practice. The relationship between hypnosis and systematic desensitization and their respective roles in affecting human behavior are examined. Therapeutic uses of hypnosis and practical exercises in the use of self-hypnosis are also explored.

PSYC 310 Sensation and Perception (3)

Prerequisite: PSYC 100. Recommended: STAT 225 (or PSYC 200) and PSYC 301. A survey of theories and historical and contemporary research in how the auditory, visual, gustatory, olfactory, kinesthetic, and touch senses acquire information and how psychological, anatomical, physiological, and environmental factors help us perceive the world.

PSYC 315 Motivation (3)

Prerequisites: PSYC 100 and 301. Recommended: STAT 225 (or PSYC 200) and PSYC 305. A study of the interaction of physiological, neurological, and pharmacological aspects of motivation with environmental influences such as culture, learning, and social dynamics. Relevant issues (such as aggression, sex, achievement, and cognition) are discussed.

PSYC 321 Social Psychology (3)

(Formerly PSYC 221.) Prerequisite: PSYC 100. An examination of the influence of social factors on individual and interpersonal behavior. Topics include conformity, attitudinal change, personal perception, interpersonal attraction, and group behavior. Students may receive credit for only one of the following courses: BEHS 221, BEHS 421, BEHS 450, PSYC 221, or PSYC 321.

PSYC 332 Psychology of Human Sexuality (3)

Prerequisite: PSYC 100. A survey of historical and contemporary psychological views on a wide variety of sexual behaviors. Topics include theory and research on the interrelationship of lifespan psychological development, psychological functioning, interpersonal processes, and sexual behaviors. Political and social issues involved in current sexual norms and practices are also discussed. Students may receive credit for only one of the following courses: BEHS 363, HLTH 377, or PSYC 332.

PSYC 334 Psychology of Interpersonal Relationships (3)

Prerequisite: PSYC 100. Recommended: STAT 225 (or PSYC 200) and PSYC 305. A study of research and theory on the development, maintenance, and dissolution of human relationships, followed by consideration of practical applications. Topics include processes critical to successful relating (such as communication, bargaining, and resolution of conflict). Focus is also on issues that are specific to troubled dyadic relations of equal partners (such as jealousy, spousal abuse, and divorce).

PSYC 337 Community Psychology (3)

Prerequisite: PSYC 100. A survey and critical examination of the interrelationship of environmental factors and variations in individual functioning. The effects of social process and social structure on the mental health of individuals in community life are evaluated. Discussion covers both theoretical models and other topics in community psychology.

PSYC 338 Psychology of Gender (3)

Prerequisite: PSYC 100. A survey of the biological, lifespan development, socialization, personality attributes, mental health factors, and special considerations associated with gender.

PSYC 339 Educational Psychology (3)

Prerequisite: PSYC 100. An overview of educational psychology focusing on processes of learning. Discussion covers measurement of differences between individuals (in intelligence, styles of thinking, understanding, attitudes, ability to learn, motivation, emotions, problem solving, and communication of knowledge) and the significance of those differences. Problems in the field are introduced and outlined. Examination of research in educational psychology supplements study. Students may receive credit for only one of the following courses: EDHD 460, PSYC 309J, or PSYC 339.

PSYC 341 Introduction to Memory and Cognition (3)

Prerequisite: PSYC 100. Recommended: STAT 225 (or PSYC 200) and PSYC 305. An introduction to basic models, methods of research, and findings in the fields of memory, problem solving, and language. Applications as well as theory are explored.

PSYC 345 Group Dynamics (3)

Prerequisites: PSYC 100 and 321. Recommended: STAT 225 (or PSYC 200) and PSYC 305. An analysis and exploration of psychological forces in small-group behavior. Issues of growth, conflict, and successful performance are considered. Emphasis is on the application of rigorous scientific theory and research to the impact group dynamics have on real organizational and community problems. Topics include group development, team building, sports psychology, multicultural influence, social advocacy, and leadership. Students may receive credit for only one of the following courses: PSYC 309A, PSYC 345, or SOCY 447.

PSYC 351 Lifespan Development Psychology (3)

Prerequisite: PSYC 100. An integrated study of the biological, socioemotional, and cognitive development of humans from conception through late adulthood. Examination of each progressive stage of development emphasizes the interaction of nature and nurture on one's physiology, capability, and potential.

PSYC 353 Adult Psychopathology (3)

Prerequisite: PSYC 100. Recommended: STAT 225 (or PSYC 200) and PSYC 305. An examination of mental disorders among adults. Topics include the identification and diagnosis of specific disorders as well as their etiology and treatment. Students may receive credit for only one of the following courses: PSYC 331, PSYC 353, or PSYC 431.

PSYC 354 Cross-Cultural Psychology (3)

Prerequisite: PSYC 100. Recommended: STAT 225 (or PSYC 200) and PSYC 305. An exploration of cultural components of theory and research in the fields of personality, social psychology, and community psychology. The interplay of individual, ethnic, and cultural factors in psychosocial growth and well-being, as well as in cross-cultural and cross-ethnic communication, is stressed. Counseling and psychotherapeutic interactions are discussed.

PSYC 355 Child Psychology (3)

Prerequisite: PSYC 100. Recommended: STAT 225 (or PSYC 200) and PSYC 305. A survey of research and theory focusing on psychological development, from conception through childhood. Physiological, conceptual, and behavioral changes are addressed, with attention to the social and biological context in which individuals develop. Students may receive credit for only one of the following courses: PSYC 333, PSYC 355, or PSYC 433.

PSYC 356 Psychology of Adolescence (3)

Prerequisite: PSYC 100. Recommended: STAT 225 (or PSYC 200) and PSYC 305. A description of adolescent development according to research and theory. The physiological, intellectual, and social changes of the teen years are viewed as interrelated, and the systems dealing with those changes are examined.

PSYC 357 Psychology of Adulthood and Aging (3)

Prerequisite: PSYC 100. Recommended: STAT 225 (or PSYC 200) and PSYC 305. An overview of the development of physiological, intellectual, and interpersonal social functioning from early adulthood through the aging years. The dual theme is that of stability and change. Discussion covers theory and research and their implications.

PSYC 361 Survey of Industrial and Organizational Psychology (3)

Prerequisite: PSYC 100. Recommended: STAT 225 (or PSYC 200) and PSYC 305. A general survey of the field of industrial/organizational psychology. Topics include entry into the organization (recruitment, selection, training, socialization); organizational psychology (motivation, attitudes, leadership); and productivity in the workplace (quality of work, performance appraisals, absenteeism, turnover). The role that the larger environment plays in influencing behavior and attitudes on the job is also considered.

PSYC 370 Foundations of Forensics Psychology (3)

Prerequisite: PSYC 100. Recommended: STAT 225 (or PSYC 200) and PSYC 305. A survey of psychological research and theory related to behavior in the criminal trial process. Topics include jury selection, criminal profiling, eyewitness testimony, prediction of violent behavior, and mental competency of the accused.

PSYC 386 Psychology of Stress (3)

Prerequisite: PSYC 100. An examination of the forces that define and determine the stress response. Stress is studied as the product of the interactions of one's social structure, occupational status, and psychological and physiological levels of well-being. The psychological perspective is brought to bear on the stresses produced by work organizations, political climate, definitions of achievement, socioeconomic pressures, and the conflicts of those circumstances with ethical and moral values. Discussion covers the constructive use of stress management techniques and the relationship between stress and illness. Students may receive credit for only one of the following courses: BEHS 463, HLTH 285, or PSYC 386.

PSYC 391 Introduction to Neuropsychology (3)

Prerequisites: PSYC 100 and 301 and STAT 225 (or PSYC 200). Recommended: PSYC 305. An examination of how the human brain governs and influences cognition, language, memory, and emotion. Principles of the organization of the brain and the interaction of the brain and behavior are presented. Clinical, developmental, and experimental factors in psychological assessment of disorders are also considered. Students may receive credit for only one of the following courses: PSYC 307A or PSYC 391.

PSYC 405 Principles of Behavior Modification (3)

Prerequisite: PSYC 100. Recommended: STAT 225 (or PSYC 200) and PSYC 305. A review of various features of human behavior. Literature on theory and research is evaluated in the application of operant and respondent conditioning principles. Analysis covers approaches to behavioral problems in school, home, and professional settings.

PSYC 415 History of Psychology (3)

(Recommended as preparation for graduate study.) Prerequisites: PSYC 100 and two upper-level psychology courses. A study of the origins of psychology in philosophy and biology and the development of psychology as a science in the 19th and 20th centuries. Current theoretical perspectives and experiments are considered in relation to the enduring problems of psychology, as well as the roles of culture, science, and technology in the development of psychological ideas.

PSYC 424 Psychology of Persuasion (3)

Prerequisites: PSYC 100. Recommended: STAT 225 (or PSYC 200 and PSYC 305 and 321. A study of the effect of social communication on behavior and attitudes. Theory and research concerning social influence and change of attitude are examined.

PSYC 432 Introduction to Counseling Psychology (3)

Prerequisite: PSYC 100. A survey and critical analysis of research and intervention strategies developed and used by counseling psychologists. Historical and current trends in content and methodology are examined.

PSYC 435 Personality Theories (3)

Prerequisite: PSYC 100. A study of major theories and perspectives on personality, including trait, psychodynamic, behavioristic, and humanistic theories. Methods of personality research and relevant findings are also introduced and applied to real-world settings.

PSYC 436 Introduction to Clinical Psychology (3)

Prerequisite: PSYC 100. A survey of diagnostic and therapeutic strategies employed by clinical psychologists. The scientist-practitioner model is emphasized through the critical analysis of theories and empirical research that provide the foundation for determining effective treatments of mental disorders.

PSYC 437 Positive Psychology (3)

Prerequisite: PSYC 100. A survey of the science of positive psychology. Focus is on the unique characteristics of the human experience that contribute to health and well-being. Topics include hope, optimism, human strengths, happiness, flow, and attachment.

PSYC 441 Psychology of Human Learning (3)

Prerequisite: PSYC 100. Recommended: STAT 225 (or PSYC 200) and PSYC 305. A review and analysis of the major phenomena and theories of human learning. Conditioning, the application of behavior analysis to real-world problems, and laboratory techniques in learning research are also presented.

PSYC 451 Principles of Psychological Assessment (3)

(Recommended as preparation for graduate study.) Prerequisites: PSYC 100 and STAT 225 (or PSYC 200). Recommended: PSYC 305. An examination of basic concepts and theories of psychological assessment, including test development. Social, legal, cultural, and ethical considerations in psychological testing are also discussed.

PSYC 466 Environmental and Ecological Psychology (3)

Prerequisite: PSYC 100. Recommended: STAT 225 (or PSYC 200) and PSYC 305. An examination of the measurement, description, and impact of the physical environments that affect various aspects of cognition and social behavior in school, at work, and at leisure. Topics include responses to environmental stress and catastrophes, personal and space territoriality, urban living, and psychological solutions to everyday environmental problems.

PSYC 486A Psychology Field Experience Through Co-op (3)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 246). An opportunity to combine academic theory with new, career-related experience in psychology. At least 12 hours per week must be devoted to new tasks for a minimum of 180 hours during the Co-op session; four new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to psychology and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

PSYC 486B Psychology Field Experience Through Co-op (6)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 246). An opportunity to combine academic theory with new, career-related experience in psychology. At least 20 hours per week must be devoted to new tasks for a total of 300 hours during the Co-op session; five to eight new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to psychology and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

Sociology

Courses in sociology (designated SOCY) may be applied as appropriate (according to individual program requirements) toward

- the general education requirement in the behavioral and social sciences;
- a minor in sociology or forensics;
- a major in homeland security or social science;
- various certificates; and
- electives.

A description of the curriculum for the sociology minor begins on p. 81. Descriptions of related curricula may be found on the following pages: forensics (p. 47), homeland security (p. 54), and social science (p. 80).

SOCY 100 Introduction to Sociology (3)

An introduction to the fundamental concepts and principles of sociology. Topics include the study of cultures, patterns of social values, social institutions, stratification, and social change. Students may receive credit for only one of the following courses: BEHS 102 or SOCY 100.

SOCY 105 Introduction to Contemporary Social Problems (3)

An exploration of various personal, institutional, cultural, historical, and global problems that confront American society today. Problems range from drugs, divorce, crime, mental illness, and alienation in modern society to the environment and national and global economic and political conflicts. Special attention is paid to issues of technology and social change. Students may receive credit for only one of the following courses: SOCY 105 or SOCY 210.

SOCY 300 American Society (3)

A survey of the social structure and organization of American society, with special reference to recent social changes. The character, structure, values, and ideology of American social movements are examined from a sociological perspective. Topics include urban demographic changes and other population trends, as well as changes in the conduct of work, family life, and recreation.

INFORMATION ON COURSES

SOCY 312 Family Demography (3)

Prerequisite: SOCY 100 or SOCY 243. A study of the family and population dynamics. Discussion covers issues of fertility (such as teenage pregnancy, the timing of parenthood, and the determinants and consequences of family size) as they relate to family behavior (such as marital patterns, the use of child-care options, and the relationship between work and the family). Issues of policy as related to demographic changes in the family are also considered.

SOCY 313 The Individual and Society (3)

Prerequisite: SOCY 100. An examination of changing concepts of the interaction between the individual and society. Analysis employs the framework of classical functional, conflict, and social constructivist theories, as well as the context of rapidly changing communication technology and globalization. Topics include the construction of social order; the role of trust in social interaction; and work, power, social organization, and the social self. Selected readings are taken from the sociologies of work, gender, postmodernism, globalization, and human rights. Persistent social problems, such as poverty and social inequality, are analyzed. Students may receive credit for only one of the following courses: BEHS 312, SOCY 311, or SOCY 313.

SOCY 325 The Sociology of Gender (3)

Prerequisite: SOCY 100. An inquiry into the institutional bases of gender roles and gender inequality, cultural perspectives on gender, gender socialization, feminism, and gender-role change. Emphasis is on contemporary American society.

SOCY 398 Special Topics in Sociology (3)

Prerequisite: SOCY 100. A study of topics of special interest.

SOCY 403 Intermediate Sociological Theory (3)

Prerequisite: SOCY 100. A study of major theoretical approaches to sociology, including functionalism, conflict, and symbolic interactionism. Original works of major theorists are examined in historical perspective.

SOCY 410 Social Demography (3)

Prerequisite: SOCY 100. A study of social demography. Topics include types of demographic analysis, demographic data, population characteristics, migration, mortality, fertility, population theories, world population growth, and population policy.

SOCY 423 Ethnic Minorities (3)

Prerequisite: SOCY 100. An exposition of basic social processes in the relations of ethnic groups, immigrant groups, African Americans, and Native Americans in the United States and of ethnic minorities in Europe.

SOCY 424 Sociology of Race Relations (3)

Prerequisite: SOCY 100. An analysis of race-related issues, focusing mainly on American society. Topics include the historical emergence, development, and institutionalization of racism; the effects of racism on its victims; and conflicts that are racially based.

SOCY 426 Sociology of Religion (3)

A survey of the varieties and origins of religious experience and religious institutions. The role of religion in social life is explored.

SOCY 427 Deviant Behavior (3)

Prerequisite: SOCY 100. An exploration of current theories of the genesis and distribution of deviant behavior. Topics include definitions of deviance, implications for a general theory of deviant behavior, labeling theory, and secondary deviance.

SOCY 428 Global Perspectives on Migrants and Refugees (3)

Prerequisite: SOCY 100. A sociological exploration of global migration including study of migrants and refugees, legal and illegal immigration, politics and laws, and the role of the global economy in generating population flows.

SOCY 432 Social Movements (3)

Prerequisite: SOCY 100. An examination of movements that seek change in the social and political structure of society. Topics include the origins, tactics, organization, recruitment, and success of such movements. Case studies feature movements in the areas of labor, civil rights, feminism, the environment, student and neighborhood activism, and gay rights.

SOCY 443 The Family and Society (3)

Prerequisite: SOCY 100. An examination of the family as a social institution. Topics include the family's biological and cultural foundation; its historic development, changing structure, and function; the interaction of marriage and parenthood; and the disorganizing and reorganizing factors in current trends.

SOCY 461 Industrial Sociology (3)

A study of the sociology of human relations in American industry and business. Topics include complex industrial and business organizations as social systems and social relationships within and between industry, business, community, and society. Students may receive credit only once under this course title.

SOCY 462 Women in the Military (3)

A cross-national analysis of past, present, and future trends in women's roles in the military. Topics include the effects of cultural forces, national security, technological changes, demographic patterns, occupational structures, labor shortages, and considerations of efficiency and rationality on women's roles in the armed forces.

SOCY 464 Military Sociology (3)

Prerequisite: SOCY 100. An overview of social change and its effects on the growth of military institutions. Topics include the structure of complex formal military organizations; the sociology of military life as a distinct cultural ethos; and the interrelationships of military institutions, civilian communities, and society. Military service is evaluated as an occupation or a profession.

SOCY 473 Sociology of Urban Environments (3)

Prerequisite: SOCY 100. A study of the rise of urban civilization and metropolitan regions. Topics include ecological process and structure, the city as a center of dominance, social problems, control, and planning.

SOCY 486A Internship in Sociology Through Co-op (3)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 246). An opportunity to combine academic theory with new, career-related experience in sociology. At least 12 hours per week must be devoted to new tasks for a minimum of 180 hours during the Co-op session; four new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to sociology and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

SOCY 486B Internship in Sociology Through Co-op (6)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 246). An opportunity to combine academic theory with new, career-related experience in sociology. At least 20 hours per week must be devoted to new tasks for a total of 300 hours during the Co-op session; five to eight new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to sociology and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

SOCY 498 Selected Topics in Sociology (1-3)

Prerequisite: SOCY 100. An advanced study of topics of special interest in sociology. Assignments include advanced reading and research.

Spanish

Courses in Spanish (designated SPAN) may be applied as appropriate (according to individual program requirements) toward

- the general education requirement in the arts and humanities;
- a major or minor in humanities;
- a certificate in Workplace Spanish; and
- electives.

Students with prior experience in the Spanish language—either through study or living abroad, informal learning from friends or family, or high school or other coursework that did not transfer to UMUC—should take a placement exam before enrolling. Students with oral proficiency in Spanish who wish instruction in written Spanish should also take the placement test.

UMUC offers a limited number of foreign language courses each term.

A description of the curriculum for the humanities major and minor begins on p. 56.

SPAN 111 Elementary Spanish I (3)

(Not open to native speakers of Spanish; assumes no prior knowledge of Spanish. Students with prior experience in the Spanish language should take a placement test to assess appropriate level.) A basic foundation in listening, speaking, reading, and writing in Spanish. Spanish culture, history, current events, and geography provide the context for instruction in grammatical structures, vocabulary, pronunciation, and writing. Focus is on acquiring the skills necessary to communicate with native Spanish speakers orally and in writing at an elementary level. Students may receive credit for only one of the following courses: SPAN 101 or SPAN 111.

SPAN 112 Elementary Spanish II (3)

(Not open to native speakers of Spanish.) Prerequisite: SPAN 111 or an appropriate score on a placement test. A continuation of the development of basic skills in listening, speaking, reading, and writing in Spanish. Spanish culture, history, current events, and geography provide the context for instruction in grammatical structures, vocabulary, pronunciation, and writing. Focus is on acquiring the skills necessary to communicate with native Spanish speakers orally and in writing at an advanced elementary level. Much of the class is conducted in Spanish. Students may receive credit for only one of the following courses: SPAN 102 or SPAN 112.

SPAN 211 Intermediate Spanish I (3)

Prerequisite: SPAN 112 or an appropriate score on a placement test. Further development of skills in listening, speaking, reading, and writing in Spanish. Spanish culture, history, current events, and geography provide the context for instruction in grammatical structures, vocabulary, pronunciation, and composition. Focus is on acquiring the skills necessary to communicate with native Spanish speakers orally and in writing at an intermediate level. Class is conducted primarily in Spanish. Students may receive credit for only one of the following courses: SPAN 201, SPAN 114, or SPAN 211.

SPAN 212 Intermediate Spanish II (3)

(Serves as preparation for upper-level courses in Spanish language, culture, and literature.) Prerequisite: SPAN 211 or an appropriate score on a placement test. Improvement of skills in listening, speaking, reading, and writing in Spanish. Spanish culture, history, current events, and geography provide the context for instruction in grammatical structures, vocabulary, pronunciation, and composition. Focus is on acquiring the skills necessary to communicate with native Spanish speakers orally and in writing at an advanced intermediate level. Class is conducted almost entirely in Spanish. Students may receive credit for only one of the following courses: SPAN 115, SPAN 202, or SPAN 212.

SPAN 318 Commercial and Workplace Spanish (4)

Prerequisite: SPAN 212 or an appropriate score on placement test. A study of Spanish business terminology, vocabulary, formats, and practices. Emphasis is on everyday spoken and written workplace Spanish, using authentic text from native speakers. Written and oral practice is provided in finding and communicating information, especially on commercial topics in business and other workplace situations. Assignments include a project involving specific vocabulary, forms of professional communication, and cultural protocols relevant to the student's workplace or major. Students may receive credit for only one of the following courses: SPAN 315 or SPAN 318.

SPAN 401 Advanced Composition I (3)

Development of written skills in Spanish. Vocabulary is enriched through in-depth study of word formation, compounds, derivatives, and word-fields, with emphasis on both the basic and figurative meanings of words. The refinement of rhetorical forms is also covered.

SPAN 486A Internship in Spanish Through Co-op (3)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 246). An opportunity to combine academic theory with new, career-related experience in Spanish. At least 12 hours per week must be devoted to new tasks for a minimum of 180 hours during the Co-op session; four new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to Spanish and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

SPAN 486B Internship in Spanish Through Co-op (6)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 246). An opportunity to combine academic theory with new, career-related experience in Spanish. At least 20 hours per week must be devoted to new tasks for a total of 300 hours during the Co-op session; five to eight new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to Spanish and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

Speech Communication

Courses in speech communication (designated SPCH) may be applied as appropriate (according to individual program requirements) toward

- the general education requirement in communications;
- a minor in speech communication or communication studies;
- a major in communication studies or laboratory management;
- a certificate in Negotiation and Conflict Management; and
- electives.

A description of the curriculum for the speech communication minor begins on p. 82. Descriptions of related curricula may be found on the following pages: communication studies (p. 24) and journalism (p. 66).

SPCH 100 Foundations of Speech Communication (3)

(Fulfills the prerequisite for all 300- or 400-level speech courses. Students for whom English is not a first language should consider taking SPCH 101X instead.) An overview of the principles of communication. Verbal and nonverbal language, listening, group dynamics, and public speaking are highlighted. Emphasis is on applying communication principles to contemporary problems and preparing various types of oral discourse. Students may receive credit for only one of the following courses: SPCH 100, SPCH 100X, SPCH 101, SPCH 107, or SPCH 108.

SPCH 100X Foundations of Speech Communication (3)

(Enrollment restricted to students for whom English is a second language.) An overview of the principles of communication. Verbal and nonverbal language, listening, group dynamics, and public speaking are highlighted. Emphasis is on applying communication principles to contemporary problems and preparing various types of oral discourse. Students may receive credit for only one of the following courses: SPCH 100, SPCH 100X, SPCH 101, SPCH 107, or SPCH 108.

SPCH 125 Introduction to Interpersonal Communication (3)

An overview of the concepts of interpersonal communication. Topics include nonverbal communication, perception, listening, the relationship of language to meaning, and feedback.

SPCH 200 Advanced Public Speaking (3)

Prerequisite: SPCH 100/100X, SPCH 101, SPCH 107, or SPCH 108. A study of rhetorical principles and models of speech composition. Principles are studied in conjunction with preparing and presenting particular forms of public communication.

SPCH 222 Interviewing (3)

A presentation of the principles and practices used in the recognized types of interview. Special attention is given to behavioral objectives and variables in communication as they figure in the process of interviewing. Students may receive credit for only one of the following courses: SPCH 222 or SPCH 422.

SPCH 324 Communication and Gender (3)

Prerequisite: Any SPCH course or COMM 300. An investigation of how communication influences gender and how gender affects communication. Topics include gender roles, similarities and differences between genders in communication styles, and the role gender plays in personal and professional relationships, as well as its role in culture and the media.

SPCH 397 Organizational Presentations (3)

Prerequisite: SPCH 100/100X, SPCH 101, SPCH 107, or SPCH 108. A study of techniques for planning small- and large-group presentations, including audience profiling and needs analysis. Topics include listener patterns and preferences, presentation organization, confidence-building techniques, platform skills, and audio/video technology and presentation software such as PowerPoint.

SPCH 420 Small-Group Communication (3)

Prerequisite: Any SPCH course or COMM 300. A study of the principles and practices that govern small-group communication in business, government, and the wider community. Topics include team building, group roles in decision making, leadership, and conflict resolution. Analysis covers communicating online and face-to-face with group members. Assignments include in-depth reading, writing, research, and group discussion.

SPCH 424 Communication in Complex Organizations (3)

Prerequisite: Any SPCH course or COMM 300. An examination of the structure and function of communication in organizations. Organizational climate and culture, information flow, networks, and role relationships are major themes.

SPCH 426 Negotiation and Conflict Management (3)

Prerequisite: Any SPCH course or COMM 300. A study of the role of communication in shaping negotiation and conflict processes and outcomes. Simulation and role play are used to model workplace practices.

SPCH 470 Listening (3)

Prerequisite: Any SPCH course or COMM 300. A survey of theories of the listening process. Emphasis is on functional analysis of listening behavior. Students may receive credit only once under this course number.

SPCH 472 Theories of Nonverbal Communication (3)

Prerequisite: Any SPCH course or COMM 300. An examination of theories, research, and applications of nonverbal communication in both personal and professional contexts. Topics include movement, body language, and gestures; clothing and personal artifacts; facial expression and eye behavior; use of space and territory; touching behavior; paralanguage; and voice characteristics. Cross-cultural and gender differences in nonverbal communication are also explored.

SPCH 482 Intercultural Communication (3)

Prerequisite: Any SPCH course or COMM 300. An examination of the major variables of communication in an intercultural context. Topics include cultural, racial, and national differences; stereotypes; values; cultural assumptions; and verbal and nonverbal channels.

SPCH 486A Internship in Speech Through Co-op (3)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 246). An opportunity to combine academic theory with new, career-related experience in speech communication. At least 12 hours per week must be devoted to new tasks for a minimum of 180 hours during the Co-op session; four new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to speech communication and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

SPCH 486B Internship in Speech Through Co-op (6)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 246). An opportunity to combine academic theory with new, career-related experience in speech communication. At least 20 hours per week must be devoted to new tasks for a total of 300 hours during the Co-op session; five to eight new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to speech communication and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

Statistics and Probability

Courses in statistics and probability (designated STAT) may be applied as appropriate (according to individual program requirements) toward

- a minor in mathematical sciences;
- the statistics requirement for a variety of majors and minors; and
- electives.

UMUC offers a limited number of courses each term in this discipline.

A description of the curriculum for the mathematical sciences minor begins on p. 74.

Students are expected to own and use scientific calculators in all mathematics and statistics courses.

STAT 200 Introduction to Statistics (3)

Prerequisite: MATH 103, MATH 106, or MATH 107. An introduction to statistics. Topics include descriptive statistics, methods of sampling, tables, graphs, percentiles, concepts of probability, normal and chi-square distributions, sampling distributions, confidence intervals, hypothesis testing of one and two means, proportions, binomial experiments, sample size calculations, correlation, and regression. Applications in business, social sciences, and other fields are discussed. Students who receive credit for STAT 200 may not receive credit for the following courses: BEHS 202, BEHS 302, BMGT 230, ECON 321, GNST 201, MATH 111, MGMT 316, PSYC 200, SOCY 201, STAT 100, STAT 225, or STAT 230.

STAT 225 Introduction to Statistical Methods in Psychology (3)

Prerequisite: MATH 103, MATH 106, or MATH 107. Recommended: PSYC 100 or introductory social sciences course. An introduction to quantitative methods in the behavioral and social sciences and psychological research. Topics include the measurement of variables, measures of central tendency and dispersion, correlation, statistical inference and probability, hypothesis testing, t-tests, analysis of variance, and chi-squares tests. Students who receive credit for STAT 225 may not receive credit for the following courses: BEHS 202, BEHS 302, BMGT 230, ECON 321, GNST 201, MGMT 316, PSYC 200, SOCY 201, STAT 100, STAT 200, STAT 230.

STAT 230 Business Statistics (3)

Prerequisite: MATH 103, MATH 106, or MATH 107. An introduction to the essential concepts of statistics for business and management. Concepts reviewed include descriptive statistics, probability theory, discrete and continuous probability distributions, sampling theory, estimation, hypothesis testing, regression, and decision theory. Discussion also covers the application of these concepts to solving problems in business and management. Students may receive credit for only one of the following courses: BEHS 202, BEHS 302, BMGT 230, ECON 321, GNST 201, MGMT 316, PSYC 200, SOCY 201, STAT 200, STAT 225, or STAT 230.

STAT 250 Intermediate Statistics and Probability

Prerequisite: STAT 200, STAT 225, or STAT 230. Further study of elementary statistics and probability. Topics include inference for two populations, population standard deviations and proportions, chi-square procedures, descriptive and inferential methods in regression and correlation, analysis of variance, multiple regression analysis, model building in regression, and experimental design and analysis of variance.

STAT 400 Applied Probability and Statistics I (3)

Prerequisite: MATH 141. An intermediate study of statistical theory. Topics include random variables and standard distributions, sampling methods, law of large numbers and the central-limit theorem, moments, estimation of parameters, and testing of hypotheses.

STAT 410 Introduction to Probability Theory (3)

Prerequisites: MATH 240 and 241. A discussion of probability and its properties. Presentation covers random variables and distribution functions in one dimension and in several dimensions, as well as moments, characteristic functions, and limit theorems.

STAT 450 Regression and Variance Analysis (3)

Prerequisite: STAT 401. A study of statistical techniques, concentrating on one-, two-, three-, and four-way layouts in analysis of variance. Concepts and techniques presented include multiple-regression analysis, the Gauss-Markov theorem, fixed-effects models, linear regression in several variables, and experimental designs.

STAT 486A Internship in Statistics Through Co-op (3)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 246). An opportunity to combine academic theory with new, career-related experience in statistics. At least 12 hours per week must be devoted to new tasks for a minimum of 180 hours during the Co-op session; four new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to statistics and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

STAT 486B Internship in Statistics Through Co-op (6)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 246). An opportunity to combine academic theory with new, career-related experience in statistics. At least 20 hours per week must be devoted to new tasks for a total of 300 hours during the Co-op session; five to eight new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. May be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to statistics and that continues to advance application of academic theory in the workplace. Students may earn up to 15 credits in all internship coursework through Co-op toward a first bachelor's degree and up to 9 credits toward a second bachelor's degree. Co-op credits may not be used for general education requirements and, unless otherwise specified, no more than 6 Co-op credits may be used in the academic major and minor (combined).

Theatre

Courses in theatre (designated THET) may be applied as appropriate (according to individual program requirements) toward

- the general education requirement in the arts and humanities;
- a major or minor in humanities; and
- electives.

UMUC offers a limited number of courses each term in this discipline.

A description of the curriculum for the humanities major and minor begins on p. 56.

THET 110 Introduction to the Theatre (3)

An introduction to the people of the theatre: actors, directors, designers, and backstage personnel. Topics include the core and characteristics of a script, theatrical forms and styles, and theatre history. Students may receive credit for only one of the following courses: HUMN 110 or THET 110.

Women's Studies

Courses in women's studies (designated WMST) may be applied as appropriate (according to individual program requirements) toward

- a minor in women's studies; and

- electives.

UMUC offers a limited number of courses each term in this discipline.

The description of the curriculum for the women's studies minor begins on p. 83.

WMST 200 Introduction to Women's Studies: Women and Society (3)

(Fulfills the general education requirement in behavioral and social sciences.) An interdisciplinary study of the status, roles, and experiences of women in contemporary society. Sources from a variety of fields (such as literature, psychology, history, and anthropology) focus on the writings of women themselves.

Writing

Courses in writing (designated WRTG) may be applied as appropriate (according to individual program requirements) toward

- the general education requirement in communications;

- the major in communication studies;

- a certificate in Workplace Communications; and

- electives.

Degree-seeking students must complete WRTG 101 (or present its equivalent in transfer) during their first 18 credits of enrollment at UMUC. WRTG 101 is prerequisite to all writing courses with higher numbers and most courses in English and communication studies. Placement tests are required for enrollment in WRTG 101 and 101X. Students may either consult the undergraduate *Schedule of Classes* for times and locations of tests or contact Exams and Testing Services by phone at 800-888-UMUC, ext. 5249, or by e-mail at *exams@umuc.edu.*

WRTG 391, 393, and 394 are designated as writing-intensive and may be applied toward the general education requirement in upper-level intensive writing.

Specific WRTG courses may be recommended in relation to specific majors and minors. Students should check the descriptions of their curricula.

Students for whom English is a second language should consider taking writing courses designated with X, such as WRTG 101X, 391X, etc.

The description of the general education requirements begins on p. 8.

The description of the curriculum for the communication studies major and minor begins on p. 24. Descriptions of related curricula begin on the following pages: English (p. 38) and journalism (p. 66).

WRTG 101 Introduction to Writing (3)

(Formerly ENGL 101. Students for whom English is not a first language should consider taking WRTG 101X instead.) Prerequisite: Satisfactory performance on a placement test or EDCP 103. Practice in effective writing and clear thinking at all levels, including the sentence and paragraph, with emphasis on the essay and research report. Specific steps reviewed within the writing process include formulating purpose, identifying an audience, and selecting and using research resources and methods of development. Assignments include composing a total of at least 4,500 words (approximately 20 pages). Students may receive credit for only one of the following courses: ENGL 101, ENGL 101X, WRTG 101, or WRTG 101X.

WRTG 101X Introduction to Writing (3)

(Formerly ENGL 101X. Enrollment restricted to students for whom English is not a first language.) Prerequisite: Satisfactory performance on a placement test or EDCP 103. Practice in effective writing and clear thinking at all levels, including the sentence and paragraph, with emphasis on the essay and research report. Specific steps reviewed within the writing process include formulating purpose, identifying an audience, and selecting and using research resources and methods of development. Assignments include composing a total of at least 4,500 words (approximately 20 pages). Students may receive credit for only one of the following courses: ENGL 101, ENGL 101X, WRTG 101, or WRTG 101X.

WRTG 288 Standard English Grammar (3)

(Formerly ENGL 281. Fulfills the general education requirement in communications.) Prerequisite: WRTG 101/101X or ENGL 101/101X. An overview of grammatical structures of standard formal and written English. Topics include parts of speech, punctuation, choice and usage of words, sentence patterns, and advanced grammatical issues. Students may receive credit for only one of the following courses: ENGL 281, ENGL 281X, or WRTG 288.

WRTG 289 Introduction to Principles of Text Editing (3)

(Formerly ENGL 278F. Fulfills the general education requirement in communications.) Prerequisite: WRTG 101/101X or ENGL 101/101X. An introduction to the practice of editing. Focus is on striving for correctness, consistency, and clarity of style, while writing, evaluating, and rewriting various documents. Students may receive credit for only one of the following courses: ENGL 278F or WRTG 289.

WRTG 291 Expository and Research Writing (3)

(Formerly ENGL 291. Fulfills the general education requirement in communications.) Prerequisites: WRTG 101/101X (or ENGL 101/101X) and LIBS 150. Continued practice in critical reading, thinking, and writing skills. Focus is on analyzing, evaluating, and synthesizing diverse sources and viewpoints to develop persuasive and argumentative writing projects. Assignments include written exercises, two short research essays, and a research paper, resulting in a total of at least 4,500 words (approximately 20 pages). Students may receive credit for only one of the following courses: ENGL 291, ENGL 291H, or WRTG 291.

WRTG 293 Introduction to Technical and Business Writing (3)

(Formerly COMM 293. Fulfills the general education requirement in communications.) Prerequisites: WRTG 101/101X (or ENGL 101/101X) and LIBS 150. An introduction to the process of technical and business writing. Topics include conducting audience and needs analyses; organizing and writing clear, precise, grammatically correct workplace prose; and producing a variety of routine professional reports and correspondence. Students may receive credit for only one of the following courses: COMM 293, ENGL 293, or WRTG 293.

WRTG 387 Issues and Methods in Tutoring Writing (3)

Prerequisite: WRTG 101/101X or ENGL 101/101X. The development of the theoretical knowledge and practical skills to strengthen writing, research, and critical thinking and be effective as a tutor, particularly of writing. Topics include various strategies for effective online tutoring, the ethics of tutoring, the writing process, and the diverse writing challenges students face and techniques to overcome them. Discussion also covers the opportunities and challenges of online tutoring and online writing pedagogy.

WRTG 388 Advanced Grammar and Style (3)

(Formerly ENGL 384. Fulfills the general education requirement in communications.) Prerequisite: WRTG 101/101X or ENGL 101/101X. An examination of the basic units of grammatical description, the nature of grammatical categories and structures and the reasons for creating and using them, and the application of grammatical concepts to written style. Students may receive credit for only one of the following courses: ENGL 384 or WRTG 388.

WRTG 390 Writing for Managers (3)

(Formerly COMM 390. Fulfills the general education require-
ment in communications.) Prerequisite: WRTG 101/101X or
ENGL 101/101X. A practicum in the kinds of writing skills
that managers need for the workplace. Communication skills
emphasized include planning information, developing reader-
based prose, improving personal writing performance and guid-
ing the writing of subordinates, and mastering such writing
tasks as strategic plans and performance appraisals. Students
may receive credit for only one of the following courses:
COMM 390, HUMN 390, or WRTG 390.

WRTG 391 Advanced Expository and Research Writing (3)

(Formerly ENGL 391. Students for whom English is a not a
first language should consider taking WRTG 391X instead.
Fulfills the general education requirement in intensive upper-
level writing.) Prerequisite: WRTG 101/101X or ENGL 101/
101X. Instruction and practice in methods of presenting ideas
and factual information clearly and effectively. Emphasis is on
developing skills fundamental to academic writing. Published
writings are discussed and evaluated. Assignments include com-
posing a total of 6,000 words (approximately 25 pages). Stu-
dents may receive credit for only one of the following courses:
ENGL 391, ENGL 391X, WRTG 391, or WRTG 391X.

WRTG 391X Advanced Expository and Research Writing (3)

(Formerly ENGL 391X. Enrollment restricted to students for
whom English is a second language. Fulfills the general educa-
tion requirement in intensive upper-level writing.) Prerequisite:
WRTG 101/101X or ENGL 101/101X. Instruction and prac-
tice in methods of presenting ideas and factual information
clearly and effectively. Emphasis is on developing skills funda-
mental to both workplace and academic writing. Published
writings are discussed and evaluated. Assignments include
composing a total of 6,000 words (approximately 25 pages).
Students may receive credit for only one of the following courses:
ENGL 391, ENGL 391X, WRTG 391, or WRTG 391X.

WRTG 393 Technical Writing (3)

(Formerly COMM 393. Students for whom English is a not
a first language should consider taking WRTG 393X instead.
Fulfills the general education requirement in intensive upper-level
writing.) Prerequisite: WRTG 101/101X or ENGL 101/101X.
The writing of technical papers and reports. Focus is on building
skills in critical thinking, research, and document design. Assign-
ments include composing a total of 6,000 words (approximately
25 pages) in various formats (e.g., the oral presentation, the
résumé, correspondence, manuals, procedures, instructions, and
different types of reports, including proposal, progress, analytic,
and feasibility). Students may receive credit for only one of the
following courses: COMM 393, COMM 393X, ENGL 393,
ENGL 393X , WRTG 393, or WRTG 393X.

WRTG 393X Technical Writing (3)

(Formerly COMM 393X. Enrollment restricted to students for
whom English is not a first language. Fulfills the general educa-
tion requirement in intensive upper-level writing.) Prerequisite:
WRTG 101/101X or ENGL 101/101X. The writing of tech-
nical papers and reports. Focus is on building skills in critical
thinking, research, and document design. Assignments include
composing a total of 6,000 words (approximately 25 pages) in
various formats (e.g., the oral presentation, the résumé, corre-
spondence, manuals, procedures, instructions, and different
types of reports, including proposal, progress, analytic, and
feasibility). Students may receive credit for only one of the fol-
lowing courses: COMM 393, COMM 393X, ENGL 393,
ENGL 393X, WRTG 393, or WRTG 393X.

WRTG 394 Business Writing (3)

(Formerly COMM 394. Students for whom English is not a first
language should consider taking WRTG 394X instead. Fulfills the
general education requirement in intensive upper-level writing.)
Prerequisite: WRTG 101/101X or ENGL 101/101X. An intro-
duction to professional workplace writing. Topics include context,
purpose, audience, style, organization, format, technology, results,
and strategies for persuasion when writing typical workplace mes-
sages. In addition to shorter assignments, a substantial formal
report that incorporates data analysis and support for conclusions
or recommendations is required. Assignments include composing
a total of 6,000 words (approximately 25 pages). Students may
receive credit for only one of the following courses: COMM 394,
COMM 394X, ENGL 394, ENGL 394X, WRTG 394, or
WRTG 394X.

WRTG 394X Business Writing (3)

(Formerly COMM 394X. Enrollment restricted to students for whom English is not a first language. Fulfills the general education requirement in intensive upper-level writing.) Prerequisite: WRTG 101/101X or ENGL 101/101X. An introduction to professional workplace writing. Topics include context, purpose, audience, style, organization, format, technology, results, and strategies for persuasion when writing typical workplace messages. In addition to shorter assignments, a substantial formal report that incorporates data analysis and support for conclusions or recommendations is required. Assignments include composing a total of 6,000 words (approximately 25 pages). Students may receive credit for only one of the following courses: COMM 394, COMM 394X, ENGL 394, ENGL 394X, WRTG 394, or WRTG 394X.

WRTG 489 Advanced Technical Editing (3)

(Formerly COMM 491. Fulfills the general education requirement in communications.) Prerequisite: WRTG 393/393X, WRTG 394/394X, COMM 393/393X, or COMM 394/394X. Recommended: WRTG 288 (or ENGL 281) or familiarity with grammar. A systematic approach to methods of preparing a document for publication or other disseminations. Discussion addresses the full range of editing levels (copyediting, substantive editing, and document design) and includes an overview of design goals that reflect specific readers and purposes. Students may receive credit for only one of the following courses: COMM 491, ENGL 489B, or WRTG 489.

WRTG 493 Advanced Technical Writing (3)

(Formerly COMM 490. Intended as a final, capstone course to be taken in a student's last 15 credits. Fulfills the general education requirement in communications.) Prerequisites: COMM 300 and either WRTG 393/393X, WRTG 394/394X, COMM 393/393X, or COMM 394/394X. A study of technical writing that integrates knowledge gained through previous coursework and experience and builds on that conceptual foundation through integrative analysis, practical application and critical thinking. Emerging issues in creating, maintaining, storing, and revising technical information are considered. Topics include the review of textual and online resources useful to technical communicators and the requirements for a professional portfolio. Emphasis is on professional communication practices. Assignments include oral presentations. Students may receive credit only once under this course number and for only one of the following courses: COMM 490, ENGL 489A, or WRTG 493.

WRTG 494 Grant and Proposal Writing (3)

(Formerly COMM 492. Fulfills the general education requirement in communications.) Prerequisite: Either WRTG 393/393X, WRTG 394/394X, COMM 393/393X, or COMM 394/394X. An advanced study of technical writing, focusing on composing competitive proposals in response to a Request for Proposals (RFPs) and other funding solicitations from the federal government and community and private sources. Discussion covers stages of the proposal-development process, including researching the funding agency for its mission, target populations, and problems of interest; assessing the RFP to determine evaluation criteria; and assembling the required elements of a successful proposal. Assignments include working in teams to a prepare a competitive proposal. Students may receive credit for only one of the following courses: COMM 492, ENGL 489C, or WRTG 494.

WRTG 496 Writing for the Computer Industry (3)

(Formerly COMM 496. Fulfills the general education requirement in communications.) Prerequisite: A 300-level writing course. Recommended: WRTG 393/393X or COMM 393/393X. Study of and practice in the designing, writing, testing, publishing, and maintaining of effective user documentation, as well as other software-development documents. The assumption is made that software tools, as well as their documentation, should relate directly to user tasks. Emphasis is on the difference between writing successfully for publication on paper and for display on the computer screen. Students may receive credit for only one of the following courses: COMM 496 or WRTG 496.

ACADEMIC AND ADMINISTRATIVE REQUIREMENTS

Institutional Credit

A course that may not be applied toward graduation may be assigned a credit value for purposes of course load per session and tuition. This institutional credit is included in the grade point average (GPA) and in determining eligibility for financial aid and veterans educational benefits. However, students required to take these courses do so in addition to the 120 units of graduation credit required for the degree.

Grading Methods

There are four grading methods at UMUC. The most commonly used is the standard method. The pass/fail alternative is available only under limited conditions. The satisfactory/D/fail method is restricted to certain specified courses. Any course may be audited. Regulations for each are given in the following paragraphs.

Grade	Interpretation	Quality Points
A	Outstanding scholarship	4
B	Good scholarship	3
C	Satisfactory scholarship	2
D	Marginal performance	1
F	Failure	0
FN	Failure for nonattendance	0
G	Grade under review	0
P	Passing (D or higher)	0
S	Satisfactory (C or higher)	0
I	Incomplete	0
AU	Audit	0
W	Withdrawal	0

Standard

Unless students choose either the pass/fail or audit option at the time of registration, they will be given a letter grade according to the standard method. Under the standard grading method, students are given a grade of A, B, C, D, or F on the basis of their performance in meeting the requirements of each course. For only a very few courses, the standard grading method is replaced by the satisfactory/D/fail method.

Pass/Fail

Degree-seeking students who have earned 30 credits (including at least 15 credits at UMUC) and who have a cumulative grade point average of 2.0 may take one course of up to 6 credits each standard session (fall, spring, or summer) on a pass/fail basis, up to a maximum of 18 credits. Students must elect pass/fail grading at the time of registration. This status may not be changed after the second week of classes has ended.

This grading method is allowed only for electives. Required courses (e.g., general education courses and courses for the major and minor) may not be taken pass/fail, nor may pass/fail grading be used in retaking a course for which a letter grade was earned previously.

Students who register for pass/fail grading must still complete all the regular requirements of the course. The teacher evaluates the work under the normal procedure for letter grades and submits a regular grade. Grades of A, B, C, or D are then converted to the grade P, which is entered into the permanent record. A grade of F remains unchanged.

Although a grade of P earns credit toward graduation, it is not included in calculating a grade point average. A failing grade carries no credit, and the failing grade is included in the computation of grade point averages.

Satisfactory/D/Fail

This grading method is available only on a limited basis. Although a grade of satisfactory (S) earns credit toward graduation, it is not included in calculating grade point averages. The grade of D earns credit and is included in computing grade point averages. While a failing grade (F) earns no credit, it is included in computing grade point averages.

Audit

Students who do not wish to receive credit may register for courses as auditors after being admitted. Students must indicate this intention when they register. Students may request a change from credit to audit status anytime before the end of the fifth scheduled week of a standard session or the third week of classes in an eight-week session.

Audited courses are listed on the permanent record, with the notation AU. No letter grade is given for audited courses, nor are credits earned.

ACADEMIC AND ADMINISTRATIVE REQUIREMENTS

Grades and Marks

Passing: The Grade of P

The grade of P is conferred after a teacher has evaluated coursework under the normal procedure for letter grades and has submitted a standard grade (A, B, C, or D). Then Undergraduate Student Affairs converts that standard grade into the grade of P.

A passing grade is recorded on the permanent record and confers credit toward graduation. However, courses graded P are not included in calculating grade point averages.

Satisfactory: The Grade of S

The grade of S is equivalent to a grade of C or higher. This grade is used to denote satisfactory progress in an experiential setting or practicum, such as EXCL 301. Although the grade of S confers credit and appears on the permanent record, courses graded S are not used in determining grade point averages.

Failure: The Grade of F

The grade of F means a failure to satisfy the minimum requirements of a course. Although it carries no credit, it is included in calculating the grade point average. A student assigned the grade of F must register again for the course, pay the applicable fees, repeat the course, and earn a passing grade in order to receive credit for that course.

Failure for Nonattendance: The Grade of FN

The grade of FN means a failure in the course because the student has not attended or participated in course assignments and activities. It is assigned when the student ceases to attend class but has not officially withdrawn.

Grade Under Review: The Mark of G

The mark of G is an exceptional and temporary administrative mark given only when the final grade in the course is under review. It is not the same as a mark of Incomplete.

Incomplete: The Mark of I

The mark of I (incomplete) is an exceptional mark given only to students whose work in a course has been satisfactory but who for reasons beyond their control have been unable to complete all the requirements of a course. The following criteria must be met:

- The student must have completed at least 60 percent of the work in the course with a grade of C or better.
- The mark of I must be requested before the end of the course.

The procedure for awarding the mark of I is as follows:

- The student must ask the teacher for a mark of I. (Teachers cannot award a mark of I on their own initiative.)
- The teacher decides whether to grant the request.
- The teacher sets a date (no more than four months after submitting the original grade) for completion of the remaining requirements of the course.
- The teacher and the student together agree on the remaining requirements of the course and the deadline for submitting the work.
- The student is responsible for completing the work.
- After the work is completed, the teacher submits a grade change to replace the mark of I on the student's record with a grade.

If the mark of I is not made up within four months or by the agreed-upon deadline, the I is changed to an F. Students should be aware that a mark of I in their final semester may delay graduation.

The mark of I cannot be removed by means of credit by examination, nor can it be replaced by a mark of W (defined below). Students who elect to repeat an incomplete course must register again for the course, pay all applicable fees, and repeat the course. For purposes of academic retention, the course grade is counted as an F. The mark of I is not used in determining grade point averages.

Withdrawal: The Mark of W

Students may receive the mark of W by officially withdrawing from a course. Procedures for withdrawing are detailed on the UMUC Web site at *www.umuc.edu/students.* Students must withdraw from a course at least two weeks before the last scheduled class in a session. (For accelerated courses, withdrawals must be submitted before the close of business on the first day of class.)

For most courses, this mark appears on the permanent record unless withdrawal is completed before the end of the schedule adjustment period. For intensive format courses, students must withdraw before the class starts in order to avoid a mark of W. For purposes of academic retention, the mark of W is counted as attempted hours. It is not used in determining grade point averages.

Changes in Grade

Teachers may change a grade previously assigned through MyUMUC, the university's online academic and administrative services portal. Any change must be made no later than four months after the original grade was awarded.

Grading Repeated Courses

When a course is repeated, only the higher grade earned in the two attempts is included in the calculation of the GPA. For purposes of academic retention, both attempts are counted. Both grades are entered on the permanent record, with a notation indicating that the course was repeated. Students cannot increase the total hours earned toward a degree by repeating a course for which a passing grade was conferred previously.

To establish credit in a course previously failed or withdrawn from, students must register, pay the full tuition and fees, and repeat the entire course successfully.

Repeated Registration for a Course

No student may register more than twice for the same course. Registering more than twice for the same course (including courses previously attempted at other institutions in the University System of Maryland) is generally forbidden. It may be allowed only under special circumstances, with prior approval of an advisor.

Grades and Quality Points

The grade point average is calculated using the quality points assigned to each grade or mark (chart on p. 233). First, the quality-point value of each grade or mark is multiplied by the number of credits; then the sum of these quality points is divided by the total number of credits attempted for which a grade of A, B, C, D, or F was received.

Academic Warning and Dismissal

At the end of every session (fall, spring, or summer), the cumulative grade point average of each student who has attempted at least 15 credits at UMUC is computed based on all UMUC graded coursework. Undergraduate Student Affairs then takes action, required by UMUC policy, according to the student's level of progress as described below.

There are four levels of academic progress: satisfactory, warning, probation, and dismissal.

Levels of Progress

SATISFACTORY

A student whose cumulative grade point average is 2.0 or higher is considered to be making satisfactory progress.

WARNING

A student whose cumulative GPA is less than 2.0 will be placed on academic warning. The student will remain on academic warning as long as the cumulative GPA is less than 2.0 and the GPA for the session is 2.0 or better.

A student who attempts 15 credits or more in a period of at least two standard sessions and earns no quality points will receive an academic warning regardless of the cumulative grade point average.

A student on academic warning whose GPA for the session is 2.0 or better, but whose cumulative GPA is less than 2.0, will continue on warning until he or she has completed courses at UMUC that raise the cumulative GPA to 2.0 or better.

A student on academic warning is limited to a maximum enrollment of 7 credits per standard session or to a maximum of 4 credits per session 1 or session 2.

PROBATION

A student on academic warning or admitted on provisional status whose GPA for the session is less than 2.0 will be put on probation.

A student on probation whose GPA for the session is 2.0 or better, but whose cumulative GPA is less than 2.0, will return to academic warning or provisional status.

A student on academic probation is limited to a maximum enrollment of 7 credits per standard session or to a maximum of 4 credits per session 1 or session 2.

ACADEMIC AND ADMINISTRATIVE REQUIREMENTS

A student on probation whose GPA for the session is less than 2.0 will be dismissed.

Regardless of cumulative GPA, a student who has maintained an average of at least 2.0 during a particular session will not be dismissed at the end of that period. A student who is dismissed is ineligible to register again for UMUC courses until he or she is reinstated.

Reinstatement After Dismissal

A student seeking reinstatement is required to

- Have all official transcripts from previously attended colleges and universities sent to UMUC, preferably before meeting with an advisor.
- Meet with an advisor before petitioning for reinstatement.
- Wait at least one standard session before petitioning for reinstatement. Such an appeal should be made in writing to the associate provost, Student Affairs.

Deadlines for requesting reinstatement are as follows:

Fall enrollment	July 15
Spring enrollment	November 15
Summer enrollment	April 15

After the student's record, the advisor's recommendation, and the student's petition have been reviewed, the student will receive a written response. Reinstated students will be placed on warning immediately or will retain provisional status, as appropriate.

Scholastic Recognition

Dean's List

Students who complete at least 12 credits (in courses graded A, B, C, D, or F) with a GPA of at least 3.5 in an academic year at UMUC are eligible for the Dean's List.

Students who fail to earn the required average by the end of the academic year must complete a minimum of 12 more credits during the next academic year to be considered for the Dean's List again. All courses taken during an academic year are used in computing the average, even though the total number of credits may exceed 12. An academic year is designated as summer through spring sessions. Eligibility for the Dean's List is calculated once a year.

Academic Honors

Academic honors for excellence in scholarship are determined by the students' cumulative GPA at UMUC. The distinction of summa cum laude is conferred on those students with a cumulative GPA of 4.000; magna cum laude honors are conferred on those students with a cumulative GPA of 3.901 to 3.999; cum laude honors are conferred on those students with a cumulative GPA of 3.800 to 3.900. To be eligible for any of these categories of recognition, a student must have earned at least 45 credits at UMUC in courses for which a letter grade and quality points were assigned. For honors to be conferred with a second bachelor's degree, the student is required to have a total of 45 new UMUC credits and the requisite GPA. (More information on attaining a second bachelor's degree may be found on p. 9.)

Honor Societies

Inquiries concerning honor societies should be addressed to the student's advisor.

ALPHA SIGMA LAMBDA

UMUC students are eligible for membership in Alpha Sigma Lambda, the national honor society for students in continuing higher education. To qualify for membership, a student must be pursuing a first bachelor's degree, have completed at least 30 credits at UMUC, in courses graded A, B, C, D, or F, and maintained a GPA of 3.7 or higher in all UMUC courses. At least 15 credits, from UMUC or transferred, must be in courses outside the major.

LAMBDA PI ETA

Membership in Lambda Pi Eta, the official communication studies honor society of the National Communication Association, is open to qualified UMUC students. To be eligible, students must have earned at least 60 credits toward the bachelor's degree, including at least 12 credits in communication studies, with a GPA of 3.5 or higher both in communication studies and overall coursework.

PHI ALPHA THETA

UMUC students may qualify for membership in Phi Alpha Theta, the international honor society in history. To qualify for membership, students must attain a GPA of 3.5 or higher in at least 12 credits of UMUC history courses and have an overall UMUC GPA of 3.4.

PHI KAPPA PHI

The honor society of Phi Kappa Phi promotes the pursuit of excellence in all fields of higher education and recognizes outstanding achievement by students, faculty, and others through election to membership and through various awards for distinguished achievement. To qualify for membership in Phi Kappa Phi, candidates must have completed at least 90 credits toward the bachelor's degree, at least 45 of which must have been for UMUC courses carrying letter grades of A, B, C, D, or F. The candidate's GPA in UMUC courses must be in the top 10 percent of the previous UMUC graduating class.

PI GAMMA MU

Pi Gamma Mu is the international honor society for the social sciences and recognizes outstanding scholarship in the social sciences at UMUC. Membership is offered to qualified students interested in anthropology, criminal justice, economics, gerontology, history, political science, social psychology, sociology, and women's studies.

Students who are in their last 60 credits of undergraduate study, have earned at least 20 hours of social science credit, and have a GPA that ranks in the upper 35 percent of their class may be invited to join.

PSI CHI

Psi Chi is the National Honor Society in psychology, founded in 1929 for the purposes of encouraging, stimulating, and maintaining excellence in scholarship and advancing the science of psychology. Qualified students must be invited to join. To qualify for membership, students must have declared a major or minor in psychology and earned at least 45 credits toward a bachelor's degree, including at least 9 credits in psychology at one of UMUC's stateside regional locations. Additionally, qualified students must be in the top 35 percent of their class, based on rankings within sophomore, junior, and senior classes; have an overall GPA of at least 3.0; and have a psychology GPA of at least 3.0.

SIGMA MU

Sigma Mu is the online psychology honor society of UMUC. The society recognizes superior scholarship by degree-seeking psychology students and provides a venue for active participation and professional exposure in psychological practice, research, and education. To qualify for membership, a student must have declared a major in psychology and must complete at least 9 credits in psychology through UMUC, maintain an overall GPA of 3.4 or higher at UMUC, and provide a letter of recommendation from a member of the UMUC psychology faculty.

SIGMA TAU DELTA

Membership in Sigma Tau Delta, the international English honor society, is open to qualified UMUC students with a major in English. To be eligible, students must have earned at least 45 credits toward the bachelor's degree with an overall GPA of 3.5 or higher. At least 30 credits must have been earned through UMUC and must include 12 credits of English, not including ENGL 101 (now WRTG 101), and 6 credits of upper-level coursework. Students must also have earned a GPA of 3.6 in English coursework at UMUC.

RIGHTS AND RESPONSIBILITIES OF THE STUDENT

Current information and links to policies and resources are available in the online *Student Handbook* at *www.umuc.edu/students/handbook.* Students should refer to the handbook for the most current information.

Attendance

The student is responsible for attending all classes and any related activities regularly and punctually. In some courses, teachers may base part of the final grade on class participation.

Students are expected to achieve the same learning objectives and do the same amount of work in an online course as they would in an on-site course. Active participation is required in all online courses, and students should expect to log in to their online courses several times a week.

Absence from class does not excuse a student from missed coursework. The student is responsible for obtaining detailed information about missed class sessions, including their content, activities covered, and any announcements or assignments. Failure to complete any required coursework may adversely affect the student's grade. Teachers are not expected to repeat material that a student has missed because of the student's absence from class.

ACADEMIC AND ADMINISTRATIVE REQUIREMENTS

Internet Access

UMUC is committed to ensuring that students acquire the level of fluency in information technology they need to participate actively in contemporary society and have access to up-to-date resources. All UMUC students must be prepared to participate in asynchronous, computer-based class discussions, study groups, online database searches, course evaluations, and other online activities whether their course is held online or in a classroom.

All UMUC students must therefore ensure that they have access to the Internet and have a current e-mail address. If the student does not have Internet access through a home computer, he or she may use one at a UMUC computer lab, a university or public library, or another source. However, that source should be regularly available.

The most current technical requirements are available online at *http://tychousa.umuc.edu/tech/min_tech.html.*

Examinations

The student is responsible for obtaining information about quizzes and examination schedules and policies. Final examinations are usually given during the last scheduled class meeting for classes meeting on-site. For online classes, the final examination is usually given during the last week of the session.

Makeup examinations and tests may be given to students who for valid reasons are unable to take exams at the scheduled time. Teachers are not required to offer makeup examinations because of a student's absence unless the student can present evidence that it was caused by unavoidable circumstances or occurred on a religious holiday.* In such cases, an examination may be rescheduled for the mutual convenience of student and teacher and must cover only the material for which the student was originally responsible. Such a rescheduling must not cause a conflict with the student's other classes. Exams and Testing Services *(www.umuc.edu/testing)* schedules makeup exam sessions for students whose teachers cannot schedule a special makeup session. There is a fee for this service.

Course Load

No student may register for courses whose scheduled meeting times overlap to any extent. Decisions on the number of courses a student can successfully complete in any one session are normally left to the student's discretion. It should be noted, however, that the majority of UMUC students register for between 3 and 9 credits, and students are strongly advised not to exceed this limit. Students should carefully and realistically assess other commitments before registering for more than 9 credits. In no case may a student register for more than 18 credits in a 17-week period without written permission from an advisor. Permission to register for more than 18 credits is based on demonstrated academic excellence at UMUC. A minimum GPA of 3.5 and an enrollment history indicating success in carrying a heavier-than-average course load at UMUC are required.

Academic Integrity

Integrity in teaching and learning is a fundamental principle of a university. UMUC believes that all members of the university community share the responsibility for academic integrity, as expressed in the University System of Maryland policy "Faculty, Student, and Institutional Rights and Responsibilities for Academic Integrity." Details are available from the Office of the Dean, School of Undergraduate Studies.

At UMUC, faculty members are expected to establish classroom environments conducive to the maintenance of academic integrity by promptly giving students a complete syllabus describing the course and its requirements, grading submitted work promptly and adequately, and arranging appropriate testing conditions, including having faculty members monitor examinations given in class.

Students at UMUC are expected to conduct themselves in a manner that will contribute to the maintenance of academic integrity. Failure to maintain academic integrity (academic dishonesty) may result in disciplinary action.

Students are responsible for understanding and avoiding academic dishonesty and plagiarism, whether intentional or unintentional. The definitions of academic dishonesty and plagiarism and the procedures for pursuing complaints of academic dishonesty are described in UMUC Policy 150.25 Academic Dishonesty and Plagiarism, which can be found at *www.umuc.edu/policy* or is available from the Office of the Dean, School of Undergraduate Studies.

* The UMUC policy on religious holidays is stated in the appendices.

Appealing a Grade

Procedures for appealing a grade are detailed in UMUC Policy 130.80 Procedures for Review of Alleged Arbitrary and Capricious Grading, which is available from the Office of the Dean, School of Undergraduate Studies, or online at *www.umuc.edu/policy.*

There is a time limit for appealing a grade. Therefore, students who want to appeal a grade must initiate the process within 30 days of the posting of the grade.

Code of Student Conduct

Students are subject to UMUC Policy 151.00 Code of Student Conduct, which can be found at *www.umuc.edu/policy* or is available from the Office of Student Affairs. Violations of the code are considered to be violations of UMUC policy and are grounds for discipline by UMUC. Allegations of misconduct by UMUC students should be referred to the provost and chief academic officer.

Student Grievance Procedures

The procedures necessary to file a formal complaint concerning the actions of members of the UMUC faculty or administrative staff are detailed in UMUC Policy 130.70 Student Grievance Procedures, which is available at *www.umuc.edu/policy* or from the Office of the Dean, School of Undergraduate Studies. Students who wish to seek redress for the acts or omissions of a faculty or staff member must first request a conference with that person and attempt to resolve the complaint informally within 14 calendar days of the alleged act or omission.

Change of Address

Students who move during the session should not only leave a forwarding address with the U.S. Postal Service but should also notify UMUC by updating their personal information through MyUMUC.

Transfer of Credits from UMUC

To have credits earned through UMUC transferred, each student must obtain authoritative guidance from the destination institution (including other institutions in the University System of Maryland). Only the destination institution can answer specific questions about its own residency and degree requirements or about the applicability of UMUC courses to its curricula. Specific policies dealing with transfer students are given in the appendices.

Code of Civility

To promote a positive, collegial atmosphere among students, faculty, and staff, UMUC has developed a Code of Civility, which is also available in the *Student Handbook* at *www.umuc.edu/students/civility.html.*

ADMISSION AND ENROLLMENT

Before the beginning of each term, UMUC holds open houses and orientations (online and on-site) for new and prospective students. These events offer an opportunity to learn about UMUC and its programs, student services, academic and career options, faculty members, and fellow students. Prospective students can be admitted and register for courses at these times.

For general information, or to be directed to specific offices, students may call 800-888-UMUC (8682). Most offices are open weekdays from 8:30 a.m. to 5 p.m. eastern time.

ADMISSION

Admission Requirements

The admission procedures of UMUC were designed to meet the needs of adult, part-time students. Most applicants who have a high school diploma or the equivalent are admissible. In most cases, neither transcripts nor test scores are required. By the end of the first session, a student who plans to earn a degree at UMUC must make sure that official transcripts have been sent from each institution previously attended.

Student Status

Upon being admitted to UMUC, students are assigned to regular or provisional status. Admission of foreign-educated applicants is governed by requirements given on p. 241.

REGULAR

A qualified applicant who wants to receive credit for courses (whether he or she intends to receive a degree or not) is admitted as a regular student. For financial aid purposes, a regular student must be seeking a degree or certificate at UMUC. Admission as a regular student is granted to applicants who submit a completed, signed application and fulfill the following academic requirements that apply to their educational level:

• Graduation from a regionally accredited or state-approved high school in the United States

or

• Successful completion of the General Education Development (GED) examination with a total score of 225 and no individual test score below 40 (for tests completed before January 2002) or a total score of 2250 and no individual test score below 410 (for tests completed after January 2002).

To be granted regular admission status, students should have maintained a cumulative grade point average of at least 2.0 (on a 4.0 scale) in all college-level work attempted at other regionally accredited colleges and universities, including other University System of Maryland institutions. However, an academic probation or dismissal that occurred at least two years before the date when the student applies for admission has no bearing on the student's admission status.

Students are not required to submit official transcripts at the time of admission. However, students must have all official documents of their educational background on file by the end of the first session of attendance. Students who present at least 24 credits of transferable college coursework are not required to submit official high school transcripts or GED scores.

PROVISIONAL

Two categories of students may be admitted in provisional status:

1. Applicants who, during the last two years, earned a cumulative grade point average of less than 2.0 (on a 4.0 scale) at another institution and/or were academically dismissed from another institution (regardless of their cumulative grade point average).

2. Foreign-educated students who have not completed at least 24 credits of transferable college coursework.

All provisional students may enroll for a maximum of 7 credits during a fall, spring, or summer session.

During their first session of enrollment at UMUC, provisional students in the first category must submit transcripts from all colleges and universities they have attended. If the student's session grade point average at UMUC is less than 2.0, the student is placed on probation. If, while on probation, the student's session grade point average is 2.0 or better, she or he returns to provisional status. If, while on probation, the student's session and cumulative grade point averages are less than 2.0, he or she is dismissed and must follow the standard reinstatement procedures that apply to all dismissed students. The student's status is automatically changed to regular after the student has successfully completed 7 credits of graded coursework with a cumulative grade point average of 2.0 or higher.

Students educated abroad must submit official transcripts verifying completion of the equivalent of a U.S. secondary education. They are eligible for regular admission status once UMUC has verified that they have completed the equivalent of a U.S. high school education.

More details on the admission of noncitizens and foreign-educated students are on p. 241.

Procedures for Admission

To apply for admission, students must complete an undergraduate admission application and pay the nonrefundable fee. Before attempting to register, students must have been officially admitted to the university. Applications for admission may be submitted online through MyUMUC (*https://my.umuc.edu*). Deadlines for admission and registration are listed in the current undergraduate *Schedule of Classes.*

Determination of Residency for Tuition Purposes

An initial determination of in-state or out-of-state status for tuition purposes is made when a student applies for admission. The determination made at that time remains in effect thereafter unless it is successfully challenged. The student is responsible for providing the information necessary to establish eligibility for in-state status. Official criteria for determining residency are in the appendices.

Further information on tuition and fees may be found on p. 243.

Reenrollment

Students who have not attended UMUC for two years must file a new application with Undergraduate Admissions before they will be allowed to register. However, they need not pay another application fee.

Transfer from UMUC Europe or UMUC Asia

Students who previously attended UMUC overseas and who wish to attend UMUC in the United States must complete a divisional transfer form. This form is located on the Web sites of the overseas divisions. There is no fee for divisional transfers.

FORWARDING OF OVERSEAS STUDENTS' RECORDS

Records of students formerly enrolled in UMUC Europe or UMUC Asia are retained in the Office of Admission and Registration of that program. If such a student later enrolls in UMUC stateside, the student's records are then requested by Undergraduate Student Affairs. (**Note:** Records of students who attended UMUC at its former campus in Schwäbisch Gmünd, Germany, are now retained at UMUC headquarters in Adelphi, Maryland.)

Admission of College Graduates

A student who has received a bachelor's degree from a regionally accredited U.S. institution is automatically admissible to UMUC as a regular (undergraduate) student upon submission of the admission application and fee. A former graduate student in the University System of Maryland whose time limit in a program has expired may also be admitted as a regular (undergraduate) student. Students who have been admitted to UMUC as graduate students may take undergraduate courses at the undergraduate rate of tuition. Courses taken while in regular (undergraduate) status, however, cannot ordinarily be applied to a graduate degree program.

Students from Other USM Institutions

Undergraduate students from other institutions of the University System of Maryland may take undergraduate courses without applying to UMUC. Instead, they must either submit a letter of permission from their department or complete a "Notification of Registration with University of Maryland University College" form, certifying good standing and eligibility to return to the last institution attended. Graduate students from other institutions of the University System of Maryland may also take undergraduate courses without applying to UMUC, but must pay graduate tuition and related fees. Transferability of academic work completed at UMUC is determined by the student's home institution. Undergraduate courses taken by graduate students may not be applied toward graduate degree requirements.

Noncitizens and Foreign-Educated Students

Prospective students who are not U.S. citizens or who were educated abroad will need to complete the following steps:

1. If English is not the student's native language, the student may not be admitted until college-level proficiency in written English is demonstrated in one of the following ways:

   • A score of at least 550 on a written version, 213 on a computer-based version, or 79 on the Internet-based version of the TOEFL (Test of English as a Foreign Language),

   • A score of at least 6.5 on the International English Language Testing System (IELTS), including the academic writing and reading modules,

   • A grade of C or higher in an English composition course from an accredited U.S. college or university,

   or

   • Graduation from a U.S. high school or university.

2. If the applicant has earned fewer than 24 credits at a U.S. college or university, completion of the equivalent of a U.S. secondary education must be verified by

• An evaluation from an approved international credit evaluation agency. (Details are available online at *www.umuc.edu/internationalcredit.*)

or

• Official transcripts showing successful completion of the U.S. GED exam with a total score of at least 225 and no individual test score below 40 (for tests completed before January 2002) or a total score of at least 2250 and no individual test score below 410 (for tests completed after January 2002).

Until this verification is received by UMUC, the student is admitted provisionally, for one session only, and may register for a maximum of 7 credits. Once verification is received, the student's status is changed to regular and he or she may register for up to 18 credits. Students are not permitted to register for subsequent sessions until verification is received.

3. Noncitizens who plan to study while resident in the United States (as opposed to studying online from abroad) must provide information on visa or immigration status. To do so, students should enclose with the admission application a copy of their permanent resident card, their visa and I-94 card, or an approval notice from the U.S. Citizenship and Immigration Services noting their visa or immigration status.

F-1 or J-1 visa holders attending other schools must submit a letter of permission from their sponsoring institutions before registration each session.

Applicants Previously Suspended or Dismissed

An academic probation or dismissal from another institution that took place at least two years before the date when a student applies for admission has no bearing on the student's admission status. However, all students previously dismissed from UMUC must apply for reinstatement.

Applicants academically suspended or dismissed from other institutions within the previous two years, regardless of their cumulative grade point average, may be admitted as provisional students. They must fulfill the requirements for provisional status. Details are given on p. 240.

An applicant who has received a disciplinary suspension or dismissal from another institution within the last three years may not be considered for admission to UMUC until officials have thoroughly reviewed the case. Such an applicant must make certain that the institution where the action was taken sends all records explaining the circumstances directly to Undergraduate

Admissions. The length of time necessary for the documents to be sent and reviewed may preclude the student's registering during the session of initial application.

Concurrent Secondary Enrollment

With the recommendation of a high school guidance counselor, an academically gifted high school senior may carry a maximum of 7 credits per session at UMUC while finishing work toward a high school diploma. At least a month before a session begins, UMUC must receive the student's application for admission, the application fee, official high school transcripts, and written permission from the appropriate officials at the high school. Such a student is required to demonstrate a cumulative grade point average of at least 3.5 (B+) in high school academic subjects. After being accepted, the student may continue to register as a "concurrent secondary" student until graduation from high school. For purposes of categorization, the student is treated as having provisional status.

Golden Identification Card for Senior Citizens

Senior citizens may qualify for admission and a Golden Identification Card. Participants in the Golden Identification Card program may register for two courses that total up to 7 credits each session for credit, on a space-available basis, without paying tuition. They may enroll during the final week of registration and must pay all fees. Credits and fees associated with EXCEL Through Experiential Learning must also be paid.

To qualify for the Golden Identification Card, the prospective student must meet the following criteria:

• Be a resident of Maryland,

• Be a U.S. citizen or produce a resident alien card (formerly an alien registration card),

• Be 60 years of age by the beginning of the session being applied for,

and

• Not be employed more than 20 hours a week.

Students may consult an advisor for further information.

Ways to Register

Registration begins each session as soon as the course schedule becomes available on the Web and continues until the start of the session. Students should check the current undergraduate *Schedule of Classes* for the deadlines for regular and late registration.

UMUC offers a number of ways to register for most courses, including online (via MyUMUC), telephone, and on-site registration. Detailed information and instructions are available each session online at *www.umuc.edu/register* and in the undergraduate *Schedule of Classes.*

The Waiting List

If a class is already full at the time of registration, the student has the option of placing his or her name on a waiting list for that class.

WAITING LIST POLICIES

Regardless of how the student registers, the following policies apply:

- Students may put their name on the waiting list for only six courses or sections.
- Students may not attend a class for which they are on the waiting list.
- Faculty members and academic advisors are not authorized to add students to a closed class.
- If a space becomes available, the first student on the waiting list will automatically be registered for it, and the charge will appear on his or her account. An e-mail will be sent to notify the student of the enrollment. If that student is ineligible for enrollment (because he or she has not met prerequisites or is enrolled in another class that conflicts in time), the space will go to the next person on the waiting list.

Students who no longer want a class should remove their name from the waiting list to prevent the possibility of automatic enrollment.

Withdrawals or Dropped Courses

Stopping payment on checks for registration fees, or not paying at registration, does not constitute an official withdrawal or relieve the student of his or her financial obligation to UMUC. Never attending or ceasing to attend class(es) does not constitute a withdrawal.

Students who officially withdraw from a course after the schedule adjustment period receive a mark of W (described on p. 234). Undergraduate students must officially withdraw no later than two weeks (14 days) before the final class. For accelerated courses, a withdrawal must be submitted before the close of business on the first day of class.

Policies and procedures for withdrawing from a course are available online at *www.umuc.edu/register.*

Tuition and Fees

All tuition and applicable fees must be paid in full at registration, unless the student

- Applied for financial aid to cover tuition and fees for the session.
- Is enrolled in UMUC's interest-free monthly payment plan (details are provided at *www.umuc.edu/payoptions).*
- Submitted proof of employer-provided tuition assistance.

Students registering by phone via IRIS are granted a certain number of days for payment to be received. (If payment is not received by the specified deadline, the registration may be canceled.)

UMUC offers a variety of payment options. Payments can be made via

- Credit card (American Express, Discover, MasterCard, or Visa)
- Money order
- Check (made payable to University of Maryland University College)
- Electronic check
- Cash (in person at Adelphi only)

Students who qualify for tuition assistance, financial aid, or veterans benefits should consult the appropriate sections of this catalog. Students interested in the monthly payment plan, administered by TuitionPay, should contact the company at 800-635-0120 or visit *www.tuitionpay.com/umuc.* More information on payment is available online at *www.umuc.edu/payoptions.*

Current Tuition and Fees

Tuition rates and fees are published each session in the undergraduate *Schedule of Classes* and are available on the Web at *www.umuc.edu/tuition.* Students should review the fee schedule carefully to see which ones apply. Fees are commonly charged for applications for admission and graduation, laboratory use (in science and some computer courses), makeup testing, transcripts, and various options for earning credit (such as Cooperative Education, Experiential Learning, and credit by examination). There is also a service charge for dishonored checks.

Refunds

A student who withdraws from a course before the first class meeting will receive a full tuition refund. A student who withdraws after classes begin will be refunded a portion of the tuition, the amount to be determined by the date of the withdrawal. Refunds for Cooperative Education courses follow university policy and are based on the date the student registered for the course. The schedule for partial refunds is given in the current undergraduate *Schedule of Classes.*

If the tuition for a student who withdraws was paid by employer contract, the refund is returned to the employer. If the tuition assistance was a partial payment, it is returned to the employer, and excess payments are refunded to the student. Financial aid awards may be canceled or reduced for financial aid recipients who withdraw from classes. Financial aid recipients should check with a financial aid advisor when withdrawing from a course to determine the impact on their awards.

No offer of financial aid is considered an active, final award until the refund period has ended. Students who withdraw before the end of that period are liable for all costs incurred and are billed accordingly.

Dishonored Checks

For each check returned unpaid by the payer's bank (whether because of insufficient funds, stopped payment, postdating, or drawing against uncollected items), UMUC assesses a service charge of $25 (over and above any service charges levied by the financial institution).

A student who stops payment on a check for tuition is thereby neither disenrolled nor relieved of responsibility for paying tuition and fees. Anyone whose checks for tuition or fees remain dishonored may be barred from classes.

Indebtedness to the University

Students who incur debts to UMUC must clear them to be permitted to register. Requests for services (including transcripts, diplomas, commencement arrangements, and transfer credit review) are denied until all debts have been paid. Outstanding debts are collected against refunds due the student. After a reasonable period of time, uncollected debts are forwarded to the Central Collection Unit of the State Attorney General's Office.

If a student fails to pay charges incurred with UMUC within 90 days of the transaction date, UMUC has the authority to deem that account delinquent and transfer it to the State of Maryland Central Collection Unit. UMUC has also received authorization from the Board of Regents to charge students' delinquent accounts a 17 percent collection fee and/or all attorney or court costs incurred by the university. Once a past-due balance with UMUC has been transferred to the state Central Collection Unit, the student's information is reported to a credit bureau. More information may be accessed from the Bursar's Office Web page at *www.umuc.edu/bursar.*

Employer-Provided Tuition Assistance

If an employer is going to pay for part or all of a student's tuition, the student must submit two copies of appropriate documentation at the time of registration. Requirements are listed at *www.umuc.edu/students/registration.* Documents that restrict payment or are in any way conditional will not be accepted. If the employer does not pay UMUC, the student is responsible for payment.

UMUC cannot issue refunds for authorizing documents submitted after registration. If the document authorizes payment for books and supplies, the student must submit a separate copy to a participating bookstore (listed at *www.umuc.edu/gen/options.shtml*) when charging books, within 15 days after the end of the registration period.

WAYS OF EARNING CREDIT

UMUC is unlike any other institution of higher education in the world in its combination of access with academic quality. It opens doors to learning by taking education to students wherever they may be. Because UMUC understands the importance of lifelong learning, it has established academic policies that encourage the appropriate use of transfer credit from other institutions. Recognizing that adult students bring to the university not only a willingness to learn but also an educational history informed by experiential learning, it incorporates the assessment of nontraditional learning (i.e., learning gained outside the classroom) into the evaluation of students.

CLASSROOM AND ONLINE STUDY

UMUC uses every feasible instructional delivery mechanism or platform to extend degree opportunities to students. Most of UMUC's degree and certificate programs are available both on-site and online. Students may choose to complete their academic studies through either or both formats to suit their schedules and preferences.

UMUC courses observe the same standards of quality regardless of delivery format. Any given course maintains the same course objectives and requirements, awards the identical amount of academic credit, and may be applied toward the same undergraduate degrees whether it is delivered in a stateside classroom, overseas, or via the Internet.

Both classroom and online programs are also supported by a full range of student services and academic resources—from extensive online library databases to admission, advising, and registration—that can be accessed on-site, online, and by phone (details are on pp. 250–58).

Classroom-Based Study

Students take UMUC courses in classrooms at locations in Maryland and the national capital region; in classrooms on U.S. military bases throughout Europe and Asia through long-standing partnerships with overseas military commands; and at work sites through contractual arrangements with employers. With so many course and service locations (listed on p. 283–84) available, students in the Maryland area who prefer direct interaction can be sure of finding courses and services close to home.

On-site courses are also enriched by access to online materials and resources.

Online Study

UMUC's role as a virtual and global university means that students can access and participate in the university experience from any place in the state, the nation, or the world. UMUC's award-winning online courses and programs offer a technology-enriched experience conducted by the same excellent faculty as its on-site offerings.

In online courses, students are linked to faculty and classmates via computer and the Internet. The faculty member leads discussions, responds to student inquiries, and posts reviewed assignments in individual folders online. Students are expected to participate frequently in online discussions.

Online students should have strong reading and writing skills, as well as a basic knowledge of the Windows environment. Technical requirements for participating in online courses are provided online at *tychousa.umuc.edu/tech/min_tech.html*.

LEARNING GAINED THROUGH EXPERIENCE

Learning acquired outside the college classroom may be assessed for credit toward a degree at UMUC. There are two ways students can make use of life experience for possible college credit: Prior Learning and Cooperative Education. Details on each method follow. Advisors can help in determining the best routes to use in fulfilling any academic plan.

Prior Learning

Students may earn credit for college-level learning acquired outside the classroom through two avenues: course-challenge examinations and EXCEL Through Experiential Learning. As many as 30 credits may be earned through a combination of course-challenge examinations and EXCEL and applied toward the bachelor's degree. However, no more than half the credits required for an undergraduate major, minor, or certificate program may be earned through Prior Learning (EXCEL and course-challenge examinations) and credit by examination (described on p. 249). Any excess credits awarded are applied where appropriate in the student's program of study.

Course-Challenge Examinations

UMUC credit can be earned for any undergraduate course for which UMUC can prepare and administer a suitable examination (called a course-challenge examination). Advisors and Prior Learning office staff can inform students about specific courses that may not be challenged by examination. Degree- or certificate-seeking students at UMUC who have received

a degree progress report and have a cumulative grade point average of at least 2.0 in UMUC coursework should carefully review the rules, procedures, and limitations described at *www.umuc.edu/priorlearning* before applying online.

Course-challenge exams are not intended as a substitute for independent study. Students may be required to show evidence of prior learning before being authorized to take a course-challenge exam. Credit may be applied toward a first or second bachelor's degree or toward a certificate. No exam may be taken more than twice, and course-challenge examinations may not be taken for courses for which the student has previously enrolled. Only one course in a sequence may be tested at one time, and students may not take an exam for a course that is prerequisite for a higher-level course they have already taken.

Credit earned by course-challenge examination earns a letter grade, according to the exam score, that is computed in the grade point average. However, this credit may not be applied to the requirement for graded coursework in the student's major. Students may not receive credit for introductory courses in their native language.

Exams may only be canceled before the student receives the exam. Refunds are given only if a suitable exam cannot be prepared.

More information on course-challenge examinations may be obtained by visiting the UMUC Web site at *www.umuc.edu/priorlearning* or by calling 800-888-UMUC, ext. 2860.

EXCEL Through Experiential Learning

EXCEL Through Experiential Learning is a unique way for students to demonstrate and earn credit for college-level learning they have gained from work, community or political involvement, or other noncollegiate experiences. To be eligible for EXCEL, students must

- Complete an EXCEL application.
- Complete an orientation (available online).
- Meet basic standards in writing (either by having taken a college writing course or by qualifying for WRTG 101 on the writing placement test).
- Be in good academic standing at UMUC (not on academic warning or probation).
- Have submitted all transcripts, exam scores, and military documents related to coursework and experience to the Registrar's Office for a review of transfer credit.

Enrollment in EXCEL 301 Learning Analysis and Planning is required. In this 3-credit course, the student prepares a portfolio describing and documenting college-level learning gained from past experiences. Because EXCEL 301 is a demanding and complex

course, part-time students should not register for more than one other course during the session in which they are enrolled in EXCEL 301. After receiving credit for EXCEL 301, students may not enroll in the class again.

EXCEL 301 is graded on an S/D/F basis (explained on p. 233). If the quality of work in the portfolio merits a grade of C or higher, a grade of S is awarded and the portfolio is forwarded for credit evaluation. Faculty members from the appropriate disciplines assess the portfolio and recommend whether to award credits. Credit earned as a result of portfolio evaluation also earns a grade of S. The S grade is not computed in the grade point average and is not applicable toward honors.

Experiential-learning credits may be awarded at both the upper and lower levels. Although a maximum of 30 credits may be earned through EXCEL, the average award is between 15 and 18 credits. These credits are considered UMUC resident credit. However, they do not fulfill requirements for graded coursework and so may not exceed half the total credits for a major, minor, or certificate.

Credit for EXCEL 301 is charged at the current tuition rate. Fees are also charged for enrollment in the program, portfolio evaluation, any additional evaluations, and credits awarded. Golden ID students and those receiving financial aid must pay all EXCEL fees.

Students should carefully review the requirements, rules, and procedures for EXCEL. More information may be obtained at *www.umuc.edu/priorlearning* or by calling 800-888-UMUC, ext. 2860.

Cooperative Education

Cooperative Education (Co-op) extends education beyond the traditional classroom experience by bringing theory into practice in the workplace. Co-op offers an opportunity for students to gain experience and develop new knowledge and skills in their chosen discipline while earning upper-level college credit, thus enabling them to accelerate completion of both their academic and career goals.

To be eligible for Co-op, students must

- Be seeking a degree or a certificate that includes a Co-op option from UMUC.
- Have completed 30 credits, including transfer credit, toward a degree (if seeking a degree).
- Have completed at least 9 credits in the discipline in which they plan to do their Co-op project.

- Have a GPA of 2.5 or better at UMUC.

- Be working in a position that offers an opportunity to apply classroom theory to practical projects that involve significant analysis and problem solving and are directly related to a given academic discipline. (Position may be paid or unpaid, part- or full-time.)

Students interested in pursuing a Cooperative Education experience must first develop a learning proposal that identifies several project tasks representing the new learning to be acquired as a result of the work experience; a faculty member in the appropriate discipline must then approve the learning proposal to ensure that it constitutes upper-level college learning. Once the learning proposal is approved, the student is given permission to register for Co-op. The learning proposal is then developed into a three-way learning contract among the employer, the student, and the faculty mentor.

Throughout the Co-op experience, students work under the supervision of the employer on completion of several of the identified project tasks and the faculty mentor on the completion of the academic assignments required to earn college credit for their work experience. The project tasks for the employer constitute the course content, which is augmented by the reflective academic assignments written for review by the faculty mentor. Students are required to communicate regularly with their faculty mentor throughout the Co-op session, which typically lasts 15 weeks.

Students may earn either 3 or 6 credits during the Co-op session. To earn 3 credits, students must devote at least 12 hours per week to tasks providing new learning (for a total of 120 hours during the Co-op session) and complete a minimum of four project tasks identified in the learning contract. To earn 6 credits, students must devote at least 20 hours per week to project tasks (for a total of 300 hours during the Co-op session) and complete five to eight project tasks identified in the learning contract.

Co-op projects may be developed in all undergraduate disciplines. Courses are listed in the UMUC catalog with the designator of the discipline and numbered 486A (for 3 credits) or 486B (for 6 credits). For example, a 3-credit Co-op in business and management would be listed as BMGT 486A, a 6-credit as BMGT 486B. Tuition for the Co-op course is charged at the current rate per credit, and an administrative fee is charged each time the student enrolls.

Students may apply up to 15 Co-op credits to their bachelor's degree (9 credits for a second bachelor's degree). Certificates that include a Co-op option typically accept no more than 3 credits of Co-op coursework. Co-op courses may not be used to satisfy general education requirements or required academic coursework in the major. However, Co-op credits may be applied to electives as well as to upper-level supplemental courses in the major or minor. A standard letter grade is awarded for successful completion of Co-op courses. It is strongly recommended that students consult with a UMUC advisor to determine how Co-op credits may help them fulfill degree requirements.

For more information, students should review the information, policies, and procedures detailed online at *www.umuc.edu/coop* or call the Cooperative Education program office at 800-888-UMUC, ext. 2880.

(Further details and regulations are given in Appendix B and Appendix C.)

UMUC will not award credit for courses that repeat work done elsewhere. Students who have earned credit at other colleges or universities are responsible for determining whether courses they plan to take at UMUC would duplicate any previously earned credit. Students who are in doubt should consult an advisor before registering.

Credit toward a UMUC degree may be assigned for work completed through the kinds of institutions described in the following sections. As many as 45 credits of transferable college coursework may be counted toward the associate's degree; as many as 90 credits may be counted toward a bachelor's degree. UMUC does not accept credits for remedial, precollege, or sectarian religious courses in transfer. A student who wants to transfer credit from other institutions to UMUC should request a review of previous credit from an enrollment specialist to determine the applicability of those credits to a degree from UMUC. No transfer credit is accepted without official transcripts.

Credits earned at other institutions during a period of disciplinary suspension or dismissal from UMUC are not accepted in transfer.

Credit from Other Colleges and Universities

When the grade earned was at least C, transfer credits from regionally accredited two- and four-year colleges and universities may be accepted for courses that apply to the student's curriculum and do not duplicate other courses for which credit has been awarded. Transfer credit for another institution's course-challenge examinations and prior learning program may be accepted if it is listed on the transcript with a passing grade.

WAYS OF EARNING CREDIT

Credit from Junior Colleges and Community Colleges

A total of 70 credits from two-year institutions (junior colleges or community colleges) may be applied toward a bachelor's degree at UMUC. A student who has already completed 70 credits may not apply further credit from a junior college or a community college to a degree from UMUC.

A student who initially enrolled in the public community colleges of Maryland will be admitted to UMUC in conformance with the policy developed and approved by the Maryland Higher Education Commission. (Details are given in the section on transfer policies in the appendices.) Students participating in one of the community college alliances with UMUC should consult with their advisors at both institutions if they plan to enroll in courses at both institutions concurrently.

EDUCATIONAL EXPERIENCES IN THE ARMED SERVICES

UMUC grants credit for military experience and study completed in service schools on the basis of the recommendations by the American Council on Education (ACE) in its *Guide to the Evaluation of Educational Experiences in the Armed Services.* Such credit is granted only if it is applicable to the student's chosen curriculum. UMUC generally accepts recommendations of ACE for lower-level and upper-level credit. Recommendations made by ACE for vocational or technical credit are considered on the same basis as, and with the same limitations as those placed on, nonmilitary sources of credit.

Community College of the Air Force

UMUC awards credit for study at technical schools of the U.S. Air Force in accordance with recommendations from the Community College of the Air Force (CCAF). Credits must be applicable to the student's chosen curriculum at UMUC, must meet other UMUC requirements for transfer credit, and are subject to the same limitations as those placed on nonmilitary credit.

- All credit from the CCAF is lower level and is applicable only to freshman and sophomore requirements.

- Since the CCAF records satisfactorily completed courses as S (satisfactory) and specifies that S equals a grade of C or better, credit may be applied wherever appropriate in the UMUC curriculum. Courses that are vocational or technical may be used only as electives up to a maximum of 21 credits.

Servicemembers Opportunity College

As a designated four-year Servicemembers Opportunity College (SOC), UMUC provides opportunities for men and women in the military services to complete educational programs through various modes of instruction scheduled at times appropriate to their duty assignments. The SOC institutions have also developed a series of degree networks that correspond to Army, Navy, Coast Guard, and Marine career specialties and lead to associate's degrees (SOCAD-2, SOCNAV-2, SOCCOAST-2, and SOCMAR-2 programs) and bachelor's degrees (SOCAD-4, SOCNAV-4, SOCCOAST-4, and SOCMAR-4 programs). The SOC concept itself was developed jointly by educational representatives from each of the military services, from the U.S. Department of Defense, and from 13 of the nation's leading associations of higher education.

TECHNICAL AND PROFESSIONAL CREDIT

Vocational and Technical Credit

Vocational and technical credit from regionally accredited institutions or ACE-approved organizations, when applicable, may be accepted as elective credit only.

This credit may be applied toward a degree at UMUC, up to the following limits:

- Associate's degree: A maximum of 12 credits.

- Bachelor's degree: A maximum of 21 credits of coherently related work.

Noncollegiate Courses

UMUC will accept for credit professional (not technical) noncollegiate courses applicable to the student's curriculum that have been evaluated by either (1) ACE (if the courses are listed in the *National Guide to Educational Credit for Training Programs)* or (2) the University of the State of New York National Program on Noncollegiate Sponsored Instruction (if listed in its *College Credit Recommendations).*

UMUC may award as many as 60 credits by examination toward the bachelor's degree (30 credits toward the associate's degree), provided that (1) there is no duplication of other academic credit, and (2) the scores presented meet UMUC standards.

Examinations may include the Advanced Placement examinations administered by the College Board, the College-Level Examination Program (CLEP), Defense Activity for Non-Traditional Education Support (DANTES) examinations, and Excelsior College Examinations. UMUC also accepts credit for professional examinations listed in the *ACE Guide to Educational Credit by Examination.* As many as 30 credits by examination awarded by other regionally accredited institutions may be accepted for courses that appear on an official transcript with a grade of C or better. Students may not receive credit for introductory courses in their native language. Students who have questions about credit by examination are encouraged to consult an advisor.

Advanced Placement

Advanced placement and college credit may be granted to students on the basis of scores on a College Board Advanced Placement (AP) examination. These examinations are normally administered to eligible high school seniors during the May preceding matriculation in college.

A student intending to transfer AP credit that was awarded at another college or similar institution must have a transcript of those scores sent directly to UMUC from the College Board. When those scores have been received, an advisor will determine whether they meet the standards established at UMUC for granting AP credit and how much credit may be awarded.

Credit earned by advanced placement may be used to fulfill major, minor, or elective requirements.

College-Level Examination Program

Up to 30 credits may be awarded for general examinations in the College-Level Examination Program (CLEP). The scores must meet UMUC standards. UMUC may award 6 credits each for the examinations in English, mathematics, natural science, social sciences and history, and humanities.

Successful completion of certain subject-area examinations is another way of earning college credit. Advisors can furnish details.

DANTES Examinations

Credit may be awarded for successfully completing certain Subject Standardized Tests of DANTES (formerly known as USAFI). Advisors have information on which tests are acceptable.

Excelsior College Examinations

Students may earn credit for successfully completing subject tests offered by Excelsior College. Tests are available in various areas of the arts and sciences, as well as in business. Scores must meet UMUC standards. Advisors can furnish details.

SERVICES AND RESOURCES

UMUC provides services and resources to help students all over the world complete their educational programs—through automated systems and resources available online or by telephone, by e-mail and telephone communication, and in person at sites throughout the Maryland area, as well as at many military sites worldwide (listed on pp. 283–84). A number of offices are responsible for the delivery of these services, including Career Services, Student Financial Services, Information and Library Services, Information Technology, Enrollment Management, and Student Affairs.

Among these, the offices of Enrollment Management and Student Affairs respond to most of the student's academic needs throughout his or her college career, providing general information; admission assistance; academic advising; registration, graduation, and transcript services; veterans benefits assistance; and services for disabled students.

In the Maryland area, services are available at the following locations:

Adelphi (UMUC Headquarters)/College Park
umucinfo@umuc.edu
Phone 800-888-UMUC

Aberdeen Proving Ground
Phone 410-272-8269

Andrews Air Force Base
Phone 301-981-3123

Arundel Mills
Phone 410-777-1882

Bethesda National Naval Medical Center
Phone 301-654-1377

Bolling Air Force Base
Phone 202-563-3611

Dorsey Station
Phone 443-459-3500

Fort Belvoir
Phone 703-781-0059

Fort Detrick
Phone 301-738-6090

Fort Meade
Phone 410-551-0431 or 301-621-9882

Fort Myer
Phone 202-563-3611

Henderson Hall, Navy Annex
Phone 202-563-3611

Laurel College Center
Phone 410-772-4162

Marine Corps Base Quantico
Phone 703-630-1543

Navy College at Anacostia
Phone 202-563-3611

Patuxent River Naval Air Station
Phone 301-737-3228

Pentagon
Phone 703-892-5394

Shady Grove
Phone 301-738-6090

Southern Maryland Higher Education Center
Phone 301-737-3228

University System of Maryland at Hagerstown
Phone 240-527-2711

Waldorf Center for Higher Education
Phone 301-632-2900

Walter Reed Army Medical Center
Phone 202-782-3023

UMUC phone representatives are available all day, every day, at 800-888-UMUC to provide answers to general questions and to help callers navigate UMUC's Web site *(www.umuc.edu).* Representatives can also make sure that callers are on the UMUC mailing list to receive upcoming class schedules, open house invitations, and other important announcements.

ADMISSION ASSISTANCE

Enrollment specialists serve individuals who are inquiring about becoming UMUC students at some future time, are admitted but have not yet registered, have not attended UMUC for two or more years and need to be readmitted (at no charge), or attended UMUC overseas. They can help prospective students apply for admission, identify financial aid opportunities, plan their curriculum, and register for their first session.

Enrollment specialists can also help qualified senior citizens apply for Golden Identification benefits. More information is on p. 242.

Students may contact an enrollment specialist by phone at 800-888-UMUC or by e-mail at *enroll@umuc.edu.* More detailed information on admission is available on p. 240.

AUTOMATED SERVICES

A number of automated services are available online to current students.

Through MyUMUC (at *https://my.umuc.edu),* students have access to many of their personal UMUC records. The system enables them to register and pay for courses, change personal information (such as home address or phone numbers), view and print reports (such as their class schedule, grade report, statement of account, unofficial transcript, and degree progress report), find out the name of their assigned academic advisor, check on the status of their financial aid application, and register for final examinations for online courses.

To access services, students must enter their identification number and personal password.

ACADEMIC ADVISING

Academic advisors provide enrolled students the information needed to plan an academic program. This assistance can include a review of potential transfer credit, help with clarification of education and career goals, and aid in selecting appropriate courses. Advising services are available at times and places convenient to students. Students who are close to UMUC's headquarters in Adelphi, Maryland, or one of the UMUC sites in the Maryland region have the option to schedule an appointment to discuss their needs with an advisor in person by calling between 8:30 a.m. and 5 p.m. eastern time, Monday through Friday. Many students, however, choose to communicate with their advisor by phone, fax, or e-mail.

Students can access their advisor's contact information through MyUMUC.

Initial Estimate of Transfer Credit

Prospective or newly admitted students can have a review of their potential transfer credit done by an enrollment specialist. This review is an estimate of the academic credit UMUC might accept toward a particular degree and of the requirements that would remain to be fulfilled. (Sources of credit are described on p. 247 and online at *www.umuc.edu/students/ugp_ss/transfer.html.)* This review is not binding on either the student or UMUC and is subject to change.

Review of International Records

Students who are seeking a review of potential transfer credit from international postsecondary educational institutions need to

- Be admitted and be seeking an undergraduate degree at UMUC.
- Mail their official international transcripts to the international credit evaluation services selected by UMUC. (Forms are available online at *www.umuc.edu/students/credeval.html.)*
- Pay fees associated with the international evaluation.
- Have all official transcripts from any U.S. institution previously attended sent to UMUC.

Degree Progress Report

To access information about degree progress, students need to submit official transcripts from all colleges and universities previously attended, including other institutions of the University System of Maryland, whether or not transfer credit is requested or granted. UMUC may deny transfer credit from any institution not listed on the application for admission. Sources of transfer credit not listed at the time of admission or approved by an advisor after admission cannot be applied toward the UMUC degree.

A degree progress report

- Includes all transfer credits applicable to the degree program.

- Lists all courses completed at UMUC.

- Incorporates other types of academic credit.

- Remains in effect only while the student remains continuously enrolled.

In the degree progress report, a student's most recent courses are applied to requirements first. Courses that could apply to multiple requirements are assigned to the first relevant category in the following order: general education requirements, then requirements for the selected academic major and minor, and finally electives. Verification of other degree-wide requirements (such as minimum number of upper-level credits) follows and may affect the remaining credits needed for the degree.

Students are responsible for submitting all pertinent academic documents (such as academic transcripts, confirmation of credit conferred by examination, or records of credit from military service schools) during their first session at UMUC. To be considered official, documents must be sent directly from the issuer to the following address:

Undergraduate Student Affairs
University of Maryland University College
3501 University Boulevard East
Adelphi, MD 20783-8070

DISABLED STUDENT SERVICES

Reasonable accommodations are available for students who have disabilities and are enrolled in any program offered at UMUC. To allow for adequate planning, students who need accommodations should contact Veteran and Disabled Student Services at least four to six weeks before the beginning of the session.

Students must request accommodations each time they register. The first time a student requests accommodation, current (within three years) documentation of a disability must be submitted. Depending on the disability, documentation may include secondary school records; medical, psychiatric, or psychological reports and diagnoses; or a psychoeducational evaluation. The documentation must provide clear and specific evidence of a disability and recommended accommodations from a qualified licensed professional.

Note: All UMUC students are required to comply with university policies and procedures and meet the academic requirements of all undergraduate certificate and degree programs. Students with disabilities should review the requirements listed in this catalog (beginning on p. 12 for bachelor's degree programs, p. 94 for certificate programs). Students should not apply to a UMUC certificate or degree program with the expectation that any academic requirement will be waived or that substitutions will be allowed.

For more information, students should contact Veteran and Disabled Student Services by phone at 800-888-UMUC, ext. 7930, or 301-985-7466 (TTY) or by e-mail at *vdsa@umuc.edu*.

UMUC's Financial Aid Department administers a variety of financial assistance programs—including grants, scholarships, federal work-study, and loans—to help students meet the costs of their university education. Aid is available for students who can prove financial need, academic merit, or both.

Regardless of income level, all students are encouraged to apply for assistance; many financing alternatives are available.

General Eligibility Requirements

An eligible applicant for UMUC assistance must

- Be admitted to UMUC as a regular degree-seeking or eligible certificate-seeking student.

- Be a U.S. citizen or classified as an eligible noncitizen.

- Be enrolled for 3 or more credits for most federal and institutional aid programs. Federal loan programs require enrollment of at least 6 credits. Audited courses, some repeated courses, credit by examination, and EXCEL portfolio credits cannot be counted.

- Demonstrate satisfactory academic progress toward a degree or certificate according to UMUC policy.

- Have a high school or GED diploma.

- Possess a valid Social Security number.

- Register with Selective Service, if required to do so.

- Not be in default on any federal student loans, nor have borrowed in excess of loan limits, nor owe a refund on any grant under Title IV federal student aid programs.

- Not be ineligible based on a drug conviction.

Financial Aid Programs

Most aid programs are available to both full- and part-time students. Amounts and eligibility for financial aid vary from year to year. Following is a brief description of amounts likely to be available for the 2008–9 award year.

Grants and Scholarships

Gift assistance, for which no repayment is required, is offered by the federal government, the state of Maryland, and UMUC. UMUC Student Financial Services administers several programs: Federal Pell Grants, Federal Supplemental Educational Opportunity Grants (SEOG), UMUC scholarships and grants, and Maryland state scholarships and grants.

The **Federal Pell Grant** program is a grant program for high-need, first-time undergraduates. Awards will range from $200 to $2,155 per session and vary by need level and enrollment status.

The **Federal Supplemental Educational Opportunity Grant (SEOG)** program offers need-based awards for high-need, first-time undergraduates. The amount and number of awards vary depending on the availability of funds allocated by the U.S. Department of Education. Typical awards will range from $300 to $600 per session.

The **UMUC President's Grant** program offers grants to students who demonstrate financial need. Typical awards will range from $100 to $600 per session, based on need.

UMUC scholarship programs, which include the UMUC President's Scholarship and the UMUC Community College Scholarship Program, offer a number of institutional scholarships as well as scholarships from corporate donors and foundations. A separate scholarship application must be completed for consideration. Requirements vary according to the individual scholarship program. Typical awards range from $200 to $1,500 per session. More information is available online at *www.umuc.edu/scholarships.*

Maryland state grant and scholarship programs provide financial assistance to Maryland residents based primarily on financial need. Awards typically require enrollment of at least 12 credits per session. Award amounts range from $200 to $3,000 annually. For more information, students should contact the Maryland Office of Student Financial Assistance at 410-260-4565 or 800-974-1024 or visit *www.mhec.state.md.us.*

The **Maryland Part-Time Grants** program offers assistance to Maryland residents enrolled for at least 6, but fewer than 12, credits per session. Awards are based on financial need. Typical awards are $300 to $600 per session. Funds for these grants are allocated to UMUC on an annual basis.

Many UMUC students receive **private scholarships** offered by corporations, associations, foundations, and other organizations that offer awards on a competitive basis to students who meet specific criteria. Scholarship links and search tools are available through the Web at *www.umuc.edu/financialaid.*

Loans

Loan programs are available to students enrolled for at least 6 credits per standard session. Students who take loans to pay for college expenses must repay the principal and interest in accordance with the terms of the promissory note.

The **Federal Perkins Loan** program offers need-based, low-interest federal loans. UMUC is the lender. Award amounts typically range between $500 and $2,000 per session. The cur-

rent interest rate is 5 percent. Repayment is made to UMUC and begins nine months after the borrower leaves school or attendance drops below half time.

The **William D. Ford Federal Direct Loan** program offers low-interest federal loans to students. Loan amounts vary based on grade level and dependency status. Repayment begins six months after the student leaves school or attendance drops below half time. For annual award amounts and general repayment terms, students should visit *www.umuc.edu/financialaid* and click on financial aid programs under information and procedures.

The **Federal Direct PLUS Loan** program enables parents with good credit histories to borrow for a dependent student enrolled for at least 6 credits per session. Parents are eligible to borrow up to the cost of education less other financial aid received by the student. Repayment begins approximately 60 days after disbursement.

Private student loan programs are also an option for UMUC students. Students whose financial aid awards do not meet their financial need may be able to borrow up to their cost of attendance through private student loan programs offered by many banks and other lenders. These education loans are not federal loans; students borrow directly from and make payments to the lender. Students who are interested in a private student loan should contact the bank of their choice or visit UMUC's Web page on private student loans at *www.umuc.edu/financialaid* for more information.

Employment

UMUC recognizes the importance of flexible, part-time employment for students who are in transition or who have financial need.

The **Federal Work-Study** program is a need-based program that provides jobs to assist students in meeting college costs. The amount of award varies according to financial need and availability of funds. Funds are paid biweekly, based on hours worked. Students must apply and be hired for employment at UMUC or in a community-service setting.

UMUC Financial Aid Standards for Satisfactory Academic Progress

Federal regulations require students receiving financial aid to maintain satisfactory academic progress toward their degree or certificate. Students who fail to meet the minimum academic standard are placed on financial aid probation for one standard session, during which they may receive financial aid. If a student fails to meet the minimum requirements during probation, the student is denied aid the following session and financial aid is not disbursed. Students should refer to the appendices for details

of the appeal process and the complete Satisfactory Academic Progress policy for financial aid students.

The Financial Aid Application Process

Students must complete the Free Application for Federal Student Aid (FAFSA) to be considered for any type of financial aid at UMUC. The FAFSA must also be completed for students to be considered for need-based Maryland state scholarships.

To be given high priority for their financial aid application and a determination of eligibility early enough for funds to be reserved by registration, students should complete their FAFSA by the priority deadlines listed below.

Students meeting these dates will have the opportunity to be considered for the various grant and scholarship programs with limited funds. Those who do not meet these deadlines may not receive their financial aid in time for registration.

Students who apply late may still receive aid, depending on their eligibility and the availability of funds. Eligibility for both loans and grants can be authorized even after the session has begun.

Program or Period Being Applied for	Priority Deadline for Filing Financial Aid Forms
Maryland State Scholarships Full Academic Year or	March 1
Fall Session Only	June 1
Spring Session Only	November 1
Summer Session	April 1

Federal Return of Funds Policy

Students receiving federal financial aid have the responsibility to follow the institution's withdrawal procedures, which are outlined on the UMUC Web site *(www.umuc.edu)*. The U.S. Department of Education requires the university to calculate a return of Title IV funds for all federal financial aid students who withdraw from all classes. Students who stop attending all classes without officially withdrawing are also subject to a return of funds calculation at the end of the session based on the last documented date of attendance as determined by the teachers. For further information, students should visit *www.umuc.edu/financialaid.*

For Further Information

All financial aid information and forms also are available at *www.umuc.edu/financialaid* on the UMUC Web site. Students with additional questions should contact the Financial Aid Office either by phone at 800-888-UMUC or by e-mail at *finaid@umuc.edu.*

Veterans Benefits Programs

Students may apply for the following educational assistance programs administered by the U.S. Department of Veterans Affairs:

- The Montgomery GI Bill–Active Duty Educational Assistance Program (MGIB, Chapter 30)

- Vocational Rehabilitation (Chapter 31)

- The Post–Vietnam Era Educational Assistance Program (Chapter 32)

- The Survivors' and Dependents' Educational Assistance Program (Chapter 35)

- Montgomery GI Bill–Selected Reserve Educational Assistance Program (Chapter 106)

- Montgomery GI Bill–Reserve Educational Assistance Program (Chapter 1607)

Detailed information on all assistance programs is available on the UMUC Web site at *www.umuc.edu/vabenefits* or on the Department of Veterans Affairs Web site at *www.gibill/va.gov/education/benefits.html*.

Application Procedures

Students who are eligible for educational benefits from the U.S. Department of Veterans Affairs should review the online information and application procedures (at *www.umuc.edu/vabenefits*). Every educational assistance program requires different paperwork and documentation to process a claim. Initial applications for benefits may be submitted online directly to the U.S. Department of Veterans Affairs. All students must also complete a UMUC Veterans Certification form each session they wish to receive benefits. The U.S. Department of Veterans Affairs processes claims and issues payment six to eight weeks after receiving completed paperwork.

Amounts and Methods of Payment

The amount of money a student may receive from the U.S. Department of Veterans Affairs depends on the educational assistance program for which the student is eligible, the number of credits for which the student is registered, the length of the session, and (for certain programs) the number of dependents the student has. The current monthly payment for each educational assistance program is available online at *www.umuc.edu/vabenefits*.

Benefits are paid directly to students on a monthly basis. The money may be used to help with tuition, books, or other costs of college education. Tuition is due upon registration, regardless of eligibility for benefits.

The U.S. Department of Veterans Affairs offers an accelerated program, which provides a lump-sum payment of 60 percent of the student's tuition and fees for certain high-cost, high-tech programs. Only undergraduate students who are paying nonresident fees and are enrolled for 17 credits or more are eligible for accelerated payment.

Evaluation of Prior Training

When a student files a claim for educational benefits, the U.S. Department of Veterans Affairs requires previous training to be evaluated so that the student receives correct transfer credit. (Information about types of training that qualify begins on p. 248; these include military training and service schools, postsecondary education, certain correspondence courses, and credit by examination.) Each student must have an evaluation completed during the first session. Students who do not comply may find future benefits delayed. After their first registration, eligible students are provided with information on the necessary procedure.

Students' Responsibilities

Students receiving benefits are expected to follow all regulations and procedures of the U.S. Department of Veterans Affairs while attending UMUC.

At UMUC, all regulations of the U.S. Department of Veterans Affairs are enforced. Students should be aware of the following requirements and consequences:

- Each student is expected to make satisfactory progress toward a degree or certificate; everyone must comply with the academic standards of UMUC.

- Each student must report all changes in enrollment—including drops, adds, withdrawals, changes to audit, and changes in degree objective.

- Registering for a course and then not attending, or ceasing to attend without officially withdrawing, is a misuse of federal funds that is punishable by law.

- Payment of benefits will be disallowed for any course in which a nonpunitive grade (i.e., a grade of I, W, or AU) is assigned.

- Payment of benefits will be disallowed for repeating a course for which transfer credit has been granted or for which a passing grade of A, B, C, D, P, or S was assigned.

- Payment of benefits will be disallowed for any course in which a grade of FN is assigned.

- Payment of benefits will be disallowed for any course that is not a requirement in a student's degree or certificate program.

SERVICES AND RESOURCES

Tutorial Assistance

Veterans, active-duty military personnel, and reservists receiving funding assistance from the U.S. Department of Veterans Affairs may qualify for tutorial assistance. Students enrolled at least half time may qualify. Payments are allowed when students demonstrate deficiency in courses that are required for their degree programs.

Work-Study Allowance

Students who are registered at least three-quarters time (9 credits) and who need money to attend school may participate in work-study. Recipients of benefits under the provisions of Chapters 30, 31, 32, 35, and 106 may be eligible. Students may work up to 400 hours during a session and receive either the federal minimum wage or the state minimum wage, whichever is greater.

For Further Information

Information and applications are available from the student's advisor or at *www.umuc.edu/vabenefits* on the UMUC Web site.

GRADUATION SERVICES

A graduation ceremony is held in May each year. Students who completed degree requirements the previous August and December, as well as those who complete their requirements that May, are invited to participate.

Students who expect to complete the requirements for a degree are responsible for making sure they have completed a degree progress report (details on p. 252), filing an application for a diploma (available online at *https://my.umuc.edu*) with Undergraduate Student Affairs, and paying the appropriate fee (currently $50). This may be done at the time of the final session's registration or up to the following dates:

December graduation	October 1
May graduation	February 15
August graduation	June 15

Students whose applications for a diploma are received after the deadlines will be considered for receiving degrees at the next graduation. Students who do not complete degree requirements in the session in which they first applied for graduation must complete a new application for diploma and pay the fee for the session in which they will graduate.

Students pursuing certificates must apply for certificates by the same deadlines. The application form is available online at *https://my.umuc.edu*.

TRANSCRIPT SERVICES

Official academic records are maintained by Undergraduate Student Affairs at UMUC. Official transcripts show coursework taken through UMUC. For students who have received an official evaluation and have regular status, transfer credit from other institutions (including others in the University System of Maryland) is listed as well. Students' records are considered confidential. Therefore, UMUC releases transcripts only upon receiving a signed request from the student and payment of the appropriate fee. (For students who submit requests online, the student and personal identification numbers are considered an official signature.)

Procedures and forms for requesting transcripts are available online at *www.umuc.edu/students/transreq.html.* A fee is charged for each UMUC transcript that is issued; an additional fee is charged for rush processing. Transcripts should be requested at least two weeks before they will actually be needed. No transcripts will be released until all financial obligations to the university have been satisfied.

STUDENT ADVISORY COUNCIL

The Student Advisory Council provides an avenue for students to express their concerns about UMUC or their academic career. The council consists of 12 members, elected by their fellow students, who act in an advisory capacity to the university president, provost, deans, and other officials on behalf of all students.

Students who would like to see certain issues addressed or who have questions should contact their council representative by e-mail at *stac@umuc.edu.*

More information on shared governance is available in the appendices of this catalog and online at *www.umuc.edu/gov.*

OTHER RESOURCES

Bookstores

Students can order required textbooks and software for all courses from MBS Direct online through the UMUC Virtual Bookstore *(www.umuc.edu/bookstore)* or by mail. MBS guarantees availability of new and used inventory, discounts for online sales, no sales tax, and an easy return and buyback program. Orders are shipped via UPS within 24 hours of receipt, Monday through Friday. Overnight and two-day delivery is available for an additional fee. Payment by personal check, MasterCard, Visa, American Express, and Discover is accepted. Some employer contracts may be accepted.

The University Book Center/Barnes & Noble in College Park also carries materials for UMUC classes held on the College Park campus. Walk-in customers should inquire at the customer service desk. Most major credit cards and some employer-provided assistance documents are accepted. Students should call 800-343-6621 for additional information and store hours.

Career Services

Career Services provides personalized assistance with clarifying skills, interests, and work-related values; making career- or life-related decisions; researching career options; planning for graduate school; and searching for employment. Through the Career Services Web page at *www.umuc.edu/careerservices,* students can access a variety of career and job search information and materials. Career Services offers job fairs, employability skills workshops such as résumé writing, tutorials, and access to CareerQuest, UMUC's online job and internship database.

Services are available by telephone, online via e-mail, or in person by appointment or on a walk-in basis. More information can be found on the Career Services Web page.

Computer Labs and Services

Computer labs are available at many UMUC sites (including Adelphi, Dorsey Station, Shady Grove, and Waldorf). These labs are available primarily for the use of students completing coursework but are also open to faculty members, staff, and alumni on a first-come, first-served basis on presentation of a valid UMUC ID. Students must bring media to save data or documents. Acceptable media include flash drives, floppy disks, and zip disks.

Lab assistants are available during scheduled hours to help users with resident software programs but cannot provide tutoring.

Students may also access host computers at UMUC via the Internet using Telnet. Two host systems are accessible: Nova and Polaris. Students must have an account for the particular system they wish to use. For most students taking courses in computing, accounts are set up automatically as part of the coursework and are valid for the duration of the class.

Students who are considering enrolling in online courses offered via WebTycho, the university's proprietary course delivery system, should review the technical requirements at *tychousa.umuc.edu/tech/min_tech.html* for the most current detailed information.

Technical support for students taking online courses is available 24 hours a day, seven days a week, at *webtychosupport@umuc.edu* or 800-807-4862.

Drug and Alcohol Awareness

As required by federal law, UMUC provides referral services for students with concerns about the use or abuse of alcohol and drugs. Students may discuss referrals with their advisor.

Information and Library Services

UMUC's Information and Library Services promotes the use of library technology and resources, teaches courses in library research, and provides access to a variety of online library resources on its Web page at *www.umuc.edu/library.* Services to students include direct borrowing privileges at all University System of Maryland and affiliated institution (USMAI) campus libraries, access to the USMAI online catalog interlibrary loan services, and access to library resources via the Internet.

Library Resources

Information and Library Services provides access to a rich collection of research materials on business, social science, science, arts and humanities, and computer and information systems.

Students can access an extensive array of subscription databases containing tens of thousands of full-text articles, as well as thousands of electronic books, through the Information and Library Services home page at *www.umuc.edu/library* or through WebTycho.

Currently enrolled students in the continental United States also have borrowing privileges at the 16 USMAI libraries. The library collections can be searched and books can be requested through the USMAI online catalog, available via the library home page. All UMUC students may use the DocumentExpress service to request that journal articles or book chapters not available online in full text be sent to them electronically.

Library Instruction and Research Assistance

To help students gain the in-depth research skills needed to locate, evaluate, and use the rich research resources available to them, Information and Library Services offers library instruction, both in person and via WebTycho. This instruction serves to complement and reinforce skills and information provided in LIBS 150 Information Literacy and Research Methods. Faculty members may contact Information and Library Services to request a library instruction session. In addition, students can obtain individualized research assistance by contacting Information and Library Services or by visiting the Peck Virtual Library Classroom (VLIB 101) within WebTycho, which serves as an additional free resource to help students improve their research skills.

Reference and research assistance is available 24 hours a day, seven days a week, through the library Web page under Ask a Librarian. For a complete list of library services, students should visit *www.umuc.edu/library* or call Information and Library Services at 800-888-UMUC, ext. 7209 (during office hours), or 800-295-2084 (after hours).

Tutoring, Mentoring, and Student Clubs

A variety of online, on-site, and referral services are available to students who are interested in academic help and support beyond the classroom. Tutors are available in selected classes. Alumni and experienced students are available to work with students online during their studies at UMUC. These mentors can offer guidance on general study strategies, career paths, and other topics that are important to academic success. Student clubs also offer students with similar interests the opportunity to meet, ask questions of faculty, and discuss related topics in an online forum. All UMUC students are eligible to join any of more than a dozen clubs focused on disciplines such as accounting, English, communications, computing, history, human resources, and psychology. Students should visit *www.umuc.edu/studentsuccess* to find out more about student tutors, mentors, and clubs.

Writing Resources and Tutoring

UMUC's online Effective Writing Center (*www.umuc.edu/writingcenter)* is available to all UMUC students 24 hours a day. The center's experienced, trained advisors help students develop key writing skills by providing individual online tutoring, self-study modules, and other writing resources.

Student can submit assignments for review and access a wide variety of information. In addition to providing writing advice, the Effective Writing Center hosts an online interactive tutorial on "How to Avoid Plagiarism" and the "Online Guide to Writing and Research"—both of which are required in many courses.

By special agreement with the Effective Writing Center, students may also receive writing tutoring at the University of Maryland, College Park Writing Center, located in 0125 Taliaferro Hall. Students should call 301-405-3785 for more information or for an appointment.

Alumni Association

The UMUC Alumni Association, founded in 1990, fosters and perpetuates lifelong relationships between alumni and the university. Its mission is to support, enhance, and promote UMUC and its community of students, faculty, staff, and alumni worldwide.

Membership in the Alumni Association is free and open to all UMUC alumni. The association invites graduates to stay connected with fellow alumni, students, and faculty through volunteer service, social events, and philanthropy. Benefit programs and resources include career services, affinity partner discounts, special alumni events, on-site library access, and chapter activities.

Membership in the UMUC Alumni Association offers an exceptional opportunity to expand personal and professional networks. The UMUC Alumni Association currently has more than 125,000 members in 47 states and 24 countries. UMUC alumni work in nearly all major international and Fortune 500 organizations, federal agencies, branches of the military, and private industry.

More information on the Alumni Association is available at *www.umucalumni.org.* Alumni may update their contact information and activate their membership via the "Online Community" link.

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ADMINISTRATION

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The School of Undergraduate Studies has a large and distinguished faculty. UMUC faculty consistently win awards, publish highly regarded scholarly works, and contribute to the intellectual understanding of their fields. They are well respected by both practitioner and academic peers. In keeping with UMUC's mission of serving nontraditional students, UMUC faculty are also nontraditional, bringing practical as well as academic experience in their fields of expertise. Because the faculty understand and practice what they teach, they are uniquely qualified to teach and guide students toward a richer and more robust understanding of how their academic learning translates into practice.

The full list of undergraduate faculty, including the disciplines they teach and their academic credentials, is available online at *www.umuc.edu/faculty.*

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Requests for undergraduate and graduate catalogs for UMUC Europe should be sent to University of Maryland University College, Unit 29216, APO AE 09102. Catalogs may also be obtained from Overseas Programs, University of Maryland University College, 3501 University Boulevard East, Adelphi, MD 20783-8067.

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Catalogs

Catalogs may be obtained by writing to UMUC Asia, Unit 5060, Box 0100, APO AP 96328-0100 or to Overseas Programs, University of Maryland University College, 3501 University Boulevard East, Adelphi, MD 20783-8067. The catalog is also available online at *www.asia.umuc.edu*.

APPENDICES

Appendix A

Policy on Student Classification for Admission and Tuition Purposes

(Approved by the Board of Regents August 28, 1990; Amended July 10, 1998; Amended November 27, 2000; Amended April 11, 2003; Amended June 23, 2006)

I. POLICY

A. Purpose

To extend the benefits of its system of higher education while encouraging the economical use of the state's resources, it is the policy of the Board of Regents of the University System of Maryland (USM) to recognize the tuition categories of in-state and out-of-state students for the purpose of admission and assessing tuition at USM institutions.

B. Burden of Proof

The person seeking in-state status shall have the burden of proving by clear and convincing evidence that he or she satisfies the requirements and standards set forth in this policy. Assignment of in-state or out-of-state status will be made by the applicable USM institution upon a review of the totality of facts known or presented to it.

C. In-State Status

To qualify for in-state tuition, a student must demonstrate that, for at least twelve (12) consecutive months immediately prior to and including the last date available to register for courses in the semester/term for which the student seeks in-state tuition status, the student had the continuous intent to

1. Make Maryland his or her permanent home; and

2. Abandon his or her former home state; and

3. Reside in Maryland indefinitely; and

4. Reside in Maryland primarily for a purpose other than that of attending an educational institution in Maryland.

Satisfying all of the requirements in Section II (and Section III, when applicable) of this policy demonstrates continuous intent and qualifies a student for in-state tuition. Students not entitled to in-state status under this policy shall be assigned out-of-state status for admission and tuition purposes.

D. Presumption

Either of the following circumstances raises a presumption that the student is residing in the state of Maryland primarily for the purpose of attending an educational institution and, therefore, does not qualify for in-state status under this policy:

1. A student is attending school or living outside Maryland at the time of application for admission to a USM institution, or

2. A student is financially dependent on a person who is not a resident of Maryland.

This presumption may be rebutted. The student bears the burden of rebutting the presumption. See III. Rebuttal Evidence at right.

II. REQUIREMENTS

Before a request for classification to in-state status will be considered, a student must comply with all of the following requirements for a period of at least twelve (12) consecutive months immediately prior to and including the last date available to register for courses in the semester/term for which the student seeks in-state tuition status. The student must demonstrate that he or she

A. Owns or possesses, and has continuously occupied, including during weekends, breaks, and vacations, living quarters in Maryland. The student must provide evidence of a genuine deed or lease and documentation of rent payments made. In lieu of a deed or lease, a notarized affidavit from a landlord showing the address, name of the student as occupant, term of residence, and history of rent payments made will be considered. As an alternative, a student may demonstrate that he or she shares living quarters in Maryland which are owned or rented and occupied by a parent, legal guardian, or spouse.

B. Has substantially all of his or her personal property, such as household effects, furniture, and pets, in Maryland.

C. Has paid Maryland income tax on all taxable income, including all taxable income earned outside the state, and has filed a Maryland tax return.

D. Has registered all owned or leased motor vehicles in Maryland.

E. Possesses a valid Maryland driver's license, if licensed.

F. Is registered to vote in Maryland, if registered to vote.

G. Receives no public assistance from a state other than the state of Maryland or from a city, county, or municipal agency other than one in Maryland.

H. Has a legal ability under federal and Maryland law to live permanently without interruption in Maryland.

I. Has rebutted the presumption that he or she is in Maryland primarily to attend an educational institution, if the student's circumstances have raised the presumption.

III. REBUTTAL EVIDENCE

Satisfying the requirements listed in paragraphs A through I of Section II does not rebut the presumption that a student is in Maryland primarily to attend an educational institution. To overcome the presumption, a student must present additional evidence.

To determine a student's intent, the university will evaluate evidence of a student's objectively verifiable conduct. Evidence that does not document a period of at least twelve (12) consecutive months immediately prior to and including the last date available to register for courses in the semester/term for which the student seeks in-state tuition status is generally considered an unfavorable factor under this policy. Evidence of intent must be clear and convincing and will be evaluated not only by the amount presented but also based upon the reliability, authenticity, credibility, and relevance of the evidence.

The absence of objective, relevant evidence is generally considered an unfavorable factor. A student's statement of intent to remain in Maryland in the future is generally not considered to be objective evidence under this policy.

Additional evidence that will be considered includes, but is not limited to, the following:

A. Source of financial support:

1. Maryland employment and earnings history through sources beyond those incident to enrollment as a student in an educational institution (e.g., beyond support provided by work study, scholarships, grants, stipends, aid, student loans, etc.), or

2. Evidence that the student is financially dependent upon a person who is a resident of Maryland.

B. Substantial participation as a member of a professional, social, community, civic, political, athletic, or religious organization in Maryland that is not university-related or otherwise incident to enrollment as a student in an educational institution.

C. Registration as a Maryland resident with the Selective Service, if male.

D. Evidence showing that the student uses his or her Maryland address as his or her sole address of record for all purposes, including on health and auto insurance records, bank accounts, tax records, loan and scholarship records, school records, military records, leases, etc.

E. An affidavit from a person unrelated to the student that provides objective, relevant evidence of a student's conduct demonstrating the student's intent to live permanently in Maryland.

IV. NONRESIDENTS WHO MAY TEMPORARILY QUALIFY FOR IN-STATE STATUS

In addition, persons with the following status shall be accorded the benefits of in-state status for the period in which they hold such status:

A. A full-time or part-time (at least 50-percent-time) regular employee of the USM or a USM institution.

B. The spouse or financially dependent child of a full-time or part-time (at least 50-percent-time) regular employee of the USM or a USM institution.

C. A full-time active member of the Armed Forces of the United States whose home of record is Maryland or one who resides or is stationed in Maryland or the spouse or a financially dependent child of such a person. Students that qualify under this provision will retain in-state status for tuition purposes as long as they are continuously enrolled regardless of a change in military assignment or status of the active member of the military.

D. A veteran of the United States Armed Forces with an honorable discharge who, within one year of discharge, presents documentation that he or she attended a secondary school in the state for at least three years and graduated or received the equivalent of a high school diploma from a secondary school in the state. The veteran must present documentation and register at a USM institution within one year of discharge for this provision to apply.

E. 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.

F. A graduate assistant appointed through a USM institution for the semester/term of the appointment. Except through prior arrangement, this benefit is available only for enrollment at the institution awarding the assistantship.

APPENDICES

V. PROCEDURES

A. An initial determination of in-state status will be made at the time of admission. The determination made at that time, and any determination made thereafter, shall prevail for each semester/term until the determination is successfully challenged in a timely manner.

B. A change in status must be requested by submitting a USM institution's "Petition for Change in Classification for Tuition." A student applying for a change to in-state status must furnish all evidence that the student wishes the USM institution to consider at the time the petition is due. The due date is based on the deadline set forth by the USM institution at which the student seeks to enroll. If the applicable USM institution has no such deadline, the due date is the last published date to register for the forthcoming semester/term for which the change in classification is sought.

C. The student shall notify the USM institution in writing within fifteen (15) days of any change in circumstances which may alter in-state status.

D. In the event that incomplete, false, or misleading information is presented, the USM institution may, at its discretion, revoke in-state status and take disciplinary action provided for by the institution's policy. Such action may include suspension or expulsion. If in-state status is gained because of false or misleading information, the institution reserves the right to retroactively assess all out-of-state charges for each semester/term affected.

E. Each USM institution shall develop and publish additional procedures to implement this policy. Procedures shall provide that on request the institution president or designee has the authority to waive any requirement set forth in Section II if it is determined that the application of the requirements creates an unjust result. These procedures shall be filed with the Office of the Chancellor.

VI. DEFINITIONS

A. Financially Dependent: For the purposes of this policy, a financially dependent student is one who is claimed as a dependent for tax purposes.

B. Parent: A parent may be a natural parent or, if established by a court order recognized under the law of the state of Maryland, an adoptive parent.

C. Guardian: A guardian is a person so appointed by a court order recognized under the law of the state of Maryland.

D. Spouse: A spouse is a partner in a legally contracted marriage.

E. Child: A child is a natural child or a child legally adopted pursuant to a court order recognized under the law of Maryland.

F. Regular Employee: A regular employee is a person employed by the USM or a USM institution who is assigned to a state budget line or who is otherwise eligible to enroll in a state retirement system. Examples of categories *not* considered regular employees are graduate students, contingent employees, and independent contractors.

G. Continuous Enrollment:

1. Undergraduate Student—An undergraduate student who is enrolled at a USM institution for consecutive fall and spring semesters, until completion of the student's current degree program or unless on an approved leave of absence or participating in an approved program off-campus.

2. Graduate and Professional—Continuous enrollment for a graduate or professional student is defined by the institution in accordance with program requirement.

VII. IMPLEMENTATION

This policy as amended by the Board of Regents on June 23, 2006, shall be applied to all student tuition classification decisions made on or after this date.

Appendix B

Policies of the Maryland Higher Education Commission on General Education and Transfer from Public Institutions in Maryland

(Code of Maryland Regulations Title 13B, Subtitle 06, Chapters 1–10)

I. SCOPE AND APPLICABILITY

This chapter applies only to public institutions of higher education.

II. DEFINITIONS

A. In this chapter, the following terms have the meanings indicated.

B. Terms Defined

1. "AA degree" means the Associate of Arts degree.

2. "AAS 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. "AS 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 lifelong 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 that has objectives comparable to those at another higher education institution, for example, a transfer program in psychology in a community college is definable as a program parallel to a baccalaureate psychology program at a four-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, that is applicable to a baccalaureate program at a receiving institution—and ordinarily the first two 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 that 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 that are applicable for credit at the institution the student is entering.

APPENDICES

III. ADMISSION OF TRANSFER STUDENTS TO PUBLIC INSTITUTIONS

A. Admission to Institutions

1. A student attending a public institution who has completed an AA, AAS, or AS 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 Section A.4 below.

2. A student attending a public institution who has not completed an AA, AAS, or AS degree, or who has completed fewer than 56 semester hours of credit, is eligible to transfer to a public institution regardless of the number of credits 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 public 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 public 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 public 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 receiving 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 public institution may set program requirements in major fields of study that simultaneously fulfill general education requirements.

3. A receiving public institution, in developing lower-division coursework, shall exchange information with other public institutions to facilitate the transfer of credits into its programs.

IV. 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 AA or AS degree to include no fewer than 30 and no more than 36 semester hours, and each baccalaureate degree program to include no fewer than 40 and no more than 46 semester hours of required core courses, with the core requiring, at a minimum, coursework in each of the following five areas:

   a. Arts and humanities,

   b. Social and behavioral sciences,

   c. Biological and physical sciences,

   d. Mathematics, and

   e. English composition

      or

2. Conforming with COMAR 13B.02.02.16D(2)(b)-(c).

B. Each core course used to satisfy the distribution requirements of Section 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 Section 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 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 Section A.1 of this regulation.

E. General education programs leading to the AAS degree shall include at least 20 semester hours from the same course list designated by the sending institution for the AA and AS degrees. The AAS degree shall include at least one 3-semester-hour course from each of the five areas listed in Section A.1 of this regulation.

F. A course in a discipline listed in more than one of the areas of general education may be applied only to one area of general education.

G. A public institution may allow a speech communication or foreign language course to be part of the arts and humanities category.

H. Composition and literature courses may be placed in the arts and humanities area if literature is included as part of the content of the course.

I. Public institutions may not include physical education skills courses as part of the general education requirements.

J. General education courses shall reflect current scholarship in the discipline and provide reference to theoretical frameworks and methods of inquiry appropriate to academic disciplines.

K. Courses that are theoretical may include applications, but all applications courses shall include theoretical components if they are to be included as meeting general education requirements.

L. 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 Section 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.

V. 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 IV of this chapter at a public institution for any general education courses successfully completed at the sending institution.

E. Except as provided in Regulation IV.M 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. AAS Degrees

   1. While there may be variance in the numbers of hours of general education required for AA, AS, and AAS 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 AAS 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 Regulation IV.M 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 coursework, or

      c. Exceed the total course credits accepted in transfer as allowed by this chapter.

   2. Responsible for meeting all requirements of the academic program of the receiving institution.

VI. TRANSFER OF NONGENERAL 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. One-half the baccalaureate degree program requirement but may not be more than 70 semester hours, *and*

   2. The first two years of the undergraduate education 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 coursework 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 coursework to be taken at the community college in fulfillment of the receiving institution's lower-division coursework requirement.

2. Recommended transfer programs in effect at the time that this regulation takes effect, which conform to this chapter, may be retained.

VII. ACADEMIC SUCCESS AND GENERAL WELL-BEING OF TRANSFER STUDENTS

A. Sending Institutions

1. Community colleges shall encourage their students to complete the associate's degree or to complete 56 hours in a recommended transfer program that includes both general education courses and courses applicable toward the program at the receiving institution.

2. Community college students are encouraged to choose as early as possible the institution and program into which they expect to transfer.

3. The sending institution shall

   a. Provide to community college students information about the specific transferability of courses at four-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 no later than midsemester 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 midsemester. The receiving institution shall inform a student of the courses that are acceptable for transfer credit and the courses that are applicable to the student's intended program of study.

4. A 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.

VIII. 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 two-year and four-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 coursework successfully completed at a community college.

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IX. TRANSFER MEDIATION COMMITTEE

A. There is a Transfer Mediation Committee, appointed by the Secretary, which is representative of the public four-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.

X. APPEAL PROCESS

A. Notice of Denial of Transfer Credit by a Receiving Institution

1. Except as provided in Section A.2 of this regulation, a receiving institution shall inform a transfer student in writing of the denial of transfer credit no later than midsemester of the transfer student's first semester, if all official transcripts have been received at least 15 working days before midsemester.

2. If transcripts are submitted after 15 working days before midsemester of a student's first semester, the receiving institution shall inform the student of credit denied within 20 working days of receipt of the official transcript.

3. A receiving institution shall include in the notice of denial of transfer credit

   a. A statement of the student's right to appeal, and

   b. A notification that the appeal process is available in the institution's catalog.

4. The statement of the student's right to appeal the denial shall include notice of the time limitations in Section B of this regulation.

B. A student believing that the receiving institution has denied the student transfer credits in violation of this chapter may initiate an appeal by contacting the receiving institution's transfer coordinator or other responsible official of the receiving institution within 20 working days of receiving notice of the denial of credit.

C. Response by Receiving Institution

1. A receiving institution shall

   a. Establish expeditious and simplified procedures governing the appeal of a denial of transfer of credit, and

   b. Respond to a student's appeal within 10 working days.

2. An institution may either grant or deny an appeal. The institution's reasons for denying the appeal shall be consistent with this chapter and conveyed to the student in written form.

3. Unless a student appeals to the sending institution, the written decision in Section 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 that the sending institution 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.

A. Report by Receiving Institution

1. A receiving institution shall report annually the progress of students who transfer from two-year and four-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.

Appendix C

Statement on Transferring Undergraduate College-Level Credits to UMUC

University of Maryland University College actively subscribes to the policy of the Maryland Higher Education Commission on the transfer of undergraduates within Maryland (found in Appendix B) and welcomes transfer students. UMUC is also a designated four-year Servicemembers Opportunity College (SOC); the SOC institutions have developed degree networks corresponding to Army, Navy, Coast Guard, and Marine career specialties. UMUC grants transfer credit for courses graded C or higher if they are applicable to an Associate of Arts (AA), a Bachelor of Arts (BA), a Bachelor of Science (BS), or a Bachelor of Technical and Professional Studies (BTPS) degree.

Credit earned elsewhere during a period of disciplinary dismissal or suspension may not be applied toward a degree from UMUC.

Students must submit official transcripts from all colleges and universities previously attended in order to receive a degree progress report, which includes transfer credit. (More information on credit evaluation is given on p. 251.)

MAXIMUM NUMBER OF TRANSFER CREDITS ACCEPTED

UMUC accepts up to 90 semester hours (45 semester hours for the associate's degree) of transfer credit from all sources combined toward the bachelor's degree. No more than 70 of the 90 semester hours may be accepted from two-year institutions (details on p. 248).

MAXIMUM NUMBER OF CREDITS ALLOWED
FOR INNOVATIVE LEARNING

UMUC allows up to 60 semester hours of credit (one-half the total credit required for the bachelor's degree) for innovative learning that is applicable to the student's curriculum (subject to limitations as follows):

- Up to 30 semester hours of credit for a combination of portfolio assessment, course-challenge examinations, or military occupational specialties, i.e., MOS, NER, etc. (details on pp. 245 and 249).

- Up to 60 semester hours of credit for learning evaluated by means of standardized examinations such as the Advanced Placement examinations administered by the College Board, the College-Level Examination Program (CLEP), DANTES examinations, or the Excelsior College Testing Program, if (1) there is no duplication of other academic credit and (2) the scores presented meet the standards of UMUC (details on p. 249).

- Up to 15 semester hours of cooperative education credit (details on p. 246). However, cooperative education credit does not count toward requirements for graded coursework within the academic major, minor, or certificate. Students seeking a second bachelor's degree may receive up to 9 semester hours of cooperative education credit.

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- Up to 60 semester hours of credit for study completed in military service schools based on recommendations made by the American Council on Education (ACE) in its *Guide to the Evaluation of Educational Experiences in the Armed Services* (details on p. 248).
- Up to 60 semester hours of credit for professional (not technical) courses that have been evaluated by either (1) the ACE *National Guide to Educational Credit for Training Programs* or (2) the University of the State of New York National Program on Noncollegiate Sponsored Instruction (PONSI) *College Credit Recommendations* (details on p. 248).
- Up to 21 semester hours of coherently related vocational and technical credit from regionally accredited institutions (details on p. 248).

MINIMUM NUMBER OF CREDITS REQUIRED FOR INSTRUCTION IN THE MAJOR AND FOR THE DEGREE

UMUC requires students to complete 120 semester hours of credit for the bachelor's degree. Regardless of the number of transfer credits they present, students must complete a minimum of 30 credits at UMUC. Students must earn at least one-half of the credits required for the major, minor, or certificate through graded coursework. Graded coursework does not include credit earned through portfolio assessment, examination, or internship/Cooperative Education.

GRADE LEVEL ACCEPTABLE FOR TRANSFER

UMUC may accept transfer credits from regionally accredited two- and four-year colleges and universities for courses graded C or above, if they apply to the student's curriculum. The grade of C-minus is not acceptable in transfer.

Statement on Transfer of General Education Requirements

A student who has satisfactorily completed a course identified as a general education requirement at a Maryland community college will have met UMUC's general education requirement, as stated in Appendix B. For other students, courses are evaluated on a case-by-case basis. UMUC has included its evaluation of many Maryland community college courses in its section of the University System of Maryland's computerized articulation system (ARTSYS). This software is available at all two- and four-year Maryland public institutions and at *artweb.usmd.edu* on the Web. Students should see an advisor for details.

Appendix D

Policy on Nondiscrimination

UMUC is committed to ensuring that all individuals have equal access to programs, facilities, admission, and employment without regard to personal characteristics not related to ability, performance, or qualifications as determined by UMUC and/or University System of Maryland policy or by federal, state, or local authorities. UMUC does not discriminate against or harass any person because of race, religion, color, creed, gender, marital status, age, national origin, ancestry, political affiliation, mental or physical disability, sexual orientation, or veteran status (including Vietnam Era veterans). All inquiries regarding UMUC's Nondiscrimination Statement or compliance with applicable statutes and regulations should be directed to the director, Diversity Initiatives, Office of the President, 3501 University Boulevard East, Adelphi, MD 20783-8000 (Phone: 301-985-7940; Fax: 301-985-7678; E-mail: *diversity-initiatives @umuc.edu;* Web site: *www.umuc.edu/diversity).*

In accordance with this Nondiscrimination Statement and UMUC's commitment to equal access, UMUC has revised Policy 40.3 (Policy and Procedures on Affirmative Action, Equal Opportunity, and Sexual Harassment). Students may access the revised policy and procedures online at *www.umuc.edu/policy/admin04030.shtml* or may contact the Office of Diversity Initiatives to have a copy mailed to them.

Appendix E

Policy on Religious Observances

(UMUC Policy 51.00)

I. UMUC conforms to the Board of Regents Policy III-5.10 Concerning the Scheduling of Academic Assignments on Dates of Religious Observance, approved on January 11, 1990.

II. So that the academic programs and services of UMUC 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 observances of their religious holidays. Students who miss a course session because of an observance of their religious beliefs must be allowed

   A. To make up any examinations, other written tests, or class work;

   B. To have access to any handouts or other material distributed in class; and

   C. To have the opportunity to obtain or review any duplicated lecture notes or slides presented in class.

III. UMUC prohibits scheduling examinations on the following religious holidays: Rosh Hashanah, Yom Kippur, and Good Friday.

Appendix F

Financial Aid Satisfactory Academic Progress Standard for Undergraduate Students

(UMUC Policy 220.30)

I.   INTRODUCTION

   A. These guidelines have been developed in accordance with federal financial aid statutes and regulations governing student eligibility. Students who receive financial aid must demonstrate financial need and make satisfactory academic progress as determined by University of Maryland University College pursuant to federal law.

   B. Financial aid recipients are required to be in good standing and to maintain satisfactory academic progress toward their degree requirements for each semester in which they are enrolled. In addition to meeting the academic standards outlined in UMUC Policy 158.00 Academic Level of Progress, financial aid recipients are required to meet the satisfactory academic progress standards outlined in this policy. Satisfactory academic progress for financial aid recipients, as described below, is evaluated three times annually, in January, June, and August. Failure to maintain satisfactory academic progress, as described below, may result in cancellation of financial aid awards, and the student may have to repay any funds already received.

II.   MINIMUM STANDARDS FOR UNDERGRADUATE STUDENTS

   A. UMUC's institutional requirements for minimum satisfactory academic progress requirements for financial aid recipients are defined as follows:

   1. Minimum cumulative grade point average (GPA).

      The student must maintain a minimum cumulative GPA of 2.0.

   2. Minimum completion rate.

      The student must maintain a minimum cumulative completion rate of two-thirds of credits attempted (67 percent).

   3. Maximum timeframe to completion—Federally mandated maximum timeframe to complete the program or degree.

      The student must complete his or her educational program within a time frame no longer than 150 percent of the published length of the educational program, as measured by credits attempted and including transfer credits (for example, the student must complete his or her program after attempting a maximum of 180 credits for a 120-credit program).

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B. Federal regulations require that UMUC track the academic progress of financial aid recipients from the first date of enrollment at UMUC, whether or not financial aid was received. Credits transferred from all other credit sources will be considered as attempted and completed credits in the evaluation of the completion rate standards.

C. Students who do not earn their degree within the maximum timeframe to completion, outlined above, will be placed in Financial Aid Denied status, not Financial Aid Probation. No financial aid will be disbursed for the student during subsequent semesters/periods of enrollment unless the student has made an appeal of the Financial Aid Denied status and the appeal (described in section VI) is granted.

III. TREATMENT OF W, I, AU, F, S, P, RT, H, AND G GRADES; NO GRADE REPORTED; AND REPEATED COURSEWORK

A. Course withdrawals (W) after the drop/add period are not included in the GPA calculation, but are considered a noncompletion of attempted coursework.

B. Incomplete (I) grades are not included in the GPA calculation and are considered a noncompletion of attempted coursework until the I grade is replaced with a permanent grade and academic progress can be re-evaluated.

C. An audit (AU) grade or a course taken out of sequence grade (H) is not considered attempted coursework. It is not included in GPA calculations or completion rate determinations.

D. A satisfactory grade (S), a passing grade (P), or a repeat through transfer grade (RT) is treated as attempted credits, which are earned but not included in calculation of the GPA.

E. F grades will be treated as attempted credits that were not earned, and so will be included both in the calculation of the GPA and minimum completion rate. This is true for both F grades (failure, academic) and for FN grades (failure due to nonattendance).

F. If a G grade (grade pending) or no grade is assigned, for any reason, it will not be included in the GPA calculation and will be considered a noncompletion of attempted coursework until a grade is assigned and academic progress can be re-evaluated.

G. The highest grade earned in a course that is repeated will count in the GPA computation, but every repeated attempt will be included in the completion rate determinations. No financial aid can be disbursed for a repeated attempt if the student already has achieved a passing grade for that course.

IV. FINANCIAL AID PROBATION STATUS

A. Undergraduate students who fail to meet the minimum 2.0 cumulative GPA standard or fail to complete at least two-thirds of cumulative credits attempted will be placed on Financial Aid Probation for the subsequent semester/period of enrollment.

B. Financial aid is received during the probationary period. Financial aid disbursements for the following semester/period of enrollment will be held until the grades and course completions have been reviewed for the probationary semester/period of enrollment.

C. Undergraduate students receiving financial aid for the first time will be placed on Financial Aid Probation if they do not meet the minimum GPA or course-completion standards as noted in this policy.

V. FINANCIAL AID DENIED STATUS

A. Undergraduate students who, while on Financial Aid Probation or in Financial Aid Denied status, fail to maintain the minimum completion rate of 67 percent and/or fail to maintain a minimum cumulative GPA of 2.0 will be placed in Financial Aid Denied status for the following semester/period of enrollment. No financial aid will be disbursed during subsequent semesters/periods of enrollment until the student is removed from Financial Aid Denied status.

B. Undergraduate students who do not earn their degree within the maximum timeframe to completion will also be placed in Financial Aid Denied status. No aid will be disbursed during subsequent semesters/periods of enrollment unless the student has made an appeal and the appeal is granted for that semester/period of enrollment (section VII of this policy describes appeal procedures). There are no exceptions to this requirement.

VI. REINSTATEMENT OF AID AFTER FINANCIAL AID DENIED STATUS

A. Reinstatement of financial aid after a student is placed in Financial Aid Denied status is achieved in one of the following ways:

  1. The student submits a written letter of appeal in accordance with the appeal process, and the Financial Aid Appeals Committee grants the appeal. The student is placed on Financial Aid Probation for the semester/period of enrollment rather than in Financial Aid Denied status.

  2. The student attends UMUC, pays for tuition and fees without the help of student financial aid, and does well enough in the coursework to satisfy all the satisfactory academic progress standards. The student regains aid eligibility in a probationary status. Students who are in Financial Aid Denied status for failure to graduate within the maximum timeframe to completion cannot regain eligibility this way. Students who are beyond the maximum timeframe to completion cannot regain financial aid eligibility except on a semester/period of enrollment–by–semester/period of enrollment basis through the appeal process.

VII. APPEAL PROCESS

A. The student must submit an appeal of Financial Aid Denied status in writing to the associate director of Financial Aid by the date specified in the Financial Aid Denied notification letter.

B. The Financial Aid Appeals Committee will review the appeal and notify the student in writing of their decision within 14 working days after the Appeals Committee meets and makes its determination.

Appendix G

Policy on Disclosure of Student Records

(UMUC Policy 210.14)

I. INTRODUCTION

UMUC complies with the Family Educational Rights and Privacy Act (FERPA) of 1974 (also known as "the Buckley Amendment"), which protects the privacy of students. In accordance with FERPA, this policy informs students of their rights to

A. Inspect and review their education records;

B. Seek an amendment of their education records, where appropriate;

C. Limit disclosure to others of personally identifiable information from education records without the student's prior written consent; and

D. File formal complaints alleging a violation of FERPA with the Department of Education.

II. DEFINITIONS

A. "Student" is an individual who is attending or who has attended UMUC. It does not include any applicant for admission to UMUC who does not matriculate, even if he or she previously attended UMUC.

B. "Education records" are records that contain information directly related to a student that are maintained by UMUC or by a third party on behalf of UMUC. The following records are not education records:

  1. Campus police or security ("law enforcement unit") records maintained solely for law enforcement purposes and maintained by that law enforcement unit.

  2. Employment records, except where a currently enrolled student is employed as a result of his or her status as a student.

  3. Records of a physician, psychologist, or other recognized professional or paraprofessional if made or used only for treatment purposes and available only to persons providing treatment.

  4. Records that contain only information relating to a person's activities after that person is no longer a student at UMUC.

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III.   INSPECTION AND REVIEW OF EDUCATION RECORDS BY STUDENTS

A.   Right of Access

1.   Each student has a right of access to his or her education records, except financial records of the student's parents and confidential letters of recommendation received prior to January 1, 1975.

2.   A student may, by a signed writing, waive his or her right of access to confidential recommendations in three areas: admission to any educational institution, job placement, and receipt of honors and awards. UMUC will not require such waivers as a condition for admission or receipt of any service or benefit normally provided to students. If the student chooses to waive his or her right of access, he or she will be notified, upon written request, of the names of all persons making confidential recommendations. Such recommendations will be used only for the purpose for which they were specifically intended. A waiver may be revoked in writing at any time; and the revocation will apply to all subsequent recommendations, but not to recommendations received while the waiver was in effect.

B.   Custodians of Education Records

The custodian of education records is

1.   For UMUC Adelphi: the registrar located in Adelphi, Maryland.

2.   For UMUC Asia: the registrar located in Tokyo, Japan.

3.   For UMUC Europe: the registrar located in Heidelberg, Germany.

4.   For Mannheim: the registrar located in Heidelberg, Germany.

5.   For Schwäbisch Gmünd: the registrar located in Adelphi, Maryland.

C.   Procedure to Request Review and/or Inspection of Education Records

Requests for review and/or inspection of education records should be made in writing to the appropriate custodian of records, as defined above. The custodian of records or designee will comply with a request for access within a reasonable time by arranging for the student to review his or her records in the presence of a staff member. If facilities permit, a student may obtain copies of his or her records by paying reproduction costs. The fee for copies is 20 cents per page. UMUC will not provide copies of any transcripts in the student's records other than the student's current UMUC transcript. Official transcripts (with the seal of UMUC) will be provided for a separate fee.

IV.   AMENDMENT OF EDUCATION RECORDS

Students may request an amendment of their education records in accordance with this procedure:

A.   Request to Amend Education Records

A student who believes that his or her education record is inaccurate, misleading, or in violation of the student's rights of privacy may ask the custodian of the education records to amend the record. The custodian of the education records or designee will decide whether to amend the record within a reasonable time after the request. If the custodian of the education records or designee decides not to amend the record, he or she will inform the student of the right to a hearing.

B.   Hearings

1.   A student may submit a written request for a hearing to challenge the content of his or her education records to the university registrar. The written request must state what records the student believes are inaccurate, misleading, or in violation of the privacy rights of the student.

2.   A hearing will be conducted by the university registrar or designee. The hearing may take place via telephone or video conferencing. The student will be given an opportunity to present evidence relevant to the issues raised and may be assisted or represented by individuals of his or her choice at his or her own expense, including an attorney.

3.   Within a reasonable period of time after the conclusion of a hearing, the university registrar will notify the student in writing of his or her decision. The written decision will include a summary of the evidence and the reasons for the decision.

a.   If the university registrar determines that the education record is inaccurate, misleading, or in violation of the privacy of the student, the education records will be amended. The university registrar will inform the student of the amendment in writing.

b. If, as a result of the hearing, the university registrar decides that the education record is not inaccurate, misleading, or otherwise in violation of the privacy rights of the student, he or she will inform the student of the right to place a statement in the record commenting on the contested information in the record or stating why he or she disagrees with the decision of the agency or institution, or both. Any such explanation will be kept as part of the student's record as long as the contested portion of the record is kept and will be disclosed whenever the contested portion of the record is disclosed.

V. DISCLOSURES

UMUC will not disclose education records or the personally identifiable information contained therein unless permitted by FERPA and under the following circumstances:

A. Prior Written Consent

The custodian of the records will provide the education records or personally identifiable information contained therein if the student provides prior written consent that the information may be disclosed. The consent must

1. Specify the records that may be disclosed;

2. State the purpose for the disclosure;

3. Identify to whom the disclosure is to be made; and

4. Be signed and dated by the student.

At the student's request and expense, a copy of the records disclosed will be provided to the student.

B. Directory Information

1. UMUC designates the following categories of information as directory information:

   a. Name;

   b. Major field of study;

   c. Dates of attendance;

   d. Degrees and awards received;

   e. Previous educational institution most recently attended; and

   f. Birth date.

2. Directory information may be disclosed in the absence of consent unless the student files a written notice, within three weeks of the first day in which the student is enrolled, informing UMUC not to disclose any or all of the categories. To prevent automatic disclosure of directory information, this notice must be filed annually within the time allotted above, with the appropriate custodian of the education records, as defined in this policy.

C. Additional Disclosures Without Prior Consent

Prior consent is not required for disclosure of education records or the personally identifiable information contained therein in the following circumstances:

1. The disclosure is to other school officials generally within the University System of Maryland (USM) or UMUC who have legitimate educational interests.

   a. "School officials" includes internal and external instructional or administrative personnel who are or may be in a position to use the information in furtherance of a legitimate educational objective, such as to provide student services. This includes, but is not limited to, faculty, staff members, and security personnel.

   b. "Legitimate educational interests" include interests directly related to the academic environment.

2. The disclosure is to officials of other schools in which a student seeks to enroll or is enrolled. Upon his or her request and at his or her expense, the student is provided with a copy of the records that have been transferred.

3. The disclosure is to authorized representatives of the comptroller general of the United States, the secretary of the U.S. Department of Education, and state or local educational authorities.

4. The disclosure is to authorized persons and organizations in connection with a student's application for, or receipt of, financial aid—but only to the extent necessary for such purposes as determining eligibility, amount, conditions, and enforcement of terms and conditions.

5. The disclosure is to state and local officials to whom, according to effective state law adopted prior to November 19, 1974, such information is specifically required to be reported.

6. The disclosure is to organizations conducting educational studies for the purpose of developing, validating, or administering predictive tests, administering student aid programs, and improving instruction. The studies shall be conducted so as not to permit personal identification of students to outsiders, and the information is destroyed when it is no longer needed for those purposes.

7. The disclosure is to accrediting organizations for purposes necessary to carry out their functions.

8. The disclosure is to the parent of a student who is dependent for income tax purposes. (**Note:** UMUC may require documentation of dependent status, such as copies of income tax forms.)

9. The disclosure is to comply with a judicial order or lawfully issued subpoena. Unless expressly prohibited by the subpoena, UMUC will make a reasonable effort to notify the student or parent of the order or subpoena in advance of compliance in order to give them time to seek protective action.

10. The disclosure is in connection with a health or safety emergency.

11. The disclosure is to an alleged victim of any crime of violence of the results of any disciplinary proceeding conducted by UMUC against the alleged perpetrator of that crime with respect to that crime.

D. Record of Disclosures

UMUC maintains with the student's education records a record of each request and each disclosure, except for

1. Disclosures to the student himself or herself.

2. Disclosures made pursuant to the written consent of the student (the written consent itself suffices as a record).

3. Disclosures to USM instructional or administrative officials.

4. Disclosures of directory information. This record of disclosures may be inspected by the student, the official custodian of the records, and other officials of UMUC and governmental officials.

VI. RIGHT TO FILE COMPLAINT

A student alleging that UMUC has not complied with the Family Educational Rights and Privacy Act (FERPA) may file a student grievance in accordance with UMUC's Student Grievance Procedures (Policy 130.70) or submit a written complaint to

Family Policy Compliance Office
U.S. Department of Education
400 Maryland Avenue, SW
Washington, DC 20202-4605

Appendix H

Policy on Shared Governance

In accordance with Board of Regents I-6.00 Policy on Shared Governance in the University System of Maryland, UMUC developed a new worldwide shared governance structure. Each of the three primary stakeholder groups—students, faculty, and staff—of UMUC has an advisory council consisting of elected representatives. These councils advise senior UMUC leadership on broad issues related to the university's strategic planning, communications, academic initiatives, and other issues. Further, there is a University Advisory Council, made of representatives from each of the three stakeholder councils, to advise and assist the president of UMUC.

STUDENT ADVISORY COUNCIL

The Student Advisory Council consists of twelve (12) student representatives from UMUC locations worldwide and includes both undergraduate and graduate students. Student Advisory Council representatives serve on the overall University Advisory Council. The Student Advisory Council provides senior management with critical input on a wide variety of institutional initiatives that affect students and student life at UMUC. To learn more about the Student Advisory Council or contact a representative, students should visit the Web page at *www.umuc.edu/gov/stac.*

Service and Classroom Locations

Major administrative centers are indicated by an asterisk. Stateside locations outside Maryland and the metropolitan Washington, D.C., area provide services only.

Stateside

CALIFORNIA

Coronado Naval Base
Point Loma Naval Base
San Diego Naval Base
Travis Air Force Base

DISTRICT OF COLUMBIA

Bolling/Anacostia
Walter Reed Army Medical Center

FLORIDA

Jacksonville Naval Air Station
Mayport Naval Station

GEORGIA

Fort Gordon
Fort Stewart
Kings Bay Naval Submarine Base

HAWAII

Camp Smith
Honolulu (Coast Guard Integrated Support Command)
Kaneohe Bay Marine Corps Base
Pearl Harbor Naval Station
Schofield Barracks
Tripler Army Medical Center

MARYLAND

Aberdeen Proving Ground
Adelphi (UMUC headquarters)*
Allegany College of Maryland
Andrews Air Force Base
Anne Arundel Community College
Arundel Mills (Anne Arundel Community College Center)
Baltimore City Community College
Bethesda National Naval Medical Center
Carroll Community College
Cecil College
Chesapeake College

College of Southern Maryland
    (La Plata, Leonardtown, Prince Frederick)
Community College of Baltimore County
Dorsey Station*
Eastern Shore Higher Education Center
Fort Detrick
Fort Meade
Frederick Community College
Garrett College
Hagerstown (University System of Maryland)
Hagerstown Community College
Harford Community College
Howard Community College
Laurel College Center
Montgomery College
Patuxent River Naval Air Station
Prince George's Community College
Shady Grove*
Southern Maryland Higher Education Center
University of Maryland, College Park
Waldorf Center for Higher Education*
Wor-Wic Community College

SOUTH CAROLINA

Fort Jackson

TEXAS

Fort Hood
Fort Sam Houston
Lackland Air Force Base

VIRGINIA

Fort Belvoir
Fort Myer
Henderson Hall, Navy Annex
Langley Air Force Base
Little Creek Naval Air Base
Norfolk Naval Station
Oceana Naval Air Station
Portsmouth Naval Medical Center
Quantico (Marine Corps Base)

WASHINGTON

Bremerton Naval Station
Everett Naval Station
Fort Lewis
Kitsap at Bangor Naval Base
McChord Air Force Base
Whidbey Island Naval Air Station

* Administrative center

APPENDICES

Europe

AFGHANISTAN

Bagram
Kabul
Kandahar
Salerno

BAHRAIN

Manama

BELGIUM

Brussels
Kleine Brogel
SHAPE

DJIBOUTI

Camp Lemonier

EGYPT

Sinai North Camp
Sinai South Camp

GERMANY

Ansbach
Bamberg
Baumholder
Büchel
Dexheim
Garmisch
Geilenkirchen
Grafenwöhr
Heidelberg*
Hohenfels
Illesheim
Kaiserslautern
Landstuhl
Mannheim
Miesau
Ramstein
Schweinfurt
Sembach
Spangdahlem
Stuttgart
Vilseck
Wiesbaden

GREECE

Souda Bay

ITALY

Aviano
Gaeta
Ghedi
Livorno
Naples
Sigonella NAS1
Vicenza

KOSOVO

Bondsteel

KUWAIT

Ali Al Salem Air Base
Camp Arifjan
Camp Buehring
Camp Virginia
Kuwait Naval Base

NETHERLANDS

AFNORTH
Volkel

PORTUGAL

Lajes
Lisbon

QATAR

Al Udeid
Camp As Sayliyah

SPAIN

Rota

TURKEY

Incirlik
Izmir

UNITED KINGDOM

Alconbury
Croughton
Fairford
Harrogate
Lakenheath
Mildenhall
St. Mawgan

Asia

AUSTRALIA

Alice Springs

CENTRAL JAPAN

Atsugi
Camp Fuji
Iwakuni
Misawa
Sasebo
Yokosuka
Yokota*
Zama

GUAM

Andersen*
COMNAVMAR

MARSHALL ISLANDS

Kwajalein

OKINAWA

Camp Courtney
Camp Foster
Camp Hansen
Camp Kinser
Camp Schwab
Camp Shields
Futenma
Kadena*
Torii Station
White Beach

SINGAPORE

U.S. Navy Region Singapore
    (NRS)

SOUTH KOREA

Camp Carroll
Camp Casey
Camp Henry
Camp Hovey
Camp Humphreys
Camp Long
Camp Red Cloud
Camp Stanley
Chinhae
K-16
Kunsan
Osan
Pohang
Suwon
Yongsan*

THAILAND

JUSMAG THAI/
    U.S.Embassy

Administrative center

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University of Maryland University College

STUDENT NAME_____ DATE_____

Degree Planning Worksheet 2008–2009

This worksheet is designed to help you plan and track your progress toward your degree. It lists all of the graduation requirements in the recommended sequence. For full course descriptions, please refer to the current undergraduate catalog. For major-specific worksheets, see *www.umuc.edu/worksheets*.

SEQUENCE *Courses are listed in the order in which students should take them.* *Changes in courses and order may affect other elements of the degree plan.*	COURSE TAKEN OR TRANSFERRED	SESSION TAKEN
Recommendations will differ for specific majors. Refer to catalog for alternatives to recommended general education requirements (GERs). Courses used for GERs may not be used in the major or minor.		
FIRST COURSES (10 credits) Take within first 18 credits. **Take placement exams before registering for writing and math courses.**		
EDCP 100 (3) *Strongly recommended first course*		
LIBS 150 (1) *Required GER course*		
WRTG 101/101X (3) *Required GER course*		
MATH 106 or higher (3) *Required GER course (check requirements of individual major)*		
INTRODUCTORY COURSES (16 credits) Take within first 30 credits.		
GVPT 170 (3) *Or other first behavioral/social science GER course*		
BIOL 103 *or* BIOL 101–102 (4) *Or other biological/physical science GER course with related lab*		
WRTG 291 (3) *Or other writing GER course*		
IFSM 201 (3) *Required computing GER course*		
PHIL 140 or foreign language course (3) *Or other arts/humanities GER course*		
FOUNDATION COURSES (21 credits) Take within first 60 credits.		
STAT 200 or other statistics course (3) *If required for major*		
PSYC 100 or SOCY 100 (3) *Or other second behavioral/social science GER course (discipline must differ from first)*		
◆ First course for major (3) *Check requirements for major*		
NSCI 100 or ASTR 100 (3) *Or other 3-credit biological/physical science GER course*		
HIST 142 or HIST 157 (3) *Or other arts/humanities GER course in historical perspective (discipline must differ from other arts/humanities GER course)*		
Other computing GER course (3) *Check requirements of individual major*		
SPCH 100, WRTG 288, or WRTG 390 (3) *Or other writing or speech GER course*		

STUDENT NAME_____ DATE_____

SEQUENCE *Note total credits for major. At least half must be upper level and at least half taken through UMUC.*	COURSE TAKEN	SESSION TAKEN
ADDITIONAL REQUIRED COURSES FOR MAJOR AND DEGREE (36–44 credits) Take after introductory/foundation courses.		
WRTG 391/391X, WRTG 393/393X, or WRTG 394/394X (3) *Upper-level intensive writing GER course*		
◆ Major course requirement (3) *See requirements for specific major*		
◆ Major course requirement (3)		
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◆ Major course requirement (3)		
MINOR OR ELECTIVES (15 credits, at least 9 credits upper level for minor) Complete in last 60 credits along with major courses.		
See requirements of individual minor.		
ADDITIONAL ELECTIVES (14–22 credits)		
Choose any courses to meet 120 credits for degree. Note minimum requirements for upper-level coursework. Complete in last 60 credits along with major and minor courses. Recommended electives (if not applied to other degree requirements): ANTH 344, BMGT 392, BMGT 496, IFSM 304		
TOTAL: 120 CREDITS		

CHECKLIST FOR FULFILLMENT OF DEGREE REQUIREMENTS See catalog for overview of all requirements.

- ❏ 30 credits at UMUC, including at least half of the major and minor and 15 credits upper level.
- ❏ 45 credits upper level, including half the credit for the major and for the minor.
- ❏ All required courses and minimum number of credits for major and minor.
- ❏ Prerequisites for major and minor courses, if needed.

- ❏ All general education requirements.
- ❏ Grade of C or better in all courses for the major and minor.
- ❏ Overall GPA of at least 2.0.
- ❏ At least half the credit for the major earned through graded coursework.
- ❏ Total 120 credits.

NOTES

Academic Calendar

Dates below are tentative. Specific dates, times, and locations, as well as dates of holidays and term breaks, are published in the undergraduate *Schedule of Classes* each term and may be accessed online at *www.umuc.edu/schedule*.

Stateside

FALL 2008

On-site
Standard	September 2–December 18
Session 1	September 2–October 22
Session 2	October 23–December 18

Online
Session 1	August 24–December 20
Session 2	September 8–December 14
Session 3	September 21–December 14
Session 4	October 5–December 14

SPRING 2009

On-site
Presession	January 2–25
Standard	January 26–May 10
Session 1	January 26–March 15
Session 2	March 23–May 10

Online
Session 1	January 18–May 15
Session 2	February 2–May 15
Session 3	February 14–May 15
Session 4	February 28–May 15

SUMMER 2009

On-site
Standard	May 25–August 22
Session 1	May 25–July 12
Session 2	July 13–August 22

Online
Session 1	May 25–August 22

Session Type	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
	FALL SESSION 2008					SPRING SESSION 2009					SUMMER SESSION 2009			
Online session 1			Aug. 24–Dec. 20, 2008					Jan. 18–May 15, 2009				May 25–Aug. 22, 2009		
Online session 2			Sept. 8–Dec. 14, 2008					Feb. 2–May 15, 2009						
Online session 3			Sept. 21–Dec. 14, 2008					Feb. 14–May 15, 2009						
Online session 4			Oct. 5–Dec. 14, 2008					Feb. 28–May 15, 2009						
On-site standard session			Sept. 2–Dec. 18, 2008					Jan. 26–May 10, 2009				May 25–Aug. 22, 2009		
On-site session 1		Sept. 2–Oct. 22, 2008						Jan. 26–Mar. 15, 2009			May 25–July 12, 2009			
On-site session 2				Oct. 23–Dec. 18, 2008					Mar. 23–May 10, 2009				July 13–Aug. 22, 2009	
Presession						Jan. 2–25, 2009								

Overseas

Information on the academic calendar for UMUC Asia and UMUC Europe is available on the Web sites for those divisions: *www.asia.umuc.edu* and *www.ed.umuc.edu.*

ABOUT UMUC

University of Maryland University College (UMUC) is one of the 11 degree-granting institutions of the University System of Maryland. The global university specializes in high-quality, career-oriented degree and nondegree programs tailored to the needs of today's working adults.

UMUC has earned a worldwide reputation for excellence as a comprehensive virtual university and, through a combination of classroom and distance-learning formats, provides educational opportunities for lifelong learning to students in Maryland, as well as throughout the United States and the world. UMUC serves its students through undergraduate and graduate degree and certificate programs, noncredit leadership development and customized programs, and conference services at its Inn and Conference Center in Adelphi, Maryland. For more information regarding UMUC and its programs, visit *www.umuc.edu.*

University of Maryland University College

School of Undergraduate Studies
3501 University Boulevard East
Adelphi, MD 20783-8080 USA

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