

UNDERGRADUATECatalog

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Welcome to University of Maryland University College! We are truly delighted that you have chosen UMUC to be your university.

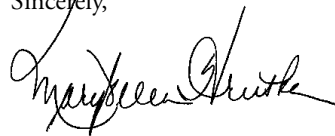
I hope you will think of this *Undergraduate Catalog* as your basic encyclopedia: a reference tool that describes the requirements for your degree and specific academic program, as well as referral information and policies. Hang onto it throughout your career at UMUC. It may look a little daunting at first, because it has so much information, but you will find it essential as you choose, plan, and track your progress toward your degree.

But the *Catalog* is not your only tool. I encourage you to take advantage of the many resources UMUC offers to keep you informed. The *Schedule of Classes* provides current offerings, and our newsletters update you on new developments and special information. The UMUC Web site has the latest descriptions of programs and policies, as well as planning guides, degree maps, online orientations, and a wealth of other information and resources.

UMUC is a visionary and evolving institution, and you will keep finding new opportunities as we add and update courses, programs, and resources. We hope that you will continue to stay connected with UMUC even after graduation, as we support your lifelong learning through alumni opportunities.

UMUC's focus is always on helping you to plan and fulfill your dreams. We want to help you continue to learn, grow, and advance in your career and life. Welcome to the UMUC family and best wishes in your educational career.

Sincerely,

A handwritten signature in black ink, appearing to read "Mary Ellen Hrutka". The signature is fluid and cursive, with a large initial "M" and "H".

Mary Ellen Hrutka, PhD
Vice Provost and Dean,
School of Undergraduate Studies

VISION

University of Maryland University College (UMUC) is a visionary institution, on the forefront of education for the 21st-century workforce. It is an entrepreneurial and creative institution, committed to the exploration of knowledge, the construction of partnerships, and innovative academic delivery. It is a large and diverse institution, serving 87,000 students around the world. It is a substantive institution, committed to lifelong learning and education of adults in the workforce.

HISTORY AND SCOPE

UMUC has fulfilled its principal mission of providing higher education opportunities to adult, part-time students for more than 50 years. Founded in 1947 as the College of Special and Continuation Studies, UMUC has grown to become one of the largest institutions in the University System of Maryland—both in terms of enrollments and its global scope—while earning accolades for the quality of its programs and its innovative use of technology.

Almost from its inception, UMUC looked beyond state boundaries to bring courses to U.S. servicemembers in Europe (since 1949) and Asia (since 1956). Today, UMUC continues to provide courses at about 130 military installations throughout Europe and Asia through long-standing partnerships with overseas military commands. UMUC also makes it possible for students anywhere to attend class via the Internet.

UMUC offers degree programs from the Associate of Arts through the Doctor of Management, undergraduate and graduate certificates, an accelerated route to teacher certification in Maryland, and noncredit leadership development programs that respond to the needs of the lifelong learner.

Throughout all the university's many programs, certain features stand out: UMUC's commitment to serving adult students, its academic quality, its active presence throughout the state of Maryland, its international scope as a global university, and its long partnership with the U.S. military.

University of Maryland University College is one of 11 degree-granting institutions within the University System of Maryland:

Bowie State University
Coppin State College
Frostburg State University
Salisbury State University
Towson University
University of Baltimore
University of Maryland, Baltimore
University of Maryland, Baltimore County
University of Maryland, College Park
University of Maryland Eastern Shore
University of Maryland University College

In addition to these 11 institutions, there are two University System of Maryland research and service units:

University of Maryland Biotechnology
Institute
University of Maryland Center for
Environmental Science

COMMITMENT TO ADULT STUDENTS

UMUC recognizes that adult students have many demands on their time and must balance studies with work and family responsibilities. To help them accomplish their education goals, UMUC provides a number of convenient and flexible options for both coursework and student services. Classroom-based courses are offered at times convenient for working adults at locations near where they live and work, while online courses may be accessed from anywhere at anytime. Most student services are available by phone or online, as well as at many UMUC locations.

UMUC's commitment to academic strength, relevance, and quality remains consistent throughout all the university's programs, class locations, and delivery formats. The university works closely with its faculty and with businesses and other organizations to develop and maintain the relevance of its curricula. The university's academic programs have the same structure and requirements whether they are offered in Maryland classrooms, at overseas locations, or through online courses.

UMUC is accredited by the Commission on Higher Education of the Middle States Association of Colleges and Schools (3624 Market Street, Philadelphia, PA 19104; phone 215-662-5606) and certified by the State Council for Higher Education in Virginia.

Experienced Faculty

UMUC's faculty is unique in that most are working professionals who bring current expertise in their fields, as well as an impressive academic background, to the classroom. They also receive an extraordinary amount of support in training and resources to help them address the special needs of both the online classroom and the adult learner.

Scholarly Activities

UMUC is recognized as a world leader in the fields of adult and distance education. UMUC's Office of Distance Education and Lifelong Learning (ODELL) supports UMUC faculty in every aspect of their work, hosts conferences and workshops, develops resource materials, and seeks grants to further the technologies and pedagogies associated with lifelong learning. ODELL houses the Center for Teaching and Learning, the Institute for Research and Assessment in Higher Education, the Center for Intellectual Property and Copyright in the Digital Environment, and the Institute for Distance Education.

Further activities are carried out by the Institute for Environmental Management, which provides educational services in the field of environmental management to individuals and corporations, and the Institute for Global Management, which conducts research and provides training on topics central to the management of international enterprises.

Recognition

UMUC's online programs have received awards from several notable organizations, including E-Gov, Forbes.com, Maryland Distance Learning Association, and the University Continuing Education Association. The International Council for Open and Distance Education has selected UMUC for its 2004 Prize of Excellence for the "highest possible excellence in the fields of open, distance, virtual, and flexible learning." In fall 2001, UMUC was the proud recipient of the highest honor in online education—the Sloan Consortium Award for Excellence in Institution-Wide Web-Based Programming, in recognition of its comprehensive online curriculum. Last year, a number of graduate curricula were honored: the National Security Agency designated UMUC a "Center of Excellence" for its graduate track in information assurance and the University Continuing Education Association (UCEA) presented an award for the Master of Distance Education program. This year, UCEA also recognized UMUC's undergraduate gerontology program with a Program of Excellence award.

PRESENCE IN MARYLAND

Although UMUC has its headquarters in Adelphi, Maryland, it delivers courses and services throughout Maryland and the Washington, D.C., metropolitan area. Courses are offered at 17 locations in the Maryland region, including many local military sites and community colleges. UMUC also maintains a major presence at three centers: the University System of Maryland Shady Grove Center, the Waldorf Center for Higher Education, and the UMUC Annapolis Center. This multitude of locations and the convenience of being able to take courses online make it easy for Maryland residents to complete their education goals without ever leaving their local area. Because UMUC also has special relationships with many Maryland community colleges, students are also able to make a smooth transition from their associate's degree program to the bachelor's degree program.

UMUC's Adelphi headquarters also serves as a conference center and as home to an extraordinary collection of art, especially works by Maryland artists. Notable among the collection are works by internationally renowned Maryland artist Herman Maril. Visitors to the Inn and Conference Center may view the collection daily from 9 a.m. to 5 p.m. Information on current exhibits is available online at www.umuc.edu/events.

GLOBAL UNIVERSITY

Having provided open and alternative education opportunities to adult learners for more than 25 years, UMUC became an early leader in distance education and has won many awards for innovation in that area. UMUC is also committed to providing comprehensive services for all its students, wherever they may be, and has been a pioneer in the development of support for students at a distance. UMUC offers full Web-based services from orientation to registration, financial aid counseling to career advising, and book ordering to grade retrieval. Through the Office of Information and Library Services, UMUC provides a state-of-the-art digital library, with electronic reserves, online databases (many of which are full text), and online help. Other services are available through the Interactive Registration and Information System (IRIS), which may be accessed via touch-tone telephone, and the Interactive Student Information System (ISIS), which may be accessed online. All these services enable students to sample an online course, meet the faculty, access student services, register, and obtain the syllabus, from any location in the world.

MILITARY PARTNERSHIPS

UMUC has been the leading educational partner with the U.S. Department of Defense for more than 50 years. More than 50 flag officers are UMUC graduates, and more than a million servicemembers have taken UMUC courses. Last year, almost 51,000 active-duty military members and dependents took UMUC courses overseas.

This long relationship has made UMUC particularly sensitive to the needs of military students and well prepared to handle details specific to military life, such as veterans benefits and the transfer of credit earned in military specialty schools.

In 2002, UMUC was awarded the contract to continue offering programs at its military sites across Europe and the Middle East. The multi-year contract is among the largest federal contracts awarded to any U.S. higher education institution. In 2003, the U.S. Department of Defense announced that they have extended UMUC's privilege to serve the U.S. military and their families in Asia for another six years.

UMUC has also developed special relationships with the U.S. Army Signal Center, the Naval War College, the Air War College, the Army Management Staff College, and both the Informational Resources Management College and the Joint Forces Staff College of National Defense University.

In addition to the School of Undergraduate Studies (described on pp. 8–9), UMUC also offers the following programs.

National Leadership Institute

The National Leadership Institute (NLI) offers a wide range of noncredit programs and services designed to help managers and executives become more effective as leaders in their organizations and to help organizations enhance their overall leadership effectiveness. NLI programs and services are offered to individuals through open enrollment and to organizations on a contractual basis. NLI programs include the Leadership Development Program and Foundations of Leadership, both offered in association with the Center for Creative Leadership, the preeminent education and research institution devoted to the development of creative leadership and effective management. NLI also offers an online leadership assessment program, designs training programs and consulting services to meet an organization's unique leadership development needs, and provides executive coaching in highly individualized coaching sessions especially suitable for senior managers.

For more information, students should call 877-999-7195, e-mail nli@umuc.edu, or visit www.umuc.edu/nli.

Graduate School

After the undergraduate degree, University of Maryland University College can help students continue their education through graduate studies. Established in 1978 to prepare business, industry, government, and not-for-profit midlevel managers, UMUC's Graduate School—now with more than 10,000 students—recently celebrated its 25th anniversary. Faculty members are distinguished by their extensive professional managerial experience as well as by their advanced education and teaching ability. All master's degree programs, except those leading to the Master of Business Administration, consist of 33–39 semester hours of graduate study.

UMUC currently has 18 graduate degree programs, including a Master of Arts in Teaching, a Master of Business Administration, a Master of Education, a Master of Software Engineering, and a Doctor of Management. The Master of Science degree is available in accounting and financial management, accounting and information technology, biotechnology studies, computer systems management, e-commerce, environmental management, health care administration, information technology, management, technology management, and telecommunications management.

The Graduate School also offers several executive degree programs (including Executive Programs leading to a Master of Business Administration, a Master of Science in technology management, or a Master of Science in information technology).

Dual degree programs enable students to acquire two graduate degrees for substantially fewer credits than would be required if the two degrees were earned separately. The Graduate School also offers more than 35 certificate programs in areas of distance education, e-commerce, general management, information technology systems, international management, and management of technological systems.

The Graduate School also offers an accelerated route to teacher certification in Maryland, preparing students with a bachelor's degree education to teach in the Maryland public school system. Courses taken through this resident teacher certification program may also be applied to either the Master of Arts in Teaching or the Master of Education programs at UMUC.

For more information, students should call 800-888-UMUC, ext. 2565, or e-mail gradschool@info.umuc.edu.

LEADERSHIP FOR THE FUTURE

The Maryland Higher Education Commission projects that by 2011, one-third of all students enrolled in the University System of Maryland will be studying at UMUC. Since 1998, UMUC's online enrollments have grown more than 1,000 percent and are expected to continue to climb. Agreements with community colleges have expanded with the introduction of the Bachelor of Technical and Professional Studies degree program and a new program in secondary education, designed to help the state meet its critical shortfall of secondary school teachers, that takes students from the associate's degree through completion of the master's degree.

Under the leadership of UMUC President Gerald A. Heeger, UMUC is taking the lead in higher education to enable students in Maryland and worldwide to reach their academic goals.

The School of Undergraduate Studies provides open access to high-quality undergraduate educational opportunities to women and men around the world. 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 Professional and Technical Studies degrees, as well as a wide range of undergraduate certificates. The School of Undergraduate Studies is committed to meeting undergraduate students' needs for lifelong 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 liberal education and diverse disciplines to the undergraduate experience, and thus incorporates the fundamentals of liberal learning 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 and cross-curricular skills and knowledge.

For their core academic studies, students may choose one of 25 academic majors from a wide variety of academic fields, including business, computing, humanities, communications, biotechnology, social sciences, legal studies, environmental management, and fire science. (A chart of available programs is on pp. 30–31.) Academic minors are available in 36 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 42 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. 90.) Courses toward these certificates may also be applied toward the bachelor's degree.

SERVING ADULT STUDENTS

UMUC welcomes all students and helps them achieve their educational goals but has a special focus on the needs of adults in the workforce. In fall 2003, the median age for students enrolled in UMUC's stateside undergraduate programs was 32 years old. Four out of five UMUC undergraduate students work full-time, and half have at least one child.

In recognition of the diverse educational goals and aspirations of our 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 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 (described on pp. 17–18). 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. 19–20).

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 terms 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.

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. Classroom courses are also enriched by access to online materials and resources.

Most of UMUC's degree and certificate programs are available online. Students may choose to pursue the entire degree online or "mix and match" online and on-site classes to suit their schedules and preferences.

Both classroom and online programs are 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. 237–46).

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 more than 50 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 eight Maryland community colleges, 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. Alliance partners include Anne Arundel Community College, Carroll Community College, College of Southern Maryland, Community College of Baltimore County, Frederick Community College, Hagerstown Community College, Montgomery College, and Prince George's Community College. 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. (Alliances are described on pp. 305–6.)

UMUC's partnerships with Maryland community colleges have expanded further with the creation of several specialized programs. The Bachelor of Technical and Professional Studies in biotechnology (described on p. 38) is a joint program with several community colleges in Maryland. A special "2+2+1" program provides a fast track for students interested in teacher certification: Students who earn an associate's degree in secondary education from a Maryland community college may complete their bachelor's degree in English, history, or social sciences at UMUC and then earn the Master of Arts in Teaching through UMUC's Graduate School. Special UMUC scholarships are also available for graduates from Maryland community colleges.

UMUC is a charter member of MarylandOnline, 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. An advisory council made up of corporate and nonprofit leaders assists the School of Undergraduate Studies in advancing the mission of UMUC. 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, the U.S. Department of Health and Human Services, UAW-Ford, Northrop Grumman, and Hewlett Packard. 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—from Honolulu Community College to New England College of Finance—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 or by e-mail at umucinfo@umuc.edu.

GENERAL INFORMATION AND ORIENTATION

Before the beginning of each semester, UMUC holds on-site and online open houses and orientations 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. 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 can be admitted either by mail, fax, online via the Web, or in one visit during walk-in admission and registration. In most cases, neither transcripts nor test scores are required. By the end of the first semester, 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 one of three status categories: regular, provisional, or semester-only. Admission of foreign-educated applicants is governed by requirements given on p. 11.

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; pay the \$30 admission fee; 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 for admission. However, students must have all official documents of their educational background on file by the end of the first semester of attendance. Students who present at least 24 semester hours of transferable college credit are not required to submit official high school transcripts or GED scores.

Provisional

Two types of students are admitted with provisional status: transfer students who had a cumulative grade-point average at their last institutions of less than 2.0 (on a 4.0 scale) within the previous two years, and those who were academically dismissed within the past two years from any institution regardless of their cumulative grade-point average. Students who were dismissed must wait at least one semester (fall, spring, or summer) after their dismissal to apply for admission to UMUC.

Provisional students may enroll for a maximum of 7 semester hours during a fall, spring, or summer semester. During their first semester of enrollment at UMUC, provisional students must submit transcripts from all colleges and universities they have attended.

If a provisional student's grade-point average at UMUC is less than 2.0, the student is placed on probation. If, while on probation, the student's semester grade-point average is 2.0 or better, she or he returns to provisional status. If, while on probation, the student's semester grade-point average is less than 2.0, he or she is dismissed and must follow the standard reinstatement procedures that apply to all dismissed students. A provisional student's status is automatically changed to regular after the student has successfully completed 15 semester hours of graded coursework with a cumulative grade-point average of 2.0 or higher.

Semester-Only

International students in the following categories may be admitted for one semester only: foreign-educated students who have not completed at least 24 semester hours of transferable college coursework and F-1 or J-1 visa holders (except in the circumstances described at right).

To be eligible to register for a subsequent semester, these students must meet the following criteria:

- Foreign-educated students who have not completed at least 24 semester hours of transferable college coursework must submit official transcripts verifying completion of the equivalent of a U.S. secondary education. While admitted for one semester only, these students must follow the same restrictions as provisional students.
- F-1 or J-1 visa holders attending other schools must submit a letter of permission from their sponsoring institutions before registration each semester.

Current F-1 visa holders who are attending one of UMUC's alliance schools or students in a UMUC program at the Universities at Shady Grove must request an I-20 from UMUC.

Admission requirements for international students are given at right.

Procedures for Admission

To apply for admission, students must complete an undergraduate admission application and pay the nonrefundable \$30 fee. Before attempting to register, students must have been officially admitted to the university. Applications for admission may be submitted by mail, by fax (to 301-985-7978), online, or in person. Deadlines for admission and registration are listed in the current *Undergraduate Schedule of Classes*. The admission form is available on p. 315 of this *Catalog*, in the *Undergraduate Schedule of Classes*, and on the Web at www.umuc.edu/ugp_app.

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.

Full information on tuition and fees may be found on p. 14.

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 an official relocation request 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, UMUC Asia, or at the two-year residential campus in Germany (now located in Mannheim) are retained in the Office of Admission and Registration of that program or campus. 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 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 or 213 on a computerized version of the TOEFL (Test of English as a Foreign Language),

- 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 semester hours at a U.S. college or university, completion of the equivalent of a U.S. secondary education must be verified by
- An evaluation from any one of several approved international credentialing agencies (listed online at www.umuc.edu/students/credeval.html)
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 semester only, and may register for a maximum of 7 semester hours. Once verification is received, the student's status is changed to regular and he or she may register for up to 18 semester hours. Students are not permitted to register for subsequent semesters until verification is received.

3. An applicant who is not a U.S. citizen must provide information on visa or immigration status. To do so, the student 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.

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. These students may apply for admission if at least one semester (fall, spring, or summer) has passed since they last attended any institution. They must fulfill the requirements for provisional status. Details are given on p. 10.

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 term 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 semester at UMUC while finishing work toward a high school diploma. At least a month before a term 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 semester hours each semester for credit, on a space-available basis, without paying tuition. They may enroll at late registration only. Although the late-registration fee is waived for senior citizens, they must pay all other 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 term being applied for,

and

- Not be employed more than 20 hours a week.

The applicant must specify date of birth and place of residence on the application form. Those data, plus retirement status, are required on a certification form to prove eligibility for a Golden Identification Card. Both forms are to be filled out at the time of application. The certification form must be completed each semester of enrollment at UMUC.

Students who previously obtained a Golden Identification Card at another institution in the University System of Maryland should present that card before registration, and must complete two forms and have them approved:

- A new certification of eligibility for a Golden Identification Card
and
- A notification of registration with UMUC.

Ways to Register

Registration begins each semester as soon as the course schedule becomes available on the Web and continues until the start of the semester. A late fee is charged for registering after the regular registration period. Students should check the current *Undergraduate Schedule of Classes* for the deadlines for regular and late registration.

UMUC offers five ways to register for most courses: by phone via the Interactive Registration and Information System (IRIS), by mail, by fax, online, and on site (either during an advising session or at a walk-in admission and registration).

By Telephone via IRIS

Students are eligible to register by phone via the Interactive Registration and Information System (IRIS) if they have already been admitted to UMUC as an undergraduate. (*Note:* Former students who have not registered for courses within the last two years must first be readmitted.) Through IRIS, students may register by entering all pertinent information via their touch-tone telephone. IRIS provides immediate feedback on course availability and the student's registration, student account, and financial aid status.

Students may call IRIS at 800-584-9413 or 301-985-7499 daily from 6 a.m. to 9 p.m. eastern time. Detailed instructions on IRIS registration are available each semester in the *Undergraduate Schedule of Classes* and online at www.umuc.edu/students/iris/irisindex.html.

Online

Admitted students may register online via the Interactive Student Information System (ISIS) at www.umuc.edu/isis. *Note:* The process is not yet fully automated and requires manual processing by UMUC to complete.

By Fax

Students may fax their registration to 301-985-7364. Forms are available in the *Undergraduate Schedule of Classes*.

Students who have an employer contract must be sure to fax their registration and employer contract at the same time. Any fees not covered by the contract must be charged to Visa or MasterCard.

By Mail

Students may mail their registration to Registrar's Office, University of Maryland University College, 3501 University Boulevard East, Adelphi, MD 20783. Forms are available in the *Undergraduate Schedule of Classes*.

On-Site

During Advising

Academic advisors will help students register during an academic advising session. The student must, however, be prepared to pay all tuition and fees at the time he or she registers.

During Walk-In Admission and Registration

Walk-in admission and registration is held in the Student and Faculty Services Center in Adelphi and at more than 15 other locations in the Baltimore/Washington metropolitan area. Students may register for any course offered (regardless of location or format) at any walk-in registration. Locations, dates, and times are listed each semester 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. Students who register by mail, fax, or online (and list no alternate classes) are added to the waiting list automatically. Students who register by phone are prompted by IRIS to choose that option.

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. Authorization may be provided only through IRIS by following the waiting list process.
- If space in class becomes available, it will be held for the student (pending confirmation) for 48 hours only. After 48 hours, the space is released to another student. The student will not be contacted if a space being held for him or her in a course becomes available—it is the student's responsibility to check in regularly with IRIS to find out course status.

The easiest way for a student to confirm registration for a class is to register through IRIS (following directions from the list course menu) and pay by entering his or her credit-card (Visa or MasterCard) information.

Schedule Adjustment

Students may make certain adjustments to their schedule through the end of late registration. The schedule-adjustment options available include changing a section or exchanging one class for another (drop/add). Students may drop/add a course only within the same academic term or semester. A fee of \$15 is charged for changing a section or exchanging one course for another. Students may add a course or change a grading option without charge.

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 receive a mark of W (described on p. 232). 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.

Students may withdraw from a course by four methods:

- Students may call IRIS at 800-584-9413 and follow the directions for dropping a course. The use of the student and personal identification numbers is considered an official “signature” authorizing the withdrawal, which is effective immediately.
- Students may access ISIS online at www.umuc.edu/ISIS and follow the directions for dropping a course. The use of the student and personal identification numbers is considered an official “signature” authorizing the withdrawal, which is effective immediately.
- Students may complete a withdrawal form through their academic advisor. The withdrawal becomes effective the date the form is filed with UMUC.
- Students may request in writing to withdraw from a course or courses. The letter should specify the course, course number, and section, and include the student’s full name, student identification number, and signature. The request should be addressed to Registrar’s Office, University of Maryland University College, 3501 University Boulevard East, Adelphi, MD 20783. The postmark on the envelope becomes the official date of withdrawal.

Students may send their withdrawal by fax (to 301-985-7364) provided that they meet the deadline, sign legibly, and follow up by mailing the original document.

UMUC cannot accept withdrawals verbally over the telephone. Failure to withdraw in the required manner results in the forfeiture of any refund and may result in a failing grade. For financial aid recipients, failure to withdraw in the required manner may result in cancellation/reversal of financial aid awards.

FINANCIAL INFORMATION

Tuition and Fees

All tuition and applicable fees must be paid in full at registration, unless the student is enrolled in UMUC’s interest-free monthly payment plan. Students registering by phone via the Interactive Registration and Information System (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.)

Payment may be made by cash, check, money order, or MasterCard or Visa credit cards. Checks should be payable to University of Maryland University College. Students who qualify for tuition assistance, financial aid, or veterans benefits should consult the appropriate sections. Students interested in the monthly payment plan, administered by Academic Management Services (AMS), should contact AMS at 800-635-0120 or visit www.amsweb.com on the Web.

Current Tuition and Fees

Tuition rates and fees are published each semester 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, late registration or changes to registration, laboratory use (in science and some computer courses), make-up 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, less the withdrawal fee per course. 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 aid was a partial payment, the aid 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 and diplomas, 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.

The Board of Regents has authorized UMUC to charge students' delinquent accounts for all collection costs incurred by UMUC. The normal collection fee is 17 percent plus attorney and/or court costs. Delinquent students are reported to a credit bureau.

Employer-Provided Tuition Assistance

If an employer is going to pay for part or all of a student's tuition, at the time of registration the student must submit two copies of a document (purchase order, tuition assistance form, or contract on company letterhead) containing the following information:

- A specific description of types of fees and charges (such as tuition, application fee, late-registration fee, change-of-registration fee, or books) and the amount to be assumed by the employer.
- The student's name and student identification number.
- The semester or term covered by the document.
- The billing address.
- The signature and telephone number of the authorizing official.

A student who does not have an authorizing document at the time of registration must pay the bill in full and arrange for direct reimbursement from the employer. UMUC cannot issue refunds for authorizing documents submitted after registration.

No credit is granted for any fees unless specified. If specified in the authorizing document, the student may charge books and supplies for 15 days after the end of each registration period. After that time, the student must pay for the books. The student must submit a separate copy of the authorizing document to the University Book Center when charging books.

Documents that restrict payment or are in any way conditional will not be accepted. If the employer does not pay UMUC within 75 days of the date on the bill, the student is responsible for payment.

WAYS OF EARNING CREDIT

UMUC is unlike any other institution of higher education in the world. It opens doors to learning by taking education to students wherever they may be, and by applying academically sound but flexible policies regarding academic credit for what students have learned in their life experiences and transfer of credit from other institutions. Note that the maximum credit allowed from all "nontraditional" sources of credit (i.e., credit earned without direct instruction—by exam, through Cooperative Education or Prior Learning, or from military sources) may not total more than one-half of the total credits required for the degree.

Classroom and Online Study

UMUC uses every feasible instructional delivery mechanism or platform to extend degree opportunities to students. 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. Students also can "attend class" from anywhere in the world by connecting electronically via the Internet.

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 on the Internet.

Service and Classroom Locations

Major administrative centers are indicated by an asterisk.

Stateside

Maryland

Aberdeen Proving Ground
Adelphi (UMUC headquarters)*
Andrews Air Force Base
Annapolis Center*
Anne Arundel Community College
Arundel Mills (Anne Arundel Community College Center)
Bethesda National Naval Medical Center
Fort Detrick
Fort Meade
Frederick Community College
Patuxent River Naval Air Warfare Center
Prince George's Community College
Southern Maryland Higher Education Center
University of Maryland, College Park
USM Hagerstown Education Center
USM Shady Grove Center*
Waldorf Center for Higher Education*

District of Columbia and Virginia

Bolling Air Force Base
Fort Belvoir
Fort Myer
Henderson Hall, Navy Annex
Marine Corps Base Quantico
Pentagon
Walter Reed Army Medical Center

Europe

Afghanistan

Bagram
Kabul
Kandahar

Bahrain

Manama

Belgium

Brussels
Kleine Brogel
SHAPE

Bosnia-Herzegovina

Sarajevo
Tuzla-Eagle Base

Croatia

Rijeka

Egypt

Sinai North Camp
Sinai South Camp

Germany

Ansbach
Babenhausen
Bamberg
Baumholder
Böblingen
Büchel
Büdingen
Darmstadt
Dexheim
Friedberg
Garmisch
Geilenkirchen
Giebelstadt
Giessen
Grafenwöhr
Hanau
Heidelberg*
Hohenfels
Illesheim
Kaiserslautern
Kitzingen
Landstuhl
Mainz-Wackernheim
Mannheim*
Miesau
Ramstein
Rhein Main
Schweinfurt
Schwetzingen
Sembach
Spangdahlem
Stuttgart-Vaihingen
Vilseck
Wiesbaden
Würzburg

Greece

Souda Bay

Iceland

Keflavik

Italy

Aviano
Gaeta
Ghedì
La Maddalena
Livorno
Naples
Sigonella NASI
Vicenza

Kuwait

Ali Al Salem Air Base
Al Jaber Air Base
Camp Doha

Netherlands

AFNORTH
Volkel

Portugal

Lajes
Lisbon

Serbia and Montenegro

Bondsteel
Montieth
Pristina

Spain

Rota

Turkey

Incirlik
Izmir

United Kingdom

Alconbury
Croughton
Fairford
Harrogate
Lakenheath
London*
Mildenhall
Molesworth
St. Mawgan
West Ruislip

Uzbekistan

Karshi-Khanabad

Asia

Australia

Alice Springs

Central Japan

Atsugi
Camp Fuji
Iwakuni
Misawa
Sasebo
Yokohama
Yokosuka
Yokota*
Zama

China

U.S. Embassy, Beijing

Guam

Andersen
COMNAVAR
NCTS

Marshall Islands

Kwajalein

Okinawa

Camp Courtney
Camp Foster
Camp Hansen
Camp Kinser
Camp Lester
Camp Schwab
Camp Shields
Futenma
Kadena*
Kadena Navy
Torii Station

Singapore

497th Combat Training Squadron

South Korea

Camp Carroll
Camp Casey
Camp Colbern
Camp Garry Owen
Camp Greaves
Camp Henry
Camp Hialeah
Camp Hovey
Camp Howze
Camp Humphreys
Camp Long
Camp Page
Camp Red Cloud
Camp Stanley
Chinhae
K-16
Kunsan
Osan
Pilsong Range
Suwon
Yongsan*

Thailand

JUSMAGT/U.S.Embassy

* Administrative center.

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 semester hours 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. 20). Any additional credits are awarded 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). Degree-seeking students at UMUC who have received an official evaluation of transfer credit and have a cumulative grade-point average of at least 2.0 in UMUC coursework should review the rules and procedures at www.umuc.edu/prior-learning (students must click on "Course Challenge") before applying online.

Credit may be applied toward a first or second bachelor's degree. Students may earn 3 credits in writing through course-challenge examination, but may earn credit for ENGL 101 or upper-level intensive writing only in the classroom or through EXCEL. Six-credit courses, because of their extensive requirements, also may not be challenged by examination.

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. For language exams, native-language status is determined by UMUC, and selected students may test only for written translation to and from English, linguistics, or literature.

Exams may only be canceled before the student receives the exam. Refunds are given only if a suitable exam cannot be prepared.

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.

More information on course-challenge examinations may be obtained by calling 800-888-UMUC, ext. 7755, or on the UMUC Web site at www.umuc.edu/priorlearning.

EXCEL Through Experiential Learning

EXCEL Through Experiential Learning is a unique way for students to gain academic credit for college-level learning acquired through employment, volunteer activities, political activities, or other noncollegiate experiences. Students document their previous learning in a portfolio, and faculty members evaluate the portfolio for possible credit.

Enrollment in EXCL 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 various experiences. Faculty members evaluate the portfolio to determine whether to award credits and how many should be awarded. EXCL 301 is a fast-paced, demanding course that requires that students be highly motivated and have substantive life experiences that can correlate to college-level learning. Successful students will have excellent writing, computer, and time management skills. Because of the complexity of this course, students should not register for more than one other course during the semester in which they enroll in EXCL 301.

EXCL 301 is graded on an S/D/F basis (explained on p. 231). If the quality of the work in the portfolio is worthy of a grade of C or higher, a grade of S is awarded and the portfolio is forwarded for credit evaluation. Credit earned as a result of portfolio evaluation also earns a grade of S. The grade of S is not computed in the grade-point average, therefore the grade from such credit is not applicable toward honors.

After receiving credit for EXCL 301, students may not enroll in the class again. Although it is possible to earn up to 30 credits through EXCEL, the average award is between 15 and 18 credits. Experiential-learning credits are awarded for both upper- and lower-level courses. These credits are considered UMUC resident credit and may be applied toward a major, minor, or certificate as long as they relate to the student's educational and career goals. However, students should be aware that they are required to complete a minimum of 15 semester hours of graded coursework to satisfy the resident credit requirement for a bachelor's degree. Half the credits for the major and minor must also be earned through graded coursework. EXCL 301 and any awarded EXCEL credit cannot be used to satisfy these requirements.

It is possible to earn EXCEL credit to satisfy the ENGL 101 and upper-level writing requirements by completing a writing delineation in the portfolio. (A delineation is the section of the portfolio that details the student's knowledge of a particular subject.) An advisor can inform students about specific coursework for which credit cannot be earned through the EXCEL program.

Credit for EXCL 301 is charged at the current tuition rate; fees are charged for enrollment in the program, portfolio evaluation, any additional evaluations, credits awarded, and any re-evaluations. Appeals and re-evaluations are determined at the discretion of the director of Prior Learning. Students should note that tuition and fees are subject to change. Golden ID students and those receiving financial aid must pay all EXCEL fees.

To be eligible, students must

- Complete an EXCEL application, including a written narrative,
- Attend an orientation,
- Meet basic standards in English composition (either by having taken college writing courses or by qualifying for ENGL 101 on the English placement test),
- Be in good academic standing at UMUC (not on academic warning or probation), and
- Have sent all transcripts, exam scores, and military occupational specialty (MOS) scores to the Registrar's Office.

Prior Learning orientations are available online at www.umuc.edu/priorlearning, in a classroom setting, or by phone. Prospective students may call 800-888-UMUC, ext. 7755, for information.

Cooperative Education

Cooperative Education (Co-op) extends education beyond the traditional classroom experience by taking it into the workplace. Co-op offers an ideal opportunity for students to gain experience and advance in a career field while earning upper-level college credit to complete their bachelor's degree.

A variety of course formats permits UMUC students, regardless of location, to participate in Cooperative Education. These internship experiences are available in all undergraduate disciplines and integrate career-related work opportunities and academic theory. Co-op positions may be paid or unpaid, part time or full time. Appropriate work situations may include a current job, a new job, an internship, community service, or a field experience. For students pursuing a new position or a career change, Co-op counselors provide assistance in conducting a job search and locating professional opportunities through the Job Development Seminar.

A learning contract that outlines the new learning to be acquired as a result of the work experience is developed by the student and a faculty member. In addition to completing the objectives specified in the learning contract, students are required to communicate with their Co-op faculty sponsor and complete five academic assignments. A letter grade is awarded for successful completion of the course.

To apply, students must meet the following criteria:

- Be seeking a degree from UMUC.
- Be working in a position, directly related to their field of study, that offers opportunity for significant new learning and professional exposure.
- Have completed 30 semester hours toward a degree.
- Have completed at least 9 semester hours of credit in the discipline in which they plan to gain Co-op experience.
- Have a GPA of 2.5 or better at UMUC.
- Have completed at least 6 credits at UMUC.

A maximum of 15 Co-op credits may be applied toward the completion of a first bachelor's degree and 9 credits toward a second bachelor's degree. Co-op courses may not be used to satisfy general education requirements. Unless otherwise specified, no more than 6 Co-op credits may be used in the academic major or minor combined. Students are encouraged to contact an advisor to determine how Co-op credits will help them complete degree requirements.

Either 3 or 6 semester hours of upper-level credit may be earned during a Co-op session. For 3 credits, at least 12 hours per week must be devoted to tasks providing new learning, totaling at least 180 hours during the Co-op session; four new learning tasks must be delineated in the Learning Proposal; and the course requirements must be completed. For 6 credits, at least 20 hours per week must be devoted to new tasks, totaling at least 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.

Co-op courses are listed with the designator of the individual academic discipline (e.g., BMGT for business and management) and are numbered 486A (for 3 credits) and 486B (for 6 credits). Normally, Co-op sessions last 15 weeks beginning from the date of enrollment. Session length may vary by prior permission only if all other credit requirements can be met.

Credit for the Co-op course is charged at the current tuition rate; an administrative fee is charged each time a student enrolls. There is a separate fee to participate in a Job Development Seminar.

Counselors in the Career and Cooperative Education Center help students enroll in the Co-op course and assist students participating in Student Career Experience Programs (SCEP) and other work-based learning situations. Students should contact the center regarding any required student/work agreements that may be required by their employers.

Information sessions are offered via telephone conference call and online at www.umuc.edu/coop. Registration information and formal approval to enter the program may be obtained from the Career and Cooperative Education Center. The center may be reached by phone at 800-888-8682, ext. 7780; by e-mail at coop@umuc.edu, or by fax at 301-985-7725.

External Sources of College Credit

(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. In certain disciplines, some of the content of community college courses may overlap that of beginning upper-level UMUC courses. Students who are in doubt should consult an advisor before registering.

Credit by Transfer

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 semester hours of these transfer credits may be counted toward the associate's degree; as many as 90 semester hours may be counted toward a bachelor's degree. 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.

Credit from Junior Colleges and Community Colleges

A total of 60 semester hours of credit 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 60 semester hours 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 study completed in service schools and in Military Occupational Specialties (MOSs) 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 limitations described on the next page.

- When a student presents a CCAF transcript, credits are awarded on the basis of evaluation by the CCAF for courses completed after December 1973 (ACE no longer evaluated Air Force schools after that date).
- 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 and only toward the BS degree, up to a maximum of 21 semester hours.
- All credit from the CCAF is lower level and is applicable only to freshman and sophomore requirements.

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, SOCNV-2, SOCCOAST-2, and SOCMAR-2 programs) and bachelor's degrees (SOCAD-4, SOCNV-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.

Vocational and Technical Credit

Vocational and technical credit from regionally accredited institutions or American Council on Education–approved organizations, when applicable, may be accepted as elective credit only.

Vocational and technical credit may not be used to satisfy degree requirements such as general education or major or minor requirements. This credit may be applied toward a degree at UMUC, up to the following limits:

- Associate's degree: A maximum of 12 semester hours.
- Bachelor's degree: A maximum of 21 semester hours of coherently related work, creditable toward the BS or BTPS only (not the BA). Whether credit may be applied to a double major depends on the majors chosen.

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*).

Credit by Examination

UMUC may award as many as 60 semester hours of credit by examination toward the bachelor's degree (30 semester hours 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 semester hours of examination credit 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 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 complete majors or minors or as electives.

College-Level Examination Program

Up to 24 semester hours may be awarded for general examinations in the College-Level Examination Program (CLEP). The scores must meet UMUC standards. UMUC may award 3 semester hours each for the English examination and the mathematics examination, and 6 semester hours for the examinations in 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.

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 42 certificates. The Associate of Arts degree and several other certificates are available only to active-duty military personnel.

Except for those programs limited to active-duty military personnel or others who conform to special stipulations, 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. Students should consult advisors 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, 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 demonstrate the ability to learn and to apply that learning to career and life experience. The UMUC degree begins with basic intellectual tools, ensuring through the general education requirements that students are able to

- Communicate effectively, orally and in writing.
- Reason mathematically.
- Examine and critically assess aesthetic, historical, and cultural works reflecting the variety of human thought and cultural achievement.
- Comprehend the nature, techniques, and limits of science and the social and behavioral sciences.
- Use libraries and other information resources to locate, evaluate, and use needed information effectively.
- Understand information technology and apply it productively.

Cross-curricular initiatives, promoted both by specific courses and by integration throughout all programs, build the student's ability to analyze, synthesize, and integrate knowledge, perspectives, and techniques. The cross-curricular requirements in effective writing, fluency in information technology, information literacy, and civic responsibility, historical, and international perspectives ensure that students are able to

- Define problems, identify appropriate resources, and use information effectively.
- Understand information technology and use it productively.
- Think critically and communicate effectively.
- Function in professional roles that require an appreciation and understanding of the interdependency among all disciplines in the global workplace.
- Put learning in the context of historical events and achievements.
- Function responsibly as adult citizens of the world, engaging and negotiating different perspectives and exercising ethical judgment in their personal and professional lives.

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 a 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 the 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, 2004.

GENERAL EDUCATION REQUIREMENTS (41 S.H.)

A. Communications (12 s.h.)

- ENGL 101 or ENGL 101X (3 s.h.)
Must be completed within first 15 s.h. Placement test required. May not be earned through credit by examination.
 - Another writing course (3 s.h.)
All 3-credit COMM courses (except COMM 300, 380, 400, 486A, 486B, and 493); ENGL 102, 278F, 291, 294, 303, 391, 391X, 480, 482, 483, 485, and 493; and JOUR 201 apply.
 - A third course in writing or a course in speech communication (3 s.h.)
All COMM and SPCH courses (except 486A and 486B); ENGL 102, 278F, 281, 281X, 291, 294, 303, 384, 391, 391X, 480, 482, 483, 485, and 493; and JOUR 201 apply.
 - An upper-level intensive writing course (3 s.h.)
ENGL 303, 391, and 391X; COMM 390, 393, 393X, 394, and 394X; and LGST 401 apply. May not be earned through credit by examination.
- No more than 3 s.h. of writing credit may be earned through credit by examination.

B. Arts and Humanities (6 s.h.)

One course each in two of the following disciplines: ARTH, ARTT, HIST, HUMN, MUSC, PHIL, THET, dance, literature, or foreign language

C. Behavioral and Social Sciences (6 s.h.)

One course each in two of the following disciplines: ANTH, BEHS, CCJS (CCJS 105, 330, 350, 360, 432, 451, 452, 453, 454, and 461 only), ECON, GEOG, GERO (except GERO 341, 342, 351, and 353), GVPT, PSYC, or SOCY

D. Biological and Physical Sciences (7 s.h.)

- A science lecture course (3 s.h.) with related laboratory course (1 s.h.) or a science course combining lecture and laboratory (4 s.h.)
 - Any other science course (3 s.h.)
- Courses from the following disciplines satisfy both requirements: ASTR, BIOL, BSCI, CHEM, GEOL, NSCI, PHYS, biotechnology, botany, entomology, general science, and zoology.

E. Mathematics (3 s.h.)

MATH 105, MATH 107, or a course at or above the level of college algebra
Must be completed within first 15 s.h. Placement test required.

Note: MATH 107 or any higher-level mathematics course is required for majors in all computing areas and most business-related areas. Students should refer to the specific major for requirements or recommendations.

F. Interdisciplinary or Emerging Issues (7 s.h.)

- *For all students:* One course (LIBS 150) in information literacy and research methods (1 s.h.), which must be completed within the first 15 s.h.
- *For computing majors:* One course satisfying the international perspective requirement and one course satisfying the civic responsibility perspective requirement (6 s.h.)
Applicable courses are listed on pp. 27–29.
- *For noncomputing majors:* A total of 6 s.h. in computing courses as follows:
 - IFSM 201 (3 s.h.)
 - An additional computing course appropriate to the academic major (3 s.h.)
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: IFSM 300 or ACCT 326 is required for business-related majors.

CROSS-CURRICULAR PERSPECTIVE REQUIREMENTS (9 S.H.)

Unless otherwise specified, these requirements may be satisfied anywhere in the degree (within the general education requirements or major, minor, or elective courses). A given course may be applied to only one of the cross-curricular requirements, even though it may appear on more than one list.

A. Historical Perspective (3 s.h.)

One course that offers a historical perspective (3 s.h.)

A list of approved historical perspective courses is found on p. 26.

B. International Perspective (3 s.h.)

One course that offers an international perspective (3 s.h.)

The international perspective requirement may be met by 3 s.h. of a foreign language. A list of other approved international perspective courses is found on p. 27. Computing majors must satisfy this requirement within the general education requirements.

C. Civic Responsibility Perspective (3 s.h.)

One course that offers a perspective on civic responsibility (3 s.h.)

A list of approved civic responsibility perspective courses is found on p. 29. Computing majors must satisfy this requirement within the general education requirements.

Total General Education and Cross-Curricular Perspective Requirements

41–50 s.h.

MAJOR, MINOR, AND ELECTIVE REQUIREMENTS

A. Academic Major (30–38 s.h.)

The number of semester hours required to complete an academic major varies according to academic program. At least half the semester hours earned within the major must be upper-level credit (i.e., 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 semester hours for each major; however, the same course may not be used to fulfill requirements for more than one major.

B. Academic Minor (15–19 s.h.)

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. The number of semester hours required to complete an academic minor varies according to academic program. At least half the semester hours 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 (15–49 s.h.)

Electives may be taken in any academic discipline. No more than 21 semester hours may consist of vocational or technical credit (described on p. 20); such credit is applicable only toward the BS or BTPS and not toward the BA. Pass/fail credit, up to a maximum of 18 s.h., may be applied toward electives only.

Total Major, Minor, and Elective Requirements

70–79 s.h.

Overall Bachelor's Degree Requirements

In addition to the general education and cross-curricular perspective requirements and the major, minor, and elective requirements listed on pp. 22–23, the overall requirements listed below pertain to all bachelor's degrees.

1. Students must complete a minimum of 120 semester hours of credit.
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 semester hours required, the following coursework must be taken through UMUC:
 - 30 semester hours (normally the final 30)
 - Half of the required number of semester hours within both the major and the minor
 - 15 semester hours at the upper level (i.e., earned in courses numbered 300 to 499), preferably within the major or minor
4. At least 45 semester hours must be upper-level credit and include
 - At least one-half of the semester hours required for the major
 - 3 semester hours in intensive writing

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

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

Total Degree Requirements

120 s.h.

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.

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 semester hours through UMUC after completing the first degree. The combined credit in both degrees must add up to at least 150 semester hours.

Students must complete all requirements for the major, as well as an upper-level intensive writing course, the computing course required for the major, an international perspective course, and a civic responsibility perspective course. If any of these requirements were satisfied in the previous degree, the remainder necessary to

complete the minimum 30 semester hours 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 semester hours 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.

APPLICABLE COURSEWORK

The following course lists apply to requirements effective fall 2004. Students who began continuous enrollment before fall 2004 should contact an academic advisor to confirm whether their course choices apply to requirements. No course may be used to fulfill more than one of the cross-curricular perspective requirements, even though it may appear on more than one list.

Historical Perspective

In addition to the courses listed below, any life and culture course of 3 or more credits (including courses numbered 105, 333, and 334) in ALBN, ARAB, CHIN, DTCH, FREN, GERM, HGRN, ICLD, ITAL, JAPN, KORN, MACE, MGRK, NORW, PORT, RUSS, SECR, SPAN, or TURK applies.

AASP	201	Introduction to African American Studies
ARTH		Any 3-credit course (except ARTH 100)
ASTD	300	The Chinese: Adapting the Past, Building the Future
ASTD	301	The Japanese: Adapting the Past, Building the Future
ASTD	302	The Two Koreas: Problems and Prospects
ASTD	303	India: The Weight of Tradition in the Modern World
ASTD	304	Southeast Asia: Development amid Diversity
ASTD	305	Pacific Century
ASTD	306	Inner Asia: Peoples, History, and Politics
ASTD	307	Russia and the Far East
BEHS	210	Introduction to Social and Behavioral Science
COMM	380	Language in Social Contexts
ECON	307	Development of Economic Ideas: Social and Political
ECON	311	American Economic Development
ECON	484	The Economy of China
ENGL	201	Western World Literature: Homer to the Renaissance
ENGL	202	Western World Literature: The Renaissance to the Present
ENGL	205	Introduction to Shakespeare
ENGL	211	English Literature: Beginning to 1800
ENGL	221	American Literature: Beginning to 1865
ENGL	304	The Major Works of Shakespeare
ENGL	310	Medieval and Renaissance British Literature
ENGL	311	17th- and 18th-Century British Literature
ENGL	313	American Literature
ENGL	350	English and American Literature: Blake to Conrad
ENGL	363	African American Authors to 1900
ENGL	364	African American Authors Since 1900
ENGL	377	Medieval Myth and Modern Narrative
ENGL	402	Chaucer

ENGL	403	Shakespeare: The Early Works
ENGL	404	Shakespeare: The Later Works
ENGL	406	Shakespeare: Power and Justice
ENGL	407	Literature of the Renaissance
ENGL	418	Major British Writers Before 1800
ENGL	420	Literature of the Romantic Period
ENGL	425	Modern British Literature
ENGL	433	American Literature: 1914 to the Present
ENGL	466	The Arthurian Legend
GVPT	444	American Political Theory
GVPT	451	Foreign Policy of Russia and the States of the Former Soviet Union
GVPT	452	Inter-American Relations
GVPT	453	Recent East Asian Politics
GVPT	455	Contemporary Middle Eastern Politics
GVPT	457	American Foreign Relations
HIST		Any 3-credit course
HUMN	102	Classical Foundations
HUMN	103	Greek and Roman Mythology
HUMN	119	American Adventure
HUMN	120	America in Perspective
HUMN	301	Crossing Cultures: World Views in the Humanities
HUMN	336	Ideas Shaping the 21st Century
HUMN	350	The Religious Quest
HUMN	351	Myth and Culture
HUMN	370	Humanity of Language
HUMN	375	Social History of Washington, D.C.
HUMN	376	Social History of a Region
HUMN	376A	Social History of Annapolis
HUMN	376B	Social History of Baltimore
IFSM	204	History and Future Trends of Computing
JOUR	410	History of Mass Communication
MUSC	130	Survey of Western Music Literature
MUSC	436	Jazz: Then and Now
PHIL	206	Chinese Philosophy: Social and Political Thought
PHIL	245	Political and Social Philosophy
PHIL	311	Studies in Existentialism
PHIL	320	Modern Philosophy
PSYC	415	History of Psychology
SOCY	313	The Individual and Society

International Perspective

Any foreign language course of 3 or more credits also applies.

ACCT	425	International Accounting
ANTH	102	Introduction to Anthropology: Cultural Anthropology and Linguistics
ANTH	343	Physical Anthropology and Archaeology
ANTH	344	Cultural Anthropology and Linguistics
ANTH	398B	Medicine, Health, and Culture
ANTH	417	Peoples and Cultures of East Asia
ARTH	200	Art of the Western World to 1300
ARTH	201	Art of the Western World from 1300
ARTH	335	17th-Century Art in the Netherlands
ARTH	370	History of World Art I
ARTH	371	History of World Art II
ARTH	380	Masterpieces of Painting
ARTH	381	Masterpieces of Sculpture
ARTH	382	Masterpieces of Architecture
ARTH	400	Egyptian Art and Archaeology
ARTH	455	20th-Century Art to 1945
ARTH	456	20th-Century Art from 1945
ARTH	489B	History of Graphic Arts
ARTH	490	Chinese Painting
ASTD		Any 3-credit course
BEHS	325	Cultural Perspectives of the Middle East
BEHS	361	Global Environmental Change
BMGT	392	Global Business Management
BMGT	446	International Finance
BMGT	482	Business and Government
BMGT	491	Exploring the Future
BMGT	498P	International Business Law
BMGT	498R	Multinational Management
BMGT	498S	Global Commerce
COMM	380	Language in Social Contexts
ECON	380	Comparative Economic Systems
ECON	440	International Economics
ECON	484	The Economy of China
ENGL	201	Western World Literature: Homer to the Renaissance
ENGL	202	Western World Literature: The Renaissance to the Present
ENGL	205	Introduction to Shakespeare

ENGL	211	English Literature: Beginning to 1800
ENGL	212	English Literature: 1800 to the Present
ENGL	304	The Major Works of Shakespeare
ENGL	310	Medieval and Renaissance British Literature
ENGL	311	17th- and 18th-Century British Literature
ENGL	312	Romantic to Modern British Literature
ENGL	350	English and American Literature: Blake to Conrad
ENGL	358	British Women Writers Since 1900
ENGL	377	Medieval Myth and Modern Narrative
ENGL	402	Chaucer
ENGL	403	Shakespeare: The Early Works
ENGL	404	Shakespeare: The Later Works
ENGL	407	Literature of the Renaissance
ENGL	418	Major British Writers Before 1800
ENGL	419	Major British Writers After 1800
ENGL	420	Literature of the Romantic Period
ENGL	425	Modern British Literature
ENGL	446	Postmodern British and American Poetry
ENGL	454	Modern Drama
ENGL	457	The Modern Novel
ENGL	466	The Arthurian Legend
GERO	410	Cross-Cultural Perspectives of Aging
GVPT	200	International Political Relations
GVPT	240	Political Ideologies
GVPT	282	The Government and Politics of the Third World
GVPT	306	Global Ecopolitics
GVPT	308	Human Rights in the World
GVPT	335	Foreign Policy and the New World Order
GVPT	401	Problems of World Politics
GVPT	401A	International Political Terrorism
GVPT	451	Foreign Policy of Russia and the States of the Former Soviet Union
GVPT	453	Recent East Asian Politics
GVPT	454	Contemporary African Politics
GVPT	455	Contemporary Middle Eastern Politics
GVPT	482	Government and Politics of Latin America
GVPT	483	Government and Politics of Asia
GVPT	484	Government and Politics of Africa
GVPT	485	Government and Politics of the Middle East
GVPT	487	Government and Politics of South Asia
GVPT	488	Comparative Studies in European Politics

HIST	115	World History I
HIST	116	World History II
HIST	141	Western Civilization I
HIST	142	Western Civilization II
HIST	284	East Asian Civilization I
HIST	285	East Asian Civilization II
HIST	324	Classical Greece
HIST	325	Alexander the Great and the Hellenistic Age
HIST	326	The Roman Republic
HIST	327	The Roman Empire
HIST	330	Europe in the Early Middle Ages: 300 to 1000
HIST	331	Europe in the High Middle Ages: 1000 to 1450
HIST	332	Europe During the Renaissance and Reformation I
HIST	333	Europe During the Renaissance and Reformation II
HIST	334	The Age of Absolutism
HIST	335	Revolutionary Europe
HIST	336	Europe in the 19th Century: 1815 to 1919
HIST	337	Europe in the World Setting Since 1914
HIST	341	African Civilization to 1800
HIST	342	Sub-Saharan Africa Since 1800
HIST	353	Latin American History I
HIST	354	Latin American History II
HIST	380	American Relations with China and Japan: 1740 to the Present
HIST	381	America in Vietnam
HIST	382	The Korean War
HIST	383	Korean History
HIST	390	The Rise of Islam to 1300
HIST	391	History of the Ottoman Empire
HIST	392	History of the Contemporary Middle East
HIST	422	Byzantine Empire I
HIST	423	Byzantine Empire II
HIST	430	Tudor England
HIST	431	Stuart England
HIST	432	Britain in the 18th Century

HIST	433	Victorian Britain
HIST	434	Britain Since World War I
HIST	436	The French Revolution and Napoleon
HIST	437	Modern France Since 1815
HIST	438	Modern Italy
HIST	439	Early Modern Germany
HIST	440	Germany in the 19th Century: 1815 to 1914
HIST	441	Modern Germany
HIST	443	Modern Balkan History
HIST	448	Russia Since 1900
HIST	480	History of Traditional China
HIST	481	History of Modern China
HIST	482	History of Japan to 1800
HIST	483	History of Japan Since 1800
HIST	485	History of Chinese Communism
HIST	496	Africa Since Independence
HIST	497	Islam in Africa
HRMN	490	International Human Resource Management
HUMN	102	Classical Foundations
HUMN	103	Greek and Roman Mythology
HUMN	301	Crossing Cultures: World Views in the Humanities
HUMN	350	The Religious Quest
HUMN	351	Myth and Culture
HUMN	360	Global Environmental Change
MRKT	454	Global Marketing
MUSC	210	The Impact of Music on Life
NSCI	361	Global Environmental Change
PHIL	206	Chinese Philosophy: Social and Political Thought
PHIL	236	Philosophy of Religion
PHIL	307	Asian Philosophy
PHIL	308	Zen Buddhism: Origin and Development
PHIL	320	Modern Philosophy
PSYC	354	Cross-Cultural Psychology
SOCY	311	The Individual and Society
SOCY	423	Ethnic Minorities
SPCH	482	Intercultural Communication

Civic Responsibility Perspective

AASP	201	Introduction to African American Studies
ACCT	411	Ethics and Professionalism in Accounting
ANTH	102	Introduction to Anthropology: Cultural Anthropology and Linguistics
ANTH	417	Peoples and Cultures of East Asia
ASTD	150	Introduction to Asian Studies I
ASTD	160	Introduction to Asian Studies II
BEHS	361	Global Environmental Change
BIOL	211	Environmental Science
BMGT	365	Leadership and Change
BMGT	378	Legal Environment of Business
BMGT	380	Business Law I
BMGT	381	Business Law II
BMGT	482	Business and Government
BMGT	496	Business Ethics
BMGT	498J	Legal Aspects of Technology Management
BMGT	498O	The Global Manager and Public Policy
BMGT	498P	International Business Law
EDPA	210	Historical and Philosophical Perspectives on Education
ENGL	406	Shakespeare: Power and Justice
ENMT	301	Environment and Ecosystems Management
ENMT	325	Global Environment and Sustainable Development
ENMT	495	Global Environmental Management Issues
GEOL	120	Environmental Geology
GERO	307	Aging, Religion, and Spirituality
GERO	327	Ethnicity and Aging
GERO	390	Economics of Aging
GERO	410	Cross-Cultural Perspectives of Aging
GVPT	200	International Political Relations
GVPT	282	The Government and Politics of the Third World
GVPT	306	Global Ecopolitics
GVPT	308	Human Rights in the World
GVPT	401	Problems of World Politics
GVPT	403	Law, Morality, and War
HIST	372	Legacy of the Civil Rights Movement
HRMN	365	Conflict Management in Organizations
HRMN	408	Employment Law for Business
HUMN	311	Workplace Ethics
HUMN	312	Ethics and Religion
HUMN	336	Ideas Shaping the 21st Century
HUMN	360	Global Environmental Change
IFSM	304	Ethics in the Information Age
LGST	204	Legal Ethics
LGST	327	Alternative Dispute Resolution
NSCI	361	Global Environmental Change
PHIL	140	Contemporary Moral Issues
PHIL	208	Death and Dying
PHIL	209	Law and Society
PHIL	236	Philosophy of Religion
PHIL	245	Political and Social Philosophy
PHIL	309	The Philosophies of Mahayana Buddhism
PHIL	340	Making Decisions
PHIL	342	Moral Problems in Medicine
PHIL	343	Sexual Morality
PSYC	334	Psychology of Interpersonal Relationships
PSYC	354	Cross-Cultural Psychology
SOCY	105	Introduction to Contemporary Social Problems
SOCY	325	The Sociology of Gender
SOCY	410	Social Demography
SOCY	423	Ethnic Minorities
SOCY	424	Sociology of Race Relations
SOCY	425	Gender Roles and Social Institutions
SPCH	324	Communication and Gender
SPCH	426	Negotiation and Conflict Management
SPCH	482	Intercultural Communication
WMST	200	Introduction to Women's Studies: Women and Society

PROGRAM CHOICES

Discipline	Major	Minor	Certificate(s)
Accounting	p. 33	p. 34	Introductory accounting, p. 91 Advanced accounting, p. 91
African American studies		p. 34	
Art		p. 35	Computer graphics and design, p. 93 Web design, p. 104
Art history		p. 36	
Asian studies	p. 36	p. 37	
Biology		p. 38	Bio-security, p. 92
Biotechnology	p. 38		
Business administration	p. 40	p. 41	Business project management, p. 92 E-commerce in small business, p. 95 Management foundations, p. 99 Women in business, p. 105
Business law and public policy		p. 41	
Business supply chain management		p. 42	E-commerce in small business, p. 95 E-commerce management, p. 96
Communication studies	p. 43	p. 45	Negotiation and conflict management, p. 100 Workplace communications, p. 106
Computer and information science	p. 46		Database design and implementation, p. 94 Object-oriented design and programming, p. 100 Software engineering, p. 102 Visual Basic programming, p. 104 Web programming, p. 105
Computer information technology	p. 47		
Computer science	p. 48		Object-oriented programming using Java, p. 100
Computer studies	p. 49	p. 50	Computer applications, p. 93 Desktop publishing, p. 95 Internet technologies, p. 98 Visual Basic programming, p. 104
Criminal justice	p. 50	p. 51	Security management, p. 102 Security operations, p. 102
Customer service management		p. 52	Customer service communications, p. 93 Customer service management, p. 94
Economics		p. 53	
English	p. 53	p. 54	

PROGRAM CHOICES (continued)

Discipline	Major	Minor	Certificate(s)
Environmental management	p. 55	p. 56	Environmental and occupational health and safety management, p. 96
Finance	p. 57	p. 57	Financial management, p. 96
Fire science	p. 58	p. 59	Public fire-protection management and administration, p. 102 Systems approach to fire safety, p. 102
Forensics		p. 60	
General studies	p. 61		
Gerontology		p. 62	Gerontology, p. 97
Global business and public policy	p. 62		
Government and politics		p. 64	Terrorism and institutions: Prevention and response, p. 103
History	p. 64	p. 66	
Humanities	p. 66	p. 67	
Human resource management	p. 67	p. 69	Human resource management, p. 97
Information systems management	p. 70		Database management, p. 94 E-commerce for IT professionals, p. 95 Information management, p. 98 Information security, p. 98 Project management for IT professionals, p. 101 Technology and management, p. 103 UNIX system administration, p. 104
International business management		p. 71	
Journalism		p. 72	
Legal studies	p. 72		Paralegal studies, p. 101
Management studies	p. 74	p. 75	Management foundations, p. 99 Technology and management, p. 103
Marketing	p. 75	p. 76	
Mathematical sciences		p. 77	
Microbiology		p. 78	
Natural science		p. 79	Laboratory management, p. 99
Psychology	p. 80	p. 81	
Social science	p. 81		
Sociology		p. 82	
Spanish			Workplace Spanish, p. 106
Speech communication		p. 83	Negotiation and conflict management, p. 100
Strategic and entrepreneurial management		p. 84	E-commerce in small business, p. 95
Women's studies		p. 85	Women in business, p. 105

MAJORS AND MINORS

The academic major requires 30 to 38 semester hours of credit, while the minor (optional) requires 15 to 19 semester hours. 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-semester-hour courses may be applied to a major or minor.

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 only available 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
Environmental management
Finance
Fire science
General studies**
Global business and public policy
Human resource management
Information systems management
Legal studies
Management studies
Marketing
Psychology
Social science

* Students should consult an advisor before selecting this major.

** Students should consult an advisor before selecting this major. General studies is not available for a double major.

Available for the BTPS

Biotechnology*

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
Computer studies
Criminal justice
Customer service management
Economics
English
Environmental management
Finance
Forensics
Fire science
Gerontology
Government and politics
History
Humanities
Human resource management
International business management
Journalism
Management studies
Marketing
Mathematical science
Microbiology
Natural 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.

Requirements for the Major

A major in accounting requires the completion of 36 semester hours of coursework in accounting, at least 18 of which must be earned in courses numbered 300 or above. An additional 18 semester hours of related business coursework are required. This coursework is applied to the student's curriculum as a minor in business administration. Specific course requirements are listed below.

For a listing of all the requirements for the bachelor's degree, students should refer to pp. 22–23.

Accounting Coursework (36 s.h.)

Required Core Courses (24 s.h.)

Students must take the following courses:

ACCT	220	Principles of Accounting I (3)
ACCT	221	Principles of Accounting II (3)
ACCT	310	Intermediate Accounting I (3)
ACCT	311	Intermediate Accounting II (3)
ACCT	321	Cost Accounting (3)
ACCT	323	Taxation of Individuals (3)
ACCT	422	Auditing Theory and Practice (3)
ACCT	495	Contemporary Issues in Accounting Practice (3)

Supplemental Major Courses (12 s.h.)

Students must take four of the following courses:

ACCT	326	Accounting Information Systems (3)*
ACCT	328	Accounting Software (3)
ACCT	410	Accounting for Government and Not-for-Profit Organizations (3)
ACCT	411	Ethics and Professionalism in Accounting (3)*
ACCT	417	Taxation of Corporations and Other Entities (3)
ACCT	424	Advanced Accounting (3)
ACCT	425	International Accounting (3)
ACCT	426	Advanced Cost Accounting (3)
ACCT	427	Advanced Auditing (3)
ACCT	436	Internal Auditing (3)
ACCT	486A	Internship in Accounting Through Co-op (3)
ACCT	486B	Internship in Accounting Through Co-op (6)

Related Business Coursework (18 s.h.)

Students must take the following business courses (which will be credited as a minor in business administration):

BMGT	230	Business Statistics (3)
BMGT	340	Business Finance (3)
BMGT	364	Management and Organization Theory (3)
BMGT	380	Business Law I (3)
MRKT	310	Marketing Principles and Organization (3)

Students must take one of the following ethics courses:

ACCT	411	Ethics and Professionalism in Accounting (3)*
BMGT	496	Business Ethics (3)

* Courses applied to the major may not be applied toward general education or related business coursework requirements.

Additional Required Coursework (12 s.h.)

Students must take the following courses; credit may be applied to general education, minor, or elective requirements, as appropriate:

ECON	201	Principles of Economics I (3)
ECON	203	Principles of Economics II (3)
MATH	107	College Algebra (3)

Students must take one of the following courses to complete the general education requirement in computing:

ACCT	326	Accounting Information Systems (3)*
IFSM	300	Information Systems in Organizations (3)

Recommendations

The following courses are recommended; credit may be applied to general education, cross-curricular perspective, or elective requirements, as appropriate.

Students are encouraged to take one of the following courses with an international focus:

ACCT	425	International Accounting (3)
BMGT	392	Global Business Management (3)

Students are encouraged to take one of the following writing courses:

COMM	390	Writing for Managers (3)
COMM	393/393X	Technical Writing (3)
COMM	394/394X	Business Writing (3)

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 semester hours of coursework in accounting, at least 9 of which must be earned in courses numbered 300 or above. Specific course requirements are listed below. If a specific course required for the minor is taken instead to satisfy requirements for the major, another course in the same discipline should be substituted to fulfill the required minimum number of semester hours for the minor. Any course used to replace an upper-level course should also be classified as upper level.

For a listing of all the requirements for the bachelor's degree, students should refer to pp. 22–23.

Accounting Coursework (15 s.h.)

Required Courses (9 s.h.)

Students must take the following courses:

ACCT	220	Principles of Accounting I (3)
ACCT	221	Principles of Accounting II (3)
ACCT	321	Cost Accounting (3)

Supplemental Minor Courses (6 s.h.)

Students must take two accounting courses from the lists of required and supplemental accounting courses for the accounting major.

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.

* ACCT 326 may be applied toward either the major or the general education requirement in computing, but not both.

Requirements for the Minor

A minor in African American studies requires the completion of 15 semester hours of coursework focusing on African American issues, drawn from various disciplines as appropriate; at least 9 of these semester hours must be earned in courses numbered 300 or above. Specific course requirements are listed below. If a specific course required for the minor is taken instead to satisfy requirements for the major, another course in the same discipline should be substituted to fulfill the required minimum number of semester hours for the minor. Any course used to replace an upper-level course should also be classified as upper level.

For a listing of all the requirements for the bachelor's degree, students should refer to pp. 22–23.

African American Studies Coursework (15 s.h.)

Required Foundation Course (3 s.h.)

Students must take the following course:

AASP	201	Introduction to African American Studies (3)

Supplemental Minor Courses (12 s.h.)

Students must take four of the following courses. No more than 6 semester hours may be earned within any single discipline.

CCJS	370	Race, Crime, and Criminal Justice (3)
ENGL	363	African American Authors to 1900 (3)
ENGL	364	African American Authors Since 1900 (3)
GVPT	272	Politics of Race Relations in the United States (3)
GVPT	434	Race Relations and Public Law (3)
HIST	372	Legacy of the Civil Rights Movement (3)
HIST	460	African American Life: 1500 to 1865 (3)
HIST	461	African American Life Since 1865 (3)
MUSC	436	Jazz: Then and Now (3)
SOCY	423	Ethnic Minorities (3)
SOCY	424	Sociology of Race Relations (3)

Special topic courses offered in various disciplines may also be used to fulfill this requirement, if approved in advance.

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 semester hours of art coursework, including 3 semester hours in art theory and 12 semester hours in art media covering drawing, painting, and graphics and design; at least 9 semester hours must be earned in courses numbered 300 or above. Specific course selections are listed below. If a specific course required for the minor is taken instead to satisfy requirements for the major, another course in the same discipline should be substituted to fulfill the required minimum number of semester hours for the minor. Any course used to replace an upper-level course should also be classified as upper level.

For a listing of all the requirements for the bachelor's degree, students should refer to pp. 22–23.

Art Coursework (15 s.h.)

Art Theory Course (3 s.h.)

Students must take one of the following art theory courses:

ARTT	100	Two-Dimensional Art Fundamentals (3)
ARTT	150	Introduction to Art Theory (3)
ARTT	200	Elements of Three-Dimensional Form and Space (3)
ARTT	220	Color in Composition (3)
ARTT	250	Elements of Commercial Design (3)
ARTT	468	Seminar: Interrelationship Between Art and Art Theory(3)

Media Courses (12 s.h.)

Students must complete four of the following media courses, with at least one course in each medium (drawing, painting, and graphics and design), for a total of 12 semester hours:

Drawing

ARTT	110	Elements of Drawing I (3)
ARTT	210	Elements of Drawing II (3)
ARTT	418	Drawing (3)

Painting

ARTT	320	Elements of Painting (3)
ARTT	428	Painting (3)
ARTT	470	Watercolor (3)

Graphics and Design

ARTT	354	Elements of Computer Graphics (3)
ARTT	479	Advanced Computer Graphics (3)
COMM	493	Graphics/Text Integration (3)

Special topic and directed study courses may also be used to fulfill this requirement, if approved in advance.

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 images from museums worldwide on the Web.
- Enhance intensive research and writing skills.

Requirements for the Minor

A minor in art history requires the completion of 15 semester hours in art history, including one 3-credit course focusing on each of the following periods: ancient world (pre–Common Era), premodern (Common Era to 1850), and modern (Common Era after 1850); at least 9 semester hours must be earned in courses numbered 300 or above. If a specific course required for the minor is taken instead to satisfy requirements for the major, another course in the same discipline should be substituted to fulfill the required minimum number of semester hours for the minor. Any course used to replace an upper-level course should also be classified as upper level.

For a listing of all the requirements for the bachelor's degree, students should refer to pp. 22–23.

Asian Studies

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

Major in Asian Studies

The Asian studies major provides an interdisciplinary overview of the life, history, politics, and cultures of Asia. It examines Asia's rich past as well as the changing contemporary scene. The curriculum focuses on the history and culture of Asia and its local and global influence, including related social, political, and philosophical issues.

Objectives

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

- Demonstrate an understanding of the historical and cultural dimensions of Asia.
- Think critically and perform research in Asian studies.
- Demonstrate effective communication skills, orally and in writing.
- 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.
- Understand and demonstrate knowledge of ethical and social responsibility issues relating to other countries.

Requirements for the Major

The major in Asian studies requires the completion of 30 semester hours of coursework related to Asian studies, drawn from various disciplines as appropriate; at least 15 of these semester hours must be earned in courses numbered 300 or above. Specific course requirements are listed below.*

For a listing of all the requirements for the bachelor's degree, students should refer to pp. 22–23.

Asian Studies Coursework (30 s.h.)

Required Foundation Courses (15 s.h.)

Students must complete the following foundation courses:

ASTD	150	Introduction to Asian Studies I (3)
ASTD	160	Introduction to Asian Studies II (3)
PHIL	307	Asian Philosophy (3)

Students must also complete two courses in an Asian language (e.g., Chinese, Japanese, Korean).

* Courses on Asian language and culture may not be offered at all locations. Students should consult an advisor before pursuing a major in Asian studies.

Required Capstone Course (3 s.h.)

Students must complete the following capstone course:

ASTD	485	Great Issues in Asian Studies (3)

Supplemental Major Courses (12 s.h.)

Students must take two courses from each of the following lists.

Traditional Asia (6 s.h.)

Students must take two of the following courses on traditional Asia:

ASTD	398Y	Anthropology of Asian Religions (3)
HIST	284	East Asian Civilization I (3)
HIST	383	Korean History (3)
HIST	480	History of Traditional China (3)
HIST	482	History of Japan to 1800 (3)
JAPN	333	Japanese Life and Culture I (3)
KORN	333	Korean Life and Culture (3)

Special topic courses in Asian studies, government and politics, history, humanities, or philosophy that focus on traditional Asia may be applied to this requirement when approved in advance.

Modern Asia (6 s.h.)

Students must take two of the following courses on modern Asia:

ANTH	417	Peoples and Cultures of East Asia (3)
ASTD	300	The Chinese: Adapting the Past, Building the Future (3)
ASTD	301	The Japanese: Adapting the Past, Building the Future (3)
ASTD	302	The Two Koreas: Problems and Prospects (3)
ASTD	303	India: The Weight of Tradition in the Modern World (3)
ASTD	304	Southeast Asia: Development amid Diversity (3)
ASTD	306	Inner Asia: Peoples, History, and Politics (3)
ASTD	307	Russia and the Far East (3)
ECON	484	The Economy of China (3)
GVPT	453	Recent East Asian Politics (3)
GVPT	483	Government and Politics of Asia (3)
GVPT	487	Government and Politics of South Asia (3)
HIST	285	East Asian Civilization II (3)
HIST	380	American Relations with China and Japan: 1740 to the Present (3)
HIST	381	America in Vietnam (3)
HIST	382	The Korean War (3)
HIST	481	History of Modern China (3)
HIST	483	History of Japan Since 1800 (3)
HIST	485	History of Chinese Communism (3)
JAPN	105	Introduction to Japanese Language and Culture (3)
JAPN	334	Japanese Life and Culture II (3)
JAPN	418	Japanese Literature in Translation (3)
KORN	105	Introduction to Korean Language and Culture (3)
KORN	418	Korean Literature in Translation (3)

Special topic courses in Asian studies, government and politics, history, humanities, or philosophy that focus on modern Asia may be applied to this requirement when approved in advance.

Minor in Asian Studies

The Asian studies minor complements the skills the student gains in his or her major discipline by offering interdisciplinary, focused study of the contemporary life, history, and culture of Asia.

Objectives

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

- Discuss aspects of the historical development of Asian life and culture.
- Discuss aspects of the cultural expression of the Asian experience.
- Demonstrate an understanding of fundamental interdisciplinary methods, research, and topics relevant to Asian studies.

Requirements for the Minor

A minor in Asian studies requires the completion of 15 semester hours of coursework in Asian studies, drawn from various disciplines as appropriate; at least 9 semester hours must be earned in courses numbered 300 or above. Specific course requirements are listed below. If a specific course required for the minor is taken instead to satisfy requirements for the major, another course in the same discipline should be substituted to fulfill the required minimum number of semester hours for the minor. Any course used to replace an upper-level course should also be classified as upper level.

For a listing of all the requirements for the bachelor's degree, students should refer to pp. 22–23.

Asian Studies Coursework (15 s.h.)

Required Foundation Course (3 s.h.)

Students must take one of the following foundation courses:

ASTD	150	Introduction to Asian Studies I (3)
ASTD	160	Introduction to Asian Studies II (3)

Supplemental Minor Courses (12 s.h.)

Students must take three or more courses from the following list, for a total of 12 semester hours. No more than 6 semester hours may be earned within any single discipline.

ANTH	417	Peoples and Cultures of East Asia (3)
GVPT	453	Recent East Asian Politics (3)
GVPT	483	Government and Politics of Asia (3)
HIST	381	America in Vietnam (3)
HUMN	350	The Religious Quest (6)
PHIL	307	Asian Philosophy (3)

All courses in the following areas are also eligible:

- Asian art and art history
- Asian studies
- Asian language
- Asian literature (in translation or the original text)
- Asian history

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 16 semester hours of coursework in biology, at least 9 of which must be earned in courses numbered 300 or above. Specific course requirements are listed below. If a specific course required for the minor is taken instead to satisfy requirements for the major, another course in the same discipline should be substituted to fulfill the required minimum number of semester hours for the minor. Any course used to replace an upper-level course should also be classified as upper level.

For a listing of all the requirements for the bachelor's degree, students should refer to pp. 22–23.

Biology Coursework (16 s.h.)

Required Foundation Course or Courses (4 s.h.)

Students must take one of the following options:

- BIOL 101 Concepts of Biology (3)
- BIOL 102 Laboratory in Biology (1)
- BIOL 105 Principles of Biology I (4)

Required Core Course (3 s.h.)

Students must take one of the following core courses:

BIOL	160	Human Biology (3)
BIOL	164	Introduction to Human Anatomy and Physiology (3)
BIOL	201	Human Anatomy and Physiology I (4)
BIOL	211	Environmental Science (3)
BIOL	215	Population Biology and General Ecology (3)
BIOL	220	Human Genetics (3)
BIOL	226	Evolution (3)
BIOL	222	Principles of Genetics (3)
BIOL	320	Forensic Biology (3)

Supplemental Minor Courses (9 s.h.)

Students must take at least three upper-level BIOL courses, for a minimum of 9 semester hours. Courses designated ENMT, FSCN, HLTH, or NUTR may *not* be applied toward the biology minor.

Biotechnology

Students who have completed an associate's 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 electing this major.

The major in biotechnology 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 on an articulation agreement with UMUC.

Major in Biotechnology Studies

The biotechnology major is designed to build on the technical and scientific knowledge gained through the associate 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.

Requirements for the Major

A major in biotechnology requires the completion of at least 36 semester hours of coursework in biology, biotechnology, and related sciences; at least 18 semester hours must be earned in courses numbered 300 or above. Students who intend to pursue a major in biotechnology must be careful to select appropriate courses at the community-college level to ensure transfer of credits. Specific course requirements are listed below.

For a listing of all the requirements for the bachelor's degree, students should refer to pp. 22–23.

Biotechnology Coursework (36 s.h.)

Required Lower-Level Courses (15 s.h.)

Students must complete 15 semester hours of lower-level coursework in the following areas at their community college:

General microbiology (with laboratory)

General genetics (with laboratory)

Biotechnology techniques

Required Upper-Level Courses (12 s.h.)

Students must complete the following upper-level courses at UMUC:

BIOL 350 Molecular and Cellular Biology (3)

BIOL 400 Life Science Seminar (3)

Students must also complete 6 semester hours in internship experience through Cooperative Education. Co-op courses are listed under the appropriate discipline and are numbered 486A (for 3 credits) or 486B (for 6 credits), e.g., BIOL 486A Internship in Life Science Through Co-op (3).*

Supplemental Major Courses (9 s.h.)

Students must take at least three of the following courses:

BIOL	304	The Biology of Cancer (3)
BIOL	305	The Biology of AIDS (3)
BIOL	320	Forensic Biology (3)
BIOL	335	Vaccine Development (3)
BIOL	337	Medical Virology (3)
BIOL	353	Microbial Genetics (3)
BIOL	356	Molecular Biology Laboratory (4)
BIOL	357	Bioinformatics (3)
BIOL	360	Developmental Biology (3)
BIOL	362	Neurobiology (3)
BIOL	398C	Regulation of Gene Expression (1)
BIOL	398D	The Ecology of Deep-Sea Hydrothermal Vents (1)
BIOL	398F	Extremophiles (1)
BIOL	398K	Stem Cells (1)
BIOL	422	Epidemiology of Emerging Infections (3)
BIOL	430	Microbial Physiology (3)
BIOL	431	Microbial Ecology (3)
BIOL	434	General Virology (3)
BIOL	435	General Virology with Laboratory (4)
BIOL	437	Pathogenic Microbiology (4)
BIOL	438	Immunology (4)
BIOL	440	Biochemistry I (3)
BIOL	441	Biochemistry II (3)
BIOL	445	Basic Pharmacology and Therapeutics I (3)
BIOL	446	Basic Pharmacology and Therapeutics II (3)
NSCI	301	Laboratory Organization and Management (3)
Additional internship study (3 or 6)*		

Related Coursework (17 s.h.)

Students must complete an additional 17 semester hours of coursework related to biotechnology (e.g., biotechnology, biochemistry, cell biology, chemistry, genetics, immunology, microbiology, molecular biology, physics, or virology). Individual courses should be selected as specified by the student's associate's degree program.

* Internship may be in any discipline, but the learning proposal must show a clear relationship to the biotechnology major. No more than 15 semester hours in internship experience may be applied to the bachelor's degree.

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.

Requirements for the Major

A major in business administration requires the completion of 36 semester hours of coursework in business administration, drawn from various disciplines as appropriate; at least 18 semester hours must be earned in courses numbered 300 or above. Specific course requirements are listed below.

For a listing of all the requirements for the bachelor's degree, students should refer to pp. 22–23.

Business Administration Coursework (36 s.h.)

Required Foundation Courses (9–12 s.h.)

Students who do not have previous business experience must take the following course:

BMGT	110	Introduction to Business and Management (3)

Students must take the following foundation courses:

ACCT	220	Principles of Accounting I (3)
ACCT	221	Principles of Accounting II (3)
BMGT	230	Business Statistics (3)

Required Core Courses (21 s.h.)

Students must take the following core courses:

BMGT	340	Business Finance (3)
BMGT	364	Management and Organization Theory (3)
BMGT	380	Business Law I (3)
BMGT	495	Strategic Management (3)*
BMGT	496	Business Ethics (3)
HRMN	300	Human Resource Management (3)
MRKT	310	Marketing Principles and Organization (3)

Supplemental Major Courses (3–6 s.h.)

To complete the 36 semester hours required for the major, students must take additional coursework from accounting, business and management, environmental management, human resource management, marketing, and management studies.

* Should be taken in the student's final 30 semester hours of study.

Additional Required Coursework (12 s.h.)

Students must take the following courses; credit may be applied to general education, minor, or elective requirements, as appropriate. As basic courses for students majoring in business administration, they should be taken early in the program.

ECON	201	Principles of Economics I (3)
ECON	203	Principles of Economics II (3)
MATH	107	College Algebra (3)
<i>or</i>		

A higher-numbered mathematics course from mathematics sequence I (listed on p. 207)

Students must take one of the following courses to complete the general education requirement in computing:

ACCT	326	Accounting Information Systems (3)
IFSM	300	Information Systems in Organizations (3)

Recommendations

The following courses are recommended; credit may be applied to general education or elective requirements, as appropriate.

COMM	390	Writing for Managers (3)
COMM	393/393X	Technical Writing (3)
COMM	394/394X	Business Writing (3)
ENMT	301	Environment and Ecosystems Management (3)

The following course is recommended for students who plan to continue study in graduate school; credit may be applied to general education or elective requirements, as appropriate.

MATH	220	Elementary Calculus I (3)

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 semester hours of coursework in business administration, drawn from various disciplines as appropriate; at least 9 semester hours must be earned in courses numbered 300 or above. Specific course requirements are listed below. If a specific course required for the minor is taken instead to satisfy requirements for the major, another course in the same discipline should be substituted to fulfill the required minimum number of semester hours for the minor. Any course used to replace an upper-level course should also be classified as upper level.

For a listing of all the requirements for the bachelor's degree, students should refer to pp. 22–23.

Business Administration Coursework (15 s.h.)

Required Foundation Course or Courses (3–6 s.h.)

Students who do not have previous business experience must take the following course:

BMGT	110	Introduction to Business and Management (3)

Students must take the following course:

BMGT	364	Management and Organization Theory (3)

Supplemental Minor Courses (9–12 s.h.)

To complete the 15 semester hours required for the minor, students must take three or more courses from accounting, business and management, environmental management, human resource management, marketing, and management studies.

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 semester hours of coursework in business law and public policy, drawn from various disciplines as appropriate; at least 9 semester hours must be earned in courses numbered 300 or above. Specific course requirements are listed below. If a specific course required for the minor is taken instead to satisfy requirements for the major, another course in the same discipline should be substituted to fulfill the required minimum number of semester hours for the minor. Any course used to replace an upper-level course should also be classified as upper level.

For a listing of all the requirements for the bachelor's degree, students should refer to pp. 22–23.

Business Law and Public Policy Coursework (15 s.h.)

Required Foundation Courses (6 s.h.)

Students must take the following courses:

BMGT	380	Business Law I (3)
BMGT	496	Business Ethics (3)

Supplemental Minor Courses (9 s.h.)

Students must take three of the following courses. Courses strongly recommended for the minor are indicated by an asterisk.

BMGT	378	Legal Environment of Business (3)
BMGT	381	Business Law II (3)
BMGT	481	Management of Public Enterprises (3)
BMGT	482	Business and Government (3)*
BMGT	498F	Environmental Management and Business (3)
BMGT	498J	Legal Aspects of Technology Management (3)
BMGT	498O	The Global Manager and Public Policy (3)
BMGT	498P	International Business Law (3)
HRMN	408	Employment Law for Business (3)*
HRMN	462	Labor Relations Law (3)

* Strongly recommended.

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 (formerly called e-commerce and technology management) 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 semester hours of coursework in business supply chain management, drawn from various disciplines as appropriate; at least 9 semester hours must be earned in courses numbered 300 and above. Specific course requirements are listed below. If a specific course required for the minor is taken instead to satisfy requirements for a major, another course in the same discipline should be substituted to fulfill the required minimum number of semester hours for the minor. Any course used to replace an upper-level course should also be classified as upper level.

For a listing of all the requirements for the bachelor's degree, students should refer to pp. 22–23.

Business Supply Chain Management Coursework (15 s.h.)

Foundation Courses (6 s.h.)

Students must take two of the following courses:

BMGT	304	Managing E-Commerce in Organizations (3)
BMGT	309	Operations Research for Management Decisions (3)
BMGT	317	Problem Solving for Managers (3)

Supplemental Minor Courses (9 s.h.)

Students must take at least three additional courses from those introductory courses not already taken and the following courses:

BMGT	230	Business Statistics (3)
BMGT	305	Knowledge Management (3)
BMGT	370	Transportation and Supply Chain Management (3)
BMGT	372	Supply Chain and Logistics Management (3)
BMGT	375	Procurement Management (3)
BMGT	383	Planning and Control of Services (3)
BMGT	384	Managing for Quality (3)
BMGT	388B	Virtual Management (3)
BMGT	412	Business Evaluation and Reengineering (3)
BMGT	487	Program Management I (3)
BMGT	488	Program Management II (3)
BMGT	491	Exploring the Future (3)
MRKT	318	Exploring Internet Marketing (1)
MRKT	457	Using Web-Enhanced Marketing Techniques (3)

Communication Studies

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

Major in Communication Studies

A major in communication studies provides for the growth of adult learners as expert communicators who can meet the challenges posed by the global workplace and the global presentation of public information. The major's cross-disciplinary approach produces graduates who have the appropriate balance of theoretical background and sophisticated, practical communication skills needed in today's workplace and public information environments.

Objectives

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

- Discuss the history of communication theory and how its principles apply to particular types of communication, including mass communication.
- Apply effective communication strategies within various types of communication.
- Gather information from a variety of sources and critically identify, examine, and present issues associated with information communicated to diverse audiences.
- Apply the techniques of independent research, including technology that fosters information literacy.
- Recognize the legal and ethical implications of communication and produce communications that are legally and ethically responsible.
- Explain how computer technology is used to develop and manage information and employ appropriate computer resources to increase the efficiency and effectiveness of communication.
- Write and edit effectively and demonstrate a clear understanding of the respective processes, tools, and techniques that apply to various types of communication.
- Assess a particular communication environment and evaluate the communication skills needed for that environment.
- Develop communication products and processes appropriate to a given audience.
- Demonstrate an understanding of the elements of typography, layout, and design and apply them effectively to various kinds of communications.
- Apply media and techniques appropriate to the solution of communication problems.

- Work as a capable communication professional within a specific communication field.
- Develop an international perspective of communication practice through awareness of intercultural communication and international business conventions.

Requirements for the Major

A major in communication studies requires the completion of 30 semester hours of coursework in communication studies, drawn from various disciplines as appropriate; at least 15 semester hours must be earned in courses numbered 300 or above. Specific course requirements are listed below.

Within the communication studies major, students may choose general study or a more structured track in business communication, journalism, speech communication, or technical communication. Students in all tracks must complete the requirements listed below, as well as those listed for their selected track, within the 30 semester hours for the major.

For a listing of all the requirements for the bachelor's degree, students should refer to pp. 22–23.

Communication Studies Coursework (30 s.h.)

Required Foundation Course (3 s.h.)

Students must take the following course:

COMM 300 Communication Theory (3)

Writing Course (3–6 s.h.)

Students must take one of the following writing courses:

COMM 390 Writing for Managers (3)
 COMM 393/393X Technical Writing (3)
 COMM 394/394X Business Writing (3)
 ENGL 303 Critical Approaches to Literature (3)
 ENGL 391/391X Advanced Expository and Research Writing (3)
 ENGL 396 Critical Analysis in Reading and Writing (6)
 LGST 401 Advanced Legal Writing (3)

Speech or English Language Course (3 s.h.)

Students must take one of the following speech or English language courses:

COMM 380 Language in Social Contexts (3)
 ENGL 278F Introduction to Principles of Text Editing (3)
 ENGL 281/281X Standard English Grammar, Usage, and Diction (3)
 ENGL 384 Advanced Grammar and Style (3)
 SPCH Any 300- or 400-level course

Capstone Course (3 s.h.)

Students must take the capstone course appropriate to their track of study (listed under the individual tracks) during the last 30 semester hours of study. Students not pursuing a track must take one of the following courses:

COMM 490 Seminar in Technical Communication (3)
 or
 COMM 495 Seminar in Workplace Communication (3)

Supplemental Major Courses (15–18 s.h.)

To complete the 30 semester hours required for the major, students must take four or more of the following courses:

COMM 293	Technical Report Writing (3)
COMM 380	Language in Social Contexts (3)
COMM 390	Writing for Managers (3)
COMM 393/393X	Technical Writing (3)
COMM 394/394X	Business Writing (3)
COMM 395	Writing in the Health Professions (3)
COMM 400	Communication and the Law (3)
COMM 490	Seminar in Technical Communication (3)
COMM 491	Technical Editing (3)
COMM 492	Grant and Proposal Writing (3)
COMM 493	Graphics/Text Integration (3)
COMM 494	Publishing a Newsletter (3)
COMM 495	Seminar in Workplace Communication (3)
COMM 496	Writing for the Computer Industry (3)
ENGL 278F	Introduction to Principles of Text Editing (3)
ENGL 396	Critical Analysis in Reading and Writing (6)
ENGL 493	Advanced Expository Writing (3)
HRMN 302	Organizational Communication (3)
HUMN 370	Humanity of Language (3)
JOUR 201	Writing for the Mass Media (3)
JOUR 202	Editing for the Mass Media (3)
JOUR	All 300- and 400-level courses
PSYC 462	The Psychology of Advertising (3)
SPCH 100/100X	Foundations of Speech Communication (3)
	<i>or</i>
SPCH 107	Speech Communication: Principles and Practice (3)
SPCH 125	Introduction to Interpersonal Communication (3)
SPCH 200	Advanced Public Speaking (3)
SPCH 222	Interviewing (3)
SPCH	All 300- and 400-level courses

Track Options

Business Communication Track

Business communication unites groups within an organization to achieve the organization's goals. This track gives students the knowledge and skills to become effective communicators within the network of information exchanges among people working in corporations, government agencies, and other complex organizations.

Business Communication Track Requirements (18 s.h.)

In fulfilling the requirements for the communication studies major, students who are pursuing a track in business communication must take the following track courses:

COMM 390	Writing for Managers (3)
COMM 394/394X	Business Writing (3)
COMM 492	Grant and Proposal Writing (3)
SPCH 470	Listening (3)

Students must take one of the following organizational communication courses:

HRMN	302	Organizational Communication (3)
SPCH	424	Communication in Complex Organizations (3)

Students who are pursuing a track in business communication must take the following capstone course:

COMM	495	Seminar in Workplace Communication (3)

Journalism Track

Journalism (mass communication) concerns the processes and principles of how to gather, process, and disseminate information to an audience or audiences through a variety of media, with the purpose of informing. The journalism track includes news writing and editing for print media, broadcast writing, magazine writing, communication history and theory, communication law, public relations theory and practice, and advertising theory and practice. *Note:* Journalism is also available as a minor; details are on p. 72.

Journalism Track Requirements (21 s.h.)

In fulfilling the requirements for the communication studies major, students who are pursuing a track in journalism must complete the following requirements.

Students must take the following courses:

COMM	400	Communication and the Law (3)
JOUR	201	Writing for the Mass Media (3)
JOUR	202	Editing for the Mass Media (3)

Students must also take three of the following courses:

JOUR	320	News Reporting (3)
JOUR	330	Public Relations Theory (3)
JOUR	331	Public Relations Techniques (3)
JOUR	334	Public Relations Programs (3)
JOUR	340	Advertising Communication (3)
JOUR	341	Advertising Techniques (3)
JOUR	350	Photojournalism in the Digital Age (3)
JOUR	371	Magazine Article and Feature Writing (3)
JOUR	380	Science Writing for Magazines and Newspapers (3)
JOUR	410	History of Mass Communication (3)
JOUR	459	Special Topics in Mass Communication (3)
JOUR	459A	Special Topics in Journalism (3)

Students who are pursuing a track in journalism must take one of the following capstone courses:

COMM	490	Seminar in Technical Communication (3)
		<i>or</i>
COMM	495	Seminar in Workplace Communication (3)

Speech Communication Track

The speech communication track helps students develop specialized skills in the dimensions of speaking and listening that relate to the workplace. This track provides students with the principles and practice that will allow them to function as oral communication specialists in a variety of communication positions within organizations. *Note:* Speech communication is also available as a minor; details are on p. 83.

Students should have taken SPCH 100 or have comparable public speaking experience before enrolling in courses for the speech communication track.

Speech Communication Track Requirements (18 s.h.)

In fulfilling the requirements for the communication studies major, students who are pursuing a track in speech communication must take five of the following track courses:

SPCH	324	Communication and Gender (3)
SPCH	420	Group Discussion and Decision Making (3)
SPCH	424	Communication in Complex Organizations (3)
SPCH	426	Negotiation and Conflict Management (3)
SPCH	470	Listening (3)
SPCH	482	Intercultural Communication (3)

Students who are pursuing a track in speech communication must take the following capstone course:

SPCH	397	Organizational Presentations (3)

Technical Communication Track

The track in technical communication helps students develop specialized skills in writing and designing text and graphics, and to develop an understanding of systems and contexts of technical communication. This emphasis refines skills in making specialized information accessible to a variety of audiences.

Technical Communication Track Requirements (18 s.h.)

In fulfilling the requirements for the communication studies major, students who are pursuing a track in technical communication must take the following track courses:

COMM	393/393X	Technical Writing (3)
COMM	491	Technical Editing (3)
COMM	493	Graphics/Text Integration (3)
SPCH	470	Listening (3)

Students must take one of the following courses:

COMM	492	Grant and Proposal Writing (3)
COMM	496	Writing for the Computer Industry (3)

Students who are pursuing a track in technical communication must take the following capstone course:

COMM	490	Seminar in Technical Communication (3)

Minor in Communication Studies

The communication studies minor complements the skills the student gains in his or her major discipline by providing for the student's growth as an expert communicator who can meet the challenges posed by the global workplace and the global presentation of public information.

Objectives

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

- Explain aspects of the history of communication theory and how its principles apply to particular types of communication, including mass communication.
- Apply effective communication strategies within various types of communication.
- Gather information from a variety of sources and critically identify, examine, and present issues associated with information communicated to diverse audiences.
- Apply the techniques of independent research, including technology that fosters information literacy.
- Recognize the legal and ethical implications of communication.
- Explain how computer technology is used to develop and manage information and use computer resources to increase the efficiency and effectiveness of communication.
- Write and edit effectively and demonstrate a clear understanding of the respective processes, tools, and techniques that apply to various types of communication.
- Develop an international perspective of communication practice through awareness of intercultural communication and international business conventions.

Requirements for the Minor

A minor in communication studies requires the completion of 15 semester hours of coursework in communication studies, drawn from various disciplines as appropriate; at least 9 semester hours must be earned in courses numbered 300 or above. Specific course requirements are listed below. If a specific course required for the minor is taken instead to satisfy requirements for the major, another course in the same discipline should be substituted to fulfill the required minimum number of semester hours for the minor. Any course used to replace an upper-level course should also be classified as upper level.

For a listing of all the requirements for the bachelor's degree, students should refer to pp. 22–23.

Communication Studies Coursework (15 s.h.)

Required Foundation Course (3 s.h.)

Students must take the following course:

COMM 300 Communication Theory (3)

Supplemental Minor Courses (12 s.h.)

Students must take four courses from those listed as fulfilling the requirements for the major in communication studies.

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.
- Appreciate the implications and significance of computer and information science for other disciplines and fields of scholarship.

Requirements for the Major

A major in computer and information science requires the completion of 30 semester hours in computer and information science, including 3 semester hours each in three out of four areas: computer networking, programming languages and operating systems, software engineering, and database systems. At least 15 semester hours must be earned in courses numbered 300 or above. Specific course requirements are listed below.

For a listing of all the requirements for the bachelor's degree, students should refer to pp. 22–23.

Computer and Information Science Coursework (30 s.h.)

Required Core Courses (15 s.h.)

Students must take one of the following course sequences:

- CMIS 102 Introduction to Problem Solving and Algorithm Design (3)
CMIS 141 Introductory Programming (3)
- CMIS 102A Fundamentals of Programming I (3)
CMIS 141A Fundamentals of Programming II (3)

Students must also take the following courses:

- CMIS 160 Discrete Mathematics for Computing (3)
- CMIS 240/241 Data Structures and Abstraction (3)
- CMIS 310 Computer Systems and Architecture (3)

Breadth Courses (9 s.h.)

Students must take at least one course in three of the following areas:

Computer Networking

- CMIS 370 Data Communications (3)
- CMIS 435 Computer Networking (3)
- CMIS 445 Distributed Systems (3)

Programming Languages and Operating Systems

- CMIS 315 Programming and Application in C++ (3)
- CMIS 325 UNIX with Shell Programming (3)
- CMIS 375 Programming in Perl (3)
- CMIS 398A Programming in C# (3)
- CMIS 415 Advanced UNIX and C (3)
- CMIS 440 Advanced Programming in Java (3)
- CMIS 475 Advanced Programming in Perl (3)
- CMIT 391 UNIX System Administration (3)
- CMIT 491 Advanced UNIX System Administration (3)

Software Engineering

- CMIS 330 Software Engineering Principles and Techniques (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)

Database Systems

- CMIS 320 Relational Databases (3)
- CMIS 398F Database Forms (3)
- CMIS 420 Advanced Relational Databases (3)
- CMIS 498B Web Database Development

Supplemental Major Courses (6 s.h.)

Students must take at least two 400-level computer and information science courses (not including CMIS 486A or CMIS 486B).

Additional Required Coursework (3 s.h.)

Students must take the following course; credit may be applied to general education, minor, or elective requirements, as appropriate.

MATH 107 College Algebra (3)

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, 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.

Requirements for the Major

A major in computer information technology requires 33 semester hours of coursework in computer information technology, 17 of which must be earned in courses numbered 300 or above and 18 of which must be earned in courses designated CMIT. Specific course requirements are listed below.

Within the computer information technology major, students may choose a more structured track in networking. Students pursuing this track must take the track courses listed below and at right within the overall requirements for the major.

For a listing of all the requirements for the bachelor's degree, students should refer to pp. 22–23.

Computer Information Technology Coursework (33 s.h.)

Required Foundation Courses (9 s.h.)

Students must take the following courses:

CMIS	310	Computer Systems and Architecture (3)
CMIS	370	Data Communications (3)
CMIS	435	Computer Networking (3)

Core Courses (15 s.h.)

Students must take at least 15 semester hours in computer information technology courses. Those who are pursuing the networking track must take the core courses specified under the track option.

Supplemental Major Courses (9 s.h.)

Students must take at least three upper-level courses from offerings in computer information technology, computer and information science, computer science, computer studies, or information systems management. Students may also apply CMIT 486A or CMIT 486B Internship in Computer Information Technology Through Co-op toward this requirement.

Additional Required Coursework (3 s.h.)

Students must take the following course; credit may be applied to general education, minor, or elective requirements, as appropriate:

MATH	107	College Algebra (3)
or		

A higher-numbered mathematics course

Track Option in Networking

Networking Track Courses (15 s.h.)

Required Core Courses (12 s.h.)*

Students must take one of the following core courses:

CMIT	366	Windows 2000 Professional (3)
CMIT	499X	Windows XP Professional (3)

Students must take one of the following core courses:

CMIT	367	Windows 2000 Server (3)
CMIT	368	Windows Server 2003 (3)

Students must take the following core courses:

CMIT	376	Windows Network Infrastructure (3)
CMIT	377	Windows Directory Services Infrastructure (3)

Supplemental Major Course or Courses (3 s.h.)

Students must take at least one of the following courses for a total of 3 semester hours:

CMIT	476	Designing a Windows Network Infrastructure (2)
CMIT	477	Designing a Windows Active Directory (2)
CMIT	480	Designing Security for a Windows Network (3)

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.

* If the student has already passed the associated Microsoft certification examination, another upper-level computer information technology course may be substituted for one or more of these courses, as appropriate.

Requirements for the Major

A major in computer science requires the completion of 38 semester hours of coursework in computer science and mathematics (including calculus); at least 18 semester hours must be earned in courses numbered 300 or above. Specific course requirements are listed below.

For a listing of all the requirements for the bachelor's degree, students should refer to pp. 22–23.

Computer Science Coursework (38 s.h.)

Required Mathematics Courses (8 s.h.)

Students must take the following mathematics courses. If one of these courses is used to satisfy the general education requirement in mathematics, the student must substitute a higher-level mathematics course or another course in computer science to meet the minimum number of semester hours required for the major.

MATH	140	Calculus I (4)
MATH	141	Calculus II (4)

Required Foundation Courses (12 s.h.)

Students must take the following foundation courses:

CMSC	101	Introductory Computer Science (3)
CMSC	130	Computer Science I (3)
CMSC	150	Introduction to Discrete Structures (3)
CMSC	230	Computer Science II (3)

Required Core Courses (9 s.h.)

Students must take three 300-level CMSC courses. *Note:* CMSC 305 does not apply.

Supplemental Major Courses (9 s.h.)

Students must take three 400-level CMSC courses. *Note:* CMSC 486A and 496B do not apply.

Recommendations

In addition to the courses listed above, the following courses are strongly recommended for students with a major in computer science. These courses may be applied to general education, minor, or elective requirements, as appropriate.

IFSM	303	Human Factors in Information Systems (3)
IFSM	304	Ethics in the Information Age (3)
MATH	240	Introduction to Linear Algebra (4)
MATH	241	Calculus III (4)
MATH	381	Operations Research (3)
MATH	390	Mathematics of Communication (3)
MATH	402	Algebraic Structures (3)
MATH	466	Numerical Analysis (3)
STAT	400	Applied Probability and Statistics I (3)
STAT	401	Applied Probability and Statistics II (3)

Computer Studies

Students may seek either an academic major or minor 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.

Requirements for the Major

A major in computer studies requires 30 semester hours of coursework in computing subjects, drawn from various disciplines as appropriate; at least 15 semester hours must be earned in courses numbered 300 or above and at least 6 semester hours must be earned in courses numbered 400 or above. Specific course requirements are listed on the next page.

For a listing of all the requirements for the bachelor's degree, students should refer to pp. 22–23.

Computer Studies Coursework (30 s.h.)

Introductory Course (3 s.h.)

Students must take one of the following introductory courses:

CMIS	102	Introduction to Problem Solving and Algorithm Design (3)
CMIS	102A	Fundamentals of Programming I (3)
IFSM	201	Introduction to Computer-Based Systems (3)

Foundation Courses (6 s.h.)

Students must take two of the following foundation courses:

CMIS	240/241	Data Structures and Abstraction (3)
IFSM	300	Information Systems in Organizations (3)
IFSM	310	Software and Hardware Concepts (3)

Programming Language Course (3 s.h.)

Students must take one of the following programming language courses (or another suitable programming language course):

CMIS	141	Introductory Programming (3)
CMIS	141A	Fundamentals of Programming II (3)
CMST	306	Introduction to Visual Basic .NET Programming (3)

Supplemental Major Courses (18 s.h.)

Students must take at least six courses from offerings in computer and information science, computer information technology, computer science, computer studies, and information systems management.

Additional Required Course (3 s.h.)

Students must take the following course; credit may be applied to general education, minor, or elective requirements, as appropriate.

MATH	107	College Algebra (3)
<i>or</i>		

A higher-numbered mathematics course

Minor in Computer Studies

The computer studies 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 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.

- 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 semester hours of coursework chosen from courses in computer and information science, computer information technology, computer science, computer studies, and information systems management; at least 9 semester hours must be earned in courses numbered 300 or above. Courses may not duplicate those used to satisfy requirements for the major.

For a listing of all the requirements for the bachelor's degree, students should refer to pp. 22–23.

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, law enforcement, corrections, security, and forensics. The criminal justice major is designed to provide students with a broad understanding of the criminal justice system, including criminal law, corrections, law enforcement, and security administration.

Objectives

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

- Analyze the foundations, functions, policies, and procedures of criminal justice.
- Analyze and describe the agencies of justice and the procedures used to identify and treat criminal offenders in various countries.
- Use cost-effective approaches to meet the challenges confronting security professionals in dealing with varied and unpredictable states of national security.
- Articulate the principles of effective law enforcement and security administration.
- Effectively explain criminal behavior, treatment, and prevention in written and oral argument.

- Analyze patterns of crime and methods of prevention in American society and in various other countries.
- Explain the role of the criminal justice system (police, courts, and corrections) in the administration of justice in the United States and other countries.
- Understand and apply prevention and treatment techniques to domestic and international crime problems.
- Critically analyze the theories that seek to explain the causes of criminal behavior and delinquency.
- Demonstrate a cohesive base of job-related skills, techniques, and principles related to criminal justice.
- Use computer technology for literature review and the analysis of criminal behavior.
- Understand and describe the history and development of criminal justice organizations, the functions of criminal justice systems in modern society, and the rule of law in various countries.

Requirements for the Major

A major in criminal justice requires the completion of 30 semester hours in criminal justice and related areas, including 3 semester hours in diversity and societal issues and 3 semester hours in historical period policy issues. At least 15 semester hours must be earned in courses numbered 300 or above. Specific course requirements are listed below.

For a listing of all the requirements for the bachelor's degree, students should refer to pp. 22–23.

Criminal Justice Coursework (30 s.h.)

Required Statistics Course (3 s.h.)

Students must take the following statistics course:

STAT	200	Introduction to Statistics (3)

Foundation Courses (6 s.h.)

Students must take two of the following foundation courses:

CCJS	100	Introduction to Criminal Justice (3)
CCJS	105	Introduction to Criminology (3)
CCJS	230	Criminal Law in Action (3)

Core Courses (9 s.h.)

Students must take at least three of the following core courses:

CCJS	234	Criminal Procedure and Evidence (3)
CCJS	320	Introduction to Criminalistics (3)
CCJS	340	Law-Enforcement Administration (3)
CCJS	350	Juvenile Delinquency (3)
CCS	352	Drugs and Crime (3)
CCJS	360	Victimology (3)
CCJS	400	Criminal Courts (3)
CCJS	432	Law of Corrections (3)
CCJS	445	Introduction to Security Management (3)
CCJS	454	Contemporary Criminological Theory (3)
CCJS	497	Correctional Administration (3)

Criminal Justice Issues Courses (6 s.h.)

Students must take at least one course from each of the following categories.

Diversity and Societal Issues (3 s.h.)

CCJS	351	Issues in Criminal Justice (6)
CCJS	370	Race, Crime, and Criminal Justice (3)
CCJS	372	Criminal Justice and Domestic Violence (3)
CCJS	451	Crime and Delinquency Prevention (3)
CCJS	452	Treatment of Criminals and Delinquents (3)
CCJS	460	School Safety and Security (3)
SOCY	311	The Individual and Society (6)
SOCY	427	Deviant Behavior (3)

Historical Period Policy Issues (3 s.h.)

CCJS	331	Contemporary Legal Policy Issues (3)
CCJS	430	Legal and Ethical Issues in Security Management (3)
HIST	319B	History of Violence in America (3)
HIST	319L	History of Drug Use in America (3)
HIST	372	Legacy of the Civil Rights Movement (3)

Supplemental Major Courses (3–6 s.h.)

To complete the 30 semester hours required for the major, students must take additional upper-level courses in criminal justice.

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, corrections, security, and forensics.

Objectives

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

- Analyze and describe the foundation, functions, policies, procedures, and critical issues in criminal justice.
- Articulate the principles of effective law enforcement, security administration, and criminal justice systems in the United States.
- Articulate the causes of criminal behavior.
- Demonstrate a cohesive base of job-related skills, techniques, and principles related to criminal justice in various countries.
- Analyze patterns of crime in American society and in various other countries.
- Explain the role of the criminal justice system (police, courts, and corrections) in the administration of justice in the United States and other countries.
- Explain the functions of the criminal justice system and demonstrate a basic understanding of criminal law and its effect on both the public and private sectors.

Requirements for the Minor

A minor in criminal justice requires the completion of 15 semester hours of coursework in criminal justice and some related areas; at least 9 semester hours must be earned in courses numbered 300 or above. Specific course requirements are listed below. If a specific course required for the minor is taken instead to satisfy requirements for the major, another course in the same discipline should be substituted to fulfill the required minimum number of semester hours for the minor. Any course used to replace an upper-level course should also be classified as upper level.

For a listing of all the requirements for the bachelor's degree, students should refer to pp. 22–23.

Criminal Justice Coursework (15 s.h.)

Foundation Courses (6 s.h.)

Students must take two of the following foundation courses:

CCJS	100	Introduction to Criminal Justice (3)
CCJS	105	Introduction to Criminology (3)
CCJS	230	Criminal Law in Action (3)

Core Courses (6 s.h.)

Students must take two of the following core courses:

CCJS	320	Introduction to Criminalistics (3)
CCJS	340	Law-Enforcement Administration (3)
CCJS	350	Juvenile Delinquency (3)
CCJS	352	Drugs and Crime (3)
CCJS	400	Criminal Courts (3)
CCJS	432	Law of Corrections (3)

Supplemental Minor Course (3 s.h.)

Students must take one of the following courses:

CCJS	351	Issues in Criminal Justice (6)
CCJS	357	Industrial and Retail Security Administration (3)
CCJS	370	Race, Crime, and Criminal Justice (3)
CCJS	372	Criminal Justice and Domestic Violence (3)
CCJS	453	White-Collar and Organized Crime (3)
CCJS	460	School Safety and Security (3)
CCJS	496	Computer Crime and Security (3)

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 semester hours in customer service management coursework, drawn from various disciplines as appropriate; at least 9 semester hours must be earned in courses numbered 300 or above. Specific course requirements are listed below. If a specific course required for the minor is taken instead to satisfy requirements for the major, another course in the same discipline should be substituted to fulfill the required minimum number of semester hours for the minor. Any course used to replace an upper-level course should also be classified as upper level.

For a listing of all the requirements for the bachelor's degree, students should refer to pp. 22–23.

Customer Service Management Coursework (15 s.h.)

Required Foundation Course (3 s.h.)

Students must take the following foundation course:

MRKT	395	Customer Service Management (3)

Supplemental Minor Courses (12 s.h.)

Students must take four of the following courses:

ACCT	301	Accounting for Nonaccounting Managers (3)
BMGT	230	Business Statistics (3)
BMGT	309	Operations Research for Management Decisions (3)
BMGT	317	Problem Solving for Managers (3)
BMGT	364	Management and Organization Theory (3)
BMGT	370	Transportation and Supply Chain Management (3)

BMGT	372	Supply Chain and Logistics Management (3)
BMGT	375	Procurement Management (3)
BMGT	378	Legal Environment of Business (3)
BMGT	383	Planning and Control of Services (3)
BMGT	384	Managing for Quality (3)
BMGT	487	Project Management I (3)
HRMN	302	Organizational Communication (3)
HRMN	406	Employee Training and Development (3)
MRKT	396	Customer Consultation and Needs Analysis (3)

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 18 semester hours in economics, at least 9 of which must be earned in courses numbered 300 or above. Specific course requirements are listed at right. If a specific course required for the minor is taken instead to satisfy requirements for the major, another course in the same discipline should be substituted to fulfill the required minimum number of semester hours for the minor. Any course used to replace an upper-level course should also be classified as upper level.

For a listing of all the requirements for the bachelor's degree, students should refer to pp. 22–23.

Economics Coursework (18 s.h.)

Required Foundation Courses (9 s.h.)

Students must take the following foundation courses:

ECON	201	Principles of Economics I (3)
ECON	203	Principles of Economics II (3)
BMGT	230	Business Statistics (3)

Supplemental Minor Courses (9 s.h.)

Students must take three upper-level economics courses.

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 and 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

- Read and 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 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 Major

A major in English requires the completion of 33 semester hours of coursework in English, including 9 semester hours in specific genres (drama, the novel, and poetry), 6 semester hours in historical periods (before and after 1800), and 6 semester hours in major authors (American and British); at least 17 semester hours must be earned in courses numbered 300 or above. Specific course requirements are listed on the next page. *Please note:* ENGL 101 is prerequisite for higher-level English courses.

For a listing of all the requirements for the bachelor's degree, students should refer to pp. 22–23.

English Coursework (33 s.h.)

Required Foundation Course (3 s.h.)

Students must take the following foundation course:

ENGL 303 Critical Approaches to Literature (3)

Genre Courses (9 s.h.)

Students must take three of the following courses. Choices must include at least one course covering each of the three genres: fiction, poetry, and drama. ENGL 240 or ENGL 340 may be substituted for only one of the genres.

ENGL	240	Introduction to Fiction, Poetry, and Drama (3)
ENGL	241	Introduction to the Novel (3)
ENGL	244	Introduction to Drama (3)
ENGL	246	The Short Story (3)
ENGL	250	Introduction to Literature by Women (3)
ENGL	345	Modern Poetry (3)
ENGL	377	Medieval Myth and Modern Narrative (3)
ENGL	434	American Drama (3)
ENGL	441	The Novel in America Since 1914 (3)
ENGL	446	Postmodern British and American Poetry (3)
ENGL	454	Modern Drama (3)
ENGL	457	The Modern Novel (3)
ENGL	476	Modern Fantasy and Science Fiction (3)

Historical Period Courses (6 s.h.)

Students must take two of the following courses, including at least one course focusing on literature written before 1800 (courses marked with an asterisk):

ENGL	201	Western World Literature: Homer to the Renaissance (3)*
ENGL	202	Western World Literature: The Renaissance to the Present (3)
ENGL	211	English Literature: Beginning to 1800 (3)*
ENGL	212	English Literature: 1800 to the Present (3)
ENGL	221	American Literature: Beginning to 1865 (3)*
ENGL	222	American Literature: 1865 to the Present (3)
ENGL	310	Medieval and Renaissance British Literature (3)*
ENGL	311	17th- and 18th-Century British Literature (3)*
ENGL	312	Romantic to Modern British Literature (3)
ENGL	313	American Literature (3)
ENGL	350	English and American Literature: Blake to Conrad (3)
ENGL	425	Modern British Literature (3)
ENGL	433	American Literature: 1914 to the Present (3)
ENGL	437	Contemporary American Literature (3)
ENGL	466	The Arthurian Legend (3)

* Covers literature written before 1800.

Major Author Courses (6 s.h.)

Students must take two of the following courses, including at least one course focusing on an American author or authors and one on a British author or authors:

ENGL	205	Introduction to Shakespeare (3)
ENGL	304	The Major Works of Shakespeare (3)
ENGL	354	American Women Writers Since 1900 (3)
ENGL	358	British Women Writers Since 1900 (3)
ENGL	363	African American Authors to 1900 (3)
ENGL	364	African American Authors Since 1900 (3)
ENGL	402	Chaucer (3)
ENGL	403	Shakespeare: The Early Works (3)
ENGL	404	Shakespeare: The Later Works (3)
ENGL	406	Shakespeare: Power and Justice (3)
ENGL	419	Major British Writers After 1800 (3)
ENGL	439	Major American Writers (3)

Supplemental Major Courses (9 s.h.)

Students must take at least three other ENGL courses, for a total of 9 semester hours.

Except for the required foundation course (ENGL 303), students may apply three 1-semester-hour courses within a single category toward the requirement for that category. No more than six 1-semester-hour courses may be applied toward the major. ENGL 499 Independent Study in English is available to students who wish to pursue a focused study on an approved topic.

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 semester hours of English coursework, at least 9 of which must be earned in courses numbered 300 or above. Specific course requirements are listed below. If a specific course required for the minor is taken instead to satisfy requirements for the major, another course in the same discipline should be substituted to fulfill the required minimum number of semester hours for the minor. Any course used to replace an upper-level course should also be classified as upper level.

For a listing of all the requirements for the bachelor's degree, students should refer to pp. 22–23.

English Coursework (15 s.h.)

Required Foundation Course (3 s.h.)

Students must take the following foundation course:

ENGL 303 Critical Approaches to Literature (3)

Supplemental Minor Courses (12 s.h.)

Students must take at least four English courses, with at least one upper-level course in each of the distribution areas listed for the English major (genre, historical period, and major author).

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.

Requirements for the Major

A major in environmental management requires the completion of 30 semester hours of coursework in environmental management; at least 15 semester hours must be earned in courses numbered 300 or above. Specific course requirements are listed below.

For a listing of all the requirements for the bachelor's degree, students should refer to pp. 22–23.

Environmental Management Coursework (30 s.h.)

Required Foundation Courses (18 s.h.)

Students must take the following foundation courses:

ENMT	301	Environment and Ecosystems Management (3)
ENMT	303	Environmental Regulations and Policy (3)
ENMT	320	Environmental and Occupational Health and Safety Management (3)
ENMT	340	Environmental Technology (3)
ENMT	405	Pollution Prevention Strategies (3)
ENMT	495	Global Environmental Management Issues (3)

Supplemental Major Courses (12 s.h.)

Students must take four of the following courses:

ENMT	305	Hazardous Materials Toxicology (3)
ENMT	310	Emergency Planning and Operations Management (3)
ENMT	315	Environmental Audits and Permits (3)
ENMT	325	Global Environment and Sustainable Development (3)
ENMT	330	Environmental Monitoring and Investigations (3)
ENMT	350	Integrated Waste Management (3)
ENMT	360	Water Environment Management (3)
ENMT	370	Environmental Information and Communications (3)
ENMT	380	Air Quality Management (3)
ENMT	390	Environmental Risk Assessment (3)
ENMT	486A	Internship in Environmental Management Through Co-op (3)
ENMT	486B	Internship in Environmental Management Through Co-op (6)

Additional Required Coursework (15–16 s.h.)

The following courses may be applied to general education, minor, or elective requirements, as appropriate. As basic courses, they should be taken early in the program.

Students must take the following courses:

BIOL	101	Concepts of Biology (3)
BMGT	230	Business Statistics (3)
MATH	115	Pre-Calculus (3)

Students must take one of the following courses:

NSCI	100	Introduction to Physical Science (3)
PHYS	121	Fundamentals of Physics I (4)

Students must take one of the following courses to complete the general education requirement in computing:

ACCT	326	Accounting Information Systems (3)
IFSM	300	Information Systems in Organizations (3)

Recommendations

The following courses are recommended; credit may be applied to general education or elective requirements, as appropriate.

BMGT	317	Problem Solving for Managers (3)
BMGT	364	Management and Organization Theory (3)
BMGT	487	Project Management I (3)
CMST	303	Advanced Features of Microcomputer Application Software (3)
COMM	293	Technical Report Writing (3)
COMM	390	Writing for Managers (3)
COMM	393/393X	Technical Writing (3)
COMM	394/394X	Business Writing (3)

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 semester hours of coursework in environmental management; at least 9 semester hours must be earned in courses numbered 300 or above. Specific course requirements are listed below. If a specific course required for the minor is taken instead to satisfy requirements for the major, another course in the same discipline should be substituted to fulfill the required minimum number of semester hours for the minor. Any course used to replace an upper-level course should also be classified as upper level.

For a listing of all the requirements for the bachelor's degree, students should refer to pp. 22–23.

Environmental Management Coursework (15 s.h.)

Required Foundation Course (3 s.h.)

Students must take the following foundation course:

ENMT	301	Environment and Ecosystems Management (3)

Supplemental Minor Courses (12 s.h.)

Students must take four environmental management courses from those listed as fulfilling the requirements for the major in environmental management.

Finance

Students may seek 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.

Requirements for the Major

A major in finance requires the completion of 36 semester hours of coursework in business and finance, drawn from various disciplines as appropriate; at least 18 semester hours must be earned in courses numbered 300 or above. Specific course requirements are listed at right.

For a listing of all the requirements for the bachelor's degree, students should refer to pp. 22–23.

Finance Coursework (36 s.h.)

Required Foundation Courses (18 s.h.)

Students must take the following foundation courses:

ACCT	220	Principles of Accounting I (3)
ACCT	221	Principles of Accounting II (3)
BMGT	230	Business Statistics (3)
BMGT	364	Management and Organization Theory (3)
BMGT	495	Strategic Management (3)
MRKT	310	Marketing Principles and Organization (3)

Required Core Courses (12 s.h.)

Students must take the following core courses:

BMGT	340	Business Finance (3)
BMGT	343	Investments (3)
BMGT	440	Financial Management (3)
BMGT	443	Security Analysis and Valuation (3)

Supplemental Major Courses (6 s.h.)

Students must take two of the following courses:

BMGT	345	Property and Liability Insurance (3)
BMGT	346	Risk Management (3)
BMGT	347	Life Insurance (3)
BMGT	444	Futures Contracts and Options (3)
BMGT	445	Commercial Bank Management (3)
BMGT	446	International Finance (3)
BMGT	498Q	Financial Analysis (3)
ECON	305	Intermediate Macroeconomic Theory (3)
ECON	306	Intermediate Microeconomic Theory (3)
ECON	430	Money and Banking (3)

Additional Required Coursework (12 s.h.)

Students must take the following courses. Credit may be applied to general education, minor, or elective requirements, as appropriate:

ECON	201	Principles of Economics I (3)
ECON	203	Principles of Economics II (3)
MATH	107	College Algebra (3)

or

a higher-numbered mathematics course

(Note: Students who are planning to study finance at the graduate level or who wish to emphasize quantitative approaches at the undergraduate level should consider taking MATH 140 Calculus I.)

Students must take one of the following courses to complete the general requirements in computing:

ACCT	326	Accounting Information Systems (3)
IFSM	300	Information Systems in Organizations (3)

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 semester hours of coursework in finance, drawn from various disciplines as appropriate; at least 9 semester hours must be earned in courses numbered 300 or above. Specific course requirements are listed below. If a specific course required for the minor is taken instead to satisfy the requirements for the major, another course in the same discipline should be substituted to fulfill the required minimum number of semester hours for the minor. Any course used to replace an upper-level course should also be classified as upper level.

For a listing of all the requirements for the bachelor's degree, students should refer to pp. 22–23.

Finance Coursework (15 s.h.)

Required Foundation Courses (6 s.h.)

Students must take the following foundation courses:

BMGT	340	Business Finance (3)
BMGT	343	Investments (3)

Supplemental Minor Courses (9 s.h.)

Students must take three of the following courses:

BMGT	342	Fundamentals of Building Wealth (3)
BMGT	345	Property and Liability Insurance (3)
BMGT	346	Risk Management (3)
BMGT	347	Life Insurance (3)
BMGT	440	Financial Management (3)

BMGT	443	Security Analysis and Valuation (3)
BMGT	444	Futures Contracts and Options (3)
BMGT	445	Commercial Bank Management (3)
BMGT	446	International Finance (3)
BMGT	498Q	Financial Analysis (3)

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

- Recognize the legal basis for public safety responsibility and product liability.
- 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 computer technology to inform and enhance operational and strategic management decisions.
- Use current information technology to access relevant managerial and educational resources worldwide.
- Develop a comprehensive hazardous materials management program, including pre-incident planning, on-site emergency response, and post-incident analysis and investigation.

- Apply skills in analysis and evaluation to complete fire-risk assessment.
- Apply project management strategies to design disaster and fire-defense planning.
- Apply design principles to detect, control, and suppress fires in buildings and other structures and use fire modeling to analyze fire propagation.
- Apply a systems analysis approach to solving problems of incendiary-fire investigation and fire protection.
- Apply risk assessment methods to analyze pre- and post-occurrence factors.
- Apply skills in human resource management to deal with the psychological effects of emergency situations.
- Evaluate fire-prevention techniques, procedures, programs, and agencies.
- Think critically and constructively and perform research in fire science using appropriate 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.
- Understand and apply current computer applications and technology in the workplace.
- Develop innovative leadership and team-management skills necessary for success in a diverse and changing workplace.
- 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 fire prevention and emergency management and their application to various situations.
- Evaluate ethical, social, civic, cultural, and political issues as they relate to fire prevention and management, human resources and human factors, information systems, and governmental regulations.

Requirements for the Major

A major in fire science requires the completion of 30 semester hours of coursework in fire science, at least 15 of which must be earned in courses numbered 300 or above. Specific course requirements are listed at right.

For a listing of all the requirements for the bachelor's degree, students should refer to pp. 22–23.

Fire Science Coursework (30 s.h.)

Required Core Courses (15 s.h.)

Students must take the following core courses:

FSCN	302	Advanced Fire Administration (3)
FSCN	304	Fire-Personnel Management (3)
FSCN	305	Fire-Prevention Organization and Management (3)
FSCN	403	Managerial Issues in Hazardous Materials (3)
FSCN	412	Political and Legal Foundations of Fire Protection (3)

Supplemental Major Courses (15 s.h.)

Students must take five of the following courses:

FSCN	303	Analytic Approaches to Public Fire Protection (3)
FSCN	306	Incendiary-Fire Analysis and Investigation (3)
FSCN	401	Disaster and Fire Defense Planning (3)
FSCN	402	Fire-Related Human Behavior (3)
FSCN	411	Fire-Protection Structure and Systems Design (3)
FSCN	413	The Community and Fire Threat (3)
FSCN	414	Fire Dynamics (3)
FSCN	415	Application of Fire Research (3)
FSCN	486A	Internship in Fire Science Through Co-op (3)
FSCN	486B	Internship in Fire Science Through Co-op (6)

Additional Required Coursework (3 s.h.)

To complete the general education requirement in computing, students must take one of the following courses:

ACCT	326	Accounting Information Systems (3)
ISFM	300	Information Systems in Organizations (3)

Recommendations

The following courses are recommended; credit may be applied to general education or elective requirements, as appropriate.

COMM	390	Writing for Managers (3)
COMM	393/393X	Technical Writing (3)
COMM	394/394X	Business Writing (3)

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 pre-incident planning, on-site emergency response, and post-incident 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 semester hours of coursework in fire science, at least 9 of which must be earned in courses numbered 300 or above. Specific course requirements are listed below. If a specific course required for the minor is taken instead to satisfy the requirements for the major, another course in the same discipline should be substituted to fulfill the required minimum number of semester hours. Any course used to replace an upper-level course should also be classified as upper level.

For a listing of all the requirements for the bachelor's degree, students should refer to pp. 22–23.

Fire Science Coursework (15 s.h.)

Required Foundation Course (3 s.h.)

Students must take one of the following foundation courses:

FSCN	302	Advanced Fire Administration (3)
FSCN	304	Fire-Personnel Management (3)

Supplemental Minor Courses (12 s.h.)

Students must take four fire science courses listed as fulfilling the requirements for the major.

Forensics

Students may seek an academic minor in forensics.

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 semester hours of coursework in criminal justice, natural science, social science, and investigation or security; at least 9 semester hours must be earned in courses numbered 300 or above. Specific course requirements are listed below. If a specific course required for the minor is taken instead to satisfy requirements for the major, another course from the lists below or another forensic science course should be substituted to fulfill the minimum number of semester hours for the minor.

For a listing of all the requirements for the bachelor's degree, students should refer to pp. 22–23.

Forensics Coursework

Required Foundation Courses (6 s.h.)

Students must complete the following foundation courses:

CCJS	234	Criminal Evidence and Procedure (3)
CCJS	320	Introduction to Criminalistics (3)

Breadth Courses (9 s.h.)

Students must take at least one course from each of the following categories to complete the minimum semester hours for the minor:

Natural Science

BIOL	240	Elements of Biochemistry (3)
BIOL	320	Forensic Biology (3)

BIOL	356	Molecular Biology Laboratory (4)
NSCI	301	Laboratory Organization and Management (3)

Social Science

CCJS	461	Psychology of Criminal Behavior (3)
FSCN	402	Fire-Related Human Behavior (3)
PSYC	370	Foundations of Forensic Psychology (3)
SOCY	427	Deviant Behavior (3)

Investigation and Security

CCJS	420	Medical and Legal Investigations of Death (3)
CCJS	496	Computer Crime and Security (3)
FSCN	306	Incendiary-Fire Analysis and Investigation
FSCN	403	Managerial Issues in Hazardous Materials (3)

General Studies

Students may seek an academic major in general studies.

Major in General Studies

The general studies major allows students to take courses in a particular focus area and related discipline or in an interdisciplinary combination. It allows the student 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.

Requirements for the Major

A major in general studies requires the completion of 30 semester hours of coursework appropriate to the option chosen (in-depth focus, interdisciplinary breadth, or individual studies); at least 15 semester hours must be earned in courses numbered 300 or above. The general studies major requires prior approval. 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 the requirements and procedure for submitting a proposal. The general studies major is subject to all requirements and limitations applied to other majors.

For a listing of all the requirements for the bachelor's degree, students should refer to pp. 22–23.

Major Options

Students must take one of the following options for the general studies major.

In-Depth Focus

For the in-depth focus, students combine courses from two disciplines: a focus area plus a supporting area. Students must take 18 semester hours in the focus area and 9 semester hours in the supporting area, as well as 3 semester hours in related elective coursework. At least 12 semester hours in the focus area and 3 semester hours in the supporting area must be earned in courses numbered 300 or above.

Interdisciplinary Breadth

For the interdisciplinary breadth option, students combine courses from three disciplines, with a minimum of 12 semester hours in each of two areas, plus 6 semester hours in the third. At least half of the semester hours in each area must be earned in courses numbered 300 or above.

Individual Studies

The individual studies option provides an opportunity for students to create and complete an individualized course of study that combines offerings from multiple disciplines. With prior approval, the student may design an interdisciplinary program of study around a clearly defined academic goal that cannot reasonably be satisfied in an existing curriculum at the university but for which an appropriate course of study can be identified and completed at UMUC.

Gerontology

Students may seek an academic minor in gerontology.

Minor in Gerontology

The gerontology minor complements the skills the student gains in his or her major discipline by examining aging from a multidisciplinary 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 historical trends and future directions in gerontology.
- 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 semester hours of coursework in gerontology, at least 9 of which must be earned in courses numbered 300 or above. Specific course requirements are listed at right. If a specific course required for the minor is taken instead to satisfy the requirements for the major, another course in the same discipline should be substituted to fulfill the required minimum number of semester hours for the minor. Any course used to replace an upper-level course should also be classified as upper level.

For a listing of all the requirements for the bachelor's degree, students should refer to pp. 22–23.

Gerontology Coursework (15 s.h.)

Required Foundation Courses (6 s.h.)

Students must take the following foundation course:

GERO 100 Introduction to Gerontology (3)

Students must take one of the following foundation courses:

GERO 220 Psychological Aspects of Aging (3)

PSYC 357 Psychology of Adulthood and Aging (3)

Core Courses (6 s.h.)

Students must take two of the following core courses:

GERO 302 Health and Aging (3)

or

BIOL 307 The Biology of Aging (3)

GERO 306 Programs, Services, and Policies (3)

GERO 327 Ethnicity and Aging (3)

GERO 331 Sociology of Aging (3)

GERO 341 The Long-Term Care Continuum (3)

GERO 342 Long-Term Care Administration (3)

GERO 351 Management of Senior Housing Environment (3)

GERO 380 End-of-Life: Issues and Perspectives (3)

GERO 486A Internship in Gerontology Through Co-op (3)

Supplemental Minor Course (3 s.h.)

Students must take one other course in gerontology.

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.

Requirements for the Major

A major in global business and public policy requires the completion of 36 semester hours of coursework in global business and public policy, drawn from various disciplines as appropriate; at least 18 semester hours must be earned in courses numbered 300 or above. Specific course requirements are listed below.

For a listing of all the requirements for the bachelor's degree, students should refer to pp. 22–23.

Global Business and Public Policy Coursework (36 s.h.)

Required Foundation Courses (15 s.h.)

Students must take the following foundation courses:

ACCT	220	Principles of Accounting I (3)
ACCT	221	Principles of Accounting II (3)
BMGT	340	Business Finance (3)
MRKT	310	Marketing Principles and Organization (3)
BMGT	364	Management and Organization Theory (3)

Required Core Courses (15 s.h.)

Students must take the following core courses:

BMGT	392	Global Business Management (3)
BMGT	366	Managing in the Public Sector (3)
BMGT	4980	The Global Manager and Public Policy (3)
BMGT	498R	Multinational Management (3)
BMGT	482	Business and Government (3)

Supplemental Major Courses (6 s.h.)

Students must take two of the following courses:

ACCT	425	International Accounting (3)
BMGT	339	Government and Business Contracting (3)
BMGT	446	International Finance (3)
BMGT	481	Management of Public Business Enterprises (3)
BMGT	496	Business Ethics (3)
BMGT	498F	Environmental Management and Business (3)
BMGT	498J	Legal Aspects of Technology Management (3)
BMGT	498P	International Business Law (3)
BMGT	498S	Global Commerce (3)
ECON	315	Economic Development of Underdeveloped Areas (3)
HRMN	408	Employment Law for Business (3)
HRMN	462	Labor Relations Law (3)
MRKT	454	Global Marketing (3)

Additional Required Coursework (18 s.h.)

Students must take the following courses. Credit may be applied to general, education, minor, or elective requirements, as appropriate:

BMGT	230	Business Statistics (3)
BMGT	380	Business Law I (3)
ECON	201	Principles of Economics I (3)
ECON	203	Principles of Economics II (3)
MATH	107	College Algebra (3)

or

a higher-numbered mathematics course

Students must take one of the following courses to complete the general requirements in computing:

ACCT	326	Accounting Information Systems (3)
IFSM	300	Information Systems in Organizations (3)

Government and Politics

Students may seek an academic minor in government and politics.

Minor in Government and Politics

The government and politics minor complements the skills the student gains in his or her major discipline by providing a study of U.S. government and politics, comparative government, international relations, public administration, and state and local administration.

Objectives

The student who graduates with a minor in government and politics will be able to

- Explain political science terminology and concepts.
- Explain a variety of approaches to the study and practice of politics.
- Explain the scope of political science, government, political process, law, and international politics.
- Articulate informed opinions about political issues and events.
- Analyze social and political problems.

Requirements for the Minor

A minor in government and politics requires the completion of 15 semester hours of coursework in government and politics, at least 9 of which must be earned in courses numbered 300 or above. Specific course requirements are listed below. If a specific course required for the minor is taken instead to satisfy the requirements for the major, another course in the same discipline should be substituted to fulfill the required minimum number of semester hours for the minor. Any course used to replace an upper-level course should also be classified as upper level.

For a listing of all the requirements for the bachelor's degree, students should refer to pp. 22–23.

Government and Politics Coursework (15 s.h.)

Foundation Courses (6 s.h.)

Students must take two of the following foundation courses:

GVPT	100	Principles of Government and Politics (3)
GVPT	170	American Government (3)
GVPT	200	International Political Relations (3)

Supplemental Minor Courses (9 s.h.)

Students must take at least one government and politics course in three of the following categories: comparative government, public administration, state and local government and administration, and international relations. An advisor can indicate which courses qualify.

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.

Requirements for the Major

A major in history requires the completion of 33 semester hours of coursework in history, at least 17 of which must be earned in courses numbered 300 or above. Specific course requirements are listed on the next page.

For a listing of all the requirements for the bachelor's degree, students should refer to pp. 22–23.

History Coursework (33 s.h.)

Required U.S. History Sequence (6 s.h.)

Students must take the following two-course sequence:

HIST	156	History of the United States to 1865 (3)
HIST	157	History of the United States Since 1865 (3)

Required Methodology Course (3 s.h.)

Students must take the following methodology course (preferably after completing 12 credits in other history coursework):

HIST	309	Introduction to Historical Writing (3)

World History Sequence (6 s.h.)

Students must take one of the following two-course sequences:

- HIST 141 Western Civilization I (3)
HIST 142 Western Civilization II (3)
- HIST 115 World History I (3)
HIST 116 World History II (3)
- HIST 284 East Asian Civilization I (3)
HIST 285 East Asian Civilization II (3)

Geographic Distribution Courses (18 s.h.)

Students must take two courses in each of the following three areas: United States, Europe, and world regions (Asia, Africa, Latin America).

United States (6 s.h.)

HIST	255	African American History (3)
HIST	266	The United States in World Affairs (3)
HIST	360	America in the Colonial Era: 1600 to 1763 (3)
HIST	361	America in the Revolutionary Era: 1763 to 1815 (3)
HIST	362	Ante-Bellum America: 1815 to 1861 (3)
HIST	363	Civil War and the New Industrial Society in the United States: 1860 to 1900 (3)
HIST	364	Emergence of Modern America: 1900 to 1945 (3)
HIST	365	Recent America: 1945 to the Present (3)
HIST	372	Legacy of the Civil Rights Movement (3)
HIST	376	Women and the Family in America to 1870 (3)
HIST	377	Women in America Since 1870 (3)
HIST	380	American Relations with China and Japan: 1740 to the Present (3)
HIST	381	America in Vietnam (3)
HIST	453	Diplomatic History of the United States Since 1914 (3)
HIST	460	African American Life: 1500 to 1865 (3)
HIST	461	African American Life Since 1865 (3)
HIST	462	The U.S. Civil War (3)
HIST	463	U.S. Military History Since 1865 (3)
HIST	467	History of Maryland (3)

Europe (6 s.h.)

HIST	141	Western Civilization I (3)
HIST	142	Western Civilization II (3)
HIST	324	Classical Greece (3)
HIST	325	Alexander the Great and the Hellenistic Age (3)
HIST	326	The Roman Republic (3)
HIST	327	The Roman Empire (3)

HIST	330	Europe in the Early Middle Ages: 300 to 1000 (3)
HIST	331	Europe in the High Middle Ages: 1000 to 1450 (3)
HIST	332	Europe During the Renaissance and Reformation I (3)
HIST	333	Europe During the Renaissance and Reformation II (3)
HIST	334	The Age of Absolutism (3)
HIST	335	Revolutionary Europe (3)
HIST	336	Europe in the 19th Century: 1815 to 1919 (3)
HIST	337	Europe in the World Setting Since 1914 (3)
HIST	357	Military History: 1494 to 1815 (3)
HIST	358	Modern Military History: 1815 to the Present (3)
HIST	375	Modern European Women's History (3)
HIST	430	Tudor England (3)
HIST	431	Stuart England (3)
HIST	432	Britain in the 18th Century (3)
HIST	433	Victorian Britain (3)
HIST	434	Britain Since World War I (3)
HIST	436	The French Revolution and Napoleon (3)
HIST	437	Modern France Since 1815 (3)
HIST	438	Modern Italy (3)
HIST	439	Early Modern Germany (3)
HIST	440	Germany in the 19th Century: 1815 to 1914 (3)
HIST	441	Modern Germany (3)
HIST	443	Modern Balkan History (3)
HIST	448	Russia Since 1900 (3)

World Regions (6 s.h.)

HIST	115	World History I (3)
HIST	116	World History II (3)
HIST	284	East Asian Civilization I (3)
HIST	285	East Asian Civilization II (3)
HIST	341	African Civilization to 1800 (3)
HIST	342	Sub-Saharan Africa Since 1800 (3)
HIST	353	Latin American History I (3)
HIST	354	Latin American History II (3)
HIST	382	The Korean War (3)
HIST	383	Korean History (3)
HIST	391	History of the Ottoman Empire (3)
HIST	392	History of the Contemporary Middle East (3)
HIST	422	Byzantine Empire I (3)
HIST	423	Byzantine Empire II (3)
HIST	464	World War I (3)
HIST	465	World War II (3)
HIST	466	The Cold War (3)
HIST	480	History of Traditional China (3)
HIST	481	History of Modern China (3)
HIST	482	History of Japan to 1800 (3)
HIST	483	History of Japan Since 1800 (3)
HIST	485	History of Chinese Communism (3)
HIST	496	Africa Since Independence (3)
HIST	497	Islam in Africa (3)

Unless otherwise specified, any course may be used to satisfy more than one of the major requirements. However, the student must still complete the minimum number of semester hours in history required for the major.

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 semester hours of coursework in history, at least 12 of which must be earned in courses numbered 300 or above. Specific course requirements are listed below. If a specific course required for the minor is taken instead to satisfy the requirements for the major, another course in the same discipline should be substituted to fulfill the required minimum number of semester hours for the minor. Any course used to replace an upper-level course should also be classified as upper level.

For a listing of all the requirements for the bachelor's degree, students should refer to pp. 22–23.

History Coursework (15 s.h.)

Required Methodology Course (3 s.h.)

Students must take the following methodology course:

HIST 309 Introduction to Historical Writing (3)

Supplemental Minor Courses (12 s.h.)

Students must take an additional four history courses. These must include at least one upper-level course in each of the three geographic areas (United States, Europe, and world regions) listed for the major.

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 philosophies.
- Apply critical reasoning, judgment, and choice.
- Write and speak effectively and clearly.
- Use computers for communication and research.

Requirements for the Major

A major in humanities requires the completion of 30 semester hours of coursework in the humanities, drawn from various disciplines as appropriate, including 6 semester hours in introductory coursework and at least 3 semester hours each in four separate content areas (the arts, language and linguistics, literature, and philosophy and religion). At least 15 semester hours must be earned in courses numbered 300 or above. Specific course requirements are listed on the next page.

For a listing of all the requirements for the bachelor's degree, students should refer to pp. 22–23.

Humanities Coursework (30 s.h.)

Foundation Courses (6 s.h.)

Students must take one of the following courses:

HUMN	119	American Adventure (3)
HUMN	120	America in Perspective (3)

Students must take one of the following courses:

HUMN	102	Classical Foundations (3)
HUMN	351	Myth and Culture (3)

Breadth Courses (12 s.h.)

Students must take at least one course from each of the following areas:

Arts

HUMN	334	Understanding Movies (3)

Any ARTT, ARTH, MUSC, THET, or dance course of 3 or more credits

Language and Linguistics

COMM	380	Language in Social Contexts (3)
HUMN	370	Humanity of Language (3)
PSYC	442	Psychology of Language (3)

Any foreign language (not literature) course of 3 or more credits

Literature

ENGL	303	Critical Approaches to Literature (3)

Any English or foreign-language literature course of 3 or more credits

Philosophy and Religion

HUMN	127	World Religions (3)
HUMN	311	Workplace Ethics (3)
HUMN	312	Ethics and Religion (3)
HUMN	350	The Religious Quest (6)
HUMN	351	Myth and Culture (3)

Any PHIL course of 3 or more credits

Supplemental Major Courses (6–12 s.h.)

To complete the 30 semester hours required for the major, students must take at least two additional courses designated HUMN. Students who must take more than two courses may also choose from those breadth courses not already taken.

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

- Discuss some of the cultural traditions, major ideas, and historical developments of the human experience.
- Explain and critically assess the interrelationships of philosophy, language, literature, history, and the arts as forms of human expression.

- Interpret some of the major historical and cultural forces that influence and control European, Asian, or American societies.
- Apply critical reasoning, judgment, and choice.
- Write and speak effectively and clearly.
- Use computers for communication and research.

Requirements for the Minor

A minor in humanities requires the completion of 15 semester hours of coursework in the humanities, including one course from each of the four breadth content areas listed for the major. At least 9 semester hours must be earned in courses numbered 300. Courses for the minor may not duplicate those used to satisfy the requirements for the major.

For a listing of all the requirements for the bachelor's degree, students should refer to pp. 22–23.

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 Human Resource Professional, Senior Human Resource Professional, and International Human Resource Professional, 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 in decision making, communication, 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.
- Describe the interaction among management, labor, and the federal agencies.
- Utilize various 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.
- 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 and development of theories and concepts in human resource management, management, employment law, strategic management, and related fields and their application to various situations.
- Evaluate ethical, social, civic, cultural, and political issues as they relate to the environment of human resource management, organizations, diversity and human factors, operations, information systems, governmental regulations, and domestic and international ventures.

Requirements for the Major

A major in human resource management requires the completion of 36 semester hours of coursework in human resource management and related business subjects, drawn from various disciplines as appropriate; at least 18 semester hours must be earned in courses numbered 300 or above. Specific course requirements are listed below.

For a listing of all the requirements for the bachelor's degree, students should refer to pp. 22–23.

Human Resource Management Coursework (36 s.h.)

Required Foundation Courses (6–9 s.h.)

Students who do not have previous business experience must take the following course:

BMGT 110 Introduction to Business and Management (3)

Students must take one of the following accounting courses:

ACCT 221 Principles of Accounting II (3)*

ACCT 301 Accounting for Nonaccounting Managers (3)

Students must take the following statistics course:

BMGT 230 Business Statistics (3)

Required Core Courses (18 s.h.)

Students must take the following core courses:

BMGT 364 Management and Organization Theory (3)

BMGT 495 Strategic Management (3)*

HRMN 300 Human Resource Management (3)

HRMN 400 Human Resource Management: Analysis and Problems (3)

HRMN 408 Employment Law for Business (3)

Students must take one of the following courses:

HRMN 362 Labor Relations (3)

HRMN 390 Contemporary Compensation Methods (3)

HRMN 406 Employee Training and Development

Supplemental Major Courses (9–12 s.h.)

To complete the 36 semester hours required for the major, students must take two or more of the following courses:

BMGT 340 Business Finance (3)*

BMGT 380 Business Law I (3)

BMGT 381 Business Law II (3)

BMGT 391 Motivation, Performance, and Productivity (3)

BMGT 464 Organizational Behavior (3)

BMGT 465 Organizational Development and Change (3)

BMGT 484 Managing Teams in Organizations (3)

HRMN 302 Organizational Communication (3)

HRMN 363 Negotiation Strategies (3)

HRMN 365 Conflict Management in Organizations (3)

HRMN 367 Organizational Culture (3)

HRMN 390 Contemporary Compensation Management (3)

HRMN 392 Stress Management in Organizations (1)

HRMN 404 Managing Diversity in Organizations (3)

* Strongly recommended, especially for students who plan to go on to graduate school..

HRMN	406	Employee Training and Development (3)
HRMN	463	Public-Sector Labor Relations (3)
HRMN	486A	Internship in Human Resource Management Through Co-op (3)
HRMN	486B	Internship in Human Resource Management Through Co-op (6)
HRMN	494	Strategic Human Resource Management (3)
MRKT	310	Marketing Principles and Organizations (3)*

Additional Required Coursework (12 s.h.)

Students must take the following courses; credit may be applied to general education, minor, or elective requirements, as appropriate.

ECON	201	Principles of Economics I (3)
ECON	203	Principles of Economics II (3)
MATH	107	College Algebra (3)

or

A higher-numbered mathematics course from mathematics sequence I (listed on p. 207)

Students must take one of the following courses to complete the general education requirement in computing:

ACCT	326	Accounting Information Systems (3)
IFSM	300	Information Systems in Organizations (3)

Recommendations

The following courses are recommended; credit may be applied to general education or elective requirements, as appropriate.

COMM	390	Writing for Managers (3)
COMM	393/393X	Technical Writing (3)
COMM	394/394X	Business Writing (3)

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.

* Strongly recommended, especially for students who plan to go on to graduate school.

- 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 semester hours of coursework in human resource management, at least 9 of which must be earned in courses numbered 300 or above. Specific course requirements are listed below. If a specific course required for the minor is taken instead to satisfy the requirements for the major, another course in the same discipline should be substituted to fulfill the required minimum number of semester hours for the minor. Any course used to replace an upper-level course should also be classified as upper level.

For a listing of all the requirements for the bachelor's degree, students should refer to pp. 22–23.

Human Resource Management Coursework (15 s.h.)

Required Foundation Courses (6 s.h.)

Students must take the following foundation courses:

HRMN	300	Human Resource Management (3)
HRMN	400	Human Resource Management: Analysis and Problems (3)

Supplemental Minor Courses (9 s.h.)

Students must take three of the following courses:

BMGT	364	Management and Organization Theory (3)
BMGT	380	Business Law I (3)
BMGT	381	Business Law II (3)
BMGT	391	Motivation, Performance, and Productivity (3)
BMGT	392	Global Business Management (3)
BMGT	464	Organizational Behavior (3)
BMGT	465	Organizational Development and Change (3)

BMGT	484	Managing Teams in Organizations (3)
HRMN	302	Organizational Communication (3)
HRMN	362	Labor Relations (3)
HRMN	363	Negotiation Strategies (3)
HRMN	365	Conflict Management in Organizations (3)
HRMN	367	Organizational Culture (3)
HRMN	390	Contemporary Compensation Management (3)
HRMN	392	Stress Management in Organizations (1)
HRMN	404	Managing Diversity in Organizations (3)
HRMN	406	Employee Training and Development (3)
HRMN	408	Employment Law for Business (3)
HRMN	463	Public-Sector Labor Relations (3)
HRMN	490	International Human Resource Management (3)

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.

Requirements for the Major

A major in information systems management requires the completion of 30 semester hours of coursework in information systems management, at least 15 of which must be earned in courses numbered 300 or above. Specific course requirements are listed below.

Within the information systems management major, students may complete general study in the subject or choose a more structured track in information assurance.

For a listing of all the requirements for the bachelor's degree, students should refer to pp. 22–23.

Information Systems Management Coursework (30 s.h.)

Required Foundation Courses (15 s.h.)

All students majoring in information systems management must take a course in a programming language (COBOL, C++, C, Java, or Visual Basic) and the following foundation courses:

IFSM	300	Information Systems in Organizations (3)
IFSM	310	Software and Hardware Concepts (3)
IFSM	410	Database Concepts (3)
IFSM	461	Systems Analysis and Design (3)

Core and Supplemental Major Courses (15 s.h.)

Distribution of core and supplemental major courses differs depending on whether the student chooses to complete general study or the specialized track. Students completing general study must complete 9 semester hours in core coursework and 6 semester hours in supplemental major coursework, as described below. Students in the information assurance track complete 6 semester hours of core coursework and 9 semester hours in supplemental major coursework, as described under the track requirements at right.

Students completing general study in information systems management must take one of the following core courses:

IFSM	302	Workplace Productivity (3)
IFSM	303	Human Factors in Information Systems (3)
IFSM	304	Ethics in the Information Age (3)
IFSM	320	Office Automation (3)

Students completing general study in information systems management must take two of the following core courses:

IFSM	425	Decision Support and Expert Systems (3)
IFSM	430	Information Systems and Security (3)
IFSM	438	Project Management (3)
IFSM	450	Telecommunication Systems in Management (3)

Students completing general study in information systems management must also take two upper-level supplemental major courses from offerings in computer and information science, computer information technology, computer science, computer studies, and information systems management. Students should be careful to ensure that all prerequisites have been met before choosing these courses.

Additional Required Coursework (6 s.h.)

All students majoring in information systems management must take the following courses (or a higher-numbered course in the same discipline); credit may be applied to general education, minor, or elective requirements, as appropriate:

MATH	107	College Algebra (3)
STAT	200	Introduction to Statistics (3)

Track Option in Information Assurance

Information Assurance Track Coursework (15 s.h.)

Students who are pursuing a track in information assurance must take the following core courses:

IFSM	430	Information Systems and Security (3)
IFSM	450	Telecommunications Systems in Management (3)

Students who are pursuing a track in information assurance must take three of the following supplemental major courses:

CMIT	320	Network Security (3)
IFSM	431	Policy Planning for Security Architects (3)
IFSM	432	Disaster Recovery Planning (3)
IFSM	433	Information Security Needs Assessment and Planning (3)
IFSM	435	Information Security and E-Commerce (3)
IFSM	454	Information System Security Mechanisms (3)
IFSM	459	Security Issues and Emerging Technologies (3)

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 semester hours of coursework in international business management, drawn from various disciplines as appropriate; at least 9 semester hours must be earned in courses numbered 300 or above. Specific course requirements are listed on the next page. If a specific course required for the minor is taken instead to satisfy the requirements for the major, another course in the same discipline should be substituted to fulfill the required minimum number of semester hours for the minor. Any course used to replace an upper-level course should also be classified as upper level.

For a listing of all the requirements for the bachelor's degree, students should refer to pp. 22–23.

International Business Management Coursework (15 s.h.)

Required Foundation Course (3 s.h.)

Students must take the following foundation course:

BMGT 392 Global Business Management (3)

Supplemental Minor Courses (12 s.h.)

Students must take four of the following courses:

ACCT	425	International Accounting (3)
BMGT	446	International Finance (3)
BMGT	498L	International Business Contract Management (3)
BMGT	498O	The Global Manager and Public Policy (3)
BMGT	498P	International Business Law (3)
BMGT	498R	Multinational Management (3)
BMGT	498S	Global Commerce (3)
HRMN	490	International Human Resource Management (3)
MRKT	454	Global Marketing (3)

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 illuminating the principles and methods used to gather information, process it, and disseminate it to an audience or audiences through a variety of media, with the purpose of informing.

Objectives

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

- Explain communication theory and its application to particular types of communication, including mass communication.
- Apply fundamental concepts and techniques in public relations theory and practice and in news writing and editing for print media, broadcast media, and advertising.
- Write and edit effectively.
- Develop journalism products and processes appropriate to a given audience, environment, and need.
- Gather information from a variety of sources and critically identify, evaluate, and present issues associated with information communicated to diverse audiences.
- Apply techniques of independent research, including research that uses technology.
- Recognize the legal and ethical implications of communication and produce communications that are ethically and legally responsible.

Requirements for the Minor

A minor in journalism requires the completion of 15 semester hours of coursework in journalism and communication studies, at least 9 of which must be earned in courses numbered 300 or above. Specific course requirements are listed below. If a specific course required for the minor is taken instead to satisfy the requirements for the major, another course in the same discipline should be substituted to fulfill the required minimum number of semester hours for the minor. Any course used to replace an upper-level course should also be classified as upper level.

For a listing of all the requirements for the bachelor's degree, students should refer to pp. 22–23.

Journalism Coursework (15 s.h.)

Required Foundation Courses (12 s.h.)

Students must take the following foundation courses:

COMM	300	Communication Theory (3)
COMM	400	Communication and the Law (3)
JOUR	201	Writing for the Mass Media (3)
JOUR	202	Editing for the Mass Media (3)

Supplemental Minor Courses (3 s.h.)

Students must take one of the following courses:

JOUR	320	News Reporting (3)
JOUR	330	Public Relations Theory (3)
JOUR	331	Public Relations Techniques (3)
JOUR	334	Public Relations Programs (3)
JOUR	340	Advertising Communication (3)
JOUR	341	Advertising Techniques (3)
JOUR	350	Photojournalism in the Digital Age (3)
JOUR	371	Magazine Article and Feature Writing (3)
JOUR	380	Science Writing for Magazines and Newspapers (3)
JOUR	410	History of Mass Communication (3)
JOUR	459	Special Topics in Mass Communication (3)
JOUR	459A	Special Topics in Journalism (3)

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.

Requirements for the Major

A major in legal studies requires the completion of 33 semester hours of coursework in legal studies, at least 17 of which must be earned in courses numbered 300 or above. Specific course requirements are listed below.

For a listing of all the requirements for the bachelor's degree, students should refer to pp. 22–23.

Legal Studies Coursework (33 s.h.)

Required Foundation Courses (12 s.h.)

Students must take the following foundation courses:

LGST	101	Introduction to Law (3)
LGST	200	Techniques of Legal Research (3)
LGST	201	Legal Writing (3)
LGST	204	Legal Ethics (3)

Procedure and Skill Courses (9 s.h.)

Students must take three of the following procedure and skill courses:*

LGST	320	Criminal Law and Procedures (3)
LGST	322	Evidence (3)
LGST	325	Litigation (3)
LGST	327	Alternative Dispute Resolution (3)
LGST	330	Administrative Law (3)
LGST	360	Computer Applications in the Legal Environment (3)
LGST	363A	Computer-Assisted Litigation Support (3)
LGST	370	Advanced Legal Analysis (3)
LGST	398P	Administrative Advocacy (3)
LGST	400	Advanced Legal Research (3)
LGST	401	Advanced Legal Writing (3)
LGST	425	Advanced Civil Litigation (3)
LGST	486A	Legal Studies Internship Through Co-op (3)
LGST	486B	Legal Studies Internship Through Co-op (6)

Substantive Law Courses (9 s.h.)

Students must take three of the following substantive law courses:*

LGST	312	Torts (3)
LGST	315	Domestic Relations (3)
LGST	316	Estates and Probate (3)
LGST	335	Elder Law (3)
LGST	340	Contract Law (3)
LGST	343	Real Estate Transactions (3)
LGST	411	Consumer Protection Law (3)
LGST	415	Intellectual Property (3)
LGST	420	Immigration Law (3)
LGST	431	Government Information Practices (3)
LGST	432	Environmental Law (3)
LGST	434	Government Contracts (3)
LGST	442	Business Organizations (3)
LGST	445	Employment Law (3)
LGST	450	Bankruptcy Law (3)

Supplemental Major Course (3 s.h.)

Students must take one additional course, to be selected either from the two previous lists or from the following courses in related disciplines:

CCJS	432	Law of Corrections (3)
CCJS	453	White-Collar and Organized Crime (3)
COMM	400	Communication and the Law (3)
ENMT	303	Environmental Regulations and Policy (3)
FSCN	412	Political and Legal Foundations of Fire Protection (3)
GVPT	399B	The Legislative Process and Lobbying Techniques (3)
GVPT	402	International Law (3)
GVPT	434	Race Relations and Public Law (3)

* Up to 6 semester hours of 1-semester-hour special topic courses in legal studies may also be used to satisfy the procedure and skill or substantive law course requirements.

Management Studies

Students may seek either an academic major or minor 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.
- Develop effective written and oral communication consistent with the management 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.

- 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.
- Evaluate ethical, social, civic, cultural, and political issues as they relate to the environment of organizational management, operations, human resources and human factors, information systems, governmental regulation, and domestic and international ventures.

Requirements for the Major

A major in management studies requires the completion of 36 semester hours of coursework in management studies, drawn from various disciplines as appropriate; at least 18 semester hours must be earned in courses numbered 300 or above. Specific course requirements are listed below.

For a listing of all the requirements for the bachelor's degree, students should refer to pp. 22–23.

Management Studies Coursework (36 s.h.)

Required Foundation Courses (9–12 s.h.)

Students who do not have previous business experience must take the following course:

BMGT	110	Introduction to Business and Management (3)

Students must take the following foundation courses:

ACCT	220	Principles of Accounting I (3)

BMGT	230	Business Statistics (3)

Students must take one of the following introductory economics courses:

ECON	201	Principles of Economics I (3)

ECON	203	Principles of Economics II (3)

Required Core Courses (6 s.h.)

Students must take the following core courses:

BMGT	364	Management and Organization Theory (3)

HRMN	302	Organizational Communication (3)

Supplemental Major Courses (18–21 s.h.)

To complete the 36 semester hours required for the major, students must take courses from the following disciplines: accounting, business and management, environmental management, fire science, human resource management, management studies, and marketing. Recommended courses are listed below.

BMGT	330	Entrepreneurship and New Venture Planning (3)

BMGT	340	Business Finance (3)

BMGT	365	Leadership and Change (3)

BMGT	378	Legal Environment of Business (3)

BMGT	380	Business Law I (3)

BMGT	381	Business Law II (3)

BMGT	392	Global Business Management (3)
BMGT	464	Organizational Behavior (3)
BMGT	482	Business and Government (3)
BMGT	495	Strategic Management (3)
BMGT	496	Business Ethics (3)
HRMN	300	Human Resource Management (3)
MGST	486A	Internship in Management Studies Through Co-op (3)
MGST	486B	Internship in Management Studies Through Co-op (6)
MRKT	310	Marketing Principles and Organization (3)

Additional Required Coursework (3 s.h.)

Students must take one of the following courses to complete the general education requirement in computing:

ACCT	326	Accounting Information Systems (3)
IFSM	300	Information Systems in Organizations (3)

Recommendation

The following course may be applied to general education or elective requirements, as appropriate:

COMM	390	Writing for Managers (3)

Minor in Management Studies

The management studies minor complements the skills the student gains in his or her major discipline by providing a study of management analysis and decision making across a broad range of organizations.

Objectives

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

- Use a multidisciplinary approach to the task of researching organizational problems, issues, and opportunities.
- Analyze information, solve problems, and make decisions from a holistic, global perspective.
- Understand and 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.
- Explain the global dimensions of various tasks: managing business, not-for-profit, and governmental organizations; analyzing global competition and competitive strategies; detecting important trends in international ventures; marketing, financing, and managing human resources; and integrating the emerging online marketplace into overall organizational strategies.

- Assess the significance of a multicultural, multinational organization.
- Develop effective written and oral communication consistent with the management and professional environment.

Requirements for the Minor

A minor in management studies requires the completion of 15 semester hours of coursework in management studies, drawn from various disciplines as appropriate; at least 9 semester hours must be earned in courses numbered 300 or above. Specific course requirements are listed below. Courses may not duplicate those used to satisfy the requirements for the major.

For a listing of all the requirements for the bachelor's degree, students should refer to pp. 22–23.

Management Studies Coursework (15 s.h.)

Required Foundation Course (3 s.h.)

Students must take the following foundation course:

BMGT	364	Management and Organization Theory (3)

Supplemental Minor Courses (12 s.h.)

Students must take at least four courses from accounting, business and management, environmental management, fire science, human resource management, management studies, or marketing.

Recommendation for the Minor

The following course is strongly recommended as an introductory course for students who have less than two years of managerial experience:

BMGT	110	Introduction to Business and Management (3)

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.

Requirements for the Major

A major in marketing requires the completion of 36 semester hours of coursework in marketing and business, at least 18 of which must be earned in courses numbered 300 or above. Specific course requirements are listed at right.

For a listing of all the requirements for the bachelor's degree, students should refer to pp. 22–23.

Marketing Coursework (36 s.h.)

Required Business Courses (15 s.h.)

Students must take one of the following accounting courses:

ACCT	221	Principles of Accounting II (3)
ACCT	301	Accounting for Nonaccounting Managers (3)

Students must take the following business courses:

BMGT	230	Business Statistics (3)
BMGT	364	Management and Organization Theory (3)
BMGT	380	Business Law I (3)
BMGT	496	Business Ethics (3)

Required Marketing Courses (12 s.h.)

Students must take the following marketing courses:

MRKT	310	Marketing Principles and Organization (3)
MRKT	410	Consumer Behavior (3)
MRKT	412	Marketing Research Applications (3)
MRKT	495	Marketing Policies and Strategies (3)*

Supplemental Major Courses (9 s.h.)

Students must take additional marketing courses, for a total of 9 semester hours. No more than three 1-semester-hour courses may be applied.

Additional Required Coursework (12 s.h.)

Students must take the following courses; credit may be applied to general education, minor, or elective requirements, as appropriate:

ECON	201	Principles of Economics I (3)
ECON	203	Principles of Economics II (3)
MATH	107	College Algebra (3)

Students must take one of the following courses to complete the general education requirement in computing:

ACCT	326	Accounting Information Systems (3)
IFSM	300	Information Systems in Organizations (3)

Recommendation

Students are encouraged to take one of the following upper-level writing courses:

COMM	390	Writing for Managers (3)
COMM	393/393X	Technical Writing (3)
COMM	394/394X	Business Writing (3)

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.

* Should be taken in the student's final 30 semester hours of study.

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 semester hours of coursework in marketing, at least 9 of which must be earned in courses numbered 300 or above. Specific course requirements are listed below. If a specific course required for the minor is taken instead to satisfy the requirements for the major, another course in the same discipline should be substituted to fulfill the required minimum number of semester hours for the minor. Any course used to replace an upper-level course should also be classified as upper level.

For a listing of all the requirements for the bachelor's degree, students should refer to pp. 22–23.

Marketing Coursework (15 s.h.)

Required Foundation Course (3 s.h.)

Students must take the following foundation course:

MRKT 310 Marketing Principles and Organization (3)

Supplemental Minor Courses (12 s.h.)

Students must take four or more courses designated MRKT from those listed as fulfilling the requirements for the marketing major.

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 semester hours of coursework in mathematics, at least 6 of which must be earned in courses numbered 300 or above. Specific course requirements are listed on the next page. If a specific course required for the minor is taken instead to satisfy the requirements for the major, another course in the same discipline should be substituted to fulfill the required minimum number of semester hours for the minor. Any course used to replace an upper-level course should also be classified as upper level.

For a listing of all the requirements for the bachelor's degree, students should refer to pp. 22–23.

Mathematics Coursework (17 s.h.)

Required Foundation Courses (8 s.h.)

Students must complete one of the following mathematics sequences:

- MATH 130 Calculus A (3)
 MATH 131 Calculus B (3)
 MATH 132 Calculus C (3)
- MATH 140 Calculus I (4)
 MATH 141 Calculus II (4)

Lower-Level Course (3 s.h.)

Students must take one of the following courses:

MATH	240	Introduction to Linear Algebra (4)
MATH	241	Calculus III (4)
MATH	246	Differential Equations (3)

Upper-Level Courses (6 s.h.)

Students must take two upper-level courses in mathematics or statistics. Students are strongly encouraged to select one course in pure mathematics and one in applied mathematics from the following lists.

Pure Mathematics

MATH	301	Concepts of Real Analysis I (3)
MATH	302	Concepts of Real Analysis II (3)
MATH	402	Algebraic Structures (3)
MATH	432	Point Set Topology (3)
MATH	436	Modern Geometry (3)
MATH	463	Complex Variables (3)

Applied Mathematics

MATH	370	Actuarial Science (3)
MATH	381	Operations Research (3)
MATH	390	Mathematics of Communication (3)
MATH	450	Logic for Computer Science (3)
MATH	466	Numerical Analysis (3)
MATH	475	Combinatorics and Graph Theory (3)
STAT	400	Applied Probability and Statistics I (3)
STAT	401	Applied Probability and Statistics II (3)
STAT	410	Introduction to Probability Theory (3)
STAT	450	Regression and Variance Analysis (3)

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 16 semester hours of coursework in microbiology, drawn from various disciplines as appropriate; at least 9 semester hours must be earned in courses numbered 300 or above. Specific course requirements are listed below. If a specific course required for the minor is taken instead to satisfy the requirements for the major, another course in the same discipline should be substituted to fulfill the required minimum number of semester hours for the minor. Any course used to replace an upper-level course should also be classified as upper level.

For a listing of all the requirements for the bachelor's degree, students should refer to pp. 22–23.

Microbiology Coursework (16 s.h.)

Required Foundation Course (4 s.h.)

Students must take one of the following foundation courses:

BIOL	230	General Microbiology (4)
BSCI	223	General Microbiology (4)

Core Courses (6 s.h.)

Student must take courses from the following list, for a minimum of 6 semester hours. *Note:* Only one course in virology (BIOL 337, BIOL 434, or BIOL 435) may be applied toward the minor.

BIOL	330	Applied Microbiology (4)
BIOL	332	Microbiology and the Public (3)
BIOL	335	Vaccine Development (3)
BIOL	337	Medical Virology (3)
BIOL	353	Microbial Genetics (3)
BIOL	420	Epidemiology and Public Health (2)
BIOL	422	Epidemiology of Emerging Infections (3)
BIOL	430	Microbial Physiology (3)
BIOL	431	Microbial Ecology (3)
BIOL	434	General Virology (3)
BIOL	435	General Virology with Laboratory (4)
BIOL	437	Pathogenic Microbiology (4)
BIOL	438	Immunology (4)
BIOL	486A	Internship in Life Science Through Co-op (3)
BIOL	486B	Internship in Life Science Through Co-op (6)

Supplemental Minor Courses (6 s.h.)

Students may choose courses from the following list:

BIOL	222	Principles of Genetics (3) <i>or</i>
BSCI	222	Principles of Genetics (4)
BIOL	240	Elements of Biochemistry (3)
BIOL	301	Human Health and Disease (3)
BIOL	304	The Biology of Cancer (3)
BIOL	305	The Biology of AIDS (3)
BIOL	320	Forensic Biology (3)
BIOL	334	Vaccines and Society (3)
BIOL	350	Molecular and Cellular Biology (3)
BIOL	356	Molecular Biology Laboratory (4)
BIOL	357	Bioinformatics (3)
BIOL	398C	Regulation of Gene Expression (1)
BIOL	398F	Extremeophiles (1)
BIOL	398I	Biotechnology and Genetic Engineering (1)
BIOL	400	Life Science Seminar (3)
BIOL	440	Biochemistry I (3)
BIOL	441	Biochemistry II (3)

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 semester hours of coursework in natural science, at least 9 of which must be earned in courses numbered 300 or above. Specific course requirements are listed below. If a specific course required for the minor is taken instead to satisfy the requirements for the major, another course in the same discipline should be substituted to fulfill the required minimum number of semester hours for the minor. Any course used to replace an upper-level course should also be classified as upper level.

For a listing of all the requirements for the bachelor's degree, students should refer to pp. 22–23.

Natural Science Coursework (17 s.h.)

Required Foundation Courses (7 s.h.)

Students must take at least two foundation courses, including a laboratory course, from the following lists for a minimum of 7 semester hours. To confirm whether a science course meets requirements for a laboratory course, students should refer to the course descriptions. Laboratory courses of 1 semester hour must be taken in conjunction with the accompanying lecture course.

Course Combinations

- BIOL 101 Concepts of Biology (3)*
BIOL 102 Laboratory in Biology (1)
- GEOL 100 Physical Geology (3)
GEOL 110 Physical Geology Laboratory (1)
- NSCI 100 Introduction to Physical Science (3)
NSCI 101 Physical Science Laboratory (1)
- PHYS 161 General Physics: Mechanics and Particle Dynamics (3)
PHYS 195 Introductory Physics Laboratory (1)

Courses

- BIOL 105 Principles of Biology I (4)*
- BIOL 106 Principles of Biology II (4)
- CHEM 103 General Chemistry I (4)
- CHEM 113 General Chemistry II (4)
- PHYS 121 Fundamentals of Physics I (4)
- PHYS 122 Fundamentals of Physics II (4)

Supplemental Minor Courses (10 s.h.)

Students must take at least three of the following courses, for a minimum of 10 semester hours. *Note:* Laboratory courses of 1 semester hour must be taken in conjunction with the accompanying lecture course.

- ASTR Any course numbered 300 or above
- BIOL Any course numbered 300 or above
- NSCI 398 Special Topics in Natural Science (1–6)

* Students may not apply both the BIOL 105–106 sequence and the BIOL 101–102 sequence to the minor.

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 degree 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.

Requirements for the Major

A major in psychology requires the completion of 33 semester hours of coursework in psychology, including 9 semester hours in psychology as a natural science, 9 semester hours in psychology as a social science, and 6 semester hours in psychology as a clinical science. At least 17 semester hours must be earned in courses numbered 300 or above. PSYC courses earning only 1 credit may not be applied to the major. Specific course requirements are listed below.

For a listing of all the requirements for the bachelor's degree, students should refer to pp. 22–23.

Psychology Coursework (33 s.h.)

Required Foundation Courses (9 s.h.)

Students must take the following foundation courses:

PSYC	100	Introduction to Psychology (3)
PSYC	305	Experimental Methods in Psychology (3)
PSYC	200	Introduction to Statistical Methods in Psychology (3)

Natural Science Psychology Courses (9 s.h.)

Students must take three of the following courses:

BIOL	362	Neurobiology (3)
PSYC	301	Biological Basis of Behavior (3)
PSYC	310	Perception (3)
PSYC	315	Motivation (3)
PSYC	341	Introduction to Memory and Cognition (3)
PSYC	391	Introduction to Neuropsychology (3)
PSYC	402	Physiological Psychology (3)
PSYC	441	Psychology of Human Learning (3)

Social Science Psychology Courses (9 s.h.)

Students must take three of the following courses:

PSYC	221	Social Psychology (3)
PSYC	345	Group Dynamics (3)
PSYC	354	Cross-Cultural Psychology (3)
PSYC	355	Child Psychology (3)
PSYC	357	Psychology of Adulthood and Aging (3)
PSYC	361	Survey of Industrial and Organizational Psychology (3)
PSYC	424	Communication and Persuasion (3)

Clinical Science Psychology Courses (6 s.h.)

Students must take two of the following courses:

PSYC	353	Adult Psychopathology (3)
PSYC	432	Introduction to Counseling Psychology (3)
PSYC	435	Personality Theories (3)
PSYC	436	Introduction to Clinical Psychology (3)
PSYC	451	Principles of Psychological Testing (3)

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, life-span 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 semester hours of coursework in psychology, including at least 3 semester hours each in courses in psychology as a natural science, a social science, and a clinical science. At least 9 semester hours must be earned in courses numbered 300 or above. PSYC courses earning only 1 credit may not be applied to the minor.

Specific course requirements are listed at right. If a specific course required for the minor is taken instead to satisfy the requirements for the major, another course in the same discipline should be substituted to fulfill the required minimum number of semester hours for the minor. Any course used to replace an upper-level course should also be classified as upper level.

For a listing of all the requirements for the bachelor's degree, students should refer to pp. 22–23.

Psychology Coursework (15 s.h.)

Required Foundation Courses (6 s.h.)

Students must take the following foundation courses:

PSYC	100	Introduction to Psychology (3)
PSYC	200	Introduction to Statistical Methods in Psychology (3)

Supplemental Minor Courses (9 s.h.)

Students must take one course in each of the three major categories (natural science psychology courses, social science psychology courses, and clinical science psychology courses) previously listed for the major.

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.

Requirements for the Major

A major in social science requires the completion of 30 semester hours of coursework in the social sciences, drawn from various disciplines as appropriate; at least 15 semester hours must be earned in courses numbered 300 or above. Specific course requirements are listed below.

For a listing of all the requirements for the bachelor's degree, students should refer to pp. 22–23.

Social Science Coursework (30 s.h.)

Statistics Course (3 s.h.)

Students must take one of the following statistics courses:

BMGT	230	Business Statistics (3)
PSYC	200	Introduction to Statistical Methods in Psychology (3)
STAT	200	Introduction to Statistics (3)

Foundation Courses (9 s.h.)

Students must take the following foundation course:

BEHS	210	Introduction to Social and Behavioral Science (3)

Students must take two of the following foundation courses, selected from different disciplines:

ECON	201	Principles of Economics I (3)
ECON	203	Principles of Economics II (3)
GEOG	100	Introduction to Geography (3)
GEOG	110	The World Today: A Regional Geography (3)
GERO	100	Introduction to Gerontology (3)
GERO	220	Psychological Aspects of Aging (3)
GVPT	100	Principles of Government and Politics (3)
HIST	156	History of the United States to 1865 (3)
HIST	157	History of the United States Since 1865 (3)
HIST	141	Western Civilization I (3)
HIST	142	Western Civilization II (3)
PSYC	100	Introduction to Psychology (3)
SOCY	100	Introduction to Sociology (3)
SOCY	105	Introduction to Contemporary Social Problems (3)

Core Courses (9 s.h.)

Students must take at least three courses in either government and politics, gerontology, or sociology and anthropology.

Supplemental Major Courses (9 s.h.)

Students must take additional courses chosen from the social science disciplines of anthropology, behavioral and social sciences, economics, gerontology, government and politics, psychology, and sociology.

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 semester hours of coursework in sociology, drawn from various disciplines as appropriate; at least 9 semester hours must be earned in courses numbered 300 or above. Specific course requirements are listed on the next page. If a specific course required for the minor is taken instead to satisfy the requirements for the major, another course in the same discipline should be substituted to fulfill the required minimum number of semester hours for the minor. Any course used to replace an upper-level course should also be classified as upper level.

For a listing of all the requirements for the bachelor's degree, students should refer to pp. 22–23.

Sociology Coursework (15 s.h.)

Required Foundation Course (3 s.h.)

Students must take one of the following foundation courses:

SOCY	100	Introduction to Sociology (3)
SOCY	105	Introduction to Contemporary Social Problems (3)

Statistics Course (3 s.h.)

Students must take one of the following statistics courses:

BMGT	230	Business Statistics (3)
PSYC	200	Introduction to Statistical Methods in Psychology (3)
STAT	200	Introduction to Statistics (3)

Supplemental Minor Courses (9 s.h.)

Students must take three of the following courses:

ANTH	417	Peoples and Cultures of East Asia (3)
ASTD	300	The Chinese: Adapting the Past, Building the Future (3)
ASTD	301	The Japanese: Adapting the Past, Building the Future (3)
ASTD	302	The Two Koreas: Problems and Prospects (3)
ASTD	303	India: The Weight of Tradition in the Modern World (3)
ASTD	304	Southeast Asia: Development amid Diversity (3)
CCJS	330	Contemporary Criminological Issues (3)
CCJS	454	Contemporary Criminological Theory (3)
SOCY		All courses not otherwise listed as a requirement for the minor

Speech Communication

Students may seek an academic minor in speech communication.

Minor in Speech Communication

The speech communication minor complements the skills the student gains in his or her major discipline by providing specialized skills in workplace communication.

Objectives

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

- Explain communication theory and its application to particular types of communication, including mass communication.
- Explain the principles and practice of speech communication appropriate to professionals in a variety of communication positions within organizations.
- Develop communication products and processes appropriate to a given audience, environment, and need.

- Gather information from a variety of sources and critically identify, examine, and present issues associated with information communicated to a diverse audience.
- Apply techniques of independent research, including research that uses technology and fosters information literacy.
- Recognize the legal and ethical implications of communication and produce communications that are ethically and legally responsible.

Requirements for the Minor

A minor in speech communication requires the completion of 15 semester hours of coursework in speech communication, drawn from various disciplines as appropriate; at least 9 semester hours must be earned in courses numbered 300 or above. Specific course requirements are listed below. If a specific course required for the minor is taken instead to satisfy the requirements for the major, another course in the same discipline should be substituted to fulfill the required minimum number of semester hours for the minor. Any course used to replace an upper-level course should also be classified as upper level.

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 pp. 22–23.

Speech Communication Coursework (15 s.h.)

Required Foundation Course (3 s.h.)

Students must take the following foundation course:

COMM	300	Communication Theory (3)

Speech or English Language Course (3 s.h.)

Students must take one of the following speech or English language courses:

COMM	380	Language in Social Contexts (3)
ENGL	278F	Introduction to Principles of Text Editing (3)
ENGL	281/281X	Standard English Grammar, Usage, and Diction (3)
ENGL	384	Advanced Grammar and Style (3)
SPCH		All courses numbered 300 or above

Supplemental Minor Courses (9 s.h.)

Students must take three of the following courses:

SPCH	324	Communication and Gender (3)
SPCH	397	Organizational Presentations (3)
SPCH	420	Group Discussion and Decision Making (3)
SPCH	424	Communication in Complex Organizations (3)
SPCH	426	Negotiation and Conflict Management (3)
SPCH	470	Listening (3)
SPCH	482	Intercultural Communication (3)

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 semester hours of coursework in strategic and entrepreneurial management, drawn from various disciplines as appropriate; at least 9 semester hours must be earned in courses numbered 300 or above. Specific course requirements are listed at right. If a specific course required for the minor is taken instead to satisfy the requirements for the major, another course in the same discipline should be substituted to fulfill the required minimum number of semester hours for the minor. Any course used to replace an upper-level course should also be classified as upper level.

For a listing of all the requirements for the bachelor's degree, students should refer to pp. 22–23.

Strategic and Entrepreneurial Management Coursework (15 s.h.)

Required Foundation Course (3 s.h.)

Students must take the following foundation course:

BMGT 364 Management and Organization Theory (3)

Supplemental Minor Courses (12 s.h.)

Students must take either four of the following 3-semester-hour courses or three 3-semester-hour courses and three 1-semester-hour courses. Courses strongly recommended for the minor are indicated by an asterisk.

Three-Semester-Hour Courses

BMGT	304	Managing E-Commerce in Organizations (3)
BMGT	317	Problem Solving for Managers (3)
BMGT	330	Entrepreneurship and New Venture Planning (3)*
BMGT	334	Managing New Ventures (3)
BMGT	336	Managing Strategic Venture Growth and Industry (3)
BMGT	337	Building the Entrepreneurial Team (3)
BMGT	339	Government and Business Contracting (3)
BMGT	365	Leadership and Change (3)
BMGT	366	Managing in the Public Sector (3)
BMGT	391	Motivation, Performance, and Productivity (3)
BMGT	392	Global Business Management (3)
BMGT	464	Organizational Behavior (3)
BMGT	465	Organization Development and Change (3)
BMGT	484	Managing Teams in Organizations (3)
BMGT	487	Project Management I (3)
BMGT	495	Strategic Management (3)*
BMGT	497	Implementing Business Strategy (3)
HRMN	302	Organizational Communication (3)
HRMN	363	Negotiation Strategies (3)
HRMN	365	Conflict Management in Organizations (3)
HRMN	367	Organizational Culture (3)
HRMN	404	Managing Diversity in Organizations (3)
HRMN	406	Employee Training and Development (3)
HRMN	494	Strategic Human Resource Management (3)

One-Semester-Hour Courses

BMGT	388D	Managing a Culturally Diverse Organization (1)
BMGT	388E	Managing Multicultural Teams (1)
BMGT	388G	Effective Business Presentations (1)

* Strongly recommended.

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 semester hours of coursework in women's studies, drawn from various disciplines as appropriate; at least 9 semester hours must be earned in courses numbered 300 or above. Specific course requirements are listed at right. If a specific course required for the minor is taken instead to satisfy the requirements for the major, another course in the same discipline should be substituted to fulfill the required minimum number of semester hours. Any course used to replace an upper-level course should also be classified as upper level.

For a listing of all the requirements for the bachelor's degree, students should refer to pp. 22–23.

Women's Studies Coursework (15 s.h.)

Required Foundation Course (3 s.h.)

Students must take the following foundation course:

WMST	200	Introduction to Women's Studies: Women and Society (3)

Supplemental Minor Courses (12 s.h.)

Students must take three or more of the following courses. No more than 6 semester hours may be taken from any single discipline.

BEHS	343	Parenting Today (3)
BEHS	453	Domestic Violence (3)
BMGT	312	Women in Business (3)
BMGT	313	Women as Entrepreneurs (3)
BMGT	314	Women as Leaders (3)
ENGL	250	Introduction to Literature by Women (3)
ENGL	354	American Women Writers Since 1900 (3)
ENGL	358	British Women Writers Since 1900 (3)
ENGL	444	Feminist Critical Theory (3)
GVPT	436	Legal Status of Women (3)
HLTH	377	Human Sexuality (3)
HLTH	471	Women's Health (3)
HIST	375	Modern European Women's History (3)
HIST	376	Women and the Family in America to 1870 (3)
HIST	377	Women in America Since 1870 (3)
HUMN	442	Contemporary Sexual Ethics (3)
PSYC	334	Psychology of Interpersonal Relationships (3)
PSYC	336	Psychology of Women (3)
SOCY	243	Sociology of Marriage and Family (3)
SOCY	312	Family Demography (3)
SOCY	325	The Sociology of Gender (3)
SOCY	425	Gender Roles and Social Institutions (3)
SOCY	430	Social Structure and Identity (3)
SOCY	443	The Family and Society (3)
SOCY	462	Women in the Military (3)
SPCH	324	Communication and Gender (3)

Special topic courses offered in various disciplines may also be used to fulfill this requirement if approved in advance.

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.

Requirements

The Associate of Arts degree (AA) requires the completion of a minimum of 60 semester hours, at least 15 of which must be taken through UMUC. Of these 60 semester hours, 32 semester hours must be earned in courses that fulfill the general education requirements listed below. The remaining 28 semester hours 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 correspond to those for the bachelor's degree (listed on p. 22), with these two exceptions:

- An upper-level intensive writing course is not required for the associate's degree.
- Only one 1-semester-hour course in information literacy and research methods is required to fulfill the interdisciplinary or emerging issues requirement for the associate's degree.

Curriculum Requirements (28 s.h.)

In addition to the general education requirements, students must take 28 semester hours of coursework related to their educational goals; at least 9 semester hours in core or core-related coursework for the chosen curriculum must be earned through UMUC. They may choose a general curriculum (described below) or a specialized curriculum with its own particular requirements (detailed at right and on the following pages). Students must earn a grade of C or higher in all core or core-related curriculum courses. 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. They may do this by combining related courses from several disciplines, exploring several interests at once, or choosing a variety of courses from throughout 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.

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. Students should take careful note of course prerequisites and recommended course sequences. Curricula may be available only in limited geographic areas.

Accounting

Accounting Core Courses (15 s.h., at least 6 of which must be completed through UMUC)

Students must take five core courses from the following list:

ACCT	220	Principles of Accounting I (3)
ACCT	221	Principles of Accounting II (3)
ACCT		Any other course in accounting or finance
BMGT		Any course in accounting or finance
MGST		Any course in accounting or finance (except MGST 120 or MGST 140)

Accounting-Related Courses (12 s.h.)

Students must take four accounting-related courses from the following list:

BMGT	110	Introduction to Business and Management (3)
BMGT	364	Management and Organization Theory (3)
BMGT	380	Business Law I (3)
BMGT	381	Business Law II (3)
BMGT	496	Business Ethics (3)
		<i>or</i>
ACCT	411	Ethics and Professionalism in Accounting (3)
CMIS	102	Introduction to Problem Solving and Algorithm Design (3)
		<i>or</i>
CMIS	102A	Fundamentals of Programming I (3)
CMST	340	Computer Applications in Management (3)
ECON	201	Principles of Economics I (3)
		<i>or</i>
ECON	205	Fundamentals of Economics (3)
ECON	203	Principles of Economics II (3)
STAT	200	Introduction to Statistics (3)
		<i>or</i>
BMGT	230	Business Statistics (3)
MGST	120	Fundamentals of the Accounting Process (3)
MRKT	310	Marketing Principles and Organization (3)

Elective Course (1 s.h.)

Students must choose an additional course in accordance with their interests and goals.

Business and Management

Business Core Courses (15 s.h., at least 6 of which must be completed through UMUC)

Students must take five core courses from the following list:

BMGT	110	Introduction to Business and Management (3)
ACCT	220	Principles of Accounting I (3)
ACCT	221	Principles of Accounting II (3)
ECON	201	Principles of Economics I (3)
		<i>or</i>
ECON	205	Fundamentals of Economics (3)
ECON	203	Principles of Economics II (3)
STAT	200	Introduction to Statistics (3)
		<i>or</i>
BMGT	230	Business Statistics (3)

Management-Related Courses (9 s.h.)

Students must take three management-related courses from the following list:

ACCT		All courses
BMGT		All courses
CMIS		All courses
CMST		All 3-semester-hour courses
ECON		All courses
GVPT	210	Introduction to Public Administration and Policy (3)
IFSM		All courses
HRMN	300	Human Resource Management (3)
MGST		All courses
MRKT	310	Marketing Principles and Organization (3)
PSYC	221	Social Psychology (3)
PSYC	361	Survey of Industrial and Organizational Psychology (3)
SOCY	331	Work, Bureaucracy, and Industry (3)
		<i>or</i>
SOCY	461	Industrial Sociology (3)
SPCH	108	Technical Speech Communication (3)

Elective Courses (4 s.h.)

Students must choose additional courses in accordance with their interests and goals.

Computer Studies

Computer-Related Core Courses (15 s.h.)

Students must take one of the following introductory computer courses:

CMIS	102	Introduction to Problem Solving and Algorithm Design (3)
CMIS	102A	Fundamentals of Programming I (3)
IFSM	201	Introduction to Computer-Based Systems (3)

Students must take one of the following programming courses (or another appropriate programming language course):

CMIS	141	Introductory Programming (3)
CMIS	141A	Fundamentals of Programming II (3)

Students must take two of the following courses:

CMIS	240/241	Data Structures and Abstraction (3)
CMIS	310	Computer Systems and Architecture (3)
<i>or</i>		
IFSM	310	Software and Hardware Concepts (3)
CMST		Any lower-level course (not to exceed 3 s.h.)
IFSM	300	Information Systems in Organizations (3)

To complete a total of 15 semester hours of coursework in computing topics, students must take one or more computer-related courses (courses designated CMIS, CMIT, CMSC, CMST, and IFSM).

Elective Courses (13 s.h.)

Students must choose additional courses in accordance with their interests and goals.

Criminal Justice

Criminal Justice Core Courses (12 s.h.)

Students must take four or more courses designated CCJS, for a total of 12 semester hours.

Elective Courses (16 s.h.)

Students must choose additional courses in accordance with their interests and goals.

Foreign Language Area Studies

A specialization in foreign language area studies gives students the opportunity to focus on the language and culture of a particular country, usually the country in which they live. Generally students are required to complete 12 semester hours in language core courses and 16 semester hours in courses related to the history and culture of the area. Specific courses are identified for each of the areas studied. Students should check with an advisor for choices in their area.

Legal Studies

Legal Studies Core Courses (12 s.h.)

Students must take the following courses:

LGST	101	Introduction to Law (3)
LGST	200	Techniques of Legal Research (3)
LGST	201	Legal Writing (3)
LGST	204	Legal Ethics (3)

Other Legal Studies Courses (6 s.h.)

Students must take two or more courses designated LGST, for a total of 6 semester hours.

Elective Courses (10 s.h.)

Students must choose additional courses in accordance with their interests and goals.

Management Studies

Management-Related Core Courses (18 s.h.)

Students must select courses from the following for a minimum of 18 semester hours:

ACCT	All courses
BMGT	All courses
CMIS	All courses
CMST	All courses
ECON	All courses
IFSM	All courses

MGST		All courses
COMM	390	Writing for Managers (3)
STAT	200	Introduction to Statistics (3)
		<i>or</i>
BMGT	230	Business Statistics (3)
GVPT	210	Introduction to Public Administration and Policy (3)
PSYC	221	Social Psychology (3)
PSYC	361	Survey of Industrial and Organizational Psychology (3)
SOCY	331	Work, Bureaucracy, and Industry (3)
		<i>or</i>
SOCY	461	Industrial Sociology (3)
SPCH	108	Technical Speech Communication (3)

Elective Courses (10 s.h.)

Students must choose additional courses in accordance with their interests and goals.

Mathematics

Math Core Courses (18 s.h.)

Students must take one of the following calculus sequences:

- MATH 130 Calculus A (3)
MATH 131 Calculus B (3)
MATH 132 Calculus C (3)
- MATH 140 Calculus I (4)
MATH 141 Calculus II (4)

Students must take the following course:

MATH 241 Calculus III (4)

Students must take one of the following algebra courses:

MATH 240 Introduction to Linear Algebra (4)
MATH 246 Differential Equations (3)

Students must take one of the following statistics courses:

STAT 200 Introduction to Statistics (3)
BMGT 230 Business Statistics (3)

Math-Related Courses (6 s.h.)

Students must take two courses in which a mathematical approach is applied to another field of study, selected from the following:

ACCT		All courses
BMGT		Any finance course
BMGT	309	Operations Research for Management Decisions (3)
CHEM	103	General Chemistry I (4)
CHEM	113	General Chemistry II (4)
CMIS	102	Introduction to Problem Solving and Algorithm Design (3)
		<i>or</i>
CMIS	102A	Fundamentals of Programming I (3)

CMIS	141	Introductory Programming (3)
		<i>or</i>
CMIS	141A	Fundamentals of Programming II (3)
CMIS	160	Discrete Mathematics for Computing (3)
CMIS	240/241	Data Structures and Abstraction (3)
CMIS	320	Relational Databases (3)
CMIS	330	Software Engineering Principles and Techniques (3)
CMSC	150	Introduction to Discrete Structures (3)
ECON	201	Principles of Economics I (3)
		<i>or</i>
ECON	205	Fundamentals of Economics (3)
ECON	203	Principles of Economics II (3)
ECON	430	Money and Banking (3)
ECON	440	International Economics (3)
PHYS		Any course numbered 111 or higher
STAT	400	Applied Probability and Statistics I (3)
STAT	401	Applied Probability and Statistics II (3)

Elective Courses (2–4 s.h.)

To complete the 28 semester hours in curriculum coursework, students must choose additional courses in accordance with their interests and goals.

Women's Studies

Women's Studies Core Course (3 s.h.)

Students must take the following course:

WMST	200	Introduction to Women's Studies: Women and Society (3)

Women's Studies–Related Courses (15 s.h.)

Students must select from the following women's studies–related courses, for a total of 15 semester hours:

ARTH	199U	The Female Form in Western Art (1)
ENGL	250	Introduction to Literature by Women (3)
ENGL	288H	African American Women Writers (1)
ENGL	288T	Life and Literature of Modern Italian Women (1)
HUMN	119	American Adventure (3)
SOCY	198E	Family Violence (1)
SOCY	198F	Marriage and the Law (1)
SOCY	243	Sociology of Marriage and Family (3)

Additional special topic courses offered in various disciplines may also be used to fulfill this requirement, if approved in advance.

Elective Courses (10 s.h.)

Students must choose additional courses in accordance with their interests and goals.

To better help working adults meet their educational goals, UMUC offers a full range of certificate programs geared toward helping members of the workforce stay current 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.

All courses for the certificate programs carry college credit and may be applied to a degree. Current students may benefit by earning a certificate while pursuing a degree. Such students must apply for the certificate before they receive their degree.

Certificates are awarded upon successful completion of the required coursework. An academic advisor must perform an official evaluation of coursework before approving certificate completion. All certificates are issued and mailed by the Registrar's Office. Transcripts are updated to reflect certificate completion.

CURRICULA

Certificates are available in the following areas. In addition to those listed below, some certificates are available only to active-duty military personnel and certain others who conform to special stipulations.

- Accounting—Introductory
- Accounting—Advanced
- Bio-Security
- Business Project Management
- Computer Applications
- Computer Graphics and Design
- Customer Service Communications
- Customer Service Management
- Database Design and Implementation
- Database Management
- Desktop Publishing
- E-Commerce for IT Professionals
- E-Commerce in Small Business
- E-Commerce Management
- Environmental and Occupational Health and Safety Management
- Financial Management
- Gerontology
- Human Resource Management
- Information Management
- Information Security
- Internet Technologies
- Laboratory Management
- Management Foundations

- 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
- Security Operations
- 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

The undergraduate certificate programs generally require 16 to 21 semester hours of course credit (except for the certificate in Paralegal Studies, which requires 60 semester hours), with a minimum grade of C in all courses. Such courses, therefore, may not be taken pass/fail. Specific requirements are listed for each certificate. Certificate students must fulfill all course prerequisites; these may be satisfied by coursework, credit by examination, or prior-learning portfolio credit (under current policies for such credit). No more than half of the total credits for any certificate may be earned through credit by examination, portfolio credit, or transfer credit from other schools. At least half of the total credits for any certificate must be earned through UMUC. In addition, at least half of the total credits for any certificate must be earned through graded coursework.

Students who wish to enroll in certificate programs must first be admitted as UMUC students in order to take certificate courses. Students are responsible for notifying UMUC of their intention to complete certificate work before completion of their last course.

Students may pursue a degree and certificate simultaneously. The application for any certificate completed while in progress toward the bachelor's degree must be submitted prior to award of the bachelor's degree. (The application is available at www.umuc.edu/forms.) Should a student decide to pursue a degree after completing the certificate, the certificate coursework may still be applied

toward the requirements for a degree. Students wishing to earn more than one certificate may not use the same course toward completion of subsequent certificates. 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.

Unless otherwise specified or necessitated by prerequisites, course sequences for each certificate suggest but do not require that courses be taken in a prescribed order.

The following certificate requirements are applicable to students who enroll on or after August 1, 2004. However, should certificate requirements change, students must either complete these requirements within two years of the change or fulfill the new requirements.

CERTIFICATE DESCRIPTIONS

Accounting—Introductory

The introductory accounting certificate program 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. To earn the certificate, students must complete six courses (five required and one elective), for a total of 18 semester hours. Students without a background in economics, basic mathematics, and statistics are encouraged to take courses in those subjects before starting the certificate program.

Program Courses

Required Courses

Students must take the following 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)

Supporting Elective

Students must take one of the following courses:

ACCT	326	Accounting Information Systems (3)
ACCT	411	Ethics and Professionalism in Accounting (3)
ACCT	417	Taxation of Corporations and Other Entities (3)
ACCT	422	Auditing Theory and Practice (3)
ACCT	425	International Accounting (3)
BMGT	340	Business Finance (3)
BMGT	341	Finance for the Nonfinancial Manager (3)

Accounting—Advanced

The advanced accounting certificate program is designed to meet the needs of accounting professionals who want to enhance their accounting skills. To earn the certificate, students must complete six courses (four required and two elective), for a total of 18 semester hours. In addition to course prerequisites, students are encouraged to take courses in economics, basic mathematics, and statistics before starting the certificate program.

Program Courses

Required Courses

Students must take the following 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)

Supporting Electives

Students must take two of the following courses:

ACCT	321	Cost Accounting (3)
ACCT	323	Taxation of Individuals (3)
ACCT	326	Accounting Information Systems (3)
ACCT	328	Accounting Software (3)
ACCT	410	Accounting for Government and Not-for-Profit Organizations (3)
ACCT	411	Ethics and Professionalism in Accounting (3)
ACCT	424	Advanced Accounting (3)
ACCT	425	International Accounting (3)
ACCT	426	Advanced Cost Accounting (3)
ACCT	427	Advanced Auditing (3)
ACCT	436	Internal Auditing (3)
BMGT	340	Business Finance (3)
BMGT	341	Finance for the Nonfinancial Manager (3)

Bio-Security

The bio-security certificate program 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. To earn the certificate, students must complete six or more courses (four required and two or more elective), for a minimum of 16 semester hours.

Program Courses

Required Courses

Students must take the following courses:

BIOL	422	Epidemiology of Emerging Infections (3)
ENMT	320	Environmental and Occupational Health and Safety Management (3)

Students must take one of the following biology courses:

BIOL	230	General Microbiology (4)
BSCI	223	General Microbiology (4)
BIOL	398G	Bacteria and Viruses (1)

Students must take one of the following terrorism courses:

GVPT	399H	Counterterrorism (3)
HIST	319A	History of Terrorism (3)

Supporting Electives

Students must take one of the following courses in institutional and emergency management and communication:

BMGT	361	Health Management (3)
CCJS	320	Introduction to Criminalistics (3)
CCJS	491	Institutional Security (3)
FSCN	403	Managerial Issues in Hazardous Materials (3)

To complete the 16 semester hours required for the certificate, students must take one or more of the following courses in microbiology topics:

BIOL	320	Forensic Biology (3)
BIOL	332	Microbiology and the Public (3)
BIOL	334	Vaccines and Society (3)
BIOL	335	Vaccine Development (3)
BIOL	350	Molecular and Cellular Biology (3)
<i>or</i>		
BIOL	353	Microbial Genetics (3)
BIOL	398I	Biotechnology and Genetic Engineering (1)

BIOL	420	Epidemiology and Public Health (2)
BIOL	434	General Virology (3)
BIOL	437	Pathogenic Microbiology (4)
BIOL	438	Immunology (4)

Business Project Management

The business project management certificate program 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 to advance to a higher level. To earn the certificate, students must complete six or more courses (three required and three or more elective), for a total of 18 semester hours.

Program Courses

Required Courses

Students must take the following courses:

BMGT	484	Managing Teams in Organizations (3)
BMGT	487	Project Management I (3)
BMGT	488	Project Management II (3)

Supporting Electives

Students must take three of the following courses. Taking at least one course in finance or accounting is recommended.

ACCT	220	Principles of Accounting I (3)
ACCT	221	Principles of Accounting II (3)
ACCT	301	Accounting for Nonaccounting Managers (3)
BMGT	304	Managing E-Commerce in Organizations (3)
BMGT	317	Problem Solving for Managers (3)
BMGT	339	Government and Business Contracting (3)
BMGT	340	Business Finance (3)
BMGT	341	Finance for the Nonfinancial Manager (3)
BMGT	346	Risk Management (3)
BMGT	366	Managing in the Public Sector (3)
COMM	492	Grant and Proposal Writing (3)
HRMN	363	Negotiation Strategies (3)

Computer Applications

The certificate program 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. The certificate is awarded to students who successfully complete six courses (four required and two elective), for a total of 18 semester hours.

Program Courses

Required Courses

Students must take the following courses:

CMST	103	Introduction to Microcomputer Software (3)
CMST	303	Advanced Features of Microcomputer Application Software (3)
CMST	340	Computer Applications in Management (3)
IFSM	201	Introduction to Computer-Based Systems (3)

Supporting Electives

Students must take two of the following courses:

IFSM	300	Information Systems in Organizations (3)
IFSM	302	Workplace Productivity (3)
IFSM	303	Human Factors in Information Systems (3)
IFSM	320	Office Automation (3)

Computer Graphics and Design

The computer graphics and design certificate program 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. To earn the certificate, students must complete six courses (four required and two elective), for a total of 18 semester hours.

Program Courses

Required Courses

Students must take the following courses:

ARTT	250	Elements of Commercial Design (3)
ARTT	354	Elements of Computer Graphics (3)
ARTT	479	Advanced Computer Graphics (3)
CMST	386	Internet: An Advanced Guide (3)

Supporting Electives

Students must take two of the following courses:

CMST	310	Desktop Publishing (3)
CMST	311	Advanced Desktop Publishing (3)
CMST	398J	Programming with JavaScript (3)
CMST	450	Web Design Methodology and Technology (3)
COMM	493	Graphics/Text Integration (3)

Customer Service Communications

The certificate program in customer service communications combines courses in communications and customer service with technological skills to prepare students for careers with management potential in such technology-related customer service areas as marketing, testing, planning, training, and customer assistance. Emphasis is on applying continuous improvement principles to communication between the customer and the organization and the ability to communicate technical information to nontechnical audiences. To earn the certificate, students must complete six required courses, for a total of 18 semester hours.

Note: Courses assume some basic knowledge of computers. Students without previous computer experience should first take CMST 103 Introduction to Microcomputer Software or IFSM 201 Introduction to Computer-Based Systems. Students with no work experience should take BMGT 110 Introduction to Business and Management.

Program Courses

Students must take the following courses:

CMST	385	Internet: A Practical Guide (3)
COMM	393/393X	Technical Writing (3)
IFSM	303	Human Factors in Information Systems (3)
MRKT	395	Customer Service Management (3)
MRKT	396	Customer Consultation and Needs Analysis (3)
SPCH	397	Organizational Presentations (3)

Customer Service Management

The customer service management certificate program 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. To earn the certificate, students must complete seven courses (six required and one elective), for a total of at least 19 semester hours.

Program Courses

Required Courses

Students must take the following courses:

BMGT	484	Managing Teams in Organizations (3)
BMGT	487	Project Management I (3)
BMGT	488	Project Management II (3)
COMM	495	Seminar in Workplace Communication (3)
MRKT	395	Customer Service Management (3)
MRKT	396	Customer Consultation and Needs Analysis (3)

Supporting Elective

Students must take one of the following courses:

BMGT	317	Problem Solving for Managers (3)
HRMN	363	Negotiation Strategies (3)
HRMN	365	Conflict Management in Organizations (3)
MRKT	310	Marketing Principles and Organization (3)
MRKT	318	Exploring Internet Marketing (1)
MRKT	457	Using Web-Enhanced Marketing Techniques (3)
PSYC	308A	Creative Problem Solving (1)

Database Design and Implementation

The certificate program 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. To earn the certificate, students must complete six courses (five required and one elective), for a total of 18 semester hours.

Program Courses

Required Courses

Students must take the following courses:

CMIS	160	Discrete Mathematics for Computing (3)
CMIS	320	Relational Databases (3)
CMIS	420	Advanced Relational Databases (3)
CMIS	498B	Web Database Development (3)
IFSM	446	Java-Based Information Systems Applications (3)

Supporting Elective

Students must take one of the following courses:

CMIS	375	Programming in Perl (3)
CMST	385	Internet: A Practical Guide (3)

Database Management

The database management certificate program 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. Elective courses include database mining and the systems analysis required to begin developing the IT infrastructure in a business environment. The certificate is awarded to students who successfully complete six courses (one introductory, three required, and two elective), for a total of 18 semester hours.

Program Courses

Introductory Course

Students must take one of the following courses. (Previous workplace experience with C, C++, Visual Basic, Ada, COBOL, or another high-level language may be substituted.)

CMIS	102	Introduction to Problem Solving and Algorithm Design (3)
CMST	306	Introduction to Visual Basic .NET Programming (3)

Required Courses

Students must take the following courses:

IFSM	410	Database Concepts (3)
IFSM	411	SQL (3)
IFSM	420	Advanced Database Concepts (3)

Supporting Electives

To complete 18 semester hours of credit, students must take at least two of the following courses:

CMIS	498B	Web Database Development (3)
CMIT	361	Developing PL/SQL Applications (3)
IFSM	304	Ethics in the Information Age (3)
IFSM	461	Systems Analysis and Design (3)

Desktop Publishing

The desktop publishing certificate program is designed for entry-level personnel whose goal is to become proficient using popular software programs in desktop publishing. The certificate is awarded to students who successfully complete six courses (four required and two elective), for a total of 18 semester hours.

Program Courses

Required Courses

Students must take the following courses:

CMST	310	Desktop Publishing (3)
ARTT	354	Elements of Computer Graphics (3)
COMM	493	Graphics/Text Integration (3)
CMST	311	Advanced Desktop Publishing (3)

Supporting Electives

Students must take two of the following courses:

CMST	103	Introduction to Microcomputer Software (3)
IFSM	201	Introduction to Computer-Based Systems (3)
COMM	491	Technical Editing (3)
ENGL	278F	Introduction to Principles of Text Editing (3)

E-Commerce for IT Professionals

The certificate program in e-commerce for IT professionals offers an overview of information systems, their role in organizations, and the technological, political, economic, and market forces related to electronic commerce. Major topics covered include requirements for hardware and the telecommunication infrastructure, consumer behavior, supply chain management, public policy, and legal, ethical, and societal issues. The certificate is awarded to students who successfully complete six courses (four required and two elective), for a total of 18 semester hours.

Program Courses

Required Courses

Students must take the following courses:

IFSM	300	Information Systems in Organizations (3)
IFSM	435	Information Security and E-Commerce (3)
IFSM	450	Telecommunication Systems in Management (3)
IFSM	455	IT Infrastructure of E-Commerce (3)

Supporting Electives

Students must take two of the following courses:

BMGT	411	Business Performance (3)
CMIS	498B	Web Database Development (3)
IFSM	304	Ethics in the Information Age (3)
IFSM	446	Java-Based Information Systems Applications (3)

E-Commerce in Small Business

The e-commerce in small business certificate program 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. To earn the certificate, students must complete seven required courses, for a total of 19 semester hours.

Program Courses

Students must take the following courses:

BMGT	304	Managing E-Commerce in Organizations (3)
BMGT	330	Entrepreneurship and New Venture Planning (3)
BMGT	339	Government and Business Contracting (3)
IFSM	300	Information Systems in Organizations (3)
MRKT	310	Marketing Principles and Organization (3)
MRKT	318	Exploring Internet Marketing (1)
MRKT	395	Customer Service Management (3)

E-Commerce Management

The e-commerce management certificate program 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. To earn the certificate, students must complete six courses (four required and two elective), for a total of at least 16 semester hours.

Program Courses

Required Courses

Students must take the following courses:

BMGT	304	Managing E-Commerce in Organizations (3)
BMGT	491	Exploring the Future (3)
IFSM	300	Information Systems in Organizations (3)
MRKT	395	Customer Service Management (3)

Supporting Electives

Students must take two of the following courses:

BMGT	411	Business Performance (3)
BMGT	412	Business Evaluation and Reengineering (3)
BMGT	487	Project Management I (3)
BMGT	488	Project Management II (3)
MRKT	318	Exploring Internet Marketing (1)

Environmental and Occupational Health and Safety Management

The certificate program 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. The certificate is awarded to students who successfully complete six courses, for a total of 18 semester hours.

Program Courses

Students must take the following courses:

ENMT	303	Environmental Regulations and Policy (3)
ENMT	305	Hazardous Materials Toxicology (3)
ENMT	310	Emergency Planning and Operations Management (3)
ENMT	320	Environmental and Occupational Health and Safety Management (3)
ENMT	340	Environmental Technology (3)
ENMT	390	Environmental Risk Assessment (3)

Financial Management

The financial management certificate program 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. To earn the certificate, students must complete six courses (five required and one elective), for a total of 18 semester hours.

Program Courses

Required Courses

Students must take one of the following finance courses:

BMGT	340	Business Finance (3)
BMGT	341	Finance for the Nonfinancial Manager (3)

Students must take the following courses:

BMGT	343	Investments (3)
BMGT	346	Risk Management (3)
BMGT	440	Financial Management (3)
BMGT	446	International Finance (3)

Supporting Elective

Students must take one of the following courses:

ACCT	301	Accounting for Nonaccounting Managers (3)
BMGT	342	Fundamentals of Building Wealth (3)
BMGT	345	Property and Liability Insurance (3)
BMGT	347	Life Insurance (3)
BMGT	443	Security Analysis and Valuation (3)
BMGT	444	Futures Contracts and Options (3)
BMGT	445	Commercial Bank Management (3)
BMGT	498Q	Financial Analysis (3)

Gerontology

The gerontology certificate program 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. The certificate includes two options: one that helps students seeking a bachelor's degree to integrate gerontology knowledge with knowledge in their major area of academic study and one that is vocationally oriented for students not seeking a higher education degree. 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). To earn this certificate, students must complete six or more courses for a total of 21 semester hours.

Program Courses

Required Courses

Students must take the following courses:

GERO	100	Introduction to Gerontology (3)
GERO	331	Sociology of Aging (3)

Students must take one of the following courses on aging and psychology:

GERO	220	Psychological Aspects of Aging (3)
PSYC	357	Psychology of Adulthood and Aging (3)

Students must take one of the following courses on biology and aging:

BIOL	307	The Biology of Aging (3)
GERO	302	Health and Aging (3)

Students who are enrolled in a bachelor's degree program must take the following course:

GERO	443	Making Gerontology Relevant to Other Disciplines (3)

Students who are not enrolled in a bachelor's degree program must take the following course:

GERO	306	Programs, Services, and Policies (3)

Practicum Experience

Students must complete 6 semester hours in internship experience via one of the following options:

GERO	486A	Internship in Gerontology Through Co-op (3) (Taken twice to earn a total of 6 credits)
GERO	486B	Internship in Gerontology Through Co-op (6)

Human Resource Management

The human resource management certificate program 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. To earn the certificate, students must complete six courses (four required and two elective), for a total of 18 semester hours.

Program Courses

Required Courses

Students must take the following courses:

BMGT	364	Management and Organization Theory (3)
HRMN	300	Human Resource Management (3)
HRMN	400	Human Resource Management: Analysis and Problems (3)

Students must take one of the following courses:

HRMN	362	Labor Relations (3)
HRMN	365	Conflict Management in Organizations (3)

Supporting Electives

Students must take two of the following courses:

BMGT	391	Motivation, Performance, and Productivity (3)
BMGT	464	Organizational Behavior (3)
BMGT	465	Organization Development and Change (3)
BMGT	484	Managing Teams in Organizations (3)
HRMN	367	Organizational Culture (3)
HRMN	390	Contemporary Compensation Management (3)
HRMN	406	Employee Training and Development (3)
HRMN	463	Public-Sector Labor Relations (3)
HRMN	490	International Human Resource Management (3)
HRMN	494	Strategic Human Resource Management (3)

Information Management

The information management certificate program 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. The certificate is awarded to students who successfully complete a minimum of six courses (one introductory, three required, and two elective), for a total of 18 semester hours.

Program Courses

Introductory Course

Students must take one of the following courses. (Previous workplace experience with C, C++, Visual Basic, Ada, COBOL, or another high-level language may be substituted.)

CMIS	102	Introduction to Problem Solving and Algorithm Design (3)
CMST	306	Introducing to Visual Basic .NET Programming (3)

Required Courses

Students must take the following courses:

IFSM	300	Information Systems in Organizations (3)
IFSM	410	Database Concepts (3)
IFSM	461	Systems Analysis and Design (3)

Supporting Electives

Students must take at least one of the following courses:

IFSM	302	Workplace Productivity (3)
IFSM	303	Human Factors in Information Systems (3)
IFSM	304	Ethics in the Information Age (3)
IFSM	390	Multimedia Design and Evaluation for Information Systems Managers (3)

Students must take at least one of the following courses:

IFSM	420	Advanced Database Concepts (3)
IFSM	438	Project Management (3)
IFSM	455	IT Infrastructure of E-Commerce (3)
IFSM	466	Object-Oriented Systems Development (3)

Information Security

The information security certificate program is designed to help computer network and IT professionals improve their security knowledge base and/or practitioner experience. Students examine the scope of catastrophic damages that terrorist attacks to information systems could cause and learn ways of protecting this critical information infrastructure and the services it provides. Causes, limitations, and implications of cyber terrorism and computer crime are addressed in an organizational context and the e-commerce environment. Students must complete six courses (four required and two elective), for a total of 18 semester hours to earn the certificate.

Program Courses

Required Courses

Students must take the following courses:

IFSM	430	Information Systems and Security (3)
IFSM	432	Disaster Recovery Planning (3)
IFSM	450	Telecommunication Systems in Management (3)

Students must take one of the following courses:

GVPT	399H	Counterterrorism (3)
HIST	319A	History of Terrorism (3)

Supporting Electives

Students must take two of the following courses:

CCJS	445	Introduction to Security Management (3)
CCJS	491	Institutional Security (3)
CCJS	496	Computer Crime and Security (3)
CMIT	320	Network Security (3)
IFSM	431	Policy Planning for Security Architects (3)
IFSM	433	Information Security Needs Assessment and Planning (3)
IFSM	454	Information Systems Security Mechanisms (3)
IFSM	457	Cyberterrorism (3)

Internet Technologies

The Internet technologies certificate program is designed to provide an introduction to Internet applications and their design and development. Hands-on experience is provided in several areas, with an emphasis on subject-related projects. A certificate is awarded to students who complete six courses (four required and two elective), for a total of 18 semester hours.

Program Courses

Required Courses

Students must take the following courses:

CMST	385	Internet: A Practical Guide (3)
CMST	386	Internet: An Advanced Guide (3)
CMST	430	Web Site Management (3)
CMST	450	Web Design Methodology and Technology (3)

Supporting Electives

Students must take two of the following courses:

CMIS	240/241	Data Structures and Abstraction (3)
CMIS	340	Programming in Java (3)
CMIS	345	Object-Oriented Design and Programming (3)
CMIS	375	Programming in Perl (3)
CMSC	480	Advanced Programming in Java (3)
CMST	398J	Programming with JavaScript (3)
CMST	498F	Web Application Development Using ColdFusion (3)
IFSM	390	Multimedia Design and Evaluation for Information Systems Managers (3)
IFSM	446	Java-Based Information Systems Applications (3)
IFSM	455	IT Infrastructure of E-Commerce (3)

Laboratory Management

The laboratory management certificate program helps prepare science professionals for roles as managers in research and development laboratories in the basic sciences. Students are awarded the certificate on successful completion of six courses (five required and one elective), for a total of at least 16 semester hours.

Program Courses

Required Courses

Students must take the following courses:

NSCI	301	Laboratory Organization and Management (3)
COMM	393/393X	Technical Writing (3)
IFSM	300	Information Systems in Organizations (3)
BMGT	487	Project Management I (3)
BMGT	488	Project Management II (3)

Supporting Elective

Students must take one of the following courses:

BEHS	398L	Introduction to Mediation (1)
BMGT	305	Knowledge Management (3)
HRMN	363	Negotiation Strategies (3)
PSYC	308A	Creative Problem Solving (1)
PSYC	308E	Cultivating Executive Skills (1)
PSYC	308H	Psychology of Motivating People at Work (1)
PSYC	308P	Multicultural Training in Organizations (1)
PSYC	309K	Managing Interpersonal Stress and Conflict (1)
SPCH	426	Negotiation and Conflict Management (3)
SPCH	482	Intercultural Communication (3)

Management Foundations

The management foundations certificate program 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. Students earn the certificate on completion of six courses (five required and one elective), for a total of 18 semester hours.

Program Courses

Required Courses

Students must take one of the following finance courses:

BMGT	340	Business Finance (3)
BMGT	341	Finance for the Nonfinancial Manager (3)

Students must take the following courses:

BMGT	364	Management and Organization Theory (3)
HRMN	300	Human Resource Management (3)
MRKT	310	Marketing Principles and Organization (3)
IFSM	300	Information Systems in Organizations (3)

Supporting Elective

Students must take one of the following courses:

BMGT	365	Leadership and Change (3)
BMGT	380	Business Law I (3)
BMGT	383	Planning and Control of Services (3)
BMGT	464	Organizational Behavior (3)
BMGT	496	Business Ethics (3)

Negotiation and Conflict Management

The interdisciplinary certificate program in negotiation and conflict management is designed for middle managers, customer service personnel, union stewards, work team representatives, contract managers, negotiators, and others whose jobs involve resolving differences between individuals and groups. They may assist in resolving differences in work teams, handle employee disputes, facilitate community discussions where broad differences are likely, assist in negotiating labor differences and contracts, or mediate disputes as an alternative to costly legal confrontations. The goal is to provide students with an understanding of group dynamics, problem solving, team building, and communication strategies that can lead to the effective resolution of conflicts. Certificates are awarded to students who successfully complete six courses (five required and one elective), for a total of 18 semester hours.

Program Courses

Required Courses

Students must take the following courses:

PSYC	345	Group Dynamics (3)
SPCH	420	Group Discussion and Decision Making (3)
SPCH	426	Negotiation and Conflict Management (3)
SPCH	470	Listening (3)
LGST	327	Alternative Dispute Resolution (3)

Supporting Elective

Students must take one of the following courses:

BMGT	317	Problem Solving for Managers (3)
BMGT	484	Managing Teams in Organizations (3)
HRMN	362	Labor Relations (3)
SPCH	472	Theories of Nonverbal Communication (3)
SPCH	482	Intercultural Communication (3)

Object-Oriented Design and Programming

The certificate program 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. To earn the certificate, students must complete six courses (three required and three elective), for a total of 18 semester hours.

Students should check the course descriptions to ensure that they have taken all prerequisites for each course.

Program Courses

Required Courses

Students must take the following courses:

CMIS	141	Introductory Programming (3)
CMIS	240/241	Data Structures and Abstraction (3)
CMIS	345	Object-Oriented Design and Programming (3)

Supporting Electives

Students must take three of the following courses:

CMIS	330	Software Engineering Principles and Techniques (3)
CMIS	340	Programming in Java (3)
CMIS	440	Advanced Programming in Java (3)
CMIS	455	Requirements Development (3)
CMIS	460	Software Design and Development (3)
CMIS	465	Software Verification and Validation (3)

Object-Oriented Programming Using Java

The certificate program 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. The certificate is awarded to students who successfully complete six required courses, for a total of 18 semester hours.

Program Courses

Students must take the following 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)

Paralegal Studies

The paralegal studies certificate program 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. A total of 60 semester hours is required for completion of the certificate, consisting of 36 semester hours of general college coursework and 24 semester hours of legal studies coursework.

Program Courses

General Education and Other Courses

Students must take 36 semester hours of college coursework, including 18 semester hours in general education courses (described on p. 22) covering at least three disciplines. ENGL 101, ENGL 101X, or the equivalent is required unless the student already has earned an associate's or a bachelor's degree before taking the first legal studies course.

All of these requirements may be fulfilled through transfer credit. Up to 30 semester hours in general education and other courses may be earned through credit by examination or prior-learning credit.

Required Courses

Students must take the following courses:

LGST	101	Introduction to Law (3)
LGST	200	Techniques of Legal Research (3)
LGST	201	Legal Writing (3)
LGST	204	Legal Ethics (3)

Supporting Electives

Students must take four or more of the following courses, including at least one procedure and legal skills course and one substantive law course, for a total of 12 semester hours:

Procedure and Legal Skills Courses

LGST	320	Criminal Law and Procedures (3)
LGST	322	Evidence (3)
LGST	325	Litigation (3)
LGST	327	Alternative Dispute Resolution (3)
LGST	330	Administrative Law (3)
LGST	360	Computer Applications in the Legal Environment (3)
LGST	363A	Computer-Assisted Litigation Support (3)
LGST	370	Advanced Legal Analysis (3)
LGST	398P	Administrative Advocacy (3)
LGST	400	Advanced Legal Research (3)
LGST	401	Advanced Legal Writing (3)
LGST	425	Advanced Civil Litigation (3)

Substantive Law Courses

LGST	312	Torts (3)
LGST	315	Domestic Relations (3)
LGST	316	Estates and Probate (3)
LGST	335	Elder Law (3)
LGST	340	Contract Law (3)
LGST	343	Real Estate Transactions (3)
LGST	411	Consumer Protection Law (3)
LGST	415	Intellectual Property (3)
LGST	420	Immigration Law (3)
LGST	431	Government Information Practices (3)
LGST	432	Environmental Law (3)
LGST	434	Government Contracts (3)
LGST	442	Business Organizations (3)
LGST	445	Employment Law (3)
LGST	450	Bankruptcy Law (3)

Up to 6 semester hours in special topic courses may be used to satisfy the substantive law or procedure and skill courses requirements. No more than 12 semester hours in required and elective legal studies courses may be earned through transfer or prior-learning credit.

Project Management for IT Professionals

The certificate program 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. The certificate is awarded to students who successfully complete six courses (four required and two elective), for a total of 18 semester hours.

Program Courses

Required Courses

Students must take the following 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)

Supporting Electives

Students must take two of the following courses:

IFSM	302	Workplace Productivity (3)
IFSM	303	Human Factors in Information Systems (3)
IFSM	304	Ethics in the Information Age (3)
IFSM	390	Multimedia Design and Evaluation for Information Systems Managers (3)
IFSM	430	Information Systems and Security (3)
IFSM	455	IT Infrastructure of E-Commerce (3)

Public Fire-Protection Management and Administration

The public fire-protection management and administration certificate program 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. To earn the certificate, students must complete six required courses, for a total of 18 semester hours.

Program Courses

Students must take the following courses:

FSCN	302	Advanced Fire Administration (3)
FSCN	304	Fire-Personnel Management (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)

Security Management

The security management certificate program provides management training relevant to modern security organizations. To earn the certificate, students must complete six required courses, for a total of 18 semester hours.

Program Courses

Students must take the following courses:

CCJS	357	Industrial and Retail Security Administration (3)
CCJS	430	Legal and Ethical Issues in Security Management (3)
CCJS	445	Introduction to Security Management (3)
CCJS	463	Security: A Management Perspective (3)
CCJS	486B	Internship in Criminal Justice Through Co-op (6)

Security Operations

The security operations certificate program provides training in current practice in commercial and government security. To earn the certificate, students must complete five required courses, for a total of 18 semester hours.

Program Courses

Students must take the following courses:

CCJS	496	Computer Crime and Security (3)
CCJS	491	Institutional Security (3)
CCJS	462	Protection of Business Assets (3)
GVPT	399H	Counterterrorism (3)
CCJS	486B	Internship in Criminal Justice Through Co-op (6)

Software Engineering

The software engineering certificate program 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. To earn the certificate, students must complete six required courses, for a total of 18 semester hours. (Two semesters of Java or C++ programming are prerequisites to the certificate coursework.)

Program Courses

Students must take the following 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)

Systems Approach to Fire Safety

The systems approach to fire safety certificate program 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. To earn the certificate, students must complete six required courses, for a total of 18 semester hours.

Program Courses

Students must take the following courses:

FSCN	303	Analytic Approaches to Public Fire Protection (3)
FSCN	306	Incendiary-Fire Analysis and Investigation (3)
FSCN	402	Fire-Related Human Behavior (3)
FSCN	411	Fire-Protection Structure and Systems Design (3)
FSCN	414	Fire Dynamics (3)
FSCN	415	Application of Fire Research (3)

Technology and Management

The technology and management certificate program 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. To earn the certificate, students must complete six courses (four required and two elective), for a total of 18 semester hours.

Program Courses

Required Courses

Students must take the following courses:

BMGT	317	Problem Solving for Managers (3)
BMGT	487	Project Management I (3)
BMGT	488	Project Management II (3)
CMST	385	Internet: A Practical Guide (3)

Supporting Electives

Students must take two of the following courses:

CMST	340	Computer Applications in Management (3)
CMST	386	Internet: An Advanced Guide (3)
IFSM	390	Multimedia Design and Evaluation for Information Systems Managers (3)
IFSM	461	Systems Analysis and Design (3)
IFSM	466	Object-Oriented Systems Development (3)

Terrorism and Institutions: Prevention and Response

The certificate program in terrorism and institutions: prevention and response 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. To earn the certificate, students must complete six courses (three required and three elective), for a total of 18 semester hours.

Program Courses

Required Courses

Students must take the following courses:

CCJS	491	Institutional Security (3)
GVPT	401A	International Political Terrorism (3)
GVPT	498X	Terrorism, Antiterrorism, and Prevention Laws (3)

Supporting Electives

Students must take one of the following courses on theories of institutional response:

GVPT	240	Political Ideologies (3)
GVPT	399H	Counterterrorism (3)
GVPT	401B	State Terrorism (3)
GVPT	401C	Urban Terrorism (3)
HIST	319A	History of Terrorism (3)
PSYC	386	Psychology of Stress (3)

Students must take two courses from the following areas on institutions and processes:

Security Management

CCJS	462	Protection of Business Assets (3)
CCJS	463	Security: A Management Perspective (3)

Environmental and Emergency Management, Fire Investigation, and Disaster Prevention

ENMT	305	Hazardous Materials Toxicology (3)
ENMT	310	Emergency Planning and Operations Management (3)
FSCN	306	Incendiary-Fire Analysis and Investigation (3)
FSCN	401	Disaster and Fire Defense Planning (3)

Computer Security, Safety, and Disaster Recovery

CCJS	496	Computer Crime and Security (3)
CMIS	335	Software Safety (3)
IFSM	432	Disaster Recovery Planning (3)

UNIX System Administration

The UNIX system administration certificate program is designed to provide an understanding of the UNIX operating system, its maintenance and security, and related theory and implementation issues. To earn the certificate, students must complete six required courses, for a total of 18 semester hours.

Program Courses

Students must take the following 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 System Administration (3)
CMIT	491	Advanced UNIX System Administration (3)

Visual Basic Programming

The Visual Basic programming certificate program is designed for students seeking entry-level programming positions. Hands-on experience using Visual Basic software is provided. A certificate is awarded to students completing six courses (four required and two elective) for a total of 18 semester hours.

Program Courses

Required Courses

Students must take the following courses:

CMIS	102	Introduction to Problem Solving and Algorithm Design (3)
CMST	306	Introduction to Visual Basic .NET Programming (3)
CMST	416	Advanced Visual Basic .NET Programming (3)

Students must take one of the following courses:

CMIS	310	Computer Systems and Architecture (3)
IFSM	310	Software and Hardware Concepts (3)

Supporting Electives

Students must take two of the following courses:

CMIS	240/241	Data Structures and Abstraction (3)
CMIS	340	Programming in Java (3)
CMIS	345	Object-Oriented Design and Programming (3)
CMSC	480	Advanced Programming in Java (3)
CMST	385	Internet: A Practical Guide (3)
CMST	386	Internet: An Advanced Guide (3)
IFSM	410	Database Concepts (3)
IFSM	420	Advanced Database Concepts (3)
IFSM	455	IT Infrastructure of E-Commerce (3)

Web Design

The Web design certificate program 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. The certificate is awarded to students who complete seven courses (five required and two elective), for a total of 21 semester hours.

Program Courses

Required Courses

Students must take the following courses:

CMST	385	Internet: A Practical Guide (3)
ARTT	250	Elements of Commercial Design (3)
CMST	386	Internet: An Advanced Guide (3)
ARTT	354	Elements of Computer Graphics (3)
CMST	450	Web Design Methodology and Technology (3)

Supporting Electives

Students must take two of the following courses:

ARTT	479	Advanced Computer Graphics (3)
CMIS	375	Programming in Perl (3)
IFSM	390	Multimedia Design and Evaluation for Information Systems Managers (3)
IFSM	446	Java-Based Information Systems Applications (3)
CMSC	480	Advanced Programming in Java (3)
CMST	398J	Programming with JavaScript (3)
CMST	498F	Web Application Development Using ColdFusion (3)

Web Programming

The Web programming certificate program 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. To earn the certificate, students must complete six courses (three required and three elective), for a total of 18 semester hours.

Students should check the course descriptions to ensure that they have taken all prerequisites for each course.

Program Courses

Required Courses

Students must take the following courses:

CMIS	141	Introductory Programming (3)
CMIS	375	Programming in Perl (3)
CMIS	475	Advanced Programming in Perl (3)

Supporting Electives

Students must take three of the following courses:

CMIS	320	Relational Databases (3)
CMIS	325	UNIX with Shell Programming (3)
CMST	385	Internet: A Practical Guide (3)
CMST	386	Internet: An Advanced Guide (3)
CMST	430	Web Site Management (3)
CMST	450	Web Design Methodology and Technology (3)
IFSM	455	IT Infrastructure of E-Commerce (3)

Women in Business

The women in business certificate program 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. To earn the certificate, students must complete six courses (four required and two elective), for a total of 18 semester hours.

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.

Program Courses

Required Courses

Students must take the following 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)

Supporting Electives

Students must take two of the following courses:

BMGT	330	Entrepreneurship and New Venture Planning (3)
BMGT	365	Leadership and Change (3)
BMGT	464	Organizational Behavior (3)
BMGT	484	Managing Teams in Organizations (3)
HRMN	367	Organizational Culture (3)
HRMN	406	Employee Training and Development (3)
HRMN	494	Strategic Human Resource Management (3)
PSYC	308J	Women Across Cultures (1)
SPCH	324	Communication and Gender (3)

Workplace Communications

The workplace communications certificate program 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. To earn the certificate, students must complete six required courses, for a total of 18 semester hours.

Program Courses

Students must take the following courses:

ENGL	101/101X	Introduction to Writing (3)
IFSM	201	Introduction to Computer-Based Systems (3)
CMST	310	Desktop Publishing (3)
COMM	495	Seminar in Workplace Communication (3)

Students must take one of the following writing courses:

COMM	393/393X	Technical Writing (3)
COMM	394/394X	Business Writing (3)

Students must take one of the following editing courses:

COMM	491	Technical Editing (3)
ENGL	278F	Introduction to Principles of Text Editing (3)

Workplace Spanish

The workplace Spanish certificate program combines language and professional study to give students a language foundation that will prepare them to work and communicate in a Spanish-speaking environment. To earn the certificate, students must complete four required courses, for a total of 16 semester hours, and pass an examination certifying proficiency in reading, writing, understanding, and speaking Spanish.

Program Courses

Required Courses

Students must take the following courses:

SPAN	101	Elementary Spanish I (4)
SPAN	102	Elementary Spanish II (4)
SPAN	201	Intermediate Spanish (4)
SPAN	318	Commercial and Workplace Spanish (4)

Proficiency Test

Students are required to take fee-based individualized tests in Spanish on reading, writing, listening, and speaking to demonstrate minimal working proficiency in each skill.

THE UNIT OF CREDIT

The unit of credit is the semester hour. One semester hour 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.

ENGL 101 Introduction to Writing is prerequisite to any higher-level course in English or communication studies. 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 (ENGL 101) at UMUC will be tested for placement. Placement testing is also required for certain courses in mathematics (p. 207). 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. 17). Advisors can explain the procedures. The goal is for students to earn college credit by successfully completing comprehensive tests of material normally covered in a semester-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 department or discipline. The number of semester hours 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.

<u>Discipline</u>	<u>Course Number</u>	<u>Course Title</u>	<u>Number of Semester Hours</u>

CHEM 103 General Chemistry I (4)

(For students majoring or minoring in a science; not appropriate for nonscience students fulfilling general education requirements. Fulfills the laboratory science requirement.)¹ Prerequisite: MATH 107 or MATH 115.² A study of the nature and composition of matter. Elements, inorganic compounds, and chemical calculations are covered.³ Students may receive credit for only one of the following courses: CHEM 102, CHEM 103, CHEM 105, CHEM 107, or CHEM 121.⁴

¹ *Explanatory material, if needed. May*

- Explain course sequence, purpose, or audience.
- Identify courses fulfilling general education requirements (listed on p. 22).
- 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." If students have not taken the specific prerequisite course listed or gained credit for that course by other means (such as course-challenge exams), they should consult an academic advisor or teacher to discuss whether they have the preparation necessary to perform well in the given course and to receive approval to waive a prerequisite.*

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.

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* Only a limited number of courses are available each semester in this discipline.

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. 33. Descriptions of other related curricula may be found on the following pages: business administration (p. 40), business supply chain management (p. 42), customer service management (p. 52), finance (p. 57), global business and public policy (p. 62), human resource management (p. 67), management studies (p. 74), marketing (p. 75), and strategic and entrepreneurial management (p. 84).

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)

(Formerly Income Tax Accounting.) 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)

Prerequisites: ACCT 221 and a course in information systems management. A study of the control aspects of accounting systems. Topics include setting standards; defining and imposing administrative, operational, and security controls; and judging the 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)

(Fulfills the civic responsibility perspective requirement.) 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)

(Formerly Advanced Tax Accounting.) 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. 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. 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)

(Fulfills the international perspective requirement.) Prerequisite: ACCT 311. A study of accounting in a multinational context. Topics include evolving international accounting and reporting standards, problems of foreign exchange and taxation, inter-company 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. 18). 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 semester hours in all internship coursework through Co-op toward a first bachelor's degree and up to 9 semester hours 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. 18). 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 semester hours in all internship coursework through Co-op toward a first bachelor's degree and up to 9 semester hours 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)

Prerequisites: ACCT 311, 321, and 422 and BMGT 364. An examination of accounting for innovative and emerging business transactions and financing. Previously acquired knowledge is drawn on to aid in thinking critically, analyzing information, and proposing solutions to complex accounting and financial issues. 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.

A description of the curriculum for the African American studies minor begins on p. 34.

AASP 201 Introduction to African American Studies (3)

(Fulfills the civic responsibility or historical perspective requirement.) 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 or forensics; and
- electives.

Descriptions of related curricula may be found on the following pages: Asian studies (p. 36), forensics (p. 60), humanities (p. 66), and social science (p. 81).

ANTH 241 Introduction to Archaeology (3)

An exploration of past human societies and cultures through archaeology, from the emergence of modern humans to the more recent historical past.

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)

(Formerly ANTH 340. Fulfills the international perspective requirement.) An interdisciplinary, intermediate-level exploration of contemporary and applied issues in physical anthropology and archaeology. Discussion covers evolution, human biological variation, and primate studies, as well as 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)

(Formerly ANTH 340. Fulfills the international perspective requirement.) 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 among 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 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 398B Medicine, Health, and Culture (3)

(Fulfills the international perspective requirement.) An examination of worldwide variations in medical practices and beliefs about health. Medical treatment and health care in the contemporary United States are also considered.

ANTH 398I Death and Dying: Cross-Cultural Perspectives (3)

An introduction to the anthropological study of death and dying, both in America and in other parts of the world. Theories of ritual and social praxis are examined as explanations of contemporary social behavior. Discussion also introduces the interdisciplinary science of thanatology and the counseling disciplines.

ANTH 401 Cultural Anthropology: Principles and Processes (3)

Prerequisite: ANTH 101, ANTH 102, or ANTH 344. An examination of the nature of human culture and its processes, both historical and functional. The approach is topical and theoretical rather than descriptive.

ANTH 402 Cultural Anthropology: World Ethnography (3)

Prerequisite: ANTH 101, ANTH 102, or ANTH 344. A descriptive survey of the culture of various areas of the world through an examination of representative societies.

ANTH 414 Ethnology of Africa (3)

(Fulfills the international or historical perspective requirement.)

Prerequisite(s): ANTH 101 and 102, or ANTH 344. A study of the native peoples and cultures of Africa.

ANTH 417 Peoples and Cultures of East Asia (3)

(Fulfills the civic responsibility or international perspective requirement.) Prerequisite: An introductory course in the social sciences or permission of the faculty member. A survey of the major sociopolitical systems of China, Korea, and Japan. Major anthropological questions are discussed.

ANTH 486A Internship in Anthropology Through Co-op (3)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 18). 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 semester hours in all internship coursework through Co-op toward a first bachelor's degree and up to 9 semester hours 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. 18). 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 semester hours in all internship coursework through Co-op toward a first bachelor's degree and up to 9 semester hours 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

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. 35.

A description of the curriculum for the humanities major and minor begins on p. 66.

ARTT 100 Two-Dimensional Art Fundamentals (3)

An exploration of the principles and elements of pictorial space through the manipulation and organization of various materials.

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 150 Introduction to Art Theory (3)

An examination of contemporary art, including a review of the dominant aesthetic, philosophic, and critical positions that inform the various works of art studied.

ARTT 152 Basics of Photography (3)

(Formerly PHOT 198.) An introduction to basic photographic procedures. Discussion covers the historical development of photography. Students may receive credit for only one of the following courses: ARTT 152 and PHOT 198.

ARTT 200 Elements of Three-Dimensional Form and Space (3)

(A continuation of ARTT 100.) Prerequisite: ARTT 100 or ARTT 110. Further study of pictorial space, focusing on problems that are more individually structured in terms of form, composition, and meaning.

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.

ARTT 220 Color in Composition (3)

Development of a student's work on an intermediate level. The principles of color in composition and pictorial construction are covered. Students may receive credit for only one of the following courses: ARTT 208C or ARTT 220.

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 298 Watercolors/Landscapes (3)

Practice in basic techniques and processes of painting nature and landscapes using watercolors.

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 350 Elements of Illustration (3)

An introduction to a variety of media and techniques used in illustration, that is, drawing and painting created for reproduction in books, advertisements, art prints, and periodicals.

ARTT 354 Elements of Computer Graphics (3)

Prerequisites: 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 468 Seminar: The Interrelationship Between Art and Art Theory (3)

An exploration of the relationship between a student's work and the theoretical context of contemporary art. May be repeated to a maximum of 6 credits when topics differ.

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. 18). 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 semester hours in all internship coursework through Co-op toward a first bachelor's degree and up to 9 semester hours 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. 18). 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 semester hours in all internship coursework through Co-op toward a first bachelor's degree and up to 9 semester hours 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 489 Special Problems in Studio Art (1–3)

May be repeated to a maximum of 6 credits.

ARTT 489E Introduction to Montage (1)

(No previous experience necessary.) An intensive, hands-on workshop exploring the many possibilities for using photocopies or other printed materials in making a composite or montage type of collage. Step-by-step procedures for making pictures are demonstrated. Some supplies and photocopies of research material in various subjects or themes are available.

ARTT 489F Drawing on Both Sides of the Brain: Eye/Hand Coordination (1)

An intensive drawing workshop focusing on the interrelationship between the left and right sides of the brain and between hand and eye. A variety of drawing approaches are used to provide insight into the difficulties encountered at all levels of experience, thereby freeing individual potential. Studio work is supplemented by demonstrations, visual examples, and use of live model and still-life elements. Aspects of works by Edwards, Nicholaides, and Bridgeman are examined.

ARTT 498 Directed Studies in Art (2–3)

(For advanced students.) May be repeated to a maximum of 6 credits when topics differ.

Art History

Courses in art history (designated ARTH) may be applied as appropriate (according to individual program requirements) toward

- the general education requirement in the arts and humanities;
- a minor in art history or Asian studies;
- a major or minor in humanities; and
- electives.

UMUC offers a limited number of ARTH courses each semester. To complete a minor, students may need to take courses at other institutions in the University System of Maryland or extend the time spent in 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. 36. Descriptions of other related curricula may be found on the following pages: Asian studies (p. 36) and humanities (p. 66).

ARTH 100 Introduction to Art (3)

A grounding in the basic tools of understanding visual art. Focus is on major approaches (such as techniques, subject matter, form, and evaluation). Discussion covers painting, sculpture, architecture, and the graphic arts.

ARTH 335 17th-Century Art in the Netherlands (3)

(Formerly ARTH 435. Fulfills the historical or international perspective requirement.) An exploration of painting from the Dutch Golden Age—the age of Rembrandt, Vermeer, Hals, Steen, and Leyster. History painting, still life, landscape, portraiture, and scenes of everyday life are studied. Discussion also covers issues of collecting art. Students may receive credit for only one of the following courses: ARTH 335 or ARTH 435.

ARTH 361 American Art Since 1876 (3)

(Fulfills the historical perspective requirement.) An overview of painting, sculpture, architecture, and the decorative arts in North America after 1876. Students may receive credit for only one of the following courses: ARTH 361, ARTH 460, or ARTH 477.

ARTH 370 History of World Art I (3)

(Fulfills the historical or international perspective requirement.) 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)

(Fulfills the historical or international perspective requirement.) 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 are examined.

ARTH 380 Masterpieces of Painting (3)

(Fulfills the historical or international perspective requirement.) 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 381 Masterpieces of Sculpture (3)

(Fulfills the historical or international perspective requirement.) Analysis of selected sculptural masterworks, 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 330 or ARTH 381.

ARTH 382 Masterpieces of Architecture (3)

(Formerly ARTH 340. Fulfills the historical or international perspective requirement.) Analysis of selected masterworks of architecture, 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 340 or ARTH 382.

ARTH 455 20th-Century Art to 1945 (3)

(Formerly ARTH 450. Fulfills the historical or international perspective requirement.) An overview of painting, sculpture, and architecture in Europe and America from the late 19th century to the end of World War II. Students may receive credit for only one of the following courses: ARTH 350, ARTH 450, or ARTH 455.

ARTH 456 20th-Century Art from 1945 (3)

(Fulfills the historical or international perspective requirement.)
An overview of painting, sculpture, and architecture in Europe and North America from 1945 to the present. Students may receive credit for only one of the following courses: ARTH 351, ARTH 451, or ARTH 456.

ARTH 486A Internship in Art History Through Co-op (3)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 18). 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 semester hours in all internship coursework through Co-op toward a first bachelor's degree and up to 9 semester hours 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. 18). 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 semester hours in all internship coursework through Co-op toward a first bachelor's degree and up to 9 semester hours 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 488D The Art of China: The UMUC Collection (1)

A gallery study tour of UMUC's Art of China collection, which includes scroll paintings, ceramics, and sculpture dating from the 16th to 20th centuries.

ARTH 489 Advanced Special Topics in Art History (3)

Advanced study of selected topics in art history. Assignments include advanced reading and research. Students may receive credit for a given topic in either ARTH 199 or ARTH 489 only once.

ARTH 489J Impressionism and Postimpressionism in Paris (3)

(Fulfills the historical or international perspective requirement.)
A study of the paintings of the impressionist and postimpressionist periods. Artists studied include impressionists Manet, Degas, Renoir, and Monet and postimpressionists Seurat, van Gogh, Gauguin, and Cézanne. Assignments include advanced reading and research. Students may receive credit for only one of the following courses: ARTH 199J or ARTH 489J.

ARTH 489M Van Gogh: Life and Work (3)

(Fulfills the historical or international perspective requirement.)
An introduction to modern art, focusing on Vincent van Gogh and his influence on modern painting. How van Gogh's experiments with color and form opened the door to a new era is explored. His influence on fauvism, German expressionism, abstract expressionism, neo-expressionism, and painters like Matisse, Kandinsky, and Jawlensky is also examined. Assignments include advanced reading and research. Students may receive credit for only one of the following courses: ARTH 199M or ARTH 489M.

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 semester 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 in 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. 36. A description of the curriculum for the humanities major and minor begins on p. 66.

ASTD 150 Introduction to Asian Studies I (3)

(The first course in the two-course sequence ASTD 150–160. Fulfills the civic responsibility or international perspective requirement, and the general education requirements in the arts and humanities or the behavioral and 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 civic responsibility or international perspective requirement, and the general education requirements in the arts and humanities or the behavioral and 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 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 485 Great Issues in Asian Studies (3)

(Fulfills the international perspective requirement.) Prerequisite: 9 credits in Asian studies or Asian studies–related coursework. A comparative study of the broad issue of modernization in Asian nations. Previous study about Asia is integrated and complemented.

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.

A description of the curriculum for the natural science minor begins on p. 79.

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. 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.

ASTR 486A Internship in Astronomy Through Co-op (3)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 18). An opportunity to combine academic theory with new, career-related experience in astronomy. 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 astronomy and that continues to advance application of academic theory in the workplace. Students may earn up to 15 semester hours in all internship coursework through Co-op toward a first bachelor's degree and up to 9 semester hours 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).

ASTR 486B Internship in Astronomy Through Co-op (6)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 18). An opportunity to combine academic theory with new, career-related experience in astronomy. 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 astronomy and that continues to advance application of academic theory in the workplace. Students may earn up to 15 semester hours in all internship coursework through Co-op toward a first bachelor's degree and up to 9 semester hours 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).

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 Asian studies, gerontology, or women's studies; and
- electives.

A description of the curriculum for the social science major begins on p. 81. Descriptions of other related curricula may be found on the following pages: Asian studies (p. 36), gerontology (p. 62), and women's studies (p. 85).

Most BEHS courses require extensive writing. Students should complete a writing course (such as COMM 390, 393, 393X, 394, and 394X and ENGL 101, 101X, 391, and 391X) or have equivalent writing experience before enrolling.

BEHS 210 Introduction to Social and Behavioral Science (3)

(Fulfills the historical perspective requirement.) 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: BEHS 201 or BEHS 210.

BEHS 325 Cultural Perspectives of the Middle East (3)

(Fulfills the international perspective requirement.) An interdisciplinary study of the cultural and social background of the peoples of the Middle East (including North Africa, the Eastern Mediterranean, and the Persian Gulf nations). Discussion addresses the background of the land and its people, ethnicities, and religions and the historical roots of current political situations. Analysis emphasizes the diversity and shared traditions of the region. Students may receive credit for only one of the following courses: BEHS 325, BEHS 336, or BEHS 498C.

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 361 Global Environmental Change (6)

(Also listed as HUMN 360 and NSCI 361. Yields 3 natural science credits and either 3 social science credits or 3 humanities credits. Fulfills the civic responsibility or international perspective requirement.) An in-depth examination of environmental changes that many believe are caused by human adaptations to Earth's natural resources and the possible effects on both the global biosphere and the human condition. Scientific and social issues are explored through various questions: Is global warming really happening? Will sea levels rise? What are the consequences of massive deforestation? What can be done when there is so much scientific uncertainty and global social diversity? The concept of sustainability, as it applies to human interactions with the environment, is emphasized. Students may receive credit for only one of the following courses: BEHS 361, GNSC 361, HUMN 360, or NSCI 361.

BEHS 364 Alcohol in American Society (6)

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 children, women, families, the workplace, and public safety are explored. Current research and trends in the treatment of alcoholism (including prevention, assessment, and intervention) are analyzed.

BEHS 383 Humor in American Society (6)

An interdisciplinary examination of humor in everyday life. Topics include the historical development of humor in the United States; the effects of the surrounding culture on the substance and function of humorous materials; the various types of humor and societal taboos; humor in literature, cinema, radio, television, and politics; the relationship of humor to social change; the social function of cartoons; and humor in other societies as well as in the United States. Sociological, psychological, political, and anthropological perspectives are presented.

BEHS 398L Introduction to Mediation (1)

An overview of the use of mediation skills in various settings, with an emphasis on interpersonal relationships and communication. Mediation skills are considered with regard to the workplace (e.g., disputes between co-workers and between labor and management) and family (e.g., familial conflict and divorce). The broad range of disputes requiring mediation in the public school setting is also explored. Students may receive credit for only one of the following courses: BEHS 398L or SPCH 426.

BEHS 398M Polar Explorations (3)

An introduction to the history of Arctic and Antarctic exploration. The national, scientific, and personal issues that drove explorers into the frozen (but not lifeless) wilderness to live in extreme environments are explored. Discussion covers heroism, sacrifice, compassion, and leadership in the face of the unknown and daunting odds. The words of the explorers themselves are used to analyze the characteristics of those who returned and those who did not.

BEHS 398N Reconnecting with Nature (3)

An examination of humankind's disconnection from nature in today's highly technological age. Topics include the social forces that have fostered this separation and the effect that such separation has on individuals and society. Experiential nature-based activities are used to explore the natural and beneficial bond between humankind and nature.

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 and Social Sciences Through Co-op (3)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 18). 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 semester hours in all internship coursework through Co-op toward a first bachelor's degree and up to 9 semester hours 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 and Social Sciences Through Co-op (6)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 18). 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 semester hours in all internship coursework through Co-op toward a first bachelor's degree and up to 9 semester hours 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).

Biological Science

Courses in biological science (designated BSCI) may be applied as appropriate (according to individual program requirements) toward

- the general education requirement in the biological and physical sciences;
- a minor in biology, forensics, microbiology, or natural science; and
- electives (including related requirements for the environmental management major).

A description of the curriculum for the biology minor begins on p. 38. Descriptions of related curricula may be found on the following pages: environmental management (p. 55), forensics (p. 60), microbiology (p. 78), and natural science (p. 79).

BSCI 105 Principles of Biology I (4)

(For students majoring or minoring in a science; not appropriate for nonscience students fulfilling general education requirements. Fulfills the laboratory science requirement.) Prerequisite: MATH 107 or MATH 115. An introduction to the basic principles of biology, with special emphasis on cellular and molecular biology. Students may receive credit for only one of the following courses: BIOL 101, BIOL 105, BOTN 101, BSCI 105, or ZOOL 101.

BSCI 222 Principles of Genetics (4)

(For students majoring or minoring in a science; not appropriate for nonscience students fulfilling general education requirements. Does not fulfill the laboratory science requirement.) Prerequisites: BIOL 105 (or BSCI 105) and CHEM 113. A discussion of the principles and mechanisms of heredity and gene expression, including plant, animal, and microbial organisms. Students may receive credit for only one of the following courses: BIOL 220, BIOL 222, or BSCI 222.

BSCI 223 General Microbiology (4)

(For students majoring or minoring in a science; not appropriate for nonscience students fulfilling general education requirements. Fulfills the laboratory science requirement.) Prerequisite: BIOL 105 or BSCI 105. An investigation of fundamental concepts in morphology, physiology, genetics, immunology, ecology, and pathogenic microbiology. Applications of microbiology to medicine, the food industry, and biotechnology are considered. Students may receive credit for only one of the following courses: BSCI 223, MICB 200, or MICB 338A.

BSCI 230 Cell Biology and Physiology (4)

(For students majoring or minoring in a science; not appropriate for nonscience students fulfilling general education requirements. Fulfills the laboratory science requirement.) Prerequisites: BSCI 105 and CHEM 103. A study of the biochemical and physiological mechanisms underlying cellular function. Topics include the properties of cells that make life possible and the mechanisms by which cells provide energy, reproduce, and regulate and integrate with each other and their environment. Students may receive credit for only one of the following courses: BSCI 230 or ZOOL 211.

BSCI 424 Pathogenic Microbiology (4)

(For students majoring or minoring in a science; not appropriate for nonscience students fulfilling general education requirements. Fulfills the laboratory science requirement.) Prerequisite: BSCI 223 or BIOL 230. A study of the role of bacteria and fungi in the diseases of humans. Emphasis is on the differentiation and culture of microorganisms; types of disease; modes of disease transmission; and prophylactic, therapeutic, and epidemiological aspects. Students may receive credit for only one of the following courses: BIOL 437, BSCI 424, or MICB 440.

BSCI 436 Drug Action and Design (3)

(For students majoring or minoring in a science; not appropriate for nonscience students fulfilling general education requirements. Does not fulfill the laboratory science requirement.) Prerequisite: CHEM 243. A discussion of the introductory principles of pharmacology. Emphasis is on “magic bullets,” novel therapies, and drug design. Students who have completed PCOL 450A or PCOL 450B may not receive credit for BSCI 436.

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 minor in biology, forensics, microbiology, or natural science;
- a major in biotechnology;
- a certificate in Bio-Security; and
- electives (including related requirements for the environmental management major).

A description of the curriculum for the biology minor begins on p. 38. Descriptions of related curricula may be found on the following pages: biotechnology (p. 38), environmental management (p. 55), forensics (p. 60), microbiology (p. 78), and natural science (p. 79).

Students may receive credit for only one of the following: BIOL 332 or MICB 322.

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. Consideration is given to current events that involve biological systems. 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 160 Human Biology (3)

(Formerly GNSC 160. 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)

(Fulfills the civic responsibility perspective requirement.) A survey of ecological principles as they apply to the interrelated dilemmas of sustainability. Topics include overpopulation, pollution, overconsumption 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, multispecies 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 217 Environment and Ecosystems (3)

Prerequisite: NSCI 100 or PHYS 121. An overview of the scientific principles governing ecosystems, particularly as they relate to the environmental consequences of resource development and industrial processes. Topics are drawn from the fields of geology, hydrology, meteorology, and ecology. The historical development of environmental management issues and approaches is introduced. Principles of environmental management at the local, regional, and global levels are also covered.

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)

Prerequisites: BIOL 105 (or BSCI 105) and 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 105, BIOL 161, or BSCI 105. 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 humans), the relationship between ontogeny and phylogeny, and the reciprocal relationships of evolution to the environment (including human culture).

BIOL 240 Elements of Biochemistry (3)

(Formerly BCHM 261. Not open to students who have successfully completed BCHM 461, BCHM 462, BIOL 440, or BIOL 441.) Prerequisite: CHEM 104, CHEM 233, or CHEM 235. Recommended: One course in biology or zoology emphasizing the molecular and cellular basis of life. An overview of the basic chemistry and metabolism of most molecules that have biological importance. Students may receive credit for only one of the following courses: BCHM 261 or BIOL 240.

BIOL 301 Human Health and Disease (3)

(For students not majoring in a science) 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 304 The Biology of Cancer (3)

(For students not majoring in a science.) 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 not majoring in a science.) 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)

(Formerly BIOL 398V. For students not majoring or minoring in a science.) 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 330 Applied Microbiology (4)

(Formerly MICB 310. Fulfills the laboratory science requirement.) Prerequisite: BIOL 230 or BSCI 223. A discussion of the ways microorganisms and microbiological principles are involved in industrial processes. The control of microorganisms, industrial fermentations, antibiotics, and sterilization are addressed. Students may receive credit for only one of the following courses: BIOL 330 or MICB 310.

BIOL 332 Microbiology and the Public (3)

(Formerly MICB 322. For students not majoring or minoring in a science.) An overview of the sociopolitical effects of microbial phenomena. The roles of epidemic disease, water pollution, immunization requirements, and solid-waste disposal in the current social and political problems of the United States are assessed. Students may receive credit for only one of the following: BIOL 332 or MICB 322.

BIOL 334 Vaccines and Society (3)

(Formerly BIOL 398R. For students not majoring in a science.) 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. Topics include the use of vaccines in disease prevention, epidemics, emerging infectious agents, and biological terrorism. Topics are considered from a historical perspective, as well as in the context of current vaccine development research. Students may receive credit for only one of the following courses: BIOL 334, BIOL 335, BIOL 398R, GNSC 398H, or MICB 388D.

BIOL 335 Vaccine Development (3)

(Formerly MICB 388D. For students majoring or minoring in a science.) Prerequisite: BIOL 230 or BSCI 223. A discussion of the basic principles of vaccine development, including bacterial and viral vaccines. Whole organism and subunit vaccines, as well as the use of adjuvants and animal models, are discussed. 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)

(Formerly BIOL 398S.) Prerequisite: BIOL 101, BIOL 105, BIOL 230, BSCI 105, or BSCI 223. 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 353 Microbial Genetics (3)

(Formerly MICB 380.) Prerequisite: BIOL 230 or BSCI 223. An examination of genetic systems in bacteria and bacterial viruses. Topics include bacterial and viral gene structure and function, fundamentals of mutation, regulation of gene expression in prokaryotes, mobile genetic elements, and transmission genetics. Emphasis is on the methods of genetic analysis used to study biological function, including both classical and molecular approaches. Students may receive credit for only one of the following courses: BIOL 353 or MICB 380.

BIOL 356 Molecular Biology Laboratory (4)

(For students majoring or minoring in a science. Fulfills the laboratory science requirement.) Prerequisite: BIOL 222, BIOL 230, BIOL 350, or BSCI 223. 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)

(Formerly BIOL 398U.) 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)

(Formerly BIOL 398T.) Prerequisite: BIOL 101, BIOL 105, or BSCI 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 105, or BSCI 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 398C Regulation of Gene Expression (1)

Prerequisite: BIOL 101 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 398D The Ecology of Deep Sea Hydrothermal Vents (1)

A study of the trench ecosystem and the organisms inhabiting the oceans' deepest biological realm—home of the “black smokers” and the animals who live without benefit of sunlight and its associated photosynthetic activity. Topics include the geological, metabolic, and evolutionary significance of these remote regions; the methods used to study them (including the use of manned and unmanned submersibles); and the possible use of trenches as refuge during global extinction events.

BIOL 398F Extremeophiles (1)

A survey of microbes that thrive in extreme environments, including extremes in temperature, pH, hydration, and metal concentration. Topics include the utility of these organisms to industry and medicine and the possibility of life in outer space.

BIOL 398G Bacteria and Viruses (1)

(Formerly MICB 388A.) 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, or MICB 200.

BIOL 398I Biotechnology and Genetic Engineering (1)

(Science background not required.) An introduction to the basic principles and applications of biotechnology and genetic engineering to medicine, agriculture, and industry. Topics include gene therapy, cloning, the identification and isolation of genes involved in human health and disease, diagnostic and forensic testing, the human genome project, bioremediation, microbial and plant bioengineering, and bioinformatics. Students may receive credit for only one of the following courses: BIOL 398I or GNSC 398B.

BIOL 398K Stem Cells (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 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 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 420 Epidemiology and Public Health (2)

(Formerly MICB 420.) Prerequisite: BIOL 230, BIOL 398G, or BSCI 223. A history of epidemiology and its characteristic features. Topics include the role of vital statistics and the critical responsibilities of public health. Students may receive credit for only one of the following courses: BIOL 420 or MICB 420.

BIOL 422 Epidemiology of Emerging Infections (3)

(Formerly MICB 388E.) Prerequisite: BIOL 230, 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)

(Formerly MICB 470.) Prerequisite: BIOL 230, BIOL 240, or BSCI 223. 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)

(Formerly MICB 480.) Prerequisites: BIOL 230 (or BSCI 223) and CHEM 243. 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: BIOL 431 or MICB 480.

BIOL 434 General Virology (3)

(Formerly MICB 460. Students seeking to satisfy the laboratory science requirement should take BIOL 435). Prerequisite: BIOL 230 or BSCI 223. 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)

(Formerly MICB 461. Fulfills the laboratory science requirement.) Prerequisite: BIOL 230 or BSCI 223. 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)

(Formerly MICB 450. Fulfills the laboratory science requirement.) Prerequisite: BIOL 230 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. 18). 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 semester hours in all internship coursework through Co-op toward a first bachelor's degree and up to 9 semester hours 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. 18). 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 semester hours in all internship coursework through Co-op toward a first bachelor's degree and up to 9 semester hours 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, finance, global business and public policy, human resource 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. 40. Descriptions of other related curricula may be found on the following pages: business law and public policy (p. 41), business supply chain management (p. 42), customer service management (p. 52), finance (p. 57), global business and public policy (p. 62), human resource management (p. 67), international business management (p. 71), management studies (p. 74), marketing (p. 75), and strategic and entrepreneurial management (p. 84).

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.

BMGT 230 Business Statistics (3)

Prerequisite: 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, or STAT 200.

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: BMGT 230 or MATH 220. 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. An examination of women's evolving roles in the business world and the forces that have created change and opportunities. How organizational theory, human resource practices, industrialization, and information technology have created new paths for professional growth is explored. 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 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 Home-Based Business (1)

An introduction to the concept of the home-based business as a small business. Topics include the costs and benefits of operating a small, home-based business venture and the types of businesses that can be successfully operated from the home. Special considerations and laws that apply to home-based 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 327 Financial Analysis and Planning for Entrepreneurs (1)

A foundation in the principles of ratio analysis for owners (or would-be owners) of small businesses. Focus is on reading and interpreting financial statements. Methods of developing and integrating plans for enhancing profitability and performance are presented and explained. Students may receive credit for only one of the following courses: BMGT 327, BMGT 398D, MGMT 327, MGMT 398J, or SBUS 398A.

BMGT 330 Entrepreneurship and New Venture Planning (3)

Recommended: Familiarity with computers and business software. 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, MGMT 330, or SBUS 200.

BMGT 334 Managing New Ventures (3)

Prerequisite: Familiarity with new venture planning. Recommended: 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 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 or MGMT 334.

BMGT 336 Managing Strategic Venture Growth and Industry(3)

Prerequisite: Familiarity with the business functions and factors involved with planning and managing a new venture. Recommended: BMGT 330. A study of business ventures during the growth and maturity phases of development using an integrated approach to entrepreneurial management. Growth problems, major issues, and management strategies for businesses in the later stages of development are explored. Topics include budgeting and planning for continued growth; developing new products, features, and product enhancements; and identifying new sources of capital and expanding into other domestic and global markets. Discussion covers how to implement cost controls, reorganize to rekindle entrepreneurial intensity, encourage innovation, and make staffing changes to achieve growth, as well as issues of cultural diversity and the use of new technologies. Students may receive credit for only one of the following courses: BMGT 336 or MGMT 336.

BMGT 337 Building the Entrepreneurial Team (3)

Prerequisite: Familiarity with business functions and factors involved with planning, organizing, and managing a new venture. Recommended: BMGT 330, BMGT 334, or BMGT 336. An exploration of growing ventures that focuses on the development of the business and key personnel and includes entrepreneurial human resource and support issues, ethics, and accountability. The appropriateness of the form of the venture—partnership, joint venture, strategic alliance, or license—is examined. Topics include ways of controlling and minimizing conflicts in the team; recruiting, motivating, and retaining team members; ensuring the responsibility and accountability of team members; and managing the team. Functional responsibilities and relationships are also discussed. Analysis covers issues related to the organization's structure, protection of proprietary information, intellectual property assignment, location and performance of work, the evolving responsibility of the entrepreneur, negotiation with employees, and the multicultural employee base. Students may receive credit for only one of the following courses: BMGT 337 or MGMT 337.

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 340 Business Finance (3)

Prerequisites: ACCT 221 and BMGT 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, BMGT 341, MGMT 398D, or TMGT 320.

BMGT 341 Finance for the Nonfinancial Manager (3)

(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.) 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 340, BMGT 341, MGMT 398D, or TMGT 320.

BMGT 342 Fundamentals of Building Wealth (3)

(For students 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 or BMGT 388N.

BMGT 343 Investments (3)

Prerequisite: 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.

BMGT 345 Property and Liability Insurance (3)

Prerequisites: ACCT 221 and BMGT 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.

BMGT 346 Risk Management (3)

Prerequisites: ACCT 221 and BMGT 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.

BMGT 347 Life Insurance (3)

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.

BMGT 361 Health Management (3)

(Formerly HMG 320.) 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 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 HMG 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 Leadership and Change (3)

(Fulfills the civic responsibility perspective requirement.) 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.

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; and 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 367 Health Insurance Analysis (3)

(Formerly HMG 498D.) An analysis of major health insurance issues and a study of health insurance administration for various health care entities, including managed-care providers. Topics include coverage by Medicare, Medicaid, and other health insurance programs and relationships between health network practices and insurance companies. Health insurance planning and programming are examined from the perspective of both businesses and health services providers. Students may receive credit for only one of the following courses: BMGT 367 or HMG 498D.

BMGT 368 Managing Organizational Change (3)

Prerequisite: BMGT 364. Introduction to the dynamics of institutionalizing small- and large-scale organizational change efforts. The objective is to provide insight into the limitations of the concept of planned organizational change. The factors that inhibit change from occurring gracefully and the role that individual behavior, group behavior, organizational structure, and organizational culture have in the planned change process are explored. Students may receive credit for only one of the following courses: BMGT 368 or TMGT 350.

BMGT 369 Health Practice Management (3)

(Formerly HMG 498E.) 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 HMG 498E.

BMGT 372 Supply Chain and Logistics Management (3)

Prerequisite: BMGT 364. An examination of logistics and supply chain systems. Focus is on analyzing, designing, and implementing systems. Topics include supply chain management strategy, planning, and operations; the role of e-commerce; 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; industrial packaging; materials handling within warehouses; 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. Fulfills the civic responsibility perspective requirement.) 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. Fulfills the civic responsibility perspective requirement.) An in-depth 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. Fulfills the civic responsibility perspective requirement.) Prerequisite: BMGT 380. Further in-depth 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 383 Planning and Control of Services (3)

Prerequisites: BMGT 230 and 364. An overview of the operations of manufacturing and service enterprises, concentrating on production and operations management, planning, and control. Topics include demand forecasting, production/service planning and control, materials planning and control, and capacity planning. Case studies are used to analyze the manufacturing environment in terms of operational planning, use of teams, teamwork, and decision making to solve problems that commonly confront managers and supervisors. Fundamentals of the analytical method are introduced early to help solve problems in the design, operation, and control of systems. Students may receive credit only once under this course number and for only one of the following courses: BMGT 383, BMGT 385, MGMT 340, MGST 318, or TEMN 318.

BMGT 384 Managing for Quality (3)

(Not open to students who have previously taken MGST 398L, MGST 398M, or MGST 398N.) Prerequisites: BMGT 230 and 364. A survey of methods used to apply principles of total quality management (TQM) in various organizational settings to improve quality and productivity. Emphasis is on quality process, management issues in achieving quality, stabilizing quality, and improving quality. Topics include the evolution of TQM theory; TQM models, tools, and techniques; the development of TQM teams; the production of graphs and charts; strategies for meeting customer expectations; benchmarking; six sigma principles; and comparison of TQM applications. Spreadsheet and statistical software may be used to develop statistical process control charts and graphs. Students may receive credit for only one of the following courses: BMGT 384, BMGT 425, or MGMT 425.

BMGT 388B Virtual Management (3)

An overview of the key organizational and individual issues involved in technology-assisted organization and employee management, i.e., virtual or distance management. Discussion covers principles of distance management, technology, and dos and don'ts. Topics include gauging organization and employee readiness for technology-enabled communication and telecommuting, identifying appropriate job types and flexibility options, applying effective communication strategies and methods when utilizing computers and telecommunication technologies, and implementing and evaluating management procedures and policies in flexible organizations.

BMGT 388F Personal Financial Management (1)

(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 and planning for financial security and retirement) is encouraged, while an understanding 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.

BMGT 391 Motivation, Performance, and Productivity (3)

(Formerly HRMN 394.) 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)

(Fulfills the international perspective requirement.) Prerequisites: BMGT 110 (or at least two years of business and management experience) and ECON 203. 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, BMGT 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.) Prerequisite: ECON 203 or ECON 205. 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 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 Business Evaluation and Reengineering (3)

A survey of the techniques and methodologies used to determine whether business processes are operating successfully and how to reengineer them for efficiency, economy, productivity, and competitive advantage. Topics include identifying the goals and objectives of a business program, examining the use of specific research designs for collecting data, collecting and using data/information for analysis and evaluation, and recognizing the functions that statistics serve in evaluation processes. Review also covers technology and business process reengineering and some tools for business reengineering. Students may receive credit for only one of the following courses: BMGT 412 or TMGT 412.

BMGT 436 Managing Entrepreneurial Ventures (3)

Prerequisite: BMGT 330 or familiarity with the business functions and factors involved with planning and managing an entrepreneurial venture. 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) by entrepreneurs. 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, or MGMT 461.

BMGT 440 Financial Management (3)

Prerequisite: 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.

BMGT 443 Security Analysis and Valuation (3)

Prerequisite: 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.

BMGT 444 Futures Contracts and Options (3)

Prerequisite: 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.

BMGT 445 Commercial Bank Management (3)

Prerequisites: BMGT 340 and ECON 430. 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.

BMGT 446 International Finance (3)

(Fulfills the international perspective requirement.) Prerequisite: 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.

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 481 Management of Public Business Enterprises (3)

Conceptual, functional, and policy analysis of public business enterprises, including telecommunications, energy, transportation, and utility industries in the domestic and global environments. Focus is on salient management and strategic issues affecting business decisions.

BMGT 482 Business and Government (3)

(Fulfills the civic responsibility or international perspective requirement.) 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. 18). 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 semester hours in all internship coursework through Co-op toward a first bachelor's degree and up to 9 semester hours 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. 18). 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 semester hours in all internship coursework through Co-op toward a first bachelor's degree and up to 9 semester hours 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)

(Fulfills the international perspective requirement.) 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 30 semester hours.) Prerequisites: BMGT 340 and 364 and MRKT 310. An overview of general management and 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, HMGMT 430, MGMT 495, or TMGT 380.

BMGT 496 Business Ethics (3)

(Fulfills the civic responsibility perspective requirement.) 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.

BMGT 497 Implementing Business Strategy(3)

Prerequisites: ACCT 220 (or ACCT 301) and BMGT 364. A study of the implementation and management of business strategy. Focus is on linkages among and management of organizational, cross-departmental, and individual initiatives to execute strategies and achieve business objectives. Current performance is analyzed to determine how to develop process measures for customer service, growth, and profitability in setting targets for future performance. Students may receive credit for only one of the following courses: BMGT 497, BMGT 498M, or MGMT 498M.

BMGT 498J Legal Aspects of Technology Management (3)

(Fulfills the civic responsibility perspective requirement.) 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.

BMGT 498O The Global Manager and Public Policy (3)

(Fulfills the civic responsibility perspective requirement.) 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. Topics include 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 498O or MGMT 498O.

BMGT 498P International Business Law (3)

(Fulfills the civic responsibility or international perspective requirement.) 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.

BMGT 498Q Financial Analysis (3)

(For students with general business interests, as well as those majoring or minoring in accounting or finance.) Prerequisite: ACCT 221. An analysis and interpretation of financial statements directed at the decision-making needs of managers, stockholders, and creditors. Topics include assessment of business performance, projection of financial requirements, analysis of capital investment decisions and financing choices, risk assessment, and valuation.

BMGT 498R Multinational Management (3)

(Fulfills the international perspective requirement.) 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.

Career Planning

Courses in career planning (designated CAPL) may be applied toward

- electives

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.

Chemistry

Courses in chemistry (designated CHEM) 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;
- electives (including related requirements for the environmental management major).

A description of the curriculum for the natural science minor begins on p. 79. A description of the requirements for the environmental management major begins on p. 55.

CHEM 103 General Chemistry I (4)

(For students majoring or minoring in a science; not appropriate for nonscience students fulfilling general education requirements. Fulfills the laboratory science requirement.) Prerequisite: MATH 107 or MATH 115. A study of the nature and composition of matter. Elements, inorganic compounds, and chemical calculations are covered. Students may receive credit for only one of the following courses: CHEM 102, CHEM 103, CHEM 105, CHEM 107, or CHEM 121.

CHEM 113 General Chemistry II (4)

(For students majoring or minoring in a science; not appropriate for nonscience students fulfilling general education requirements. Fulfills the laboratory science requirement.) Prerequisite: CHEM 103 or CHEM 105. A study of kinetics; homogeneous, heterogeneous, and ionic equilibria; oxidation/reduction reactions; electrochemistry; and chemistry of the elements. Students may receive credit for only one of the following courses: CHEM 113 or CHEM 115.

CHEM 231 Organic Chemistry I (3)

(Formerly CHEM 233. Not open to students who have completed CHEM 233 or CHEM 237. For students majoring or minoring in a science; not appropriate for nonscience students fulfilling general education requirements. Fulfills the laboratory science requirement.) Prerequisite: CHEM 113, CHEM 115, or CHEM 135–136 with a grade of C or better. The chemistry of carbon: aliphatic compounds, aromatic compounds, stereochemistry, arenes, halides, alcohols, esters, and spectroscopy. Students may receive credit for only one of the following courses: CHEM 104, CHEM 231, CHEM 233, or CHEM 235.

CHEM 232 Organic Chemistry Laboratory I (3)

(Formerly CHEM 233. Not open to students who have completed CHEM 233 or CHEM 237. For students majoring or minoring in a science; not appropriate for nonscience students fulfilling general education requirements. Fulfills the laboratory science requirement.) Prerequisite: CHEM 113, CHEM 115, or CHEM 135–136 with a grade of C or better; corequisite: CHEM 231. Provides experience in developing some basic laboratory techniques, recrystallization, distillation, extraction, chromatography. Students may receive credit for only one of the following courses: CHEM 104, CHEM 231, CHEM 233, or CHEM 235.

CHEM 243 Organic Chemistry II (4)

(For students majoring or minoring in a science; not appropriate for nonscience students fulfilling general education requirements. Fulfills the laboratory science requirement. A continuation of CHEM 233.) Prerequisite: CHEM 233 with a grade of C or better. Further study of organic chemistry. Emphasis is on molecular structure, substitution reactions, carbonium ions, aromaticity, synthetic processes, and macromolecules. Students may receive credit for only one of the following courses: CHEM 243 or CHEM 245.

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 or minor in communication studies;
- a minor in journalism or speech communication;
- a certificate in Workplace Communications or various other areas; and
- electives.

COMM 390, 393, 393X, 394, and 394X (as well as ENGL 303, 391, and 391X and LGST 401) are designated as writing intensive and may be applied toward the general requirement in upper-level intensive writing.

COMM 293, 300, 380, 395, 400, 490, 491, 492, 493, 494, 495, and 496 may be applied toward the general education requirement in communications, but not toward the general education requirement in upper-level intensive writing.

Specific COMM courses may be recommended in relation to specific majors and minors. Students should check the descriptions of their curricula.

A description of the curriculum for the communication studies major and minor begins on p. 43. Descriptions of other related curricula may be found on the following pages: journalism (p. 72) and speech communication (p. 83).

COMM 293 Technical Report Writing (3)

(Formerly ENGL 293. Fulfills the general education requirement in communications.) Prerequisite: ENGL 101. An introduction to the process of technical writing. Discussion covers conducting audience and needs analyses; organizing and writing clear, precise, grammatically correct technical prose; and producing a variety of routine technical reports and correspondence. Students may receive credit for only one of the following courses: COMM 293 or ENGL 293.

COMM 300 Communication Theory (3)

(Fulfills the general education requirement in communications, but is not a writing course.) Prerequisite: ENGL 101. An introduction to the study of communication theory. The basic theories of human communication and their applications in the contexts of interpersonal, small-group, organizational, public, and intra/intercultural communication are analyzed. The relationship between communication theory, research, and practice is explored. Topics range from communication as a way of “knowing” to contemporary issues associated with computer-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 319C Copyright and Creativity: A Guide for Writers and Artists (1)

An introduction to the concepts and issues associated with current interpretation of intellectual property laws as they apply to the creative professions. Case studies in copyright and patent law are used to demonstrate how to protect creative work. Assignments may include a short paper and a final examination.

COMM 379A Critical Perspectives in Mass Communications (3)

An in-depth examination of 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.

COMM 380 Language in Social Contexts (3)

(Fulfills the general education requirement in communications, but is not a writing course. Fulfills the historical or international perspective requirement.) Prerequisite: ENGL 101. 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 390 Writing for Managers (3)

(Fulfills the general education requirement in intensive upper-level writing.) Prerequisite: ENGL 101. 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 guiding 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 or HUMN 390.

COMM 393 Technical Writing (3)

(Students for whom English is a second language should consider taking COMM 393X instead. Fulfills the general education requirement in intensive upper-level writing.) Prerequisite: ENGL 101. The writing of technical 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, 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, or ENGL 393X.

COMM 393X Technical Writing (3)

(Enrollment restricted to students for whom English is a second language. Fulfills the general education requirement in intensive upper-level writing.) Prerequisite: ENGL 101X. The writing of technical 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, 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, or ENGL 393X.

COMM 394 Business Writing (3)

(Students for whom English is a second language should consider taking COMM 394X instead. Fulfills the general education requirement in intensive upper-level writing.) Prerequisite: ENGL 101. 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, or ENGL 394X.

COMM 394X Business Writing (3)

(Enrollment restricted to students for whom English is a second language. Fulfills the general education requirement in intensive upper-level writing.) Prerequisite: ENGL 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, or ENGL 394X.

COMM 400 Communication and the Law (3)

(Formerly JOUR 400. 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. 18). 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 semester hours in all internship coursework through Co-op toward a first bachelor's degree and up to 9 semester hours 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. 18). 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 semester hours in all internship coursework through Co-op toward a first bachelor's degree and up to 9 semester hours 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 490 Seminar in Technical Communication (3)

(Fulfills the general education requirement in communications.) Prerequisites: COMM 300 and either COMM 393 or COMM 394. An exposition of current issues and methods in creating, maintaining, storing, and revising technical information. 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 or ENGL 489A.

COMM 491 Technical Editing (3)

(Fulfills the general education requirement in communications.) Prerequisite: COMM 393 or COMM 394. Recommended: 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 or ENGL 489B.

COMM 492 Grant and Proposal Writing (3)

(Fulfills the general education requirement in communications.) Prerequisite: COMM 393 or COMM 394. An advanced study of technical writing, focusing on composing competitive proposals in response to 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 prepare a competitive proposal. Students may receive credit for only one of the following courses: COMM 492 or ENGL 489C.

COMM 493 Graphics/Text Integration (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: ENGL 101. An introduction to graphic design theory that explores the integration of text and graphics in formal and practical design. Focus is on organizing information, developing strategic design solutions to enhance communication, and applying critical and creative processes to produce and evaluate design.

COMM 494 Publishing a Newsletter (3)

(Fulfills the general education requirement in communications.) Prerequisite: A 300-level writing course. The planning, writing, designing, and production of newsletters for various publics. Concepts are presented for targeting writing to specific audiences, improving readability, and for using typography and design effectively. Discussion also covers newsletter formats, the application of desktop publishing to newsletter layout and design, and commercial printing. Assignments include writing several articles and participating in a group project.

COMM 495 Seminar in Workplace Communication (3)

(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 COMM 393 or COMM 394. A capstone study of public relations writing. Emphasis is on enhancing advanced-level writing skills and developing flexibility in changing writing tone from piece to piece. How to produce various communications (such as press releases, feature stories, fact sheets, and executive speeches) is examined. Elements of document design are also covered.

COMM 496 Writing for the Computer Industry(3)

(Fulfills the general education requirement in communications.)
Prerequisite: A 300-level writing course. 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.

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 computer studies;
- a certificate in Software Engineering, UNIX System Administration, or various other computer-related areas; and
- electives.

Students without recent experience in problem solving with computers must take CMIS 102. It is recommended that for the first two semesters 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 semester followed by CMIS 240 and 310 in the second.

A description of the curriculum for the computer and information science major begins on p. 46. Descriptions of other computer-related curricula may be found on the following pages: computer information technology (p. 47), computer science (p. 48), computer studies (p. 49), and information systems management (p. 70).

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. 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.) Prerequisite: MATH 107 strongly recommended. 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 240 Data Structures and Abstraction (3)

(Taking CMIS 140 and 240 in consecutive semesters is recommended.) Prerequisite: CMIS 140. A study of program design and the implementation of abstract data structures. Topics include programming tools, verification, debugging and testing, and data structures. Emphasis is on stacks, queues, lists, recursion, trees, sorting, and searching. A modern object-oriented language is used for programming exercises. Students may receive credit for only one of the following courses: CMIS 240 or CMIS 315.

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 310 Computer Systems and Architecture (3)

(Not open to students who have completed CMSC 311.) Prerequisite: CMIS 140, CMIS 141, or CMIS 141A. Recommended: CMIS 160. 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 241 or a two-semester sequence in a programming language other than C++ (such as Pascal, Ada, PL/I, C, or Java) or equivalent experience. 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 140, CMIS 141, or CMIS 141A. Recommended: CMIS 310. 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 140, CMIS 141, or CMIS 141A. 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 240, CMIS 241, CMIS 340, or CMIS 315. Recommended: CMIS 310. 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)

(Formerly CMIS 398S.) 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 240 or a two-semester sequence in a programming language other than Java (such as Pascal, Ada, PL/I, C, or C++). A one-semester study of the important features of the Java programming language. Topics include design of classes, class libraries, data structures, exception handling, threads, input and output, and applet programming. Programming projects in Java are included. Students may receive credit for only one of the following courses: CMIS 241 or CMIS 340.

CMIS 345 Object-Oriented Design and Programming (3)

Prerequisite: CMIS 240, CMIS 241, CMIS 315, or CMIS 340. An examination of the principles, practices, and applications of programming in an object-oriented environment. Assignments include programming projects in an object-oriented language (such as C++ or Java) that implement techniques and language features of object-oriented design. Students may receive credit only once under this course number.

CMIS 370 Data Communications (3)

Prerequisite: CMIS 310. Investigation of the effects of communication technology on information systems. Major topics include components of communication systems, architectures and protocols of networks, security measures, regulatory issues, and the design of network systems. Issues and applications in local area networks and communication services are covered. 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 140, CMIS 141, CMIS 141A, or equivalent programming experience. An introduction to the Perl scripting language. The basic features of Perl (including data and variable types, operators, statements, regular expressions, functions, and input/output) are covered. Additional 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 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 398F Database Forms (3)

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.

CMIS 415 Advanced UNIX and C (3)

Prerequisites: CMIS 241 (or CMIS 240, CMIS 315, or CMIS 340) and 325. Recommended: CMIS 310. 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 or CMIS 340. An exploration of advanced Java applications. Topics include networking, client/server issues, Java database connectivity, remote method invocation, and Enterprise JavaBeans. Projects include group work and an in-depth case study of a Java-based system. Students may receive credit for only one of the following courses: CMIS 440 or CMIS 498A.

CMIS 445 Distributed Systems (3)

Prerequisites: CMIS 241 (or CMIS 240, CMIS 315, or CMIS 340) and 310. Recommended: CMIS 325. An exploration of protocols and methods for allocating to more than one processor various parts of the work associated with a single task. Emphasis is on environments such as array processing, parallel processing, and multiprocessor systems and communication among cooperating processes. Topics include reliability, security, and protection, as well as how these issues affect the development of programs and systems. Standards for object-oriented programming (Common Object Request Broker Architecture) are discussed. Projects include programming. 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. Methods of specifying and developing requirements for generating software are discussed. 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. Other topics 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 also 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 475 Advanced Programming in Perl (3)

(Formerly CMIS 498P) Prerequisite: CMIS 375 or CMIS 398P. A study of advanced Perl features such as packages, modules, classes, and objects. Focus is on creating a complete Perl database application. A Web server is used to connect front-end technology such as HTML forms with back-end server-based Perl programming for functional Web-based client/server applications. Common Gateway Interface (CGI) programming is explored to provide database connectivity for use in the client/server model. Students may receive credit for only one of the following courses: CMIS 475 or CMIS 498P.

CMIS 486A Internship in Computer and Information Science Through Co-op (3)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 18). 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 semester hours in all internship coursework through Co-op toward a first bachelor's degree and up to 9 semester hours 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 and Information Science Through Co-op (6)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 18). 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 semester hours in all internship coursework through Co-op toward a first bachelor's degree and up to 9 semester hours 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.

CMIS 498B Web Database Development (3)

Prerequisites: 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. Three-tiered architecture is studied in depth via a number of hands-on activities and projects.

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 computer studies; and
- electives.

A description of the curriculum for the computer information technology major begins on p. 47. Descriptions of other computer-related curricula may be found on the following pages: computer and information science (p. 46), computer science (p. 48), computer studies (p. 49), and information systems management (p. 70).

CMIT 261 Introduction to Oracle (3)

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. Other topics 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)

(Formerly CMIT 265M.) An introduction to networking technologies for individual workstations, local area networks, wide area networks, and the Internet, with emphasis on the OSI 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 a grade of C or better, CompTIA Network+ certification, or equivalent knowledge (with consent of faculty member). Presentation of and practice in the fundamentals of computer network security. Topics include authentication, remote access, Web security, intrusion detection, basic cryptography, physical security, and disaster recovery. Course material relates to topics covered on the vendor-neutral CompTIA Security+ Certification examination—the standard of competency for entry-level network security professionals. Hands-on exercises are included.

CMIT 350 Interconnecting Cisco Devices (3)

(Formerly CMIT 499D.) 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 Catalyst 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. Projects include configuring various protocols, including IP, IPX, RIP, IGRP, 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)

(Formerly IFSM 498O.) 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, 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 366 Windows 2000 Professional (3)

(Formerly CMIT 366M.) Prerequisite: CMIT 265 with a grade of C or better or permission of faculty member. An introduction to Windows 2000 Professional. Focus is on developing the skills necessary to install and configure Windows 2000 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 use of Windows 2000 Professional as a stand-alone distributed file system or as part of a work group or a domain. Hands-on exercises are included. Students may receive credit for only one of the following courses: CMIT 366 or CMIT 366M.

CMIT 367 Windows 2000 Server (3)

(Formerly CMIT 367M.) Prerequisite: CMIT 265 with a grade of C or better or permission of faculty member. A study of Windows 2000 Server installation and administration. Focus is on developing the skills necessary to install and configure Windows 2000 Server. 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. Students may receive credit for only one of the following courses: CMIT 367 or CMIT 367M.

CMIT 368 Windows Server 2003 (3)

Prerequisite: CMIT 265 with a grade of C or better or consent of the faculty member. 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 376 Windows Network Infrastructure (3)

(Formerly CMIT 376M.) Prerequisite: CMIT 367 or 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)

(Formerly CMIT 377M.) Prerequisite: CMIT 367 or 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)

(Formerly CMIT 381O.) 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 System Administration (3)

(Formerly CMIS 390.) Prerequisite: CMIS 325. An in-depth examination of UNIX internals, including loading, configuring, and maintaining UNIX operating systems. Both theory and hands-on experience are provided in boot-up and shutdown processes; file system creation and structure; system maintenance and security, especially in the network file system and network information system; and UNIX Internet provider network configuration and maintenance. The Red Hat Linux operating system is used for all lab work. Students may receive credit for only one of the following courses: CMIS 390, CMIS 391, or CMIS 398U.

CMIT 392 Designing and Implementing Databases with SQL Server (3)

(Formerly CMIT 392M.) Recommended: An 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)

(Formerly CMIT 394M.) Recommended: An 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 450 Designing Cisco Networks (3)

(Formerly CMIT 499C. Designed to help in preparing for the Cisco Certified Network Associate Examination 640-441.) Prerequisite: CMIT 265 or CMIT 350. The development of the knowledge and skills necessary for network design using Cisco Systems technologies. Fundamentals of small- and medium-sized network design are introduced. Focus is on developing the skills to identify the Cisco products, LAN/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 LAN networks. Students may receive credit for only one of the following courses: CAPP 398C, CMIT 450, or CMIT 499C.

CMIT 476 Designing a Windows Network Infrastructure (2)

(Formerly CMIT 476M.) Prerequisite: CMIT 367 or CMIT 368. Recommended: CMIT 376. The development of the knowledge and skills necessary to design a Windows network infrastructure. Topics include building a networking services foundation, designing internet and extranet connectivity solutions, and creating an integrated network services infrastructure design and network service design to support applications. Students may receive credit for only one of the following courses: CMIT 476 or CMIT 476M.

CMIT 477 Designing a Windows Active Directory (2)

(Formerly CMIT 477M.) Prerequisite: CMIT 367 or CMIT 368. Recommended: CMIT 377. A study of Active Directory design issues. Topics include naming strategy, delegation of administrative authority, schema policy, group policy support, infrastructure, and domain and multiple-domain structure. Students may receive credit for only one of the following courses: CMIT 477 or CMIT 477M.

CMIT 480 Designing Security for a Windows Network (3)

(Formerly CMIT 480M.) Prerequisite: CMIT 367 or CMIT 368. The development of the knowledge and skills necessary to design a security framework for small, medium, and enterprise networks using Windows 2000 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.

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. 18). 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 semester hours in all internship coursework through Co-op toward a first bachelor's degree and up to 9 semester hours 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. 18). 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 semester hours in all internship coursework through Co-op toward a first bachelor's degree and up to 9 semester hours 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 490 Designing an Upgrade Strategy: NT to Windows 2000 (1)

(Formerly CMIT 490M.) Prerequisite: CMIT 367. The development of the skills and knowledge necessary to select and design a migration strategy from NT 4.0 to Windows 2000 Active Directory service. Topics include developing a domain upgrade strategy, restructuring domains, planning to deploy a migration strategy, and minimizing the impact on operations during an upgrade. Students may receive credit for only one of the following courses: CMIT 490 or CMIT 490M.

CMIT 491 Advanced UNIX System Administration (3)

(Formerly CMIS 490.) Prerequisite: CMIT 391. A continuation of the study of UNIX system administration. Topics such as printer administration, mail server configuration and maintenance, storage and backup strategies, domain name service (DNS), kernel configurations, and UNIX Internet server design and setup are explained in detail, covering both theory and implementation. Advanced topics include network file servers (NFS), network information service (NIS), UNIX Internet protocols, user and system security, and in-depth trouble-shooting techniques. Discussion also covers automation of administration tasks and the writing of shell scripts to augment the boot process. 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)

Recommended: 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 499C, CMIT 499D, or working knowledge of network routing procedures. 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 499D, CMIT 499E, or permission of faculty member. 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 499D, CMIT 499E, or permission of faculty member. 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 499M Exchange Server 2003 (3)

Prerequisite: CMIT 367 or consent of faculty member. 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 2003 in a medium to large (250- to 5000-seat) electronic messaging environment. Hands-on practice is provided.

CMIT 499X Windows XP Professional (3)

Prerequisite: CMIT 265 with a grade of C or better or permission of faculty member. 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 operating systems, administration, security, transmission control protocol/Internet protocol, and troubleshooting Windows XP Professional. Hands-on exercises are included.

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 computer studies;
- a certificate in Object-Oriented Programming Using Java; and
- electives.

A description of the curriculum for the computer science major begins on p. 48. Descriptions of other computer-related curricula may be found on the following pages: computer and information science (p. 46), computer information technology (p. 47), computer studies (p. 49), and information systems management (p. 70).

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 or CMSC 101.

CMSC 130 Computer Science I (3)

(Formerly Introductory Computer Science. For students majoring in computer science. Taking CMSC 130 and 230 in consecutive semesters 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)

(Formerly Elementary Data Structures. For students majoring in computer science. Taking CMSC 130 and 230 in consecutive semesters 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 305 Programming and Applications in Java (3)

(For students with previous programming experience.) Prerequisites: A two-semester computer science sequence (including an introductory programming course and a data structures course) in a programming language other than Java (such as Pascal, C++, C, Ada, or PL/I) and either MATH 130, MATH 140, or MATH 220. A fast-paced, one-semester guide to using Java to implement fundamental programming constructs and basic data structures. Emphasis is on implementing Java concepts that have already been studied and understood. Students who completed CMSC 230 after fall 1998 may receive credit for only one of the following courses: CMSC 230 or CMSC 305.

CMSC 311 Computer Organization (3)

Prerequisites: CMSC 130 and 230. 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 330 Advanced Programming Languages (3)

Prerequisite: CMSC 230 or CMSC 305. A study of imperative and declarative programming languages. C++ is presented as the prime imperative language and compared with Ada and Java. LISP and PROLOG are introduced as declarative languages. Formal syntax and semantics are discussed.

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. An introduction to batch systems, spooling systems, and third-generation multiprogramming systems. The parts of an operating system are described in terms of their function, structure, and implementation. Discussion covers basic policies for allocating resources. Assignments may include programming projects.

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)

(Formerly Data Structures.) Prerequisites: CMSC 230 and 330. 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 421 Introduction to Artificial Intelligence (3)

Prerequisites: CMSC 330 and 335. An exploration of various areas of artificial intelligence, including search, inference, knowledge representation, learning, vision, natural languages, expert systems, and robotics. Programming languages (e.g., LISP, PROLOG), programming techniques (e.g., pattern matching, discrimination networks), and control structures (e.g., agendas, data dependencies) are implemented in suitable applications.

CMSC 424 Database Design (3)

Prerequisite: CMSC 335. 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 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.

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 475 Combinatorics and Graph Theory (3)

(Also listed as MATH 475.) Prerequisites: MATH 240 and 241. An exploration of general enumeration methods, difference equations, and generating functions. Focus is on elements of graph theory, matrix representations of graphs, and applications of graph theory to transport networks. Matching theory and graphical algorithms are also considered. Students may receive credit for only one of the following courses: CMSC 475 or MATH 475.

CMSC 480 Advanced Programming in Java (3)

Prerequisite: CMSC 335 or equivalent object-oriented and Java programming experience. 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. 18). 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 semester hours in all internship coursework through Co-op toward a first bachelor's degree and up to 9 semester hours 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. 18). 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 semester hours in all internship coursework through Co-op toward a first bachelor's degree and up to 9 semester hours 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 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.

CMSC 498D Topics in Software Systems Engineering (3)

Prerequisites: CMSC 330 and 335. An exploration of software engineering from both a systems engineering and a managerial point of view. Coverage of issues in software systems engineering includes definition of requirements, specification, design, verification and validation, and estimation of costs of software. Topics in management include planning, organizing, staffing, directing, and controlling, as those activities apply to the development of software systems.

CMSC 498G Image Processing and Computer Graphics (3)

Prerequisites: MATH 240 and CMSC 335. An investigation of concepts and techniques of image processing and computer graphics. Review covers input/output devices, display programs, and statistical attributes of images. Transformations, thresholding, clipping, and edge detection are implemented. Convolution and filters, Fourier and wavelet transforms, and volume rendering and animation of three-dimensional graphical objects are introduced. Topics include methods to scan conversion of lines and polygons and to apply two- and three-dimensional geometric and projective transformations, as well as algorithms for hidden-surface removal, reflection and lighting, and representation of general curves and surface.

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 or minor in computer studies;
- a major in computer and information science, computer information technology, or information systems management;
- a certificate in various computer-related areas; and
- electives.

A description of the curriculum for the computer studies major and minor begins on p. 49. Descriptions of other computer-related curricula may be found on the following pages: computer and information science (p. 46), computer information technology (p. 47), computer science (p. 48), and information systems management (p. 70).

CMST 100A Introduction to Microcomputers: Hardware and Software (1)

(Graded on a satisfactory/D/fail basis only.) An introduction to the hardware and software of computer systems and the terminology and functional parts of a computer. Extensive explanations of, as well as practice with, the operating system and utilities of a microcomputer are provided. Students may receive credit for only one of the following courses: CAPP 100A or CMST 100A.

CMST 100B Introduction to Microcomputers: Word Processing (1)

(Graded on a satisfactory/D/fail basis only.) Prerequisite: CMST 100A. An introduction to word processing as one of the many applications of microcomputers. The characteristics of word processing are analyzed. Topics include typical features, as well as costs and trends of available software. Hands-on practice with typical word-processing software is provided. Students may receive credit for only one of the following courses: CAPP 100B, CAPP 103, CMST 100B, or CMST 103.

CMST 100D Introduction to Microcomputers: Presentation Graphics (1)

(Graded on a satisfactory/D/fail basis only.) Prerequisite: CMST 100A. An introduction to the principles of presentation graphics. Topics include text and analytical charts, free-form graphics and clip art, and animation and slide shows. Hands-on practice with typical presentation graphics software is provided. Students may receive credit for only one of the following courses: CAPP 100D or CMST 100D.

CMST 100E Introduction to Microcomputers: Networks and Communication (1)

(Graded on a satisfactory/D/fail basis only.) Prerequisite: CMST 100A. An introduction to the use of computer networks to interconnect microcomputers and to the current hardware, software, and communication standards and protocols that make networking possible. Hands-on practice with typical communications software and network configuration is provided. Students may receive credit for only one of the following courses: CAPP 100E or CMST 100E.

CMST 100F Introduction to Microcomputers: Databases (1)

(Graded on a satisfactory/D/fail basis only.) Prerequisite: CMST 100A. An introduction to database systems, including terminology and principles of database management systems. Focus is on how best to organize, manage, and access stored data; how to protect databases; and how to extract useful information. Hands-on practice with typical database software is provided. Students may receive credit for only one of the following courses: CAPP 100F, CAPP 103, CMST 100F, or CMST 103.

CMST 100G Introduction to Microcomputers: Spreadsheets (1)

(Graded on a satisfactory/D/fail basis only.) Prerequisite: CMST 100A. An introduction to the use of electronic worksheets to analyze numerical data, including basic terminology, formats, and other applications. Hands-on practice with typical spreadsheet software is provided. Students may receive credit for only one of the following courses: CAPP 100G, CAPP 103, CMST 100G, or CMST 103.

CMST 100J Introduction to Microcomputers: Security (1)

(Graded on a satisfactory/D/fail basis only.) Prerequisite: CMST 100A. An introduction to computer security. Topics include both physical and software security and the types of computer viruses that afflict modern information systems. Discussion covers the use of the operating system and antiviral software tools to protect, detect, and recover from viral attacks. Hands-on practice in applying these tools is provided. Students may receive credit for only one of the following courses: CAPP 100J or CMST 100J.

CMST 100K Introduction to Microcomputers: Accessing Information via the Internet (1)

(Graded on a satisfactory/D/fail basis only.) Prerequisite: CMST 100A. An introduction to the Internet and the wealth of information it contains. Focus is on practical and efficient means for gaining access to information through the use of browsers on a home computer system and search engines on the Internet. Topics include mechanisms by which the Internet operates, security issues on the Internet, intellectual property right issues, and the ethics of the Internet, as well as other current topics involving the interface between the Internet and the citizen. Students who have already earned credit for CAPP 385, CAPP 386, CMST 385, or CMST 386 cannot earn credit for CMST 100K. Students may receive credit for only one of the following courses: CAPP 100K, CAPP 101C, or CMST 100K.

CMST 100L Introduction to Microcomputers: Web Page Design (1)

(Graded on a satisfactory/D/fail basis only.) Prerequisite: CMST 100A. An introduction to Web page design and site management. The characteristics of Web page design and navigation structures are analyzed, and typical features of current commercial software are presented. Hands-on practice with typical Web page design and site management software is provided. Students may receive credit for only one of the following courses: CAPP 100L or CMST 100L.

CMST 100M Introduction to Microcomputers: HTML (1)

(Graded on a satisfactory/D/fail basis only.) Prerequisite: CMST 100A. An introduction to the use of HTML to create basic and advanced World Wide Web-enabled documents. Topics include creating and editing Web pages, placing HTML documents on the Web, designing Web pages with tables, and using frames in Web pages. Assignments include designing and implementing Web pages using HTML. Students may receive credit for only one of the following courses: CAPP 100M, CAPP 101H, or CMST 100M.

CMST 100N Introduction to Microcomputers: Desktop Operating Systems (1)

(Graded on a satisfactory/D/fail basis only.) Prerequisite: CMST 100A. An introduction to the use and configuration of graphical user interfaces, focusing on Microsoft Windows operating systems. Topics include working with Windows programs, managing files and folders using Windows Explorer, customizing Windows using the Control Panel, using Internet services in Windows, and managing shared files and resources. Students may receive credit for only one of the following courses: CAPP 100N, CAPP 101M, CAPP 101T, or CMST 100N.

CMST 100P Introduction to Microcomputers: Using UNIX/Linux (1)

(Graded on a satisfactory/D/fail basis only.) Prerequisite: CMST 100A. An introduction to configuring and using UNIX and Linux on microcomputers and workstations. Hands-on experience in configuring the desktop environment of a Linux operating system is provided. Topics include UNIX commands, file management, the X-Window graphical user interface, and window managers such as Gnome and KDE. Students may receive credit for only one of the following courses: CAPP 100P or CMST 100P.

CMST 100Q Introduction to Microcomputers: Personal Digital Assistants (1)

(Graded on a satisfactory/D/fail basis only.) An introduction to personal digital assistants (PDAs). Focus is on the two major operating systems for PDAs: Palm Pilot and Pocket PC. Topics include understanding the functions of PDAs, comparing the two operating systems, using built-in and typical third-party applications, and connecting and exchanging information with desktop computers. Students are encouraged to bring their own PDAs to class. Students may receive credit for only one of the following courses: CMST 100Q or CMST 198Q.

CMST 103 Introduction to Microcomputer Software (3)

An introduction to microcomputers and application 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 100E, 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 for designing and developing computer games. Topics include history of games, game design, genres of games, multi-player games, online games, game development environments and employment opportunities, and ethical, social, and cultural aspects of video gaming.

CMST 303 Advanced Features of Microcomputer Application Software (3)

Prerequisite: CMST 103. A presentation of application software packages that includes advanced features of operating systems, spreadsheets, database management, and electronic information exchange for business applications. Presentation software is reviewed, and hands-on experience with the software is provided. Students may receive credit for only one of the following courses: CAPP 303 or CMST 303.

CMST 306 Introduction to Visual Basic .NET Programming (3)

Prerequisite: CMIS 102 or CMIS 102A. A structured approach to developing programs using the Visual Basic .NET programming language. Hands-on experience in implementing features of this visual interface for program design is provided. Assignments include programming projects in Visual Basic .NET.

CMST 310 Desktop Publishing (3)

Prerequisite: CMST 100A, CMST 100B, or IFSM 201. An introduction to concepts and methods of 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 Desktop Publishing (3)

Prerequisite: CMST 310. A project-oriented study of the concepts and methods of desktop publishing. Techniques for using color in page layouts are implemented. Emphasis is 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. Students learn to publish 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: 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: A Practical Guide (3)

Prerequisite: IFSM 201. An introduction to the Internet and the World Wide Web. Topics include basic principles and protocols of the Internet; configuration and use of graphical Web browsers; application programs such as Telnet, FTP, e-mail, and Net news readers; finding and retrieving information on the World Wide Web; and the use of portals and search engines. Discussion covers Internet security measures as well as social, ethical, and legal issues related to the growth of the Internet. HTML and Web page design are introduced. 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 Internet: An Advanced Guide (3)

Prerequisite: CMST 385. A study of advanced applications for the Internet and the World Wide Web. Focus is on Web page design, including features such as frames, animation, and cascading style sheets. Dynamic HTML and JavaScript are introduced. Assignments include publishing a Web page. Students may receive credit for only one of the following courses: CAPP 386 or CMST 386.

CMST 398J Programming with JavaScript (3)

Prerequisites: CMIS 102 (or CMIS 102A) and CMST 386. A structured approach to programming with JavaScript to build dynamic, interactive Web pages. Topics include adaptive forms, dynamic HTML, event modeling, cross-browser compatibility, cookies, and security issues. Programming projects are included.

CMST 416 Advanced Visual Basic .NET Programming (3)

Prerequisite: CMST 306. An investigation of advanced Visual Basic .NET 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 .NET 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 Methodology and Technology (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 technology to enhance the Web presence of a small business. Topics include multimedia and interactivity. Online commerce and Internet security issues are discussed. Assignments include a comprehensive project. Students may receive credit for only one of the following courses: CAPP 498D or CMST 450.

CMST 486A Internship in Computer Studies Through Co-op (3)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 18). 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 semester hours in all internship coursework through Co-op toward a first bachelor's degree and up to 9 semester hours 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. 18). 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 semester hours in all internship coursework through Co-op toward a first bachelor's degree and up to 9 semester hours 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 498F Web Application Development Using ColdFusion (3)

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.

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. 18. 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, 330, 350, 360, 432, 451, 452, 453, 454, and 461 apply.);
- a major in criminal justice or legal studies;
- a minor in criminal justice, forensics, or sociology;
- a certificate in various security-related areas; 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. 50. Descriptions of other related curricula may be found on the following pages: forensics (p. 60), legal studies (p. 72), and sociology (p. 82).

CCJS 100 Introduction to Criminal Justice (3)

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 the 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 punishment, 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)

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)

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 330 Contemporary Criminological Issues (3)

(Fulfills the general education requirement in the behavioral and social sciences.) Prerequisite: CCJS 100 or CCJS 105. An examination of various criminological problems. Topics include career criminals, prison overcrowding, prediction, ecological studies of crime, and family and delinquency. Students may receive credit for only one of the following courses: CCJS 330 or CRIM 330.

CCJS 331 Contemporary Legal Policy Issues (3)

Prerequisite: CCJS 230 or CCJS 234. A 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)

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 350 Juvenile Delinquency (3)

(Fulfills the general education requirement in the 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)

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)

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 the 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)

A historical and theoretical study of the role and treatment of racial/ethnic minorities in the criminal justice system.

CCJS 372 Criminal Justice and Domestic Violence (3)

(Formerly CCJS 498I.) Prerequisite: CCJS 100 or CCJS 105. An examination of the development and evaluation of domestic violence and the response of the criminal justice system to the problem. Focus is on development and enforcement of criminal laws and sanctions across the United States, with an emphasis on Maryland law. Students may receive credit for only one of the following courses: CCJS 372 or CCJS 498I.

CCJS 400 Criminal Courts (3)

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 420 Medical and Legal Investigations of Death (3)

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, methods of collecting and handling evidence, and investigations of injuries and their impact on prosecutions and convictions. Case studies illustrate practical applications of various forms of forensic styles and parameters.

CCJS 430 Legal and Ethical Issues in Security Management (3)

(Formerly CCJS 498F.) 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 432 Law of Corrections (3)

(Fulfills the general education requirement in the behavioral and social sciences.) Prerequisite: CCJS 230 or CCJS 234. A review of the law of criminal corrections, from sentencing to final release or release on parole. Topics include probation, punishments, special treatments 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 444 Advanced Law-Enforcement Administration (3)

Prerequisite: CCJS 340 or permission of faculty member. A foundation in organizing the labor, material, and systems needed to accomplish the major goals of social control. Topics include personnel and systems management, as well as political controls and limitations on authority and jurisdiction. Students may receive credit for only one of the following courses: CCJS 444 or CJUS 444.

CCJS 445 Introduction to Security Management (3)

(Formerly CCJS 498G.) 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 445 or CCJS 498G.

CCJS 451 Crime and Delinquency Prevention (3)

(Fulfills the general education requirement in the behavioral and social sciences.) Prerequisite: CCJS 100 or CCJS 105. A review of methods and programs used in preventing crime and delinquency. Students may receive credit for only one of the following courses: CCJS 451 or CRIM 451.

CCJS 452 Treatment of Criminals and Delinquents (3)

(Fulfills the general education requirement in the behavioral and social sciences.) Prerequisite: CCJS 100 or CCJS 105. Analysis of processes and methods used to modify criminal and delinquent behavior. Students may receive credit for only one of the following courses: CCJS 452 or CRIM 452.

CCJS 453 White-Collar and Organized Crime (3)

(Fulfills the general education requirement in the 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 the behavioral and social sciences.) Prerequisite: CCJS 100 or CCJS 105. A brief historical overview of criminological theory up to the 1950s. 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 460 School Safety and Security (3)

A study of methods of safeguarding the school environment. Topics include threat assessment in schools, essential security components for school safety and security, school culture and implications for safety and security, and crime prevention in schools (including the identification of warning signs and critical incident planning).

CCJS 461 Psychology of Criminal Behavior (3)

(Fulfills the general education requirement in the 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)

(Formerly CCJS 498H.) 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)

(Formerly CCJS 498K.) 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 464 Certified Protection Professional Program (3)

(Designed for private security and law-enforcement professionals.) A study of security management, focusing on the educational requirements for accreditation.

CCJS 486A Internship in Criminal Justice Through Co-op (3)

Prerequisites: CCJS 100 or CCJS 105; 9 credits in criminal justice; and formal admission to the Co-op program (program requirements are listed on p. 18). 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 semester hours in all internship coursework through Co-op toward a first bachelor's degree and up to 9 semester hours 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: CCJS 100 or CCJS 105; 9 credits in criminal justice; and formal admission to the Co-op program (program requirements are listed on p. 18). 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 semester hours in all internship coursework through Co-op toward a first bachelor's degree and up to 9 semester hours 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)

(Formerly CCJS 498E.) 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)

(Formerly CCJS 498A.) Prerequisite: CCJS 100 or CCJS 105. 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)

(Formerly CCJS 498C.) 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)

(Formerly CCJS 498D.) 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, principles of structure, 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 498 Selected Topics in Criminology/Criminal Justice (3)

(Offered in response to student requests and faculty interest.) Prerequisites: CCJS 100 (or CCJS 105) and 230. Study of criminological topics of special interest to advanced undergraduates. May be repeated to a maximum of 6 credits in CCJS, CJUS, and CRIM when topics differ.

CCJS 498B Forensics and Psychology (1)

A survey of psychological research and theory dealing with behavior in the criminal trial process. Topics include jury selection, criminal profiling, eyewitness testimony, prediction of violent behavior, and mental competency of the accused. Students may receive credit for only one of the following courses: CCJS 498B or PSYC 309E.

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. Public perceptions created by the manner in which crime is covered by the media are explored. Whether media responsibility includes crime prevention is considered.

CCJS 498L The Origin of the Right to Counsel (1)

An exploration of the historical basis of the right to counsel and the rationale behind the Sixth Amendment to the Constitution.

CCJS 498M The Role of the Public Defender in the Criminal Justice System (1)

An examination of the role of the public defender in the defense of the poor and indigent accused of criminal acts. Topics include the role of the public defender in the criminal justice system, the origin of the right to counsel, the indigent in the criminal justice system, the death penalty, and profiling.

CCJS 498N Media and the Courts (1)

An examination of the interaction between the First Amendment right to free speech and press and the fair administration of the criminal justice system, including the Sixth Amendment right to a public trial.

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, 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. 53. Descriptions of related majors may be found on the following pages: finance (p. 57), global business and public policy (p. 62), and social science (p. 81).

ECON 201 Principles of Economics I (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.

ECON 203 Principles of Economics II (3)

Recommended: ECON 201. 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)

Prerequisite(s): ECON 201 and 203, or ECON 205. 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)

Prerequisites: ECON 201 and 203. 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)

Prerequisites: ECON 201 and 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 307 Development of Economic Ideas: Social and Political (3)

(Fulfills the historical perspective requirement.) Prerequisite: ECON 201 or ECON 205. A study of the development of economic ideas as they relate to underlying philosophies, views of the prospects of humanity, the role of values, methods of analysis, social history, and contemporary politico-economic problems. Theories advanced by Marx, Marshall, Veblen, Schumpeter, Samuelson, Friedman, Keynes, Galbraith, Myrdal, Robinson, and others are discussed.

ECON 311 American Economic Development (3)

(Fulfills the historical perspective requirement.) Prerequisite(s): ECON 201 and 203, or ECON 205. An analysis of the major issues in the growth and development of the American economy. Basic economic theory is considered as it affected and was affected by such institutions and events as agriculture, banking, industrialization, slavery, transportation, and the Great Depression of the 1930s.

ECON 315 Economic Development of Underdeveloped Areas (3)

Prerequisite(s): ECON 201 and 203, or ECON 205. 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 370 Labor Markets, Human Resources, and Trade Unions (3)

Prerequisite(s): ECON 201 and 203, or ECON 205. A survey of labor markets and the American labor movement. Topics include the growth and composition of the labor force, theories of determining wages, the wage/price spiral, collective bargaining, problems of unemployment and labor-market operations, and governmental regulation of employment and labor relations. Students may receive credit for only one of the following courses: ECON 370 or ECON 470.

ECON 380 Comparative Economic Systems (3)

(Fulfills the international perspective requirement.) Prerequisite(s): ECON 201 and 203, or ECON 205. 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 or ECON 205. 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 385 Economics of Natural Resources (3)

Prerequisite: ECON 203 or ECON 205. Economic analysis of problems with natural resources, emphasizing the usage rate of exhaustible resources and the obstacles to growth that such consumption creates.

ECON 422 Quantitative Methods in Economics I (3)

Prerequisites: ECON 201 and 203 and BMGT 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)

Prerequisite(s): ECON 201 and 203, or ECON 205. 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)

(Fulfills the international perspective requirement.) Prerequisite(s): ECON 201 and 203, or ECON 205. 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)

Prerequisite(s): ECON 201 and 203, or ECON 205. A study of public finance, examining 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)

Prerequisite(s): ECON 201 and 203, or ECON 205. 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).

Education: Counseling and Personnel Services

Courses in this discipline—education: counseling and personnel services (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, 103, and 103X do not fulfill the general education requirement in communications; they may be used as elective credit only.

General descriptions of other courses designed to help students succeed in school or on the job are given under career planning (courses designated CAPL) and library skills (courses designated LIBS).

EDCP 101 Effective Writing Skills (3)

(Does not fulfill the general education requirement in communications. Recommended as preparation for ENGL 101.) A study of writing designed to improve basic skills at the level of sentence and paragraph. Topics include word choice, 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 101, EDCP 101X, or ENGL 100.

EDCP 103 Elements of Composition and Style (3)

(Does not fulfill the general education requirement in communications. Recommended as preparation for ENGL 101.) Prerequisite: Satisfactory performance on a placement test or recommendation of an advisor. A review of basic writing skills. Topics include increasing language awareness, developing sophisticated diction, and improving grammar. Practice is provided in writing complex sentences, giving examples, and developing extended paragraphs. Focus is on discerning, gathering, organizing, and presenting evidence and on developing a narrative voice. Students may receive credit for only one of the following courses: EDCP 103, EDCP 103X, or ENGL 100.

English

Courses in English (designated ENGL) may be applied as appropriate (according to individual program requirements) toward

- the general education requirement in communications (writing courses) or in the arts and humanities (literature courses);
- a major or minor in English or humanities; and
- electives.

ENGL 101, 101X, 102, 278F, 281, 281X, 291, 294, 384, 480, 481, 482, 483, 485, 487, 488, and 493 may be applied toward the general education requirement in communications. Other communications courses are also available under communication studies (courses designated COMM), journalism (courses designated JOUR), and legal studies (courses designated LGST).

ENGL 303, 391, and 391X (as well as COMM 390, 393, 393X, 394, and 394X, and LGST 401) are designated as writing intensive and may be applied toward the general education requirement in upper-level intensive writing.

Courses in literature may be applied toward the general education requirement in the arts and humanities.

ENGL 106 and EDCP 101, 101X, 103, and 103X may be used as electives but do not fulfill requirements.

Degree-seeking students must complete ENGL 101 (or present its equivalent in transfer) during their first 15 semester hours of enrollment at UMUC. ENGL 101 is prerequisite to all English writing courses with higher numbers and most courses in communication studies. Placement tests are required for enrollment in ENGL 101 and 101X. Students may either consult the *Undergraduate Schedule of Classes* for times and locations of tests or contact the Testing Center by phone at 800-888-UMUC, ext. 5249, or by e-mail at testingcenter@umuc.edu.

Students for whom English is a second language should consider taking writing courses designated with X, such as ENGL 101X, 391X, etc. Other writing courses are available under the discipline of communication studies.

A description of the curriculum for the English major and minor begins on p. 55. A description of the curriculum for the humanities major and minor begins on p. 66.

ENGL 101 Introduction to Writing (3)

(Students for whom English is a second language should consider taking ENGL 101X instead.) Prerequisite: Satisfactory performance on a placement test. 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 or ENGL 101X.

ENGL 101X Introduction to Writing (3)

(Enrollment restricted to students for whom English is a second language.) Prerequisite: Satisfactory performance on a placement test. 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 or ENGL 101X.

ENGL 201 Western World Literature: Homer to the Renaissance (3)

(Fulfills the historical or international perspective requirement.) Prerequisite: ENGL 101. 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 202 Western World Literature: The Renaissance to the Present (3)

(Fulfills the historical or international perspective requirement.)
Prerequisite: ENGL 101. A survey of European classic writings from the Renaissance to the modern age. Literary form and the way the works reflect the changing ideas and values of European civilization are discussed. Readings may include works by Shakespeare, Molière, Voltaire, Goethe, Dostoyevsky, and Camus. Selections may vary each semester.

ENGL 205 Introduction to Shakespeare (3)

(Fulfills the historical or international perspective requirement.)
Prerequisite: ENGL 101. An examination of representative Shakespearean plays from each genre (comedy, history, tragedy, and romance).

ENGL 211 English Literature: Beginning to 1800 (3)

(Fulfills the historical or international perspective requirement.)
Prerequisite: ENGL 101. An introduction to significant works of English literature, surveying earlier works to the Romantic period. Readings include *Beowulf*, and works by Chaucer, Spenser, Marlowe, and Milton.

ENGL 212 English Literature: 1800 to the Present (3)

(Fulfills the international perspective requirement.) Prerequisite: ENGL 101. A survey of the major literary movements of the 19th and 20th centuries, from the Romantic to the Victorian to the modern. Authors studied may include Wordsworth, Keats, the Brontës, Tennyson, Browning, Yeats, Joyce, and Woolf.

ENGL 221 American Literature: Beginning to 1865 (3)

(Fulfills the historical perspective requirement.) Prerequisite: ENGL 101. A close study of some masterpieces of American literature, covering the period from the beginning of American literature to 1865.

ENGL 240 Introduction to Fiction, Poetry, and Drama (3)

Prerequisite: ENGL 101. 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 semester to semester. Films may be included. Students may receive credit for only one of the following courses: ENGL 240 or ENGL 340.

ENGL 278F Introduction to Principles of Text Editing (3)

(Fulfills the general education requirement in communications.)
Prerequisite: ENGL 101. 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.

ENGL 281 Standard English Grammar, Usage, and Diction (3)

(Students for whom English is a second language should consider taking ENGL 281X instead. Fulfills the general education requirement in communications, but is not a writing course.) Prerequisite: ENGL 101. An overview of grammatical structures of standard formal and written English. Topics may 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 or ENGL 281X.

ENGL 288 Special Topics in Literature (3)

An introduction to literary works written by a specific author or authors, representative of a literary movement, or produced in a specific time or place. Students may receive credit for a given topic in either ENGL 288 or ENGL 388 only once.

ENGL 289 Special Topics in Literature (1–3)

An introduction to literary works written by a specific author or authors, representative of a literary movement, or produced in a specific time or place. Students may receive credit for a given topic in either ENGL 289 or ENGL 389 only once.

ENGL 291 Expository and Research Writing (3)

(Fulfills the general education requirement in communications.)
Prerequisites: ENGL 101 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 for a total of at least 4,500 words (approximately 20 pages). Students may receive credit for only one of the following courses: ENGL 291 or ENGL 291H.

ENGL 294 Introduction to Creative Writing (3)

(Fulfills the general education requirements in communications.)
Prerequisite: ENGL 101. An introductory study of creative writing designed to develop critical awareness, creativity, and skill in writing and analyzing poems and short stories.

ENGL 303 Critical Approaches to Literature (3)

(Fulfills the general education requirement in intensive upper-level writing. Designed as a foundation for other upper-level literature courses.) Prerequisite: ENGL 101. 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. Assignments include composing a total of 6,000 words (approximately 25 pages).

ENGL 310 Medieval and Renaissance British Literature (3)

(Fulfills the historical or international perspective requirement.) Prerequisite: ENGL 101. 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)

(Fulfills the historical or international perspective requirement.) Prerequisite: ENGL 101. A study of the culture of 17th- and 18th-century Britain seen through detailed examination 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)

(Fulfills the international perspective requirement.) Prerequisite: ENGL 101. 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: ENGL 101. 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.

ENGL 354 American Women Writers Since 1900 (3)

Prerequisite: ENGL 101. 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)

(Fulfills the international perspective requirement.) Prerequisite: ENGL 101. 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)

(Fulfills the historical perspective requirement.) Prerequisite: ENGL 101. 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 Chesnut, and Paul Laurence Dunbar.

ENGL 364 African American Authors Since 1900 (3)

(Fulfills the historical perspective requirement.) Prerequisite: ENGL 101. 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 377 Medieval Myth and Modern Narrative (3)

(Not open to students who have completed ENGL 361. Fulfills the historical or international perspective requirement.) Prerequisite: ENGL 101. A study of literary patterns characteristic of medieval myth, epic, and romance; their continuing vitality in modern works; and links between medieval works (such as *The Prose Edda*, *Beowulf*, *Le Morte d'Arthur*, *The Volsunga Saga*, and *Grettis Saga*) and modern narratives (such as Tolkien's *The Lord of the Rings*).

ENGL 384 Advanced Grammar and Style (3)

(Fulfills the general education requirement in communications, but is not a writing course.) Prerequisite: ENGL 101. 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 only once under this course number.

ENGL 391 Advanced Expository and Research Writing (3)

(Fulfills the general education requirement in intensive upper-level writing.) Prerequisite: ENGL 101. Instruction and practice in methods of presenting ideas and factual information clearly and effectively. Emphasis is on developing skills fundamental 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 or ENGL 391X.

ENGL 391X Advanced Expository and Research Writing (3)

(Enrollment restricted to students for whom English is a second language. Fulfills the general education requirement in intensive upper-level writing.) Prerequisite: ENGL 101 or ENGL 101X. Instruction and practice in methods of presenting ideas and factual information clearly and effectively. Emphasis is on developing skills fundamental 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 or ENGL 391X.

ENGL 402 Chaucer (3)

(Fulfills the historical or international perspective requirement.) Prerequisite: ENGL 101. An examination of selections from middle and modern English versions of Chaucer's *Canterbury Tales*. The cultural, literary, and linguistic foundations of Chaucer's tales are covered. Theme, structure, genre, and imagery are examined in each tale.

ENGL 406 Shakespeare: Power and Justice (3)

(Fulfills the historical perspective or civic responsibility requirement.) Prerequisite: ENGL 101. 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 425 Modern British Literature (3)

(Fulfills the historical or international perspective requirement.) Prerequisite: ENGL 101. An examination of representative authors and works in the development of British literature from the late 19th century to the present.

ENGL 433 American Literature: 1914 to the Present (3)

(Fulfills the historical perspective requirement.) Prerequisite: ENGL 101. 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 434 American Drama (3)

Prerequisite: ENGL 101. An examination of representative authors in the development of American drama, with emphasis on post-World War II writers. Playwrights studied may include Glaspell, O'Neill, Hellman, Miller, Williams, Hansberry, Inge, Albee, Shepard, Wilson, Howe, Henley, and Hwang. Film and television adaptations may be included.

ENGL 437 Contemporary American Literature (3)

Prerequisite: ENGL 101. A survey of representative authors and works in the development of American literature from 1945 to the present, with emphasis on fiction and drama. Works studied may include fiction by Truman Capote, John Cheever, Flannery O'Connor, Anne Tyler, Kurt Vonnegut, and Alice Walker and dramas by Tennessee Williams, Arthur Miller, Lorraine Hansberry, William Inge, August Wilson, Lanford Wilson, Tina Howe, Sam Shepard, and Tony Kushner. Some films may also be included.

ENGL 439 Major American Writers (3)

Prerequisite: ENGL 101. A literary analysis of the works of significant American writers, emphasizing subject matter, themes, and techniques. Representative writers usually include Twain, Wharton, Dreiser, Lewis, Fitzgerald, Hemingway, Faulkner, and Frost; other authors may be included. May be repeated to a maximum of 6 credits when topics differ.

ENGL 441 The Novel in America Since 1914 (3)

Prerequisite: ENGL 101. 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 Drama (3)

(Fulfills the international perspective requirement.) Prerequisite: ENGL 101. An examination of representative authors in the development of modern drama, from Ibsen to the present. Plays are generally drawn from the works of Ibsen, Strindberg, Chekhov, Shaw, O'Neill, Miller, Williams, Brecht, Pirandello, Hansberry, Orton, Ionesco, Beckett, Pinter, Fugard, Albee, Stoppard, and Shepard. Film and television adaptations of some of the plays may be included.

ENGL 457 The Modern Novel (3)

(Fulfills the international perspective requirement.) Prerequisite: ENGL 101. An examination of the development of the novel from the late 19th century to the present, with emphasis on British and American works. Authors and works vary each semester but may include writers such as Thomas Hardy, Henry James, Theodore Dreiser, Edith Wharton, Virginia Woolf, William Faulkner, James Joyce, Anne Tyler, Alice Walker, and Tim O'Brien.

ENGL 466 The Arthurian Legend (3)

(Fulfills the historical or international perspective requirement.) Prerequisite: ENGL 101. 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 476 Modern Fantasy and Science Fiction (3)

Prerequisite: ENGL 101. An analysis of major works of fantasy and science fiction published since the middle of the 18th century. Emphasis is on the development of the genre as well as on literary and cultural issues. Authors may include Jonathan Swift, Mary Shelley, Nikolai Gogol, Edgar Allan Poe, Mark Twain, Robert Louis Stevenson, H. G. Wells, Ray Bradbury, Isaac Asimov, Ursula LeGuin, T. H. White, Robert Heinlein, Philip Dick, Douglas Adams, and Marion Zimmer Bradley.

ENGL 480 Creative Writing (3)

(Fulfills the general education requirement in communications.) Prerequisite: ENGL 101. Discussion and critical examination of students' work (poetry, fiction, and/or drama). Constructive suggestions for improvement are offered. Students may receive credit for only one of the following courses: ENGL 480 or ENGL 498.

ENGL 486A Internship in English Through Co-op (3)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 18). 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 semester hours in all internship coursework through Co-op toward a first bachelor's degree and up to 9 semester hours 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. 18). 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 semester hours in all internship coursework through Co-op toward a first bachelor's degree and up to 9 semester hours 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 upper-level credits in English and consent of faculty member and department. 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 or minor in environmental management, forensics, or management studies;
- a certificate in Bio-Security or Environmental 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. 55. A description of the curriculum for the management studies major and minor begins on p. 74.

ENMT 301 Environment and Ecosystems Management (3)

(Fulfills the civic responsibility perspective requirement.) 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 the local, regional, and global levels are also covered.

ENMT 303 Environmental Regulations and Policy (3)

(Formerly ENMT 493.) 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)

An introduction to the human body, how it functions, and how normal body functions are altered by exposure to 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)

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)

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 320 Environmental and Occupational Health and Safety Management (3)

A study of the principles of health and safety management. Topics include recognition, evaluation, and control of hazards; medical surveillance; personal protective equipment; spill and exposure prevention; and contamination reduction and removal methods. Emphasis is on relating these principles to the regulatory processes (e.g., OSHA/NIOSH) governing environmental and occupational health and safety.

ENMT 325 Global Environment and Sustainable Development (3)

(Fulfills the civic responsibility perspective requirement.) An overview of the processes of economic growth and energy development and their impact on the global environment and biosphere. Review covers the effect on biodiversity, conservation, assessment methods, and mitigation. Topics include the relationship between energy and the environment, the impact of fossil fuels on the environment, global concerns of ozone depletion and climate change, alternative and renewable energy sources, conservation and technical advances, and sustainable energy development. Global agreements to balance economic growth against life-support systems and the natural resource base are surveyed. The collective thinking of various experts on how to advance and create sustainable development is also explored.

ENMT 330 Environmental Monitoring and Investigations (3)

An examination of principles and methods used in monitoring, sampling, and analyzing pollutants in air, water, soil, and wastes. These activities are reviewed with respect to permitting and compliance, environmental audits, site assessments, site investigations, health and safety, and remediation. Focus is on developing and implementing plans for sampling and analyses, maintaining quality assurance and quality control, using equipment for sampling and monitoring, complying with regulatory requirements, and presenting investigation results. Site assessment and remedial investigation practices are also reviewed to characterize sites and explore “how clean is clean?”

ENMT 340 Environmental Technology (3)

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 350 Integrated Waste Management (3)

An overview of applicable regulations and technology and management practices related to the generation, handling, minimization, prevention, storage, processing, treatment, transfer, and disposal of wastes. Topics include the regulations, methods, and scientific principles for safely managing wastes from generation through final disposal (i.e., from cradle to grave). Emphasis is on basic principles of integrated and systematic management of municipal, hazardous, nuclear, mixed, and special wastes. The history of waste management is also covered.

ENMT 360 Water Environment Management (3)

An overview of basic water system composition and how human activities cause pollution. Focus is on relevant laws and regulations, pollution assessment and evaluation techniques, alternative approaches to control pollution, and management systems. Discussion also covers systems for safe drinking water, water pollution control for sewage and industrial wastewater, stormwater management, and sludge management.

ENMT 370 Environmental Information and Communications (3)

A study of the structure, methodology, and application of the theoretical principles of communication of environmental information as they pertain to a specific audience, content area, or situation. Emphasis is on conveying risk and legal information, communicating in emergencies, and using public relations skills. An overview of information technology and the use of computers in environmental management is also provided. Topics include Internet sites, geographical information systems, environmental models and applications, environmental monitoring and measurement, and automated compliance strategies.

ENMT 380 Air Quality Management (3)

An overview of air quality management principles and strategy. Focus is on the atmosphere, pollutants and sources, dispersion, effects, regulations, air pollution control technology and management, indoor air quality, 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)

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. 18). 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 semester hours in all internship coursework through Co-op toward a first bachelor's degree and up to 9 semester hours 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. 18). 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 semester hours in all internship coursework through Co-op toward a first bachelor's degree and up to 9 semester hours 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)

(Fulfills the civic responsibility perspective requirement.) An examination of issues in economic development, environmental pollution, remediation, and conservation within a multifaceted scientific, legal, political, and global context. Selected topics are drawn from ongoing national and international events concerning environmental issues. An overview of the fundamental elements of an integrated environmental management program is provided, using specific examples. Case studies apply principles and concepts to environmental perspectives, experiences, and research issues. Project-planning and implementation techniques are considered with respect to environmental management and new paradigms of design for the environment, industrial ecology, environmental accounting, etc. Previously acquired knowledge and skills complement an advanced management project focusing on current issues in the field.

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. 17. 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: Attendance at a Prior Learning orientation, formal admission to the program, and a college-level writing course or satisfactory score on the English placement test. (Students should visit www.umuc.edu/priorlearning for information or to complete the Web orientation and apply to EXCEL.) 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.

Fire Science

Courses in fire science (designated FSCN) may be applied as appropriate (according to individual program requirements) toward

- a major or minor in fire science 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.

Most courses require extensive writing. Students should complete a writing course (such as ENGL 101, 101X, 391, and 391X) or have equivalent writing experience before enrolling.

A description of the curriculum for the fire science major and minor begins on p. 58. A description of the curriculum for the management studies major and minor begins on p. 74.

FSCN 302 Advanced Fire 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)

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 Fire-Personnel Management (3)

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 Incendiary-Fire Analysis and Investigation (3)

A presentation of procedures and techniques for determining, collecting, comparing, and analyzing data on incendiary fires. Topics include principles of ignition phenomena and propagation variables, the role of insurance and governmental programs in combating arson, and techniques of analyzing and predicting data, such as pattern analysis. Discussion deals with the legislative, economic, psychological, sociological, and legal aspects of incendiarism.

FSCN 401 Disaster and Fire Defense Planning (3)

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)

Explanation of the dynamics of human behavior in fire incidents. Emphasis is on the functions and implementation of prevention practices, programs, codes, and ordinances. The concepts of risk, personal invulnerability, role, and group dynamics are examined in relation to design aspects of buildings and mitigation of the effects of fire on modern society. Discussion deals with proper ways of conducting postfire interviews and emphasizes the psychological effects of communications during emergencies.

FSCN 403 Managerial Issues in Hazardous Materials (3)

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 Design (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)

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)

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 role 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)

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 486A Internship in Fire Science Through Co-op (3)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 18). 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 semester hours in all internship coursework through Co-op toward a first bachelor's degree and up to 9 semester hours 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: Formal admission to the Co-op program (program requirements are listed on p. 18). 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 semester hours in all internship coursework through Co-op toward a first bachelor's degree and up to 9 semester hours 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).

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 semester in this discipline.

GEOL 100 Physical Geology (3)

A study of the principles of dynamic and structural geology. The rocks and minerals composing Earth, the movement within it, and its surface features and the agents that form them are surveyed. 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 and for international perspective coursework;
- a major or minor in humanities; and
- electives.

UMUC offers a limited number of foreign language courses each semester.

A description of the curriculum for the humanities major and minor begins on p. 66.

GERM 111 Elementary German I (3)

(Assumes no prior knowledge of German. Fulfills the international perspective requirement.) An elementary study of German. Emphasis begins with oral communication skills, and leads to 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. Students may receive credit for only one of the following courses: GERM 101 or GERM 111.

GERM 112 Elementary German II (3)

(Fulfills the international perspective requirement.) Prerequisite: GERM 111 with a grade of C or better. Continued basic study of German, emphasizing oral communication and leading to a balanced development of proficiency in the four communication skills of listening, speaking, reading, and writing. Basic structures, vocabulary, pronunciation, and writing are practiced. Study of culture, history, and geography continues. Oral and written authentic text from native speakers is used as much as possible. Students may receive credit for only one of the following courses: GERM 101 or GERM 112.

Gerontology

Courses in gerontology (designated GERO) may be applied as appropriate (according to individual program requirements) toward

- the general education requirements for behavioral and social sciences (except GERO 341, 342, 351, and 353 and 1-credit GERO courses);
- a minor in gerontology;
- a certificate in gerontology; and
- electives.

A description of the curriculum for the gerontology minor begins on p. 62.

GERO 100 Introduction to Gerontology (3)

(Formerly GERO 210 Social Gerontology.) 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)

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 302 Health and Aging (3)

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)

Recommended: 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)

(Fulfills the civic responsibility perspective requirement.) 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.

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. The impact of policy and services on women's development and quality of life and life planning for midlife and aging women are also discussed. Students may receive credit for only one of the following courses: GERO 311 or GERO 497E.

GERO 327 Ethnicity and Aging (3)

(Fulfills the civic responsibility perspective requirement.)

Recommended: 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)

Recommended: 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)

Recommended: 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 phenomenon 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)

Recommended: 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)

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 understanding community- vs. institution-based care and its continuum 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.) An overview of the administrative and operational issues of long-term care facilities. The responsibilities of a long-term care administrator and 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)

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 Environment (3)

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)

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)

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). Other topics include 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 discussed. 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)

Recommended: 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)

(Fulfills the civic responsibility perspective requirement.) Prerequisite: ECON 201, ECON 203, or ECON 205. 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. Other topics include 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 implications of demographics for our society and its economic structure.

GERO 410 Cross-Cultural Perspectives of Aging (3)

(Fulfills the civic responsibility or international perspective requirement.) Recommended: 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)

Recommended: 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. 18). 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 semester hours in all internship coursework through Co-op toward a first bachelor's degree and up to 9 semester hours 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. 18). 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 semester hours in all internship coursework through Co-op toward a first bachelor's degree and up to 9 semester hours 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 495E Developing Stress-Management Programs for Older Adults (1)

An exploration of various approaches for identifying sources of stress and developing stress-management strategies and skills for a diverse older adult population. Focus is on various stress models and the development of stress-management programs for specific groups within the older adult population. Skills and strategies for addressing various types of stress are explored.

GERO 495G Common Clinical Conditions of Older Patients (1)

(Geared toward a nonmedical, lay audience.) A review of both emergent and nonemergent medical conditions that commonly afflict elderly populations. Case histories are presented as examples. Conditions discussed include pain, bleeding, infection, incontinence, feeding problems, confusion, and falls and fractures.

GERO 495I More Than Movement (1)

Presentation of and practice in activities designed to motivate and increase joint articulation, range of motion, and enjoyment of body movement, as well as to stimulate deeper breathing and physical awareness. Focus is on promoting healthier bodies, minds, and spirits through interrelated arts, fun, and social interaction regardless of the level of physical functioning.

GERO 495L Movement, Stress Management, and Fulfilling Human Potential (1)

A practical exploration of creative ways to attain more awareness, develop techniques for relaxing and reducing stress, and increase one's ability for self-expression. Music, art, imagery, relaxation, deep breathing, sensitivity awareness, dance, and theatre games are used to improve self-confidence and communication abilities. Students may receive credit for only one of the following courses: EDHD 499Z or GERO 495L.

GERO 495N Aging Creatively and Positively (1)

(Students should wear loose, comfortable clothing.) An overview of techniques for relaxation and rejuvenation designed to aid in understanding the aging process and attitudes toward it.

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 a new understanding of grief and loss that has emerged from health care and counseling practices. Therapeutic interventions, responding to varied loss-inducing situations, that help clients satisfactorily work through accompanying grief while promoting personal growth are explained.

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. Further 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 496H International Perspective on Health Services in Gerontology (1)

A comprehensive overview of methods and techniques used to analyze how international health systems provide gerontological services. Examination covers government- and nongovernment-sponsored approaches to ensuring continued health-benefits coverage/services to older and retiree populations. Topics include resources, organization, economic development and support, and delivery of services for several countries. Students may receive credit for only one of the following courses: FMCD 499F or GERO 496H.

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 covered 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 life span.

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 minor in government and politics, African American studies, or social science;
- a major in social science;
- a certificate in various policy-related areas; and
- electives.

A description of the curriculum for the government and politics minor begins on p. 64. Descriptions of other related curricula may be found on the following pages: African American studies (p. 34), criminal justice (p. 50), and social science (p. 81).

GVPT 100 Principles of Government and Politics (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 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 199 Introductory Topics in Government and Politics (1–3)

Introduction to topics of specialized interest.

GVPT 200 International Political Relations (3)

(Fulfills the civic responsibility or international perspective requirement.) 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)

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)

(Fulfills the international perspective requirement.) A survey and an analysis of the leading ideologies of the modern world. Topics include anarchism, communism, socialism, fascism, nationalism, and democracy.

GVPT 260 State and Local Government (3)

A study of the functioning and the problems of state and local government in the United States. Illustrations are drawn from Maryland jurisdictions.

GVPT 272 Politics of Race Relations in the United States (3)

An examination of the political dimension of historical and contemporary racial cleavage in the United States. Emphasis is on the period after World War II.

GVPT 282 Government and Politics of the Third World (3)

(Fulfills the civic responsibility or international perspective requirement.) 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 socio-economic environments that are common to most of the states of Africa, the Middle East, Asia, and Latin America.

GVPT 306 Global Ecopolitics (3)

(Fulfills the civic responsibility or international perspective requirement.) An assessment of controversial worldwide problems. Topics may include growth and its limitations, agricultural productivity, the depletion of resources, the energy crisis, pollution, and the general effects of science and technology on the ecological, socio-economic, and political systems of the world. These problems are considered as objects of public policy.

GVPT 308 Human Rights in the World (3)

(Formerly GVPT 399Y. Fulfills the civic responsibility or international perspective requirement.) 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 or GVPT 399Y.

GVPT 335 Foreign Policy and the New World Order (6)

(Fulfills the international perspective requirement.) A comparative study of foreign policy among the economic and military world powers: the United States, the People's Republic of China, Japan, the European Union, and Russia. Focus is on their special characteristics in terms of foreign policy, their comparative behavior, and their interrelationships. Topics include the collapse of the Soviet Union, conflict in the Middle East, the rise of new economic powers, and other events that are reshaping the world order. Students may receive credit for only one of the following courses: BEHS 332, BEHS 335, BEHS 498B, or GVPT 335.

GVPT 400 Business and Politics (3)

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)

(Fulfills the civic responsibility or international perspective requirement.) A study of governmental problems of international scope. Topics include causes of war, problems of neutrality, and propaganda. Assignments include reports on readings from current literature.

GVPT 401A International Political Terrorism (3)

(Fulfills the international perspective requirement.) An examination of the development of international political terrorism. Topics may include the definition of terrorism; the historical antecedents of modern terrorism; the motivations, organizations, and support networks of terrorists; the nature of crisis management; the responses of the world community; the effects of terrorism on free societies; and the linkages of terrorist states to international terrorism. The ability of civilization to withstand this type of attack upon its fabric is discussed.

GVPT 401B State Terrorism (3)

An exploration of the use of terror and political violence by governments, against their own citizenry or against other nations, in the furtherance of national goals. Review begins with the Reign of Terror in revolutionary France and culminates with a recent 20th-century example, the invasion of Kuwait by Iraq.

GVPT 401C Urban Terrorism (3)

An examination of terrorism in the urban environment. Topics include the definition of terrorism; the historical antecedents of urban terrorism, from the Paris Commune to the *Minimanual of the Urban Guerrilla*; the motivation, organization, tactics, and support networks of urban terrorists; and the nature of crisis management in the face of urban terrorist activity. The role of advanced technology in rendering society more vulnerable to urban terrorism is evaluated, with industrial and postindustrial society considered as catalysts for terrorist attacks in urban settings. Urban terrorism is viewed in the contexts of transnational and international terrorism. The effects of terrorism on a free society are assessed.

GVPT 401D International Terrorism (1)

An examination of the origins, theories, methods, dangers, and possible future of international terrorism. The serious nature of terrorism today and how prepared government should be to control it are addressed. Topics include the definition of terrorism; reasons for growth; terrorist groups and their grievances; supporters of terrorism; questions of moral or philosophical justification; and protection against kidnappings, skyjackings, and bombings. Assignments include advanced reading and research. Students may receive credit for only one of the following courses: GVPT 199C or GVPT 401D.

GVPT 402 International Law (3)

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)

(Fulfills the civic responsibility perspective requirement.) An exploration of fundamental moral and legal issues concerning war.

GVPT 405 Defense Policy and Arms Control (3)

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 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 412 Public Financial Administration (3)

A survey of governmental financial procedures. Analysis focuses on processes of current and capital budgeting, the administration of public borrowing, the techniques of public purchasing, and the machinery of control through preaudit and postaudit.

GVPT 413 Governmental Organization and Management (3)

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)

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 426 Public Opinion (3)

An examination of public opinion and its effect on political action. Emphasis is on propaganda, pressure groups, and the formation and measurement of opinions.

GVPT 431 Introduction to Constitutional Law (3)

A systematic inquiry into the general principles of the U.S. constitutional system. Special reference is made to the role of the judiciary in interpreting and enforcing the federal 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 442 History of Political Theory: The Middle Ages to the Present (3)

(Fulfills the historical perspective requirement.) A survey of the principal political theories set forth in the works of thoughtful writers from Niccolò Machiavelli to John Stuart Mill.

GVPT 443 Contemporary Political Theory (3)

(Fulfills the historical or international perspective requirement.) Prerequisite: GVPT 100. A survey of the principal political theories and ideologies from Karl Marx to the present.

GVPT 444 American Political Theory (3)

(Fulfills the historical perspective requirement.) 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 the States of the Former Soviet Union (3)

(Fulfills the historical or international perspective requirement.) A study of the development of the foreign policy of Russia and the other states of the former Soviet Union. The processes of policy formation and the forces and conditions that make for continuities and changes are examined. Students may receive credit only once under this course number.

GVPT 452 Inter-American Relations (3)

(Fulfills the historical perspective requirement.) An analytical and historical study of the policies of the United States toward Latin America. Focus is on examining problems in relations with particular countries and discussing recent political developments.

GVPT 453 Recent East Asian Politics (3)

(Fulfills the historical or international perspective requirement.) A perspective on the background of recent political events in East Asia. Interpretation of the influence of those events on worldwide politics is included.

GVPT 454 Contemporary African Politics (3)

(Fulfills the international perspective requirement.) A survey of contemporary developments in the international politics of Africa. Special emphasis is on the role of an emerging Africa in world affairs.

GVPT 455 Contemporary Middle Eastern Politics (3)

(Fulfills the historical or international perspective requirement.) A survey of contemporary developments in the international politics of the Middle East. Emphasis is on the role emerging Middle Eastern nations have been taking in world affairs.

GVPT 457 American Foreign Relations (3)

(Fulfills the historical perspective requirement.) 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 of the major foreign policies of the United States is provided.

GVPT 460 State and Local Administration (3)

A study of the administrative structure, procedures, and policies of state and local governments. The focus is on the state level and on intergovernmental relationships. Illustrations are drawn from Maryland governmental arrangements.

GVPT 461 Metropolitan Administration (3)

An examination of problems facing administrators of public services, planning, and coordination in a metropolitan environment.

GVPT 473 Legislature and Legislation (3)

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 474 Political Parties (3)

A descriptive and analytical examination of American political parties, nominations, elections, and political leadership.

GVPT 475 The Presidency and the Executive Branch (3)

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 479 Problems in American Public Policy (3)

A study of the background and interpretation of various factors that affect the formation and execution of American public policy.

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 481 Government and Administration of Russia and the States of the Former Soviet Union (3)

(Fulfills the international perspective requirement.) A comparative study of the governmental systems and political processes of the states of the former Soviet Union.

GVPT 482 Government and Politics of Latin America (3)

(Fulfills the international perspective requirement.) A comparative study of the governmental systems and political processes of the countries of Latin America. The cases of Argentina, Brazil, Chile, and Mexico are evaluated.

GVPT 483 Government and Politics of Asia (3)

(Fulfills the international perspective requirement.) A comparative study of the political systems of China, Japan, India, and other selected Asian countries.

GVPT 484 Government and Politics of Africa (3)

(Fulfills the international perspective requirement.) A comparative study of the governmental systems and political processes of the countries of Africa. Special emphasis is on the problems of nation-building in emerging countries.

GVPT 484A Conflicts in Contemporary Black Africa (1)

A concise introduction to the political background of Africa. Topics include Africa's colonial heritage, the post-independence period with the problems faced by the new African leadership, and the demands of a modern economy. Pan-Africanism and the importance and problems of the African states in the United Nations are also considered. Assignments include advanced reading and research. Students may receive credit for only one of the following courses: GVPT 199H or GVPT 484A.

GVPT 485 Government and Politics of the Middle East (3)

(Fulfills the international perspective requirement.) A comparative study of the governmental systems and political processes of the countries of the Middle East. Emphasis is on the problems of nation-building in emerging countries.

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. 18). 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 semester hours in all internship coursework through Co-op toward a first bachelor's degree and up to 9 semester hours 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. 18). 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 semester hours in all internship coursework through Co-op toward a first bachelor's degree and up to 9 semester hours 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 South Asia (3)

(Fulfills the international perspective requirement.) A comparative study of political processes and governmental forms of such countries as India, Pakistan, Bangladesh, Sri Lanka, and Nepal.

GVPT 488 Comparative Studies in European Politics (3)

(Formerly GVPT 486. Fulfills the international perspective requirement.) Prerequisite: GVPT 280 or GVPT 282. A comparative study of political processes and governmental forms in selected European countries. Students may receive credit for only one of the following courses: GVPT 486 or GVPT 488.

GVPT 498 Advanced Topics in Government and Politics (1–3)

In-depth study of topics of specialized interest.

GVPT 498A Contemporary Issues in the Middle East (1)

An investigation of the modern Middle East. Topics include significant stages in modern Arab history, notions of honor and shame, religion, and other factors of cultural importance. Western stereotypes and misconceptions of the region and the people are examined. Analysis covers the problems of state development, the struggle over Palestine, and the causes and possible results of the Gulf War.

GVPT 498X Terrorism, Antiterrorism, and Prevention Laws (3)

A review and analysis of federal laws on terrorism. Emphasis is on the analysis and application of federal acts, laws against terrorism, and antiterrorism provisions. Topics include policy formation and the implementation of current terrorism, antiterrorism, and prevention laws. Various components of the laws and their impact are assessed.

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 and for historical perspective coursework;
- a major or minor in history;
- a minor in African American studies, Asian studies, or women's studies; and
- electives.

A description of the curriculum for the history major and minor begins on p. 64. Descriptions of other related curricula may be found on the following pages: African American studies (p. 34), Asian studies (p. 36), humanities (p. 66), and women's studies (p. 85).

HIST 115 World History I (3)

(Fulfills the historical or international perspective requirement.) 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)

(Fulfills the historical or international perspective requirement.) 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 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 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 319 Special Topics in History (3)

An in-depth study of specific topics, themes, events, or problems in history. Assignments include advanced reading and research. Students may receive credit for a given topic in either HIST 219 or HIST 319 only once.

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. Other topics include violence and organized crime, domestic terrorism, violent crimes, student protest, and labor violence. Assignments include advanced reading and research.

HIST 319D A History of Sex in America (3)

A survey of the changing and conflicting ideas, debates, and practices surrounding sex in North America from the beginnings of European colonization until the present. Assignments include advanced reading and research.

HIST 319L History of Drug Use in America (3)

A survey of the longstanding 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 336 Europe in the 19th Century: 1815 to 1919 (3)

(Fulfills the historical or international perspective requirement.) A study of the political, economic, social, and cultural development of Europe from the Congress of Vienna to World War I.

HIST 337 Europe in the World Setting Since 1914 (3)

(Fulfills the historical or international perspective requirement.) An investigation of the political, economic, and cultural developments of Europe since 1914, with special emphasis on the factors involved in the two world wars and their worldwide effects and significance.

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 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)

(Fulfills the historical perspective or civic responsibility requirement.) 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 376 Women and the Family in America to 1870 (3)

(Formerly HUMN 366.) A commentary on the diversity of experience that has confronted American women and families. Three motifs are traced throughout the history of interactions between the family and the social environment: changes and continuities in the division of labor on the basis of gender, the resilience of the family in response to social and economic change, and the relationship between ideals and realities in family life. 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)

(Fulfills the historical or international perspective requirement.)

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 382 The Korean War (3)

(Formerly HIST 318O. Fulfills the historical or international perspective requirement.) An exploration of the Korean War, including the origins of the conflict on the peninsula and the reasons for Soviet, American, and Chinese involvement. Military strategy and campaigns are discussed, as are U.S. domestic politics and the consequences of the war for the nations and peoples involved. Students may receive credit for only one of the following courses: HIST 382 or HIST 318O.

HIST 383 Korean History (3)

(Fulfills the historical or international perspective requirement.)

A study of the history of Korea from prehistory to the present. Focus is on Korea's political, social, and economic history. Korea's relations with China and Japan are explored. Students may receive credit only once under this course title.

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)

(Formerly HIST 419N.) 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 464 World War I (3)

An intensive study of the First World War. Topics include the development of nationalism and socialism in late 19th-century Europe, the causes of the First World War, trench warfare on the Western Front, war in the Balkans, total war on the home fronts, the Russian Revolution of 1917, the collapse of the Central Powers, the 1918 settlements, the postwar conflicts that continued to haunt Europe until 1923, and the concept of the Lost Generation.

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 467 History of Maryland (3)

An examination of the political, social, and economic history of Maryland from the 17th century to the present.

HIST 481 History of Modern China (3)

(Fulfills the historical or international perspective requirement.) A study of the history of modern China from 1644 to the present. Focus is on the process of change, as China moved from her perceived position as the center of the civilized world to that of a nation-state in a complex international environment.

HIST 483 History of Japan Since 1800 (3)

(Fulfills the historical or international perspective requirement.) 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. 18). 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 semester hours in all internship coursework through Co-op toward a first bachelor's degree and up to 9 semester hours 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. 18). 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 semester hours in all internship coursework through Co-op toward a first bachelor's degree and up to 9 semester hours 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 499 Independent Study in History (1–3)

Prerequisite: 6 credits in upper-level history, approval of department, and agreement of faculty member to act as supervisor. Directed independent study of topics of special interest not covered by regularly scheduled courses in history. May be repeated to a maximum of 6 credits when topics differ.

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.

Most courses require extensive writing. Students should complete a writing course (such as COMM 390, 393, 393X, 394, and 394X and ENGL 101, 101X, 391, and 391X) or have equivalent writing experience before enrolling.

A description of the curriculum for the humanities major and minor begins on p. 66.

HUMN 102 Classical Foundations (3)

(Fulfills the historical or international perspective requirement.) 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 119 American Adventure (3)

(Fulfills the historical perspective requirement.) A survey of the early history of the United States, covering the discovery of the New World through the Civil War and Reconstruction. Emphasis is on social history, including the effects of political and social events on women, children, the family unit, African Americans, and Native Americans. The clash between European and Native American cultures, the violence of the revolution, and the trials and tribulations of the early pioneers are explored. Students may receive credit for only one of the following courses: HIST 156 or HUMN 119.

HUMN 120 America in Perspective (3)

(Fulfills the historical perspective requirement.) A survey of the second hundred years of the history of the United States, beginning in 1877 with the closing of the American frontier and the move into industrialization. Review covers crucial events and issues in recent history, including the Great Depression, the rise of big business, Roosevelt's New Deal, World Wars I and II, the Cold War, the Vietnam War, the civil rights movement, and the end of the Cold War. The complex forces and events that have determined the course of modern American history and shaped America as it is today are traced and interpreted. Students may receive credit only once under this course number and for only one of the following courses: HIST 157 or HUMN 120.

HUMN 301 Crossing Cultures: World Views in the Humanities (6)

(Fulfills the historical or international perspective requirement.) An examination of Western and non-Western roots of human identity viewed from philosophical, cultural, and intellectual perspectives. The ways in which different peoples express their essential intellectual heritage through philosophy, religion, and the arts are studied. Ideas and cultural expression from specific areas of the world, from antiquity through 1750, are explored. Areas covered are Africa, the Middle East, South Asia, the Far East, the Americas, and Europe. Outcomes of cross-cultural interaction are considered.

HUMN 311 Workplace Ethics (3)

(Fulfills the civic responsibility perspective requirement.) 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. From this basis, workplace issues such as discrimination, harassment, the quality of work life, professional rights and responsibilities, and specific cases exemplifying these issues are discussed. 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 312 Ethics and Religion (3)

(Fulfills the civic responsibility perspective requirement.) An exploration of the roles religions around the world play in the establishment of the moral codes in the societies where they are practiced and the results when different religions promote different moral responses in the same society. Discussion covers the relationships, if any, of ethics—the search for general principles that underlie specific moral rules or claims—to the different religions that express these moral codes.

HUMN 334 Understanding Movies (3)

An analysis of one of the most important means of artistic expression of the 20th century. 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 (6)

(Fulfills the civic responsibility or historical perspective requirement.) 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 at the same time 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 339 Aging in Literature, Film, and the Arts (3)

A critical examination of the experience of aging as portrayed in literature, film, and the arts in different countries. The experiences of older adults are explored as they relate to identity, intimacy, friendships, prejudice or discrimination, family, intergenerational relationships, health, independence, social roles, grieving, and end-of-life issues.

HUMN 350 The Religious Quest (6)

(Fulfills the historical or international perspective requirement.) A comparative exploration of aspects of several religions, emphasizing specific forms of expression and practice. Focus is on the major faiths of the world in terms of numbers of adherents: Hinduism, Buddhism, Judaism, Christianity, Islam, and religions of China and Japan. An interdisciplinary approach is used to deal with the religions in their historical, social, literary, artistic, philosophical, and theological aspects.

HUMN 351 Myth and Culture (3)

(Fulfills the historical or international perspective requirement.) 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 360 Global Environmental Change (6)

(Also listed as BEHS 361 and NSCI 361. Yields 3 natural science credits and either 3 humanities credits or 3 social science credits. Fulfills the civic responsibility or international perspective requirement.) An in-depth examination of environmental changes that many believe are caused by human adaptations to Earth's natural resources and the possible effects on both the global biosphere and the human condition. Scientific and social issues are explored through various questions: Is global warming really happening? Will sea levels rise? What are the consequences of massive deforestation? What can be done when there is so much scientific uncertainty and global social diversity? The concept of sustainability, as it applies to human interactions with the environment, is emphasized. Students may receive credit for only one of the following courses: BEHS 361, GNSC 361, HUMN 360, or NSCI 361.

HUMN 370 Humanity of Language (3)

(Fulfills the historical perspective requirement.) A study of linguistics that examines the symbolic structure of human language. Language is explored in terms of sound, word, sentence, and meaning; spoken and written language are compared in different societies and eras. Fundamental questions related to the human experience with language are addressed.

HUMN 375 Social History of Washington, D.C. (3)

(Fulfills the historical perspective requirement.) 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 376 Social History of a Region (3)

(Fulfills the historical perspective requirement) An integrated study of the artistic, architectural, cultural, social, political, economic, and military history of a city or region. The place and its unique history determine the focus or foci. The different aspects of the place are studied through reading, lecture, and site tours.

HUMN 376A Social History of Annapolis (3)

(Fulfills the historical perspective requirement.) A study of the artistic, architectural, cultural, social, political, economic, and military history of Annapolis, one of the oldest cities in the United States. Annapolis is examined in relation to the Chesapeake Bay, as a naval center, as a center of government with the oldest state capitol building, and as a center of the slave trade that became home to early “free men of color” before the Civil War. Archaeological and preservation sites are toured.

HUMN 376B Social History of Baltimore (3)

(Fulfills the historical perspective requirement.) 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 398B Popular Culture in 20th-Century America (3)

A study of American popular culture. Topics include the popularity and influence of icons like Elvis Presley, Frank Sinatra, John Wayne, Marilyn Monroe, Babe Ruth, Michael Jordan, and the Simpsons; the role of race, gender, economic class, and age; and popular culture as an expression of freedom, unity, and individualism or one of crass materialism, corporate domination, and declining moral values. Assignments include advanced reading and research. Students may receive credit for only one of the following courses: HUMN 198B or HUMN 398B.

HUMN 399 Independent Study in Humanities (1–6)

(For advanced students.) Directed independent study of topics of special interest not covered by regularly scheduled courses. May be repeated to a maximum of 6 credits when topics differ.

HUMN 442 Contemporary Sexual Ethics (3)

An inquiry into ethical considerations of contemporary sexual behavior. Topics include the changing dynamics between male and female (modes, expectations, and codes); the increase of sexual activity and freedom (premarital, postmarital, and extramarital); laws, such as those concerning abortion, homosexuality, and rape (whether outside or within marriage); the sexual rights of women; and speculations about ethical dimensions of human sexual activity in the future.

HUMN 486A Internship in Humanities Through Co-op (3)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 18). 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 semester hours in all internship coursework through Co-op toward a first bachelor's degree and up to 9 semester hours 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. 18). 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 semester hours in all internship coursework through Co-op toward a first bachelor's degree and up to 9 semester hours 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 various business-related areas; and
- electives.

A description of the curriculum for the human resource management major and minor begins on p. 67. Descriptions of other management-related curricula may be found on the following pages: accounting (p. 33), business administration (p. 40), environmental management (p. 55), fire science (p. 58), global business and public policy (p. 62), management studies (p. 74), and marketing (p. 75).

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)

Prerequisite: BMGT 364. 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. Focus is on 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)

Prerequisite: HRMN 362. An introduction to methods and processes of negotiation and collective bargaining. Negotiating strategies related to selected products, services, and management issues are explored. Case studies and exercises in negotiation are used to examine various strategies. 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)

(Fulfills the civic responsibility perspective requirement.) An introduction to the processes observed and the 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 390 Contemporary Compensation Management (3)

Prerequisites: BMGT 230 and HRMN 300. An exploration of alternative compensation philosophies. Topics include strategies of employee compensation, incentives to productivity, employee motivation, and performance appraisal. Strategies such as incentive cash and/or stock compensation programs, employee ownership, and nonmonetary rewards are discussed and evaluated in varying situations. Discussion also covers techniques for identifying and classifying critical job components and observable standards and measures, setting compensation for job performance, and developing an executive compensation program. The interrelationship between compensation, motivation, performance appraisal, and performance within the organization is examined. Students may receive credit for only one of the following courses: BMGT 388L or HRMN 390.

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 to 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 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.

HRMN 404 Managing Diversity in Organizations (3)

Prerequisite: BMGT 364. An examination of the major forces in technological and industrial change, with emphasis on workforce diversity. Topics include issues related to valuing and managing diversity, problem solving, team building, customer service, strategic management, organizational adaptability, and changing technologies, markets, and customers. Students may receive credit for only one of the following courses: BMGT 498G, HRMN 404, or MGMT 498G.

HRMN 406 Employee Training and Development (3)

Prerequisites: BMGT 364 and HRMN 300. 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)

(Fulfills the civic responsibility perspective requirement.) 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)

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 463 Public-Sector Labor Relations (3)

Prerequisite: HRMN 362. A study of the development and structure of labor relations in public-sector employment. The responses of federal, state, and local governments to unionization and collective bargaining are analyzed. Case studies of governmental units, public unions, and union issues demonstrate and reinforce principles. Students may receive credit for only one of the following courses: BMGT 463 or HRMN 463.

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. 18). 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 semester hours in all internship coursework through Co-op toward a first bachelor's degree and up to 9 semester hours 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. 18). 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 semester hours in all internship coursework through Co-op toward a first bachelor's degree and up to 9 semester hours 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 494 Strategic Human Resource Management (3)

Prerequisite: HRMN 300. An exploration of methods for aligning human resource management functions and activities with corporate strategic goals. The case-study method is used to illustrate and analyze principles of integration. Topics include human resource planning and diversity; strategies for recruitment, selection, and development; equal opportunity, sexual harassment, and discrimination policies; compensation planning; appraisal system planning; and strategic labor/management issues. The influence of changes in legislation and federal regulation, new forms of business, and the growth of teleworking is discussed. Students may receive credit for only one of the following courses: BMGT 388K or HRMN 494.

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 systems management, computer information technology, computer studies, or management studies;
- a minor in computer studies or forensics;
- a certificate in various computer-related areas; and
- electives.

A description of the curriculum for the information systems management major begins on p. 70. Descriptions of other computer-related curricula may be found on the following pages: computer and information science (p. 46), computer information technology (p. 47), computer science (p. 48), and computer studies (p. 49).

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 204 History and Future Trends of Computing (3)

(Fulfills the historical perspective requirement.) A historical account of the pioneers of computing and the rise of the computer industry (as well as related industries). Although technical and institutional developments are the focus, developments are explained in a broader historical context. Factors such as the state of scientific knowledge, economic conditions, defense requirements, the nature of business and financial systems, and governmental policy are taken into consideration.

IFSM 300 Information Systems in Organizations (3)

Prerequisite: IFSM 201. An overview of information systems, their role in organizations, and the relation of information systems to the objectives and structure of an organization. Human aspects of computing, types of computer systems, and general theory of systems are discussed.

IFSM 302 Workplace Productivity (3)

Prerequisite: 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)

Prerequisite: IFSM 201. A general survey of the application of human factors to the design and use of information systems. The history, evolution, and current state of the human-computer interface are covered. The contributions of psychology, engineering, and physiology to the development of ergonomics are described.

IFSM 304 Ethics in the Information Age (3)

(Fulfills the civic responsibility perspective requirement.) Prerequisite: IFSM 201. An introduction to information systems as used to provide information for decision making in a democratic society. The philosophy, techniques, and ethical considerations involved in evaluating information systems are discussed.

IFSM 310 Software and Hardware Concepts (3)

Prerequisites: IFSM 201 and MATH 012. 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 320 Office Automation (3)

Prerequisite: IFSM 201. An examination of office information systems and decision-support systems as emerging critical elements of data and information systems for business uses. Emphasis is on information-processing considerations at the systems level, including analysis and management of support activities. Discussion covers interfaces between machines and their users, current and future technological trends, and their effects on data processing and the office environment.

IFSM 350 Wireless Telecommunications (3)

(Formerly IFSM 398W.) 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 390 Multimedia Design and Evaluation for Information Systems Managers (3)

Prerequisite: IFSM 300. An investigation of microcomputer-based multimedia systems and their application. Emphasis is on concepts and techniques for creating professional presentations using sound, clip art, video, and text. Discussion covers hardware selection and the use of the Internet as a resource for multimedia projects. The effects of multimedia presentations and the social issues involved in their use are examined.

IFSM 410 Database Concepts (3)

(Formerly Database Program Development.) Prerequisites: IFSM 300 and either CMIS 140, CMIS 141, CMIS 141A, CMIS 315, CMIS 340, CMSC 130, CMST 305, or CMST 306. 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 425 Decision Support and Expert Systems (3)

Prerequisite: IFSM 300. An analysis of information support systems that serve the management user at all levels of the decision-making process. The information provided by such systems is derived from multiple models and databases within and/or external to an organization. Theoretical concepts are related to examples from specific organizations. Research on the development of expert systems and commercially available applications is 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 430 and an upper-level writing course (such as COMM 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. 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)

Prerequisites: IFSM 300 and 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 435 Information Security and E-Commerce (3)

(Formerly IFSM 498H.) Prerequisite: IFSM 300. An introduction to the four essential elements of safe electronic commerce: the data transaction, the server, the client, and the host network. Topics include encryption, firewalls, transaction security, securing Web commerce, and Web security risk management. Students may receive credit for only one of the following courses: IFSM 435 or IFSM 498H.

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: BMGT 487, IFSM 438, or TMGT 430.

IFSM 446 Java-Based Information Systems Applications (3)

Prerequisites: IFSM 300 and either CMIS 140, CMIS 141, CMIS 141A, CMIS 315, CMIS 340, CMSC 130, CMST 305, or CMST 306. An introduction to the use of Java in designing and maintaining interconnectivity, accessing information, and supplying online information to clients, vendors, and remote staff. Strategies for protecting and securing Internet/intranet systems are also examined. Projects include building a Java-based application, such as one part of an electronic commerce system. Students may receive credit for only one of the following courses: IFSM 446 or IFSM 498W.

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)

Prerequisites: IFSM 300 and 450. 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 455 IT Infrastructure of E-Commerce (3)

(Formerly IFSM 498F.) Prerequisites: IFSM 300 and 310. An introduction to both the theory and practice of doing business over the Internet and World Wide Web. Topics include the general structure, protocols, utility programs, popular Internet applications, and Web client/server architecture that support the Internet and electronic commerce. The technologies of electronic commerce (including software, security issues, and payment systems) are addressed. Project planning and management and customer relationship management issues are also explored. Students may receive credit for only one of the following courses: IFSM 455 or IFSM 498F.

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)

Prerequisites: IFSM 300 and 450. A detailed overview of various emerging network technologies such as wireless networks based on IEEE 802.11 standards, Mobile Adhoc 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. The use of existing solutions and mechanisms for addressing the security requirements for these applications is examined, and the impact of these solutions on the parameters of quality of service for these applications 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 486A Internship in Information Systems Management Through Co-op (3)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 18). 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 semester hours in all internship coursework through Co-op toward a first bachelor's degree and up to 9 semester hours 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. 18). 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 semester hours in all internship coursework through Co-op toward a first bachelor's degree and up to 9 semester hours 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 498 Special Topics in Information Systems (1–3)

A seminar on topics in the design and implementation of information-processing systems.

Journalism

Courses in journalism (designated JOUR) may be applied as appropriate (according to individual program requirements) toward

- a major or minor in communication studies (including the journalism track in the communication studies major);
- a minor in journalism; and
- electives.

JOUR 201 fulfills the general education requirement in communications.

A description of the curriculum for the journalism minor begins on p. 72. Descriptions of related curricula may be found on the following pages: communication studies (p. 43) and speech communication (p. 83).

JOUR 201 Writing for the Mass Media (3)

(Fulfills the general education requirement in communications.)

Prerequisite: ENGL 101. 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 319A Analyzing and Understanding the News (1)

An analysis of radio, television, and newspaper reporting designed to improve critical understanding of the news. Topics include the benefits of channel surfing and turning to more than one news provider, whether print or broadcast, for information. Reasons for loyalty to favorite sources of news information 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)

Prerequisites: 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)

(Formerly Photojournalism. Students are required to use their own camera and budget for the costs of film and processing of 20–30 rolls of film.) Prerequisite: A course in journalism. 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)

(Fulfills the historical perspective requirement.) Prerequisite: ENGL 101. 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)

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. 18). 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 semester hours in all internship coursework through Co-op toward a first bachelor's degree and up to 9 semester hours 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. 18). 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 semester hours in all internship coursework through Co-op toward a first bachelor's degree and up to 9 semester hours 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 Paralegal Studies; and
- electives.

LGST 401 may be applied toward the general education requirement in upper-level intensive writing, and LGST 360 and 363A may be applied toward the general education requirement in computing.

A description of the legal studies major begins on p. 72.

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)

(Fulfills the civic responsibility perspective requirement.) A survey of basic principles relating to the ethical practice of law. Rules and guidelines governing the ethical conduct of lawyers and non-lawyers 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 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)

Pre requisite: 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 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)

(Fulfills the civic responsibility perspective requirement.) 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.

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 360 Computer Application in the Legal Environment (3)

Prerequisite: Basic familiarity with computers. 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)

Prerequisite: LGST 325. A focused study for the intermediate computer user of the uses of computer software to support litigation. Topics include databases; 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)

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 398A Sports Law (3)

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.

LGST 398P Administrative Advocacy (3)

The fundamentals of preparing and presenting a case at an administrative agency hearing that allows representation by non-attorneys. Topics include gathering, reviewing, and organizing information; reviewing agency files; interviewing, preparing, and examining claimants and witnesses; drafting memoranda of law and opening and closing statements; organizing a hearing notebook; negotiating with the agency; and interpreting and applying agency regulations. Students may receive credit for only one of the following courses: LGST 398P or PLGL 398P.

LGST 400 Advanced Legal Research (3)

Prerequisite: LGST 200. An exhaustive study of methods and techniques for planning and completing a complex legal research project. Features and uses of Lexis and other online sources for both primary and secondary legal authority are presented. Assignments include legal research and written analysis. Students may receive credit for only one of the following courses: LGST 400 or PLGL 400.

LGST 401 Advanced Legal Writing (3)

(Fulfills the general education requirement in intensive upper-level intensivewriting.) Prerequisite: LGST 201. 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 398E, 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 431 Government Information Practices (3)

Prerequisite: LGST 201. An introduction to federal statutes and interpretive case law governing requirements, exemptions, and procedures related to the disclosure of information by the federal government. Focus is on 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 431, PLGL 331, or PLGL 431.

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 434 Government Contracts (3)

Prerequisites: LGST 201 and 340. An overview of the rules and regulations that must be followed in preparing and executing government contracts for the prospective paralegal. Methods of acquisition, types of contracts and settlements, modifications, socioeconomic provisions, and disputes and remedies are covered. Assignments include legal research and written analysis. Students may receive credit for only one of the following courses: LGST 434 or PLGL 434.

LGST 442 Business Organizations (3)

Prerequisite: LGST 201. 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. 18). 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 semester hours in all internship coursework through Co-op toward a first bachelor's degree and up to 9 semester hours 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. 18). 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 semester hours in all internship coursework through Co-op toward a first bachelor's degree and up to 9 semester hours 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

Courses in library skills (designated LIBS) may be applied toward

- the general education requirement in information literacy; and
- electives.

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. Experience in approaching research, selecting a topic, and retrieving information on topics of professional or personal interest is provided.

Focus is on developing the following information literacy skills: understanding the research process; selecting relevant 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.

Management Studies

Courses in management studies (designated MGST) may be applied as appropriate (according to individual program requirements) toward

- a major or minor in management studies; and
- electives.

A limited number of courses are offered each semester in this discipline, but other business-related disciplines are applicable to the management studies major or minor.

A description of the curriculum for the management studies major and minor begins on p. 74. Descriptions of related curricula may be found on the following pages: accounting (p. 33), business administration (p. 40), environmental management (p. 55), fire science (p. 58), human resource management (p. 67), and marketing (p. 75).

MGST 160 Principles of Supervision (3)

An introductory study of the skills required to effectively supervise and manage employees in organizations. Focus is on knowing how to plan, organize, and control the work load and understanding worker behavior. Topics include the role and function of supervisors, recruitment and evaluation of workers, management by objectives, task delegation, motivation strategies, training and professional development, communication and conflict management, and time management.

Marketing

Courses in marketing (designated MRKT) may be applied as appropriate (according to individual program requirements) toward

- a major or minor in marketing, business administration, global business and public policy, or management studies;
- a certificate in various business-related areas; and
- electives.

A description of the curriculum for the marketing major and minor begins on p. 75. Descriptions of other management-related curricula may be found on the following pages: accounting (p. 33), business administration (p. 40), environmental management (p. 55), fire science (p. 58), global business and public policy (p. 62), human resource management (p. 67), and management studies (p. 74).

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 318 Exploring Internet Marketing (1)

Recommended: MRKT 310. An exploration of various potential uses and goals of Internet marketing in addition to its obvious role of inducing sales or generating sales leads. Topics include the role of electronic commerce in the marketing mix, advantages of using the Internet as a marketing tool, the ethical and legal constraints of Internet marketing, and creative strategies for implementing Internet marketing campaigns. Current publications, online computer exercises, and class discussions are used to examine marketing via the Internet. Students may receive credit for only one of the following courses: BMGT 398O, BMGT 398R, MGMT 398O, MGMT 398R, or MRKT 318.

MRKT 353 Retail Management (3)

Prerequisite: MRKT 310. A review of the organization, location, design, layout, management, and policies of retail stores. Topics include retail planning, administration, operational control, customer behavior, competition, marketing channels, the legal environment, financial planning, merchandise planning and buying, credit policies, pricing, brands, and advertising and promotion. Personal selling, customer service, sales management, strategic planning, human resource management, training, and information technologies commonly applied in retailing are also examined. Students may receive credit for only one of the following courses: BMGT 353 or MRKT 353.

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 374 Small Business Marketing (3)

Prerequisite: MRKT 310. An overview of how marketing principles and theories apply to small businesses and entrepreneurial efforts. Topics include marketing tools and techniques required for start-up businesses, such as new business development, core competencies and technologies, marketing research, marketing planning, relationship marketing, and partnerships with customers and suppliers. Marketing-mix issues specific to small business (such as developing new products and services, selecting sites, choosing distribution channels, establishing pricing policies, and developing and evaluating promotional campaigns) are also explored. Types and sources of marketing information available to the small-business person are identified. Students may receive credit for only one of the following courses: MGMT 332 or MRKT 374.

MRKT 395 Customer Service Management (3)

(Formerly BMGT 395.) Prerequisite: BMGT 364. 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 396 Customer Consultation and Needs Analysis (3)

(Formerly BMGT 396.) Prerequisite: MRKT 395. A study of customer consultation and needs analysis for the front-line supervisor of customer service personnel. Issues such as working with internal staff and external customers to develop effective processes, procedures, and ongoing communication are explored. Focus is on establishing and maintaining a high level of customer satisfaction and loyalty. Skills covered include conducting formal and informal needs analysis and recommending improvements such as training, documentation, job aids, and electronic performance support systems; documenting and securing agreement on requirements and commitments; developing communication and work process flows to ensure quality of service; designing and delivering presentations; and creating customer satisfaction surveys and suggesting service improvements. Students may receive credit for only one of the following courses: BMGT 388I, BMGT 396, or MRKT 396.

MRKT 397 Customer Satisfaction and Loyalty (3)

(Formerly BMGT 397.) A study of various approaches used for determining the level of customer satisfaction with the products and services of a small business. Techniques for setting customer-satisfaction goals and putting systems in place to achieve those goals are examined. Students may receive credit for only one of the following courses: BMGT 397, MGMT 398F, or MRKT 397.

MRKT 410 Consumer Behavior (3)

Prerequisite: MRKT 310. Recommended: PSYC 100 or PSYC 221. 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: 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)

(Fulfills the international perspective requirement.) 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. Students may receive credit for only one of the following courses: BMGT 454 or MRKT 454.

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 Using Web - Enhanced Marketing Techniques (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 471 Business Marketing (3)

Prerequisite: MRKT 310. An examination of the basic marketing functions applied to business and government sectors rather than individual consumers. Topics include planning and introducing products, analyzing and forecasting markets, developing and using channels, pricing and planning promotional strategies, and managing a sales force and business marketing. Students may receive credit for only one of the following courses: BMGT 453 or MRKT 471.

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. 18). 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 semester hours in all internship coursework through Co-op toward a first bachelor's degree and up to 9 semester hours 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. 18). 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 semester hours in all internship coursework through Co-op toward a first bachelor's degree and up to 9 semester hours 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)

(To be taken in student's last 30 semester hours.) Prerequisites: MRKT 310 and one other marketing course. A study of integrative decision making in marketing, with case studies. The use of appropriate decision models is stressed, along with 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; 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 012	Intermediate Algebra
MATH 107	College Algebra
MATH 220	Elementary Calculus I
MATH 221	Elementary Calculus II
Approved course in statistics	

Sequence II

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

Students are strongly urged to complete lower-level mathematics courses early in their college career.

Placement tests are required for enrollment in MATH 012, 105, 107, 108, 115, 140, and 220. Students may either consult the *Undergraduate Schedule of Classes* for times and locations of tests or contact the Testing Center by phone at 800-888-UMUC, ext. 5249, or by e-mail at testingcenter@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. 77. A description of the computer science major begins on p. 48.

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.) Prerequisite: MATH 001 or an appropriate score on a placement test. 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 score 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 105 Mathematics: Contemporary Topics and Applications (3)

(Not intended for students planning to take MATH 107 or higher-numbered courses; does not serve as a prerequisite for these courses.) Prerequisite: MATH 012 or an appropriate score on the placement test. A survey of contemporary topics in mathematics, covering applications and projects. Topics include problem solving, sequences and series, financial management, geometry, probability, and statistics.

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 score 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 score 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 score 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(s): MATH 107–108, MATH 115, or an appropriate score 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 score 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.

MATH 221 Elementary Calculus II (3)

Prerequisite: MATH 140 or MATH 220. A study of differential and integral calculus. Emphasis is on elementary techniques of integration and various applications. Students may receive credit for only one of the following courses: MATH 131, MATH 132, MATH 141, or MATH 221.

MATH 240 Introduction to Linear Algebra (4)

Prerequisite: MATH 141. 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. 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. 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)

(The first course of a two-course sequence.) 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 302 Concepts of Real Analysis II (3)

(The second course of a two-course sequence. A continuation of MATH 301.) Prerequisite: MATH 301. Further study of real analysis. Students may receive credit for only one of the following courses: MATH 302 or MATH 411.

MATH 370 Actuarial Science (3)

Prerequisite: MATH 241. A study of the computation of rates based on statistical probabilities. Focus is on measurement of interest, force of interest, term-certain annuities, and mathematical techniques in analyzing life insurance settlement options. Topics may also include materials from the mathematics of compound interest in the associateship examinations of various actuarial organizations.

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 390 Mathematics of Communication (3)

Prerequisite: MATH 240. An overview of the mathematics of electronic communication. Topics include signaling and modulation; filtering and signal noise ratio; encoding for error correction/detection and compression; Fourier analysis; congestion in networks, queuing, routing, and flow control; and cryptography.

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 432 Point Set Topology (3)

Prerequisite: MATH 241. A survey of connectedness, compactness, transformations, and homomorphisms. The concepts are applied to various spaces. Particular attention is paid to the Euclidean plane.

MATH 436 Modern Geometry (3)

Prerequisites: MATH 240 and 241. A survey of the basic concepts of modern geometry. Topics include curves in the plane and Euclidean space, surfaces in Euclidean space and orientability of surfaces, Gaussian and mean curvatures, surfaces of revolution and ruled and minimal surfaces, special curves on surfaces, Theorema Egregium, and the intrinsic geometry of surfaces.

MATH 450 Logic for Computer Science (3)

(Also listed as CMSC 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.

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. Discussion also covers 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 475 Combinatorics and Graph Theory (3)

(Also listed as CMSC 475.) Prerequisites: MATH 240 and 241. An exploration of general enumeration methods, difference equations, and generating functions. Focus is on elements of graph theory, matrix representations of graphs, and applications of graph theory to transport networks. Matching theory and graphical algorithms are also considered. Students may receive credit for only one of the following courses: CMSC 475 or MATH 475.

MATH 486A Internship in Mathematics Through Co-op (3)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 18). 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 semester hours in all internship coursework through Co-op toward a first bachelor's degree and up to 9 semester hours 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. 18). 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 semester hours in all internship coursework through Co-op toward a first bachelor's degree and up to 9 semester hours 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.

A description of the curriculum for the humanities major and minor begins on p. 66.

MUSC 130 Survey of Western Music Literature (3)

(Fulfills the historical perspective requirement.) An introduction to the major historical styles and forms of Western classical music. Focus is on selected masterworks, their composers and cultural context, and hallmarks of the styles they represent. Works are studied through reading, discussion, and active listening to recordings and live performances. Students may receive credit for only one of the following courses: HUMN 130, MUSC 130, or MUSC 131.

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)

(Formerly HUMN 211. Fulfills the international perspective requirement.) 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)

(Formerly HUMN 436. Fulfills the historical perspective requirement.) 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 minor in natural science; and
- electives.

A description of the curriculum for the natural science minor begins on p. 79.

NSCI 100 Introduction to Physical Science (3)

(For students not majoring in a science.) Prerequisite: MATH 012. 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; 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.

NSCI 170 Concepts of Meteorology (3)

(For students not majoring or minoring in science.) Prerequisite: MATH 012. 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, 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; 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 record-keeping, 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 361 Global Environmental Change (6)

(Also listed as BEHS 361 and HUMN 360. Yields 3 natural science credits and either 3 social science credits or 3 humanities credits. Fulfills the civic responsibility or international perspective requirement.) An in-depth examination of environmental changes that many believe are caused by human adaptations to Earth's natural resources and the possible effects on both the global biosphere and the human condition. Scientific and social issues are explored through various questions: Is global warming really happening? Will sea levels rise? What are the consequences of massive deforestation? What can be done when there is so much scientific uncertainty and global social diversity? The concept of sustainability, as it applies to human interactions with the environment, is emphasized. Students may receive credit for only one of the following courses: BEHS 361, GNSC 361, HUMN 360, or NSCI 361.

NSCI 398E Environmental Damage: Separating Fact from Fiction (1)

An examination of the controversies surrounding current environmental issues and the underlying evidence. Topics include the destruction of tropical rainforests; loss of biodiversity; the proliferation of *Pfiesteria* in waterways; contamination of local communities by PCBs, lead, and nuclear waste; chlorination of drinking water; the use of pesticides and herbicides on food supplies; global warming; and the state of the ozone layer. These topics are also considered with respect to the history and evolution of the environmental movement and environmental regulations. Students may receive credit for only one of the following courses: BEHS 361, ENMT 301, GNSC 361, NSCI 398E, HUMN 360, NSCI 361, or NSCI 398E.

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 399 Independent Study in Natural Science (1–6)

Prerequisite: 6 upper-level credits in natural science and agreement of faculty member to act as supervisor. Directed independent study of topics of special interest not covered by regularly scheduled courses in natural science. May be repeated to a maximum of 6 credits when topics differ.

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; and
- electives.

UMUC offers only a limited number of courses each semester in this discipline.

A description of the curriculum for the humanities major and minor begins on p. 66.

PHIL 100 Introduction to Philosophy (3)

(Formerly HUMN 125.) 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 140 Contemporary Moral Issues (3)

(Fulfills the civic responsibility perspective requirement.) An exploration of how philosophical analysis can be a foundation for thinking clearly about moral issues. Problems approached analytically 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 170 Introduction to Logic (3)

A general introduction to the discipline of logic. Traditional and modern deductive techniques are demonstrated and used; informal fallacies are clarified. Students may receive credit for only one of the following courses: HUMN 170 or PHIL 170.

PHIL 310 Ancient Philosophy (3)

A study of the origins and development of philosophy and science in ancient Greece, focusing on the pre-Socratic philosophers, Socrates, Plato, and Aristotle.

PHIL 320 Modern Philosophy (3)

(Fulfills the historical or international perspective requirement.) A study of major philosophical issues of the 16th, 17th, and 18th centuries. Writings of such philosophers as Descartes, Newton, Hume, and Kant are explored.

PHIL 340 Making Decisions (3)

(Formerly HUMN 345. Fulfills the civic responsibility perspective requirement.) Analysis of various approaches to making decisions in personal, professional, and public life. The logic of decision making, risk and probability, moral aspects of making decisions, and the standard biases in judgment are considered. Students may receive credit for only one of the following courses: HUMN 345 or PHIL 340.

PHIL 342 Moral Problems in Medicine (3)

(Fulfills the civic responsibility perspective requirement.) A critical exploration of the dimensions of decisions in health-related contexts. Readings are drawn from philosophical, medical, and other sources. Students may receive credit for only one of the following courses: HUMN 342 or PHIL 342.

PHIL 343 Sexual Morality (3)

(Fulfills the civic responsibility perspective requirement.) A critical examination of practical moral issues related to sexual conduct. The resources of moral and social philosophy are used as texts. Students may receive credit for only one of the following courses: HUMN 343 or PHIL 343.

PHIL 385 Philosophy and Computers (3)

Prerequisite: 3 credits in logic or computer science. A presentation of philosophical issues concerning computers, focusing on non-quantitative treatment of major results in computation theory regarding absolute limits on computers. Fundamental problems concerning computers used as models of human intelligence are examined. Students may receive credit for only one of the following courses: HUMN 385, PHIL 308C, or PHIL 385.

Physics

Courses in physics (designated PHYS) 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.

A description of the natural science minor begins on p. 79.

PHYS 121 Fundamentals of Physics I (4)

(For students majoring or minoring in a science; not appropriate for nonscience students fulfilling general education requirements. Fulfills the laboratory science requirement. Together with PHYS 122, generally satisfies the minimum requirement of medical and dental schools. The first course in a two-course sequence.) Prerequisite: MATH 108, MATH 115, or knowledge of college-level trigonometry. An exploration of mechanics. Topics include kinematics, force, dynamics, conservation laws, and rotational motion.

PHYS 122 Fundamentals of Physics II (4)

(For students majoring or minoring in a science; not appropriate for nonscience students fulfilling general education requirements. Fulfills the laboratory science requirement. Together with PHYS 121, generally satisfies the minimum requirement of medical and dental schools. A continuation of PHYS 121.) Prerequisite: PHYS 121. An exploration of the fields of heat, sound, electricity, magnetism, optics, and modern physics.

PHYS 161 General Physics: Mechanics and Particle Dynamics (3)

(For students majoring or minoring in a science; not appropriate for nonscience students fulfilling general education requirements.) Prerequisite or corequisite: MATH 131 or MATH 141. A study of the laws of motion, force, and energy. The principles of mechanics, collisions, linear momentum, rotation, and gravitation are investigated. Students may receive credit for only one of the following courses: PHYS 141, PHYS 161, PHYS 171, or PHYS 191.

PHYS 262 General Physics: Vibrations, Waves, Heat, Electricity, and Magnetism (4)

(For students majoring or minoring in a science; not appropriate for nonscience students fulfilling general education requirements. Fulfills the laboratory science requirement.) Prerequisite: PHYS 161. A rigorous study of general physics. Topics include vibrations, waves, and fluids; heat, kinetic theory, and thermodynamics; and electrostatics, circuits, and magnetism. Students may receive credit for only one of the following courses: PHYS 142, PHYS 192, PHYS 262, or PHYS 272.

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 or social science;
- a minor in psychology or forensics; and
- electives.

A description of the curriculum for the psychology major and minor begins on p. 80. A description of the social science major begins on p. 81. A description of the forensics minor begins on p. 60.

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 200 Introduction to Statistical Methods in Psychology (3)

Prerequisites: PSYC 100 and college algebra (MATH 107 or MATH 115). 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-square tests. Students may receive credit only once under this course number. Students who receive credit for PSYC 200 may not receive credit for the following courses: BEHS 202, BEHS 302, BMGT 230, ECON 321, GNST 201, MGMT 316, SOCY 201, STAT 100, or STAT 200.

PSYC 221 Social Psychology (3)

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, or PSYC 221.

PSYC 235 Psychology of Adjustment (3)

Prerequisite: PSYC 100. 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.

PSYC 301 Biological Basis of Behavior (3)

Prerequisite: PSYC 100. Recommended: 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 Experimental Methods in Psychology (3)

Prerequisites: PSYC 100 and 200. A survey of research methods in sensory systems, memory and cognition, motivation, development, and personality and social behavior. Statistical and computer applications are introduced. Opportunities to enhance laboratory skills and gain experience in the psychological sciences are provided.

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 306J Humanistic Psychology (1)

Prerequisite: PSYC 100. A presentation of humanistic psychology and a theoretical orientation characterized by the belief that people are capable of change and, when given the opportunity, will develop to their fullest potential. The major theorists of this approach are presented, and the integration of their work with relevant research and clinical practice is discussed.

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 307C Computers and Psychology (1)

Prerequisite: PSYC 100. A broad discussion of the various ways in which the fields of computing and psychology intersect. Focus is on the growing field of “cyberpsychology”—the study of how people use the Internet to obtain and process information, build relationships at a distance, and learn in a virtual environment. Discussion also covers clinical and educational applications of computers, as well as data collection and analysis. Class participation is emphasized.

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 307S Psychology of Humor (1)

(Formerly PSYC 309S.) Prerequisite: PSYC 100. A presentation of theory and research on the concept of humor. Topics include personality and the development of a sense of humor, as well as the relationship between humor, health, and psychotherapy.

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 308A Creative Problem Solving (1)

Prerequisite: PSYC 100. An investigation of psychological theory, research, and practical applications of creative problem solving. Emphasis is on learning successful problem-solving techniques for personal growth and job enrichment. Students may receive credit for only one of the following courses: PSYC 308A or PSYC 309A.

PSYC 308B Sexual Prejudice and Discrimination (1)

(Formerly PSYC 309B.) Prerequisite: PSYC 100. An overview of psychological and social research and theory, covering various ways in which sexist thought and practice are manifested in society. Topics include foundations of sexism, overt sexism, subtle and covert sexism, and outcomes and reduction of sexism.

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 308J Women Across Cultures (1)

Prerequisite: PSYC 100. An exploration of how women respond to the interaction of gender, culture, and ethnicity. Focus is on examining cultural commonalities and differences in psychological issues that women encounter. Problems that affect women as a result of race, class, or gender and possible solutions are presented. Students may receive credit for only one of the following courses: PSYC 308J or PSYC 309J.

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 308N Psychology of Extreme Environments (1)

Prerequisite: PSYC 100. An exploration of the biological, cognitive, and social factors affecting psychological survival and stress under extreme or unusual environmental conditions (e.g., those found in desert, arctic, underwater, and cybernetic environments and in outer space). Emphasis is on applying theory and research methodology to relevant issues such as wellness, communication, problem solving, and interpersonal relationships.

PSYC 308P Multicultural Training in Organizations (1)

(Formerly PSYC 309P.) Prerequisite: PSYC 100. A study of strategies to improve self-image, communication style, and public presentations based on a cross-cultural perspective of management. Theoretical foundations and relevant research are examined as the basis for practical applications of multicultural training in organizations. Activities and demonstrations are designed to provide valuable knowledge and cross-cultural skills.

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 308S Psychology of Social Advocacy and Justice (1)

Prerequisite: PSYC 100. An introduction to the history, research methods, and real-world applications of advocacy for social justice. Focus is on individual, interpersonal, group, and organizational factors in social advocacy. Topics include personal skills, persuasion and attitude change, couples and family advocacy, risk analysis and management, strategic empowerment, and the impact of advocacy on the legal and mental health professions as well as on consumerism and peace building. Practical tools of advocacy discussed include the media and the arts.

PSYC 308T Psychology of Political Behavior (1)

(Formerly PSYC 309T.) Prerequisite: PSYC 100. An overview of psychological influences on domestic and international politics. Focus is on analyzing political behavior from a psychological perspective. Topics include what voters look for in a candidate, how the various media affect elections, how foreign policy is made, and how our perceptions of other nations may be distorted.

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 309F Introduction to Adolescent Psychopathology (1)

Prerequisite: PSYC 100. An exploration of both theoretical and applied aspects of abnormal adolescent development. Topics include eating disorders, juvenile delinquency, theft, murder, depression, and suicide. An overview of key elements in the clinical diagnosis of adolescent psychopathology is also presented.

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 309I Introduction to Psychoanalysis (1)

(Not a course in psychotherapy.) Prerequisite: PSYC 100. A study of psychoanalysis as a means to illuminate healthy and unhealthy human behaviors, especially in interpersonal relationships. The goal is to gain a basic understanding and appreciation of psychoanalytic theory. Readings and exercises are designed to encourage the application of analytical theory to personal situations.

PSYC 309K Managing Interpersonal Stress and Conflict (1)

Prerequisites: 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 309L Traumatic Stress Disorder (1)

Prerequisite: PSYC 100. A presentation of the causes, symptoms, diagnosis, and treatment of individuals suffering from traumatic stress disorders. Biological, environmental, and developmental perspectives are considered. Relevant activities and real-world applications supplement study.

PSYC 309O Interpersonal and Family Counseling (1)

Prerequisite: PSYC 100. An overview of counseling approaches and techniques. Focus is on compiling rules and suggestions for effective counseling and understanding the differences between counseling, therapy, and friendship through a case-study analysis. Exposure to role playing and alternative counseling approaches is provided. The analysis of personality and interpersonal dynamics and various methods of coping with culturally diverse counseling situations are also addressed.

PSYC 309P Multicultural Psychotherapy (1)

Prerequisite: PSYC 100. An exploration of the impact of race, ethnicity, religion, and other cultural differences on the practice of sensitive and effective psychotherapy. Topics include communication, family structure, values, and motivation. The interrelationship of culture, clinical assessment, and diagnosis is also considered. Students may receive credit only once for this course.

PSYC 309W Professional Psychology(1)

Prerequisite: PSYC 100. An overview of the profession of psychology. A panel of psychologists present lessons learned in teaching, research, therapy, and organizational consulting. 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 Perception (3)

Prerequisite: PSYC 100. Recommended: PSYC 200 and 305. A survey of phenomena and theories of perception. Topics include the psychological, anatomical, physiological, and environmental factors important in determining how humans perceive the world. Historical background and contemporary research are examined.

PSYC 315 Motivation (3)

Prerequisites: PSYC 100 and 301. Recommended: PSYC 200 and 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 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 life-span 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)

(Fulfills the civic responsibility perspective requirement.) Prerequisite: PSYC 100. Recommended: PSYC 200 and 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 335 Psychology of Men (3)

Prerequisite: PSYC 100. A survey of the biology, life-span development, socialization, personality attributes, mental health factors, and special problems of men.

PSYC 336 Psychology of Women (3)

Prerequisite: PSYC 100. A survey of the biology, life-span development, socialization, personality attributes, mental health factors, and special problems of women.

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 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: PSYC 200 and 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 342 Psychology of Aggression (3)

Prerequisites: PSYC 100 and 221. Recommended: PSYC 305. An exploration of the psychology of aggression. Topics include theories of violence and aggression, the classification, treatment, and modification of antisocial behavior, and the development of conscience and prosocial behavior.

PSYC 345 Group Dynamics (3)

Prerequisites: PSYC 100 and 221. Recommended: PSYC 200 and 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 353 Adult Psychopathology (3)

Prerequisite: PSYC 100. Recommended: PSYC 200 and 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)

(Fulfills the civic responsibility or international perspective requirement.) Prerequisite: PSYC 100. Recommended: PSYC 200 and 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: PSYC 200 and 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)

Prerequisites: PSYC 100 and 355. Recommended: PSYC 200 and 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: PSYC 200 and 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: PSYC 200 and 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 Forensic Psychology (3)

Prerequisite: PSYC 100. Recommended: PSYC 200 and 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 385 Health Psychology (3)

Prerequisites: PSYC 100. Recommended: PSYC 305 and either PSYC 337 or PSYC 353. A study of psychological principles applied to the promotion and maintenance of health, the prevention and treatment of illness, and changing public opinion about health-related matters. Behavioral components of health risk factors and improvement of the health care system are addressed.

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 conflict of those circumstances with ethical and moral values. Practical applications discussed include 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 200, and either PSYC 301 or PSYC 305, or permission of faculty member. 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 402 Physiological Psychology (3)

Prerequisites: PSYC 100 and 301. Recommended: PSYC 200 and 305. An introduction to research on the physiological basis of human behavior. Sensory phenomena, motor coordination, emotion, drives, and the neurological processes of learning are covered.

PSYC 403 Animal Behavior (3)

Prerequisites: PSYC 100 and 301. Recommended: PSYC 200 and 305. An inquiry into social interactions, learning, sensory processes, motivations, and other aspects of animal behavior. Study explores experimental methods. Emphasis is on the behavior of mammals.

PSYC 405 Principles of Behavior Modification (3)

Prerequisites: PSYC 100 and 200. Recommended: 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)

(Fulfills the historical perspective requirement.) 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 Communication and Persuasion (3)

Prerequisites: PSYC 100 and 221. Recommended: PSYC 200 and 305. 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 as well as 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 441 Psychology of Human Learning (3)

Prerequisite: PSYC 100. Recommended: PSYC 200 and 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 442 Psychology of Language (3)

Prerequisites: PSYC 100 and 341. Recommended: PSYC 200 and 305. An introductory survey of psycholinguistic research, theory, and methodology. Emphasis is on the contribution of linguistic theory to the psychological study of linguistic behavior and cognition. Linguistic theory and the psychological studies of syntax and semantics are presented. Topics include the biological basis of the grammars of language and speech, phonetics and phonological performance, and the perception and production of speech. Analysis covers the role of language as part of cognitive development and the relation of language comprehension to thought.

PSYC 443 Thinking and Problem Solving (3)

Prerequisites: PSYC 100 and 341. Recommended: PSYC 200 and 305. A survey of topics in the psychology of thinking and problem solving. Current theories, data, and research on methods of problem solving are studied in light of the historical development of this field. Major concepts of inquiry include formal problem-solving theory, computer models of thinking and human problem-solving behavior, and strategies for sharpening thinking processes and making problem-solving behaviors more effective.

PSYC 446 Death and Dying (3)

Prerequisites: PSYC 100 and 432 (or PSYC 436). Recommended: PSYC 357. An exploration of the psychological effects of death and dying on human behavior. Death-related variables are identified and evaluated as to their contributions to the development of individual differences across the life span. Topics include current research and clinical findings on anxiety, depression, guilt, conflict, and defense mechanisms, as well as death education and bereavement counseling. Students may receive credit only once under this course title.

PSYC 451 Principles of Psychological Testing (3)

Prerequisites: PSYC 100 and 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 462 The Psychology of Advertising (3)

Prerequisite: PSYC 100. Recommended: PSYC 361. An analysis of advertising in terms of psychological theories and observations of consumer behavior. The information and fundamental insights presented regarding advertising provide understanding of consumer motivation. The analysis of the purchase process includes environmental variables, the individual determinants of behavior, and the consumer's decision process. General theoretical principles in psychology are applied to the processes of identifying a target population and developing and evaluating an advertising plan, as well as determining the effectiveness of advertising. Students may receive credit for only one of the following courses: BEHS 462 or PSYC 462.

PSYC 463 Psychology of Motivation and Attitudes in Organizations (3)

Prerequisites: PSYC 100 and 361. Recommended: PSYC 200. A study of theories, research, and practice regarding the assessment, understanding, and prediction of motivation at work. Focus is on theories and the assessment and consequences of various work-related attitudes. Theory, research, and practice are integrated.

PSYC 464 Psychology of Leaders in Work Organizations (3)

Prerequisites: PSYC 100 and 361. Recommended: PSYC 200 and 305. A study of the psychological assumptions and implications of various theories of management and leadership. The challenges examined include selecting and training workers, developing workers' careers, changing the behavior of managers, and influencing organizational processes. The ways managers' behavior is affected by the larger environment, the nature of the product or service, and the organizational structure are also considered.

PSYC 465 Psychology of Organizational Processes (3)

Prerequisite: PSYC 100. Recommended: PSYC 200 and 361. A review of various theories of interpersonal, intragroup, and intergroup relations. Emphasis is on issues of conflict, competition, and cooperation, in light of the role of power in organizations. Ways of diagnosing organizational problems, and intervention as a means of solving them, are explored. Students may receive credit for only one of the following courses: BEHS 411 or PSYC 465.

PSYC 466 Environmental and Ecological Psychology (3)

Prerequisite: PSYC 100. Recommended: PSYC 200 and 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 478 Independent Study in Psychology (1–3)

Prerequisite: Written consent of faculty member and 12 credits in psychology with at least a 3.0 average. Integrated reading, under direction, leading to the preparation of an adequately documented report on a special topic.

PSYC 486A Psychology Field Experience Through Co-op (3)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 18). 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 semester hours in all internship coursework through Co-op toward a first bachelor's degree and up to 9 semester hours 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. 18). 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 semester hours in all internship coursework through Co-op toward a first bachelor's degree and up to 9 semester hours 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 social science; and
- electives.

A description of the curriculum for the sociology minor begins on p. 82. A description of the curriculum for the forensics minor begins on p. 60. A description of the curriculum for the social science major begins on p. 81.

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 227 Introduction to the Study of Deviance (3)

An introduction to the sociological study of deviant behavior. Topics include mental illness, sexual deviance, and the use of drugs. Students may receive credit for only one of the following courses: SOCY 227 or SOCY 327.

SOCY 243 Sociology of Marriage and Family (3)

A study of demographic trends in family and marriage, including childbearing and divorce, sociological theories of mate selection, marital interaction, and marital dissolution. Contemporary controversial issues, such as the relationship of unmarried couples, alternative marriage forms, abortion, and violence in the family, are discussed. Students may receive credit for only one of the following courses: SOCY 243 or SOCY 343.

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.

SOCY 311 The Individual and Society (6)

(Fulfills the international perspective requirement.) A study of interactions between the individual and society. Basic sociological concepts, theories, and methods of research are presented as they apply to the individual. Those means are used in examining how the individual is shaped by history, family, and the surrounding cultural environment. Another focus is the reciprocal relationship, whereby individuals modify the world around them and their ideas influence society. Students may receive credit for only one of the following courses: BEHS 312 or SOCY 311.

SOCY 312 Family Demography (3)

Prerequisite: 3 credits in sociology. 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 325 The Sociology of Gender (3)

(Fulfills the civic responsibility perspective requirement.) Prerequisite: 3 credits in sociology. 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 331 Work, Bureaucracy, and Industry (3)

Prerequisite: 3 credits in sociology. A sociological approach to the world of work. Occupational careers and personal experiences in the bureaucratic organizations of modern industrial society are investigated.

SOCY 335 Sociology of Violence (3)

Prerequisite: 3 credits in sociology. An examination of collective domestic conflict and an evaluation of the sociological theories that explain why such conflict occurs. Topics include ethnic conflict, colonial insurrections, terrorism, coups d'état, and revolution.

SOCY 398 Special Topics in Sociology (3)

Prerequisite: 3 credits in sociology. A study of topics of special interest.

SOCY 403 Intermediate Sociological Theory (3)

Prerequisite: 6 credits in sociology. 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)

(Fulfills the civic responsibility perspective requirement.) Prerequisite: 3 credits in sociology. 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)

(Fulfills the civic responsibility or international perspective requirement.) Prerequisite: 3 credits in sociology. 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)

(Fulfills the civic responsibility perspective requirement.) Prerequisite: 3 credits in sociology. 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 425 Gender Roles and Social Institutions (3)

(Fulfills the civic responsibility perspective requirement.) Prerequisite: 3 credits in sociology. An investigation of the relationship between gender roles and the structure of social institutions (such as the economy, the family, the political system, religion, and education). Discussion covers the incorporation of gender roles into social institutions, perpetuation or transformation of gender roles by social institutions, and the way changes in gender roles affect social institutions.

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: 3 credits in sociology. 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 430 Social Structure and Identity (3)

A study of theoretical issues in social psychology, focusing on social construction of identity. Identity formation and transformation in social processes and structural and cultural dimensions of social identity are covered.

SOCY 432 Social Movements (3)

Prerequisite: 3 credits in sociology. 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 433 Social Control (3)

Prerequisite: 6 credits of sociology or permission of faculty member. A study of forms, mechanisms, and techniques of group influence on human behavior. Problems of social control in contemporary society are examined.

SOCY 434 Sociology of Personality (3)

Prerequisite: SOCY 100 or SOCY 105. A study of the development of human nature and personality in contemporary social life. Topics include processes of socialization, attitudes, individual differences, and social behavior. Students may receive credit only once under this course title.

SOCY 441 Social Stratification and Inequality (3)

Prerequisite: 3 credits in sociology. A sociological study of social class, status, and power. Topics include theories of stratification, correlates of social position, functions and dysfunctions of social inequality, status inconsistency, and social mobility.

SOCY 443 The Family and Society (3)

Prerequisite: 3 credits in sociology. An examination of the family as a social institution. Its 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 are explored.

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 on women's roles in the armed forces by cultural forces, national security, technological changes, demographic patterns, occupational structures, labor shortages, and considerations of efficiency and rationality.

SOCY 464 Military Sociology (3)

Prerequisite: 3 credits in sociology. 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 466 Sociology of Politics (3)

Prerequisite: 6 credits in sociology. An introduction to the sociology of political phenomena, involving the basic concepts and major findings in the field. Topics include the relationship of the polity to other institutional orders of society and the relationship of political activity in America to the theory of democracy.

SOCY 473 The City (3)

Prerequisite: 6 credits of sociology or permission of department. 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. 18). 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 semester hours in all internship coursework through Co-op toward a first bachelor's degree and up to 9 semester hours 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. 18). 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 semester hours in all internship coursework through Co-op toward a first bachelor's degree and up to 9 semester hours 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 498I Applied Sociology (3)

A practical application of the concepts, skills, and tools of sociology to analyze problems facing a variety of clients and organizations, including business, government, religion, and community agencies and groups. Sociological perspective and tools are used to identify, investigate, and actively seek solutions to issues of structure, process, and social change. Assignments include advanced reading and research.

SOCY 498Q Intercultural Sociology (3)

A study of social structures and cultural values comparing and contrasting societies that hunt and gather, those that garden and farm, and those that rely upon industrial production. The development of fully industrialized societies and countries (such as Korea and Brazil) that are still undergoing industrialization are compared. 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 and for international perspective coursework;
- a major or minor in humanities;
- a certificate in Workplace Spanish; and
- electives.

UMUC offers a limited number of foreign language courses each semester.

A description of the curriculum for the humanities major and minor begins on p. 66.

SPAN 101 Elementary Spanish I (4)

(Open only to students with fewer than two years of Spanish. Fulfills the international perspective requirement.) Introduction to the basic structures, vocabulary and pronunciation of the Spanish language. Focus is on developing working proficiency in the four skills (listening, speaking, reading, and writing) using authentic text from native speakers. Practice is provided in finding and communicating information. Students who have received credit for SPAN 111 or SPAN 112 may not receive credit for SPAN 101.

SPAN 102 Elementary Spanish II (4)

(Fulfills the international perspective requirement.) Prerequisite: SPAN 101. Further study of the functions and structures of the Spanish language. Focus is on developing working proficiency in the four skills (listening, speaking, reading, and writing) using authentic text from native speakers. Practice is provided in finding and communicating information. Students may receive credit for only one of the following courses: SPAN 102 or SPAN 211.

SPAN 201 Intermediate Spanish (4)

(Fulfills the international perspective requirement.) Prerequisite: SPAN 102. Continued study of the functions and structures of the Spanish language. Focus is on developing working proficiency in the four skills (listening, speaking, reading, and writing) using authentic text from native speakers. Practice is provided in finding and communicating information, especially in workplace situations. Students may receive credit for only one of the following courses: SPAN 201, SPAN 203, or SPAN 212.

SPAN 318 Commercial and Workplace Spanish (4)

(Fulfills the international perspective requirement.) Prerequisite: SPAN 201 or equivalent Spanish proficiency. A study of 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 486A Internship in Spanish Through Co-op (3)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 18). 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 semester hours in all internship coursework through Co-op toward a first bachelor's degree and up to 9 semester hours 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. 18). 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 semester hours in all internship coursework through Co-op toward a first bachelor's degree and up to 9 semester hours 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 major or minor in communication studies (including the speech communication track in communication studies);
- a minor in speech communication; and
- electives.

A description of the curriculum for the speech communication minor begins on p. 83. Descriptions of related curricula may be found on the following pages: communication studies (p. 43) and journalism (p. 72).

SPCH 100 Foundations of Speech Communication (3)

(Fulfills the prerequisite for all 300- or 400-level speech courses.) An overview of the principles of communication. Verbal and non-verbal 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: A 100-level speech performance course. 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 220 Small-Group Discussion (3)

A consideration of the principles, methods, and types of discussion. Principles are applied to the analysis of contemporary problems.

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)

(Fulfills the civic responsibility perspective requirement.) Prerequisite: COMM 300 or a course in speech communication. An investigation of the way communication creates images of male and female. Consideration is given to what constitutes masculine and feminine characteristics, the differences between male and female behavior and styles in communicating, and the implications of those images and styles for interpersonal transactions.

SPCH 397 Organizational Presentations (3)

(Formerly Delivering Organizational Presentations: Technique and Technology.) Prerequisite: A 100-level speech performance course. 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 Group Discussion and Decision Making (3)

Prerequisite: A 100-level speech performance course or COMM 300. A study of current theory, research, and techniques regarding small-group process. Group dynamics, leadership, and decision making are covered.

SPCH 424 Communication in Complex Organizations (3)

Prerequisite: A course in speech communication 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)

(Fulfills the civic responsibility perspective requirement.) Prerequisite: A course in speech communication 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)

(Formerly Theories of Listening.) Prerequisite: A course in speech communication 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: A course in speech communication or COMM 300. A survey of nonverbal communication in human interactions. Theory and research on proxemics, kinesics, and paralinguistics are recognized and identified in expressions of relationship, affect, and orientation both within and across cultures.

SPCH 482 Intercultural Communication (3)

(Fulfills the civic responsibility or international perspective requirement.) Prerequisite: A course in speech communication 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 Communication Through Co-op (3)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 18). 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 semester hours in all internship coursework through Co-op toward a first bachelor's degree and up to 9 semester hours 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 Communication Through Co-op (6)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 18). 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 semester hours in all internship coursework through Co-op toward a first bachelor's degree and up to 9 semester hours 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.

A description of the curriculum for the mathematical sciences minor begins on p. 77.

Students are expected to own and use scientific calculators in all mathematics and statistics courses.

STAT 200 Introduction to Statistics (3)

Prerequisite: 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, or STAT 100.

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 401 Applied Probability and Statistics II (3)

(A continuation of STAT 400.) Prerequisite: STAT 400. Explication of more advanced statistical concepts. Topics include sufficient and consistent estimators, minimum variance and maximum likelihood estimators, point estimation, and interval estimation. Applications include testing of hypotheses, regression correlation and analysis of variance, sampling distributions, sequential tests, and elements of nonparametric methods.

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 or STAT 420. 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. 18). 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 semester hours in all internship coursework through Co-op toward a first bachelor's degree and up to 9 semester hours 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. 18). 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 semester hours in all internship coursework through Co-op toward a first bachelor's degree and up to 9 semester hours 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.

A description of the curriculum for the humanities major and minor begins on p. 66.

THET 110 Introduction to the Theatre (3)

(Formerly HUMN 110.) 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.

THET 120 Acting I (3)

(Formerly HUMN 111.) An introduction to basic acting techniques, with exercises to develop concentration, imagination, sensing abilities, and emotional memory. Textual analysis, character analysis, and scene study are introduced. Assignments include applying techniques to character portrayal by performing short scenes. Students may receive credit for only one of the following courses: HUMN 111 or THET 120.

THET 320 Acting II (3)

(A continuation of THET 120.) Prerequisite: THET 111, THET 120, or audition. Further study of the fundamentals of acting. Focus is on textual analysis, personalization, objectives, and characterization by performing short plays.

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.

The description of the curriculum for the women's studies minor begins on p. 85.

WMST 200 Introduction to Women's Studies: Women and Society (3)

(Fulfills the civic responsibility perspective requirement.) 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.

SCHOLASTIC AND ADMINISTRATIVE STANDARDS

Institutional Credit

A course that may not be applied toward graduation may be assigned a credit value for purposes of semester load and tuition. This institutional credit is included in the grade-point average 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 semester hours (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 semester hours (including at least 15 semester hours at UMUC) and who have a cumulative grade-point average of 2.0 may take one course of up to 6 semester hours of credit each semester (fall, spring, or summer) on a pass/fail basis, up to a maximum of 18 credits. Stu-

dents 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 they have been 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 semester or the third week of classes in an eight-week term.

Audited courses are listed on the permanent record, with the notation AU. No letter grade is given for audited courses, nor are credits earned.

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 withdrawing by telephone through the Interactive Registration and Information System (IRIS), online via the Interactive Student Information System (ISIS), by completing a registration-change form in Undergraduate Student Affairs, or by submitting a written request at least two weeks before the last scheduled class in a semester or term. (For accelerated courses, withdrawals must be submitted before the close of business on the first day of class.) Any of these procedures constitutes official withdrawal.

This mark appears on the permanent record unless withdrawal is completed before a course begins. 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 the Interactive Faculty Information System (IFIS). 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. 231). 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 term, the cumulative grade-point average of each student who has attempted at least 15 semester hours at UMUC is computed based on all UMUC graded coursework. At the end of each semester (fall, spring, or summer), Undergraduate Student Affairs 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 semester GPA is 2.0 or better.

A student who attempts 15 semester hours or more in a period of at least two semesters and earns no quality points will receive an academic warning regardless of the cumulative grade-point average.

A student on academic warning whose semester GPA 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 semester hours per semester or to a maximum of 4 semester hours per term I or term II.

Probation

A student on academic warning or admitted on provisional status whose semester GPA is less than 2.0 will be put on probation.

A student on probation whose semester GPA 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 semester hours per semester or to a maximum of 4 semester hours per term I or term II.

Dismissal

A student on probation whose semester GPA 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 semester 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 semester before petitioning for reinstatement. Such an appeal should be made in writing to the associate provost, Undergraduate 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 semester hours (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 semester hours 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 fall through summer terms. Eligibility for the Dean's List is calculated once a year, after the summer semester.

Academic Honors

Academic honors for excellence in scholarship, determined from the student's cumulative GPA, are awarded to no more than 10 percent of the graduating class. The distinction of summa cum laude is conferred on the highest 2 percent, magna cum laude on the next 3 percent, and cum laude on the next 5 percent. To be eligible for any of these categories of recognition, a student must have earned at least 45 semester hours 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 semester hours of new UMUC credit and the requisite GPA. More information on attaining a second bachelor's degree may be found on p. 25.

Honor Societies

Inquiries concerning honor societies should be addressed to the student's advisor.

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 semester hours of credit 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.

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 semester hours 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 semester hours, from UMUC or transferred, must be in courses outside the major.

Sigma Mu

Sigma Mu is the 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, complete at least 9 semester hours 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 semester hours toward the bachelor's degree with an overall GPA of 3.5 or higher. At least 30 semester hours must have been earned through UMUC and must include 12 semester hours of English beyond ENGL 101 and 6 semester hours of upper-level credit. Students must also have earned a GPA of 3.6 in English coursework at UMUC.

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 semester hours of UMUC history courses and have an overall UMUC GPA of 3.4.

RESPONSIBILITIES OF THE STUDENT

Attendance

The student is responsible for attending all classes and any related activities regularly and punctually. 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.

In some courses, in which active participation is integral to the learning process, teachers may base part of the final grade on class participation; those courses obviously require regular attendance. Teachers must announce any such requirement at the beginning of the semester.

Courses offered online have their own policies on attendance. The requirements expected for participation are specified in all courses offered online.

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.

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.

Make-up 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 make-up 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. The Testing Center schedules make-up exam sessions for students whose teachers cannot schedule a special make-up session. There is a fee for this service.

Course Loads

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 semester 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 semester hours, and students are strongly advised not to exceed this limit. Students should carefully and realistically assess other commitments before registering for more than 9 semester hours. In no case may a student register for more than 18 semester hours in a 15-week period without written permission from an advisor. Permission to register for more than 18 semester hours 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.

* The UMUC policy on religious holidays is stated in the appendices.

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.

Academic dishonesty includes but is not limited to obtaining or giving aid on an examination, having unauthorized prior knowledge of an examination, doing work for another student, and plagiarism.

Plagiarism is the presentation of another person's idea or product as one's own. Plagiarism includes (but is not limited to) copying verbatim all or part of another person's work; using phrases, charts, figures, illustrations, computer programs, or mathematical or scientific solutions without citing the source; paraphrasing ideas, conclusions, or research without citing the source; and using all or part of a literary plot, poem, film, musical score, or other artistic product without attributing the work to its creator.

Students can avoid unintentional plagiarism by carefully following accepted scholarly practices. Notes taken for papers and research projects should accurately record sources of material to be cited, quoted, paraphrased, or summarized, and papers should acknowledge those sources in footnotes.

UMUC's policy on Academic Dishonesty and Plagiarism can be found at www.umuc.edu/policy or is available from the Office of the Dean, School of Undergraduate Studies.

Appealing a Grade

Procedures for appealing a grade are 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 the UMUC Code of Student Conduct, which can be found at www.umuc.edu/policy or is available from the Office of the Dean, School of Undergraduate Studies. 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 vice provost, Undergraduate Student Affairs.

Filing Students' Grievances

The procedures necessary to file a formal complaint concerning the actions of members of the UMUC faculty or administrative staff are available at www.umuc.edu/policy or from the Office of the Dean, School of Undergraduate Studies.

Change of Address

Students who move during the semester or term should not only leave a forwarding address with the U.S. Postal Service but should also notify Undergraduate Student Affairs as soon as possible. Forms are available online via the Interactive Student Information System (ISIS) at www.umuc.edu/isis.

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.

RESPONSIBILITIES OF UMUC

UMUC considers the following goals in designing and reviewing the courses it offers. These goals are also considered in evaluating the acceptability of courses presented for transfer of credit from other institutions.

1. Presentation of material should conform to representations in official publications, announcements, and advertisements, or descriptions furnished to students before a course begins.
2. Students should be able to have regular contact with members of the faculty.
3. Students should be able to participate in the process of learning.
4. Students should have opportunities to interact with one another.
5. Students are entitled to have their work evaluated on an individual basis by faculty members.

CODE OF CIVILITY

To promote a positive, collegial atmosphere among students, faculty, and staff, UMUC has developed the following Code of Civility:

Respect

Treat all students, faculty, and staff with respect and in a professional and courteous manner at all times and in all communications, whether in person or in written communication (including e-mail).

Kindness

Refrain from using profanities, insults, or other disparaging remarks.

Truth

Endeavor to cite only the truth and not knowingly misrepresent, mischaracterize, or misquote information received from others.

Responsibility

Take responsibility for one's own actions instead of blaming others.

Cooperation

Work together with other students, faculty, and staff in a spirit of cooperation toward the common goals of seeking and providing quality education.

Privacy

Strive to uphold the right to privacy and not talk about others.

AVAILABILITY OF SERVICES

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. A number of offices are responsible for the delivery of these services, including the Career and Cooperative Education Center and the offices of Financial Aid, 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)

umucinfo@umuc.edu

Phone 800-888-UMUC; Fax 301-985-7884/7889

Aberdeen Proving Ground

chesapeake@umuc.edu

Phone 410-272-8269; Fax 410-273-0394

Andrews Air Force Base

seneca@umuc.edu

Phone 301-981-3123; Fax 301-420-3982

Annapolis Center

chesapeake@umuc.edu

Phone 410-266-3774 or 301-261-8199; Fax 301-261-8655

Fort Meade

chesapeake@umuc.edu

Phone 410-551-0431 or 301-621-9882; Fax 301-621-9898

Shady Grove Center

potomac@umuc.edu

Phone 301-738-6000; Fax 301-738-6040

Waldorf Center for Higher Education

seneca@umuc.edu

Phone 301-645-4303 or 301-870-6013; Fax 301-870-6939

Walter Reed Army Medical Center

seneca@umuc.edu

Phone 202-782-9023

GENERAL INFORMATION

UMUC phone representatives are available all day, every day, at 800-888-UMUC to provide answers to general questions and for help navigating UMUC's Web site. 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 semester of classes.

Enrollment specialists can also help qualified senior citizens apply for Golden Identification benefits. More information is on p. 12.

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. 10.

AUTOMATED SERVICES

A number of automated services are available to current students by telephone through the Interactive Registration and Information System (IRIS) and online through the Interactive Student Information System (ISIS).

Through IRIS, students can register for classes or make changes to their registration, look up their grades for the current semester or the two previous semesters, and check on the status of their financial aid application. IRIS is available seven days a week, from 6 a.m. to 9 p.m. eastern time, at 800-584-9413.

Though ISIS (available online at *www.umuc.edu/isis*), students have access to many of their personal UMUC records. ISIS

enables them to change personal information (such as home address, e-mail address, or phone numbers), view and print reports (such as their class schedule, grade report, statement of account, unofficial transcript, and academic audit), check on the status of their financial aid application, and register for final examinations for online courses.

To access services via IRIS or ISIS, students must enter their student identification number and personal identification number (PIN).

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 near 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.

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. 15 and are described 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.

Evaluation of International Records

Students who are seeking an evaluation 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.

Official Evaluation for Degree-Seeking Students

Students who have completed 6 semester hours at UMUC, with a cumulative GPA of 2.0 or better, are eligible to request an official evaluation of their transfer credit. For this evaluation, 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.

An official evaluation

- Includes all transfer credits earned up to the date of the evaluation that may be applied to a UMUC degree program.
- Lists all courses completed at UMUC.
- Incorporates other types of academic credit.
- Indicates the amount and type of coursework still required for the degree being sought.

The official evaluation remains in effect only while the student remains continuously enrolled.

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 services schools) during their first semester 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

Once eligible, students should apply for an official evaluation early in their program by contacting an academic advisor or accessing ISIS. No one may apply for graduation before receiving an official evaluation.

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 the director of Veteran and Disabled Student Services at least four to six weeks before the beginning of the semester.

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 already listed in this *Catalog* (beginning on p. 21 for bachelor's degree programs, p. 90 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 call the director of Veteran and Disabled Student Services at 800-888-UMUC, ext. 7930, or 301-985-7466 (TTY) or send an e-mail to vdsa@umuc.edu.

FINANCIAL AID

UMUC's Financial Aid Office administers a variety of financial assistance programs—including grants, loans, federal work-study, and scholarships—to help students meet the costs of their university education. Aid is available for students who can prove financial need, academic merit, or both. Students are urged to research the various sources of aid through their employers and through the UMUC Financial Aid Office.

UMUC attempts to assist all adult students, particularly those studying part time, who would otherwise be unable to afford a college education. Regardless of income level, all students are encouraged to apply for assistance; many financing alternatives are available.

Students must apply for aid through UMUC, not through any other office or institution of the University System of Maryland. (This can be a confusing point; students must be clear in all correspondence.) Students must reapply for financial aid at each school attended.

General Eligibility Requirements

An eligible applicant for UMUC need-based-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.

Students enrolled in certificate programs may be subject to prorated aid eligibility depending upon the length of the certificate program. A financial aid advisor can provide more detailed information.

Financial Aid Programs

Most aid programs are available to both full- and part-time students. UMUC offers several kinds of aid, including grants, scholarships, work-study, and loans. In most cases, at least half-time enrollment (6 semester hours) is required.

Amounts and eligibility for financial aid vary from year to year. Following is a brief description of amounts likely to be available for the 2004–5 award year. For more detailed information, students may refer to the current *UMUC Guide to Financial Aid*.

Grants and Scholarships

Gift assistance, for which no repayment is required, is offered by the federal government, the state of Maryland, and UMUC. The UMUC Financial Aid Office administers several types of gift assistance: 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 federal, need-based grant program for high-need, first-time undergraduates. Awards for the 2004–5 year will range from \$200 to \$2,025 per semester. Award amounts 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 of the award varies depending on the availability of funds allocated by the Department of Education. Typical awards during the 2004–5 year will range from \$150 to \$300 per semester. Funds are limited, so students are encouraged to apply early.

The **UMUC President's Grant** program offers grants to students who demonstrate financial need. Typical awards during the 2004–5 year will range from \$100 to \$500 per semester, based on need. Funds are limited, so students are urged to apply early.

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 programs. Typical awards range from \$200 to \$1,500 per semester,

depending on the specific program. Most scholarships require a minimum GPA for consideration. Students may refer to the UMUC scholarship brochure for further information.

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 semester. Award amounts range from \$200 to \$3,000 annually. Senatorial and Delegate Scholarship awards are based on criteria established by the elected official. High school seniors may qualify for the Guaranteed Access Grant if they meet specific criteria. The Educational Assistance Grants are need-based grants for full-time undergraduate students. For more information, students should contact the Office of Student Financial Assistance at 410-260-4565 or 800-974-1024.

The **Maryland Part-Time Grants** program offers assistance to Maryland residents enrolled for at least 6, but fewer than 12, credits per semester. Awards are based on need. Typical awards are \$300 to \$600 per semester. Funds for these grants are allocated to state colleges on an annual basis and are administered by the institution.

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. Students should inquire about scholarship possibilities through organizations with which they have an affiliation. Additional 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 semester. 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 \$1,500 per semester. The current 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. Students may qualify for a subsidized Federal Direct Loan, which is based on financial need. Students can also acquire an unsubsidized Federal Direct Loan, which is not based on need—that is, personal or family income level is not considered. The federal government pays the interest on need-based Federal Direct Loans while the borrower is in school or a deferment status. Students with an unsubsidized Federal Direct Loan (not based on need) are responsible for the interest during in-school and deferment periods. The interest rate is variable but will not exceed 8.25 percent. Interest rates are set each year in June. 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 see the *UMUC Guide to Financial Aid*.

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 semester. It is a federal loan program, available to parents of undergraduate dependent students, that is not based on need. Parents are eligible to borrow up to the cost of education less other financial aid received by the student. Repayment begins 60 days after disbursement, though deferments (granted by the Department of Education) may allow for a delay in payment until after the period of enrollment. The PLUS interest rate is variable but is capped at 9 percent.

Alternative 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. Alternative student loans typically require a credit check and often a cosigner. Students are generally required to be enrolled for at least 6 credits. Students with an alternative loan must pay their tuition charges when they register for classes. Registration will not be held pending payment, since alternative loan checks are usually mailed directly to the borrower. Students who are interested in an alternative student loan should contact the bank of their choice or visit UMUC's Web page on alternative student loans at www.umuc.edu/financialaid for more information.

Employment Programs for Students

UMUC recognizes the importance of flexible, part-time employment for students who are in transition or who have financial need. Employment opportunities involve positions in the university setting; some community-service positions are available.

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. Students who do not secure such employment forfeit their work-study award.

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 semester, 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 semester 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.

Completing the Financial Aid Application Forms

Students must complete the Free Application for Federal Student Aid (FAFSA) and the UMUC Financial Aid Data Form to be considered for any type of financial aid at UMUC. There is no cost to the student to obtain or process these forms. The FAFSA must also be completed for a student to be considered for need-based Maryland state scholarships. The application process can take from six to ten weeks, so students are encouraged to apply early. The *UMUC Guide to Financial Aid* provides more information on the application process.

UMUC Financial Aid Priority Deadlines

One of the most important aspects of the financial aid process is applying for assistance as early as possible. The application deadlines listed on this page are priority deadlines. Students meeting these dates will have the opportunity to be considered for the various grant and scholarship programs with limited funds. Students meeting the priority deadlines will also enjoy the security of having their award authorizations ready at the time of registration. 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. Late applications are processed continually throughout the award year, so students are always encouraged to apply. Eligibility for both loans and grants can be authorized even after the semester has begun.

To be given high priority for their financial aid applications and a determination of eligibility early enough for funds to be reserved by registration, students should complete both their Free Application for Federal Student Aid (FAFSA) and the UMUC Financial Aid Data Form by the priority deadlines below.

PROGRAM OR PERIOD BEING APPLIED FOR	PRIORITY DEADLINE FOR FILING FINANCIAL AID FORMS
Maryland State Scholarships	March 1
Full Academic Year or Fall Semester Only	June 1
Spring Semester Only	November 1
Summer Semester	April 1

Federal Return of Funds Policy

Students receiving federal financial aid have the responsibility to follow the institution's withdrawal procedures as outlined on p. 14 of this catalog. The 1998 Reauthorization of the Higher Education Act requires the university to calculate a return of Title IV funds for all federal financial aid students who withdraw from all classes on or before the 60-percent attendance point in the semester. UMUC is required to return to the federal programs any award funds that were "unearned" based on the percentage of attendance. Students who stop attending all classes without officially withdrawing are also subject to a return of funds calculation at the end of the semester based on the last documented date of attendance as determined by the teachers. For further information, students should refer to the *UMUC Guide to Financial Aid*.

For Further Information

Information and applications are available from the Financial Aid Office. Students can also obtain a current financial aid kit by contacting their advisor. 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, ext. 7510, or by e-mail at finaid@umuc.edu.

VETERANS BENEFITS

Veterans Benefits Programs

The following is a summary of the educational assistance that the U.S. Department of Veterans Affairs makes available to active-duty military personnel, veterans, and their dependents who are attending UMUC:

- **The Post-Vietnam Era Educational Assistance Program** (VEAP, Chapter 32) may extend benefits to active-duty personnel and veterans who enlisted in the military after January 1, 1977. Eligible applicants who contributed to an educational fund have their contributions matched at the rate of two dollars for each dollar. (Eligibility to enroll in this program ended on March 31, 1987.)
- **The Montgomery GI Bill-Active Duty Educational Assistance Program** (MGIB, Chapter 30) assists students who entered active duty for the first time after July 1, 1985, and agreed to have their pay reduced \$100 for 12 months. Veterans must have been honorably discharged; active-duty personnel must have served at least two years.

If the service does not pay 100 percent of tuition and fees and the student is on active duty, is eligible for MGIB benefits, and plans to use tuition assistance, the student may apply for MGIB Tuition Assistance Top-up for the balance. The amount of the benefit is limited to the amount that the student would receive for the same course(s) if regular MGIB benefits were being paid. In no case will

the amount paid by the military combined with the amount paid by the Department of Veterans Affairs exceed the total cost of the course(s). The use of Tuition Assistance Top-up reduces future entitlement to MGIB benefits. Further information on Tuition Assistance Top-up is available on the Department of Veterans Affairs Web site at www.gibill.va.gov.

- Certain veterans and active-duty military personnel who were eligible for educational assistance under the **GI Bill** (Chapter 34) on December 31, 1989, may become eligible for benefits under the Montgomery GI Bill if they meet specific criteria (available from Undergraduate Student Affairs) and have some unused entitlement. Other veterans who were voluntarily or involuntarily separated and who elected to participate in Chapter 30 may be eligible. Certain Post-Vietnam Era Educational Assistance Program participants who elected to participate in Chapter 30 may also be eligible.
- **Vocational Rehabilitation** (Chapter 31) provides assistance to veterans who have a service-connected disability of at least 20 percent and need vocational rehabilitation.
- The provisions of the **Survivors' and Dependents' Educational Assistance Program** (Chapter 35) award educational benefits to spouses and children of veterans who either died while in service, died as a result of a service-connected disability, or became totally and permanently disabled as a result of their military service.
- Besides Chapter 35, the **Restored Entitlement Program for Survivors** also assists dependents. Eligibility for educational benefits under this program is limited to unmarried full-time students between the ages of 18 and 22 whose parent died while on active duty before August 13, 1981, or as a result of a service-connected disability incurred before August 13, 1981.
- Educational assistance through the provisions of the **Montgomery GI Bill—Selected Reserve Educational Assistance Program** (Chapter 106) may be available to students who have a six-year obligation in the Selected Reserves that was signed after June 30, 1985. Students who are officers must agree to serve an additional six years beyond their current obligation.
- Benefits awarded under the **Department of Defense Educational Assistance Test Program** (Sections 901 and 903) are available to veterans whom the department chose for participation from among those who enlisted between November 30, 1980, and September 30, 1981.

Application Procedures

Students who are eligible for educational benefits from the U.S. Department of Veterans Affairs should review the online information on 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 semester 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 semester hours of credit for which the student is registered, the length of the semester, 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. Eligibility for benefits does not delay payment of tuition.

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 semester hours of credit 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. 19; 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 semester. 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 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 that is not a requirement in a student's degree or certificate program.

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 semester hours of credit) 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 semester 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 an official evaluation (details on p. 238), filing an application for a diploma (available online at www.umuc.edu/forms) with Undergraduate Student Affairs, and paying the appropriate fee (currently \$50). This may be done at the time of the final semester'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 semester or term in which they first applied for graduation must complete a new application for diploma and pay the fee for the semester or term in which they will graduate.

Students pursuing certificates must apply for certificates by the same deadlines. The application form is available online at www.umuc.edu/forms.

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 via ISIS, the Interactive Student Information System, the student and personal identification numbers are considered an official signature.)

Transcripts may be requested online via ISIS (at www.umuc.edu/isis), by mail to the address listed below, by fax to 301-985-7360, and in person at any site providing academic advising services. When requesting transcripts by mail or fax, students must remember to submit their full name (including any other names, such as a maiden name, under which records may be on file), date of birth, and dates and places of attendance. Mail-in requests and payment should be sent to

Undergraduate Student Affairs
University of Maryland University College
3501 University Boulevard East
Adelphi, MD 20783-8070

Each UMUC transcript that is issued costs \$5; rush processing of transcripts (sent by first-class mail within 24 hours) is available for an additional \$15 each. Payment must accompany each signed request for a transcript. There is no charge for sending a transcript to another institution in the University System of Maryland. Checks should be made payable to University of Maryland University College. To pay by fax, students must use Visa or MasterCard; credit-card information must include the expiration date.

Students who were last enrolled with UMUC in Europe or Asia can also request transcripts online via ISIS. Mail requests for overseas transcripts should be sent directly to the Office of Admissions and Registrations of the program most recently attended, since the records of students last enrolled overseas are kept in the appropriate overseas headquarters.

UMUC Europe
Attn.: Transcripts
Unit 29216
APO AE 09102

UMUC Asia
Unit 5060, Box 0100
APO AP 96328-0100

Transcripts should be requested at least two weeks before they will actually be needed. No transcripts will be released until all financial obligations 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

Textbooks and supplies may be ordered online, by phone or fax, or in person from several bookstores, many of which are convenient to the sites where classes meet. At some regional locations, either the textbooks themselves or order forms are available to facilitate purchases. Bookstores usually have updated lists of the books required for each course. The *Undergraduate Schedule of Classes* and the UMUC Web site contain information about obtaining required and recommended textbooks and other materials.

Career and Cooperative Education Center

The Career and Cooperative Education Center at UMUC serves all UMUC undergraduate and graduate students and alumni worldwide. It also serves the employer community by preparing self-aware employees who know their strengths, skills, values, and uniqueness, and where they might potentially fit in today's global marketplace.

Many resources are offered by the center to help students and alumni explore and achieve their academic goals and gain the skills they need to be self-sufficient in pursuing those goals. Some services are provided in conjunction with advisors and with representatives from Graduate Student Affairs. Students and alumni

may take advantage of career resources by accessing the Web page at www.umuc.edu/careercenter; calling 800-888-UMUC, ext. 7780; or visiting the center in Adelphi. Students coming to the center are encouraged to call or send an e-mail in advance to request an appointment. The e-mail address is careercenter@umuc.edu.

Programs and resources of the Career and Cooperative Education Center include

- Online résumé posting.
- Access to online job postings.
- Online resources and links for career decision making and development.
- Online career assessment.
- Résumé review online, by phone, or in person.
- Interview preparation online, by phone, or in person.
- Job posting notebooks (available on site).
- A computer workstation available in the Adelphi offices by appointment or on a first-come, first-served basis.

Job search assistance offered by the center includes the Job Development Seminar, offered online and on site for a fee. This seminar provides comprehensive information on preparing for and conducting a job search. Optional follow-up services include résumé revision and review and a mock interview session. Résumé referral is provided for eligible undergraduates who enroll in Cooperative Education.

CAPL 398A Career Planning Management, a 1-credit course, is available for individuals who need strategies for managing career change or transition or to deal with fluctuations in the job market.

Specifics about Cooperative Education may be found on p. 18.

Computer Labs and Services

Computer labs are available at many UMUC sites (including Adelphi, Annapolis, 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 a floppy or zip disk to save data or documents. 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.

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.

Direct Borrowing Privileges

Currently enrolled students have borrowing privileges at the libraries of the following institutions:

Bowie State University
Coppin State College
Frostburg State University
Morgan State University
Salisbury State University
St. Mary's College of Maryland
Towson University
University of Baltimore
University of Maryland, Baltimore
University of Maryland, Baltimore County
University of Maryland Center for Environmental Science
University of Maryland, College Park
University of Maryland Eastern Shore
University of Maryland University College

To borrow USMAI materials, students must have a current semester sticker and bar code on their UMUC student ID card. (The current sticker is included with the student's registration confirmation each semester.) Students are also encouraged to make use of library resources in their area, including community college and other libraries.

Library Resources

Students may access an extensive array of online journal databases and national and international newspapers via the Information and Library Services Web page at www.umuc.edu/library; or through WebTycho, UMUC's online course delivery system. Authorized library users may access more than 100 databases—most of which index or link to full-text articles covering business, management, social science, science, arts and humanities, and computer and information systems.

The USMAI online catalog provides access to USMAI books. Students can access the USMAI online catalog from the Information and Library Services Web page at www.umuc.edu/library, through WebTycho, and at any USMAI library or UMUC regional site.

USMAI library materials can be delivered to any USMAI library (including the Shady Grove Center library) or UMUC circulation site (at the Annapolis Center and the Waldorf Center for Higher Education) for pickup. UMUC students who reside outside Maryland (but within the continental United States) may have books sent to their address of record. In addition, all UMUC students may use interlibrary loan to request that journal articles or book chapters not available in full text online be sent to them either by mail or electronically in portable document format (PDF) via the Web.

Library Instruction and Research Assistance

Students are often overwhelmed by or are unaware of the vastness of the resources—print, nonprint, and automated—available to them. Information and Library Services provides classroom and online instruction and individualized research assistance.

At the request of a faculty member, Information and Library Services can arrange for an in-class or online presentation to introduce students to locating and learning to use relevant library resources. Online students may access the Peck Virtual Library Classroom within WebTycho as an additional free resource to help them improve their research skills. UMUC also offers LIBS 150 Information Literacy and Research Methods, a required 1-credit course that focuses on developing information literacy skills. Topics include understanding the research process; developing research skills; selecting relevant print and electronic sources to answer research questions; effectively using Web search engines to find information; evaluating, organizing, and correctly citing the information found; and avoiding plagiarism. LIBS 150 must be taken within the student's first 15 semester hours of coursework.

UMUC reference librarians are available by phone, online, and at several locations to assist students with their research needs. At the Adelphi Student and Faculty Services Center, UMUC librarians are available during established hours or by appointment to answer questions or provide individual instruction. UMUC staff members are also available during selected hours at McKeldin Library on the campus of University of Maryland, College Park. Students may also obtain reference assistance or information about library services by calling Information and Library Services at 800-888-UMUC, ext. 7209; by sending an e-mail message to library@umuc.edu; or by accessing UMUC's real-time online interactive chat or library conference via the Web at www.umuc.edu/library (students should click on "Ask a Question"). Chat, e-mail, and phone assistance are now available 24 hours a day, seven days a week.

Tutoring

A number of online, on-site, and referral services are available to students who are interested in academic help beyond the classroom. UMUC services that are provided online or on-site (in computing and writing) carry no charge. Fees for tutors on UMUC referral lists are arranged privately between student and tutor. Students may call 800-888-UMUC for general tutoring information.

Writing Resources

The *Guide to Writing and Research* is now required for use in all undergraduate courses where another such guide to writing and research is not already required. Students may purchase a print copy of the guide or access the guide online at <http://tychousa.umuc.edu/writinggdel>.

Free, in-person writing services are available to UMUC students at the University of Maryland, College Park, Writing Center, located in room 0125 of Taliaferro Hall on the College Park campus. Students should call 301-405-3785 for information about hours and appointments.

The UMUC Online Writing Center may be accessed on the Web at www.umuc.edu/writingcenter.

Alumni Association

The UMUC Alumni Association was established in 1990 to support, enhance, and promote UMUC and its community of alumni and students worldwide. The Alumni Association reaches out to all members of the UMUC community with opportunities to become involved in association activities as well as professional and personal development seminars and workshops.

With a membership of more than 100,000 alumni, the association offers programs and services that are beneficial to both alumni and students. In addition to funding scholarships for UMUC students, the association seeks to encourage alumni and students to participate actively in the UMUC community by attending events, volunteering, and staying connected to their alma mater in ways that contribute to its success.

Membership in the UMUC Alumni Association is automatic upon graduation—there are no applications or fees. Following are just a few of the benefits of being a UMUC alumnus:

- Regular issues of the *Achiever* alumni magazine.
- Eligibility to apply for an Alumni Association affinity credit card and other credit management services.
- Discounted GEICO automobile insurance.
- Discounts at UMUC's Virtual Bookstore.
- Networking opportunities and access to career resources.

More information about the UMUC Alumni Association is available online at www.umucalumni.org; by contacting the Alumni Relations office at 800-888-UMUC, ext. 7179; or by sending an e-mail to alumni@umuc.edu. Student inquiries are always welcome.

UNIVERSITY SYSTEM OF MARYLAND

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BA, Brooklyn College, 1951
MA, University of Minnesota, 1953
JD, Salmon P. Chase College of Law, 1959

Benedek, Cindy B.

Biology

BS, University of Maryland, College Park, 1990
MS, Hood College, 1995

Bergquist, Kathleen

Behavioral and Social Sciences

BA, Christopher Newport University, 1991
MSW, Norfolk State University, 1997
PhD, College of William and Mary, 2000

Berman, Carl R.

Natural Science

BA, Tulane University, 1964
MS, Old Dominion University, 1977
PhD, College of William and Mary, 1983

Bernstein, Lisa

English

BA, Wellesley College, 1986
MS, Georgetown University, 1992
PhD, University of Maryland, College Park, 1998

Bevelaqua, Joan B.

Art

BA, Anna Maria College, 1974
MFA, Towson University, 2000

Beverly, William

English

BA, Oberlin College, 1987
MA, University of Florida, 1991
PhD, University of Florida, 1998

Beyers, John F.

Mathematics

BS, Towson State University, 1992
MA, American University, 1994
PhD, American University, 2000

Bhaskar, Shivarajpur K.

Computer Science

BE, Bangalore University (India), 1979
ME, Indian Institute of Science (India), 1981
PhD, University of Maryland, College Park, 1993

Bickel, Kirk

Library Skills

BS, University of Maryland University College, 1999
MLS, University of Maryland, College Park, 2001

Bielec, John A.

Legal Studies

BS, University of Maryland, College Park, 1988
JD, Catholic University of America, 1991

Bilker, David

Accounting

BBA, Temple University, 1974
MBA, Drexel University, 1977

Billingsley, Lance W.

Government and Politics

BA, University of Maryland, College Park, 1961
JD, State University of New York at Buffalo, 1964

Binkley, John C.

History

BA, Loyola University Chicago, 1970
MA, Loyola University Chicago, 1975
JD, DePaul University, 1983
PhD, Loyola University Chicago, 1985

Bishop, Perry C.

Journalism

BA, University of Arizona, 1968
MSEd, University of Southern California, 1974
MS, Butler University, 1978

Black, Debra A.

Business and Management

BA, Loretto Heights College, 1983
MBA, University of Phoenix, 2001

Black, Theodore S.

Economics

BA, Florida Atlantic University, 1973
MA, University of Washington, 1975
PhD, University of North Carolina at Chapel Hill, 1980

Blattman, Michael

Accounting

BA, Queens College, City University of New York, 1974
MBA, St. John's University (New York), 1978

Bledsoe, Johnny

Information Systems Management

BS, University of Alabama, 1984
MS, University of Maryland University College, 1995

Blegen, Michael L.

Computer Studies

BS, Cornell University, 1992
MS, George Mason University, 2000

Blissett, Rodney Ricardo

Information Systems Management

BS, University of Maryland University College, 1981
MGA, University of Maryland University College, 1990

Blunck, Ronald G.

Business and Management

BS, Iowa State University, 1969
MBA, University of Maryland, College Park, 1974

Bobrowsky, Matthew S.

Astronomy

BA, Northwestern University, 1977
MS, University of Maryland, College Park, 1980
PhD, University of Maryland, College Park, 1985

Bohonak, Noni M.

Computer and Information Science

BS, North Carolina State University, 1980
MS, Shippensburg University of Pennsylvania, 1985
PhD, Nova Southeastern University, 2000

Boisvert, Judie

Biology

BA, University of California, Berkeley, 1996
PhD, Stanford University, 2001

Bojanova, Irena*Computer and Information Science*

MS, Sofia University (Bulgaria), 1987
PhD, Institute of Mathematics and Informatics,
Bulgarian Academy of Sciences (Bulgaria), 1992

Boland, Frederick E.*Computer and Information Science*

BS, University of Maryland, College Park, 1974
MS, Pennsylvania State University, 1977
MS, University of Maryland, College Park, 1986

Bolton, John A.*Philosophy*

BA, University of Essex (England), 1986
MA, University of Essex (England), 1988

Bonner, Jeffrey H.*Information Systems Management*

BS, Valparaíso University, 1980
MS, University of Maryland University College, 2000

Bonner, Kimberly*Communication Studies*

BA, University of Virginia, 1993
JD, University of Virginia, 1996

Booth, James W.*English*

BA, University of North Carolina at Greensboro,
1974
MA, University of North Carolina at Greensboro,
1982
DA, State University of New York at Albany, 1985

Booth, Richard*Behavioral and Social Sciences*

BA, St. Ambrose University, 1969
MSW, University of Iowa, 1977
PhD, Saybrook Graduate School and Research Center,
1994

Boubail, Ouanessa*Computer and Information Science*

BS, Université d'Alger (Algeria), 1976
MBA, Case Western Reserve University, 1980

Bouling, Edward F.*Computer Studies*

BS, University of Maryland University College, 1991
MS, Bowie State University, 1977

Bourget-Tactuk, Jose*Humanities*

BA, Southern Adventist College, 1978
MA, Andrews University, 1985
PhD, Andrews University, 1997

Bouwman, Clark*Communication Studies*

BA, Pennsylvania State University, 1977
MS, Johns Hopkins University, 2001

Bowie, Dawn*Legal Studies*

BS, University of Maryland University College, 1994
JD, University of Baltimore, 2001

Bowler, Michael H.*Behavioral and Social Sciences*

BS, College of the Holy Cross, 1957
MSW, Boston College, 1959
PhD, Washington University (Missouri), 1979

Bowlin, Elizabeth*Business and Management*

BS, University of Maryland University College, 1994
MS, University of Maryland University College, 1999

Boyd, Mary L.*Business and Management*

BS, Columbia Union College, 1990
MS, Johns Hopkins University, 1993

Boyd, Thomas J.*Biology*

BA, Washington and Lee University, 1987
BS, Washington and Lee University, 1987
MS, Scripps Institute of Oceanography, University of
California, San Diego, 1992
PhD, Scripps Institute of Oceanography, University of
California, San Diego, 1993

Braden, Myesha*History*

BS, Southern University and A&M College, 1994
JD, Tulane University, 1998

Bradley, Diane*Human Resource Management*

BA, California State University, Long Beach, 1985
JD, Howard University, 1989

Bradley, Megan E.*Psychology*

BS, Shippensburg University of Pennsylvania, 1992
MA, Marshall University, 1994
PhD, University of Maryland, Baltimore County,
1999

Braxton-Lieber, Sherri N.*Computer Studies*

BS, Wake Forest University, 1992
MS, North Carolina State University, 1994
PhD, George Washington University, 1999

Breeskin, John*Psychology*

BA, Teachers College, Columbia University, 1957
MA, Teachers College, Columbia University, 1958
PhD, University of Texas at Austin, 1966

Bres, Mimi G.*Biology*

BS, University of Nevada, Reno, 1976
MS, University of Nevada, Reno, 1978
PhD, George Washington University, 1987

Bridge, Diane L.*Legal Studies*

BA, Duquesne University, 1983
JD, Duquesne University, 1986
MA, George Washington University, 1992
MPA, Harvard University, 1996

Brino, Jason C.*Legal Studies*

BA, University of Notre Dame, 1991
JD, University of Notre Dame, 1994

Brittan-Powell, Christopher S.*Psychology*

BA, Boston College, 1984
MA, University of Maryland, College Park, 1996
PhD, University of Maryland, College Park, 1998

Brock, Gerald*Accounting*

BS, New Mexico State University, 1967
MS, New Mexico State University, 1969
BS, University of Maryland University College, 1989

Brockunier, Nicholas*Business and Management*

BA, Knox College, 1969
BS, University of Maryland University College, 1976
MBA, University of Maryland, College Park, 1978

Brodie, Steven G.*Biology*

BS, University of Texas at San Antonio, 1989
MS, University of Texas at San Antonio, 1990
PhD, University of New Mexico, 1996

Brown, Johnnie*Business and Management*

BS, Morgan State University, 1976
MPA, University of Baltimore, 1979
PhD, Morgan State University, 1997

Brown, Major L.*Information Systems Management*

BS, University of Maryland University College, 1978
MPA, American University, 1981

Bruzdzinski, Michael C.*Information Systems Management*

BA, Loyola College in Maryland, 1978
MA, Northern Illinois University, 1979
MA, University of Baltimore, 1982

Buchanan, Wayne D.*Human Resource Management*

BA, National University, 1997
MS, Central Michigan University, 1987
PhD, Capella University, 1998

Buckley-Fletcher, Carolyn*English*

BA, George Mason University, 1977
MA, Catholic University of America, 1983
PhD, Catholic University of America, 1992

Buckstead, Jonathan R.

Library Skills

BA, St. Olaf College, 1985
MLIS, University of Hawaii at Manoa, 1989
MA, University of Hawaii at Manoa, 1994

Burgos, Linda F.

Legal Studies

BA, Wheaton College (Illinois), 1983
JD, American University, 1987

Burgoyne, Susan G.

Speech

BA, Towson State University, 1989
MA, San Diego State University, 1992

Burkhard, Fred

History

BA, Rutgers University, 1978
MA, Rutgers University, 1980
PhD, University of Wisconsin–Madison, 1986

Burnett, Cornell C.

Biology

BS, Tougaloo College, 1959
MS, Howard University, 1975
PhD, Howard University, 1978

Burns, Edward R.

Experiential Learning

BA, George Washington University, 1969
MGA, University of Maryland University College, 1995

Burns, James D.

Computer Science

BS, University of South Carolina Aiken, 1981
MS, Naval Postgraduate School, 1987

Burson, Phyllis J.

Psychology

BS, Valparaiso University, 1961
MA, University of Chicago, 1965
PhD, University of Chicago, 1974

Bush, Roberta G.

Computer Studies

BA, San Francisco State University, 1983
MA, San Francisco State University, 1987

Buszuwski, James A.

Economics

BS, St. Bonaventure University, 1974
PhD, Boston College, 1978

Butler, John J.

Accounting

BS, Pennsylvania State University, 1969
MBA, Pennsylvania State University, 1971

Cain, Kim L.

Information Systems Management

BS, University of Maryland University College, 1997
MS, University of Maryland University College, 2000

Caldwell, Dean S.

Human Resource Management

BA, Western State College of Colorado, 1976
MS, Idaho State University, 1982
PhD, Idaho State University, 1983

Calloway, Nathaniel Roy

Accounting

BA, Oberlin College, 1968
MSA, Southeastern University, 1977
MBA, Southeastern University, 1984
MPA, Southeastern University, 1984
PhD, Walden University, 2004

Campana, Joseph

English

BA, Williams College, 1996
MA, Cornell University, 2000
PhD, Cornell University, 2003

Campbell, Catherine

Biology

MS, University of Miami, 1993
PhD, University of Miami, 1999

Campbell, Catherine A.

Marketing

BS, Kent State University, 1972
MBA, Florida Atlantic University, 1981

Campbell, I. Matthew

Criminology/Criminal Justice

BA, Pomona College, 1967
MA, Catholic University of America, 1970
JD, Catholic University of America, 1976

Cantor, Eugene H.

Accounting

BS, University of Maryland, College Park, 1972
JD, Emory University, 1976
LLM, Georgetown University, 1980

Caporaletti, Wanda G.

Legal Studies

BS, Salisbury State University, 1986
JD, University of Baltimore, 1989

Carnaroli, Giovanni

Business and Management

BS, North Carolina State University, 1991
MBA, University of Maryland, College Park, 1993

Carr-Friday, Sophia

Criminology/Criminal Justice

BA, University of Maryland, College Park, 1989
MA, University of Maryland, College Park, 1994
PhD, University of Maryland, College Park, 1997

Carrol, Nora

Human Resource Management

BFA, Syracuse University, 1971
MS, Syracuse University, 1991

Carsley, Catherine

Communication Studies

BA, Fordham University, 1988
PhD, Princeton University, 1993

Carson-Canady, Tiffany H.

Computer Studies

BS, Long Island University, 1993
MS, George Washington University, 2000

Carter, Stephen S.

Fire Science

BA, Thiel College, 1968
MS, University of Maryland, College Park, 1998

Carwell, Louise M.

Legal Studies

BA, University of Rochester, 1984
JD, Case Western Reserve University, 1984

Case, Vera L.

Business and Management

BS, Pennsylvania State University, 1983
JD, University of Maryland, Baltimore, 1993

Cassidy, Joan

Human Resource Management

BA, Florida State University, 1965
MS, Florida International University, 1979
EdD, Virginia Polytechnic Institute and State University, 1990

Castner, Joanna

Communication Studies

BA, Eastern New Mexico University, 1991
MA, Texas Tech University, 1994
PhD, Texas Tech University, 2000

Cavanaugh, Andrew

English

BA, Michigan State University, 1984
MA, Eastern Michigan University, 1991

Chaires, Margaret S.

Economics

BA, Catholic University of America, 1966
MA, Claremont Graduate School, 1972
AA, Prince George's Community College, 1986

Champ, Robert L.

English

BA, Loyola University Chicago, 1979
MA, Loyola University Chicago, 1985
PhD, University of Maryland, College Park, 1993

Chandramouli, Ramaswamy*Computer and Information Science*

MS, Indian Institute of Technology (India), 1979

MS, University of Texas at Dallas, 1984

PhD, George Mason University, 1994

Chang, Hui-Hua*History*

BA, National Taiwan University at Taipei, 1988

PhD, Indiana University Bloomington, 2003

Chatterjee, Lali*Astronomy*

BS, University of Calcutta (India), 1969

MS, Jadavpur University (India), 1972

PhD, Jadavpur University (India), 1980

Chavis, Earl V.*Information Systems Management*

BA, University of Maryland, College Park, 1969

MA, University of Maryland, College Park, 1972

PhD, Howard University, 1979

Chawla, Nishi*English*

BA, University of Delhi (India), 1978

MA, University of Delhi (India), 1980

PhD, George Washington University, 1996

Chiang, Lee*Mathematics*

BS, University of Science and Technology of China, 1982

MS, Anhui University (China), 1984

PhD, University of Maryland, College Park, 1994

Chiappelli, Theodore*Business and Management*

BA, University of Pittsburgh at Johnstown, 1975

MHA, University of Pittsburgh, 1985

MSSM, University of Southern California, 1989

PhD, Johns Hopkins University, 1996

Chibili, Philomina A.*Computer Studies*

BS, Université de Yaounde (Cameroon), 1990

MA, Université de Buéa (Cameroon), 1993

MIT, American Intercontinental University, 2000

Childs, Edmund P.*Computer Studies*

BS, Western Connecticut State University, 1979

MS, University of Phoenix, 1987

Chin, Carey C.*Computer Information Technology*

BS, University of Maryland, College Park, 1981

BS, University of Maryland, College Park, 1989

MS, Johns Hopkins University, 1995

Chiricosta, Tracey C.*Communication Studies*

BA, Smith College, 1988

MS, Rensselaer Polytechnic Institute, 1989

Chong, Alice S.*Legal Studies*

BA, University of Maryland, College Park, 1992

JD, Rutgers University, 1996

Choy, Marguerite E.*Mathematics*

BA, Reed College, 1967

MS, Case Western Reserve University, 1969

Chu, Alice*Communication Studies*

BS, University of California, Berkeley, 1992

MA, University of Texas at Austin, 1997

PhD, University of Texas at Austin, 2003

Chung, Tracy*English*

BA, Tufts University, 1993

MA, American University, 1997

Ciliberti, Barrie S.*Government and Politics*

BA, Ursinus College, 1957

MA, Georgetown University, 1960

PhD, Catholic University of America, 1975

Claiborne, Gay D.*English*

BS, New Mexico State University, 1970

MA, New Mexico State University, 1972

PhD, University of South Florida, 1991

Clark, Lawrence*Communication Studies*

BA, William Carey College, 1984

MA, University of Texas–Pan American, 1990

PhD, Texas A&M University, 1999

Clarke, Timothy E.*Legal Studies*

BA, University of Maryland, College Park, 1968

JD, University of Maryland, Baltimore, 1971

Clauson, James R.*Computer Studies*

BSBA, University of Central Florida, 1976

MBA, University of South Carolina, 1979

MS, Murray State University, 1990

Clay, Orin B.*Information Systems Management*

BS, U.S. Naval Academy, 1989

MS, Troy State University, 1995

MS, George Washington University, 2002

Claytor, Bobby H.*Information Systems Management*

BS, University of Maryland University College, 1997

MS, University of Oklahoma, 1999

MS, George Washington University, 2000

Clegern, Robert W.*Biology*

BA, University of Colorado, 1965

MS, University of Illinois at Urbana-Champaign, 1966

PhD, University of Illinois at Urbana-Champaign, 1972

Clekis, Joanna M.*Behavioral and Social Sciences*

BA, Eckerd College, 1981

MA, Georgia State University, 1985

PhD, University of Sarasota, 2000

Clemons, Traci E.*Business and Management*

BA, University of West Florida, 1992

MS, University of Alabama, 1996

PhD, University of Alabama, 1997

Cohen, Bonnie B.*Communication Studies*

BA, Douglass College, Rutgers University, 1993

JD, New England School of Law, 1996

Cohen, Mark A.*Computer Studies*

BS, Old Dominion University, 1978

JD, University of Baltimore, 1981

Cole, James R.*Information Systems Management*

BA, Western Maryland College, 1959

MBA, Loyola University Chicago, 1980

Cole, Portia L.*Sociology*

BA, George Washington University, 1989

MS, Catholic University of America, 1993

PhD, American University, 2003

Collert, Gerald J.*Human Resource Management*

BS, Wayland Baptist University, 1986

MA, Midwestern State University, 1988

MS, State University of New York College at Plattsburgh, 1992

Collins, Dale R.*Human Resource Management*

BA, Western Reserve University, 1964

MPA, Syracuse University, 1966

PhD, Syracuse University, 1973

Collins, Gerald A.*Criminology/Criminal Justice*

BA, University of Maryland, College Park, 1995

JD, Catholic University of America, 2000

Collins, Pamela E.*Business and Management*

BS, Texas Southern University, 1973

MS, American University, 1995

Colston, Valerie J.*Computer Studies*

BA, University of California, San Diego, 1980
 MA, San Diego State University, 1986

Coltri, Laurie S.*Legal Studies*

BS, California Institute of Technology, 1974
 JD, University of Southern California, 1978
 PhD, University of Maryland, College Park, 1995

Columbia, Kenneth*Human Resource Management*

BS, George Washington University, 1977
 MA, George Washington University, 1980

Comitz, Paul H.*Information Systems Management*

BS, State University of New York at Buffalo, 1983
 MS, University of Redlands, 1988
 MS, University of Redlands, 1992
 MS, Johns Hopkins University, 1998

Conley, James B.*Accounting*

BS, University of Colorado, 1974
 JD, University of Denver, 1979

Connors, Joan L.*Communication Studies*

BA, Marquette University, 1989
 MA, Marquette University, 1991
 PhD, University of Minnesota, Twin Cities, 2001

Conway, Timothy*Criminology/Criminal Justice*

BA, University of Pittsburgh, 1974
 MA, University of Pittsburgh, 1985

Cornick, Janet M.*Business and Management*

BA, Shaw University, 1971
 MS, Morgan State University, 1977
 EdD, University of Maryland, College Park, 1993

Cortese, James*Communication Studies*

BA, University of Massachusetts Amherst, 1967
 MA, Northeastern University, 1969
 PhD, University of Wisconsin–Madison, 1979

Cortese, Romana*English*

BA, State University of New York at Buffalo, 1970
 MA, State University of New York at Buffalo, 1973
 PhD, University of Wisconsin–Madison, 1981

Costa, Joseph*Psychology*

BS, Boston University, 1960
 MSED, University of Southern California, 1976
 EdD, University of Southern California, 1980

Cotter, John M.*Government and Politics*

BA, University of Maryland, College Park, 1993
 MA, University of Kentucky, 1997
 PhD, University of Kentucky, 2002

Cottle, James*Communication Studies*

BA, University of Maryland, College Park, 1971
 MEd, University of Maryland, College Park, 1972
 PhD, University of Maryland, College Park, 1976

Craig, Patrick M.*Art*

BFA, Western Michigan University, 1974
 MFA, University of Cincinnati, 1976

Crain, Barbara*Natural Science*

MAEd, Ruprecht-Karls-Universität Heidelberg
 (Germany), 1979
 MEd, State of Bavaria (Germany), 1982
 MS, Johns Hopkins University, 1998

Cranford, Christine L.*Communication Studies*

BA, East Carolina University, 1993
 MA, East Carolina University, 1999

Creasi, Anita*Business and Management*

BS, Virginia Polytechnic Institute and State University,
 1975
 MBA, George Mason University, 1983

Creech, Pat L.*Communication Studies*

BS, Purdue University, 1961
 MA, University of Wisconsin–Milwaukee, 1970
 MA, University of Wisconsin–Madison, 1973
 PhD, Indiana University Bloomington, 1979

Cresce, Arthur R.*Experiential Learning*

MA, Georgetown University, 1973
 PhD, University of Maryland, Baltimore, 1988

Crespo, Nichole C.*Biology*

BS, University of Central Florida, 1993
 PhD, University of South Florida, 2001

Crosby, Jack W.*Information Systems Management*

BS, Pennsylvania State University, 1961
 MS, University of Houston, 1967
 PhD, University of Houston, 1970

Crowley-Farrell, Mary E.*Communication Studies*

BA, Rutgers University, 1978
 MA, University of Pennsylvania, 1980

Csulak, Emery J.*Computer Studies*

BS, George Mason University, 1991
 MS, University of Maryland University College, 1997

Cubillos, Pedro O.*Computer Science*

BS, Universidad de Chile, 1974
 MS, University of Iowa, 1981
 PhD, University of Iowa, 1981

Cuccia, Robert A.*Communication Studies*

BA, Valparaíso University, 1962
 MA, American University, 1968

Cummins, Melvin B.*Business and Management*

BS, Towson State University, 1976
 MBA, University of Baltimore, 1980
 PhD, University of Maryland, College Park, 1994

Cutler, Herschel*Marketing*

BA, Boston University, 1957
 MBA, University of Pennsylvania, 1958
 PhD, Syracuse University, 1960

Cutshall, Rex R.*Business and Management*

BS, Indiana State University, 1984
 MA, University of Evansville, 1988
 PhD, Kennedy-Western University, 1997

Cuty-Ruiz, Laura L.*Psychology*

BS, Florida State University, 1989
 MA, University of Alabama, 1991
 PhD, University of Alabama, 1995

Dade, Lennell René*Psychology*

BS, Lincoln University (Pennsylvania), 1984
 MA, Indiana University of Pennsylvania, 1986
 PhD, Howard University, 1993

Daigh, John D.*Accounting*

BS, U.S. Military Academy, 1970
 MD, University of Texas Southwestern Medical
 School, 1978
 BS, University of Maryland University College, 1998

Dalal, Vistasp P.*Natural Science*

MS, Nagpur University (India), 1983
 MS, Wichita State University, 1987

Dambroski, Stanley*English*

BA, University of Maryland, College Park, 1982
 MA, University of Maryland, College Park, 1987
 PhD, University of Maryland, College Park, 1999

Damera, Raveendra*Environmental Management*

BS, Nagarjuna University (India), 1986
MS, University of Maryland, College Park, 1994

Damond, Marietta E.*Psychology*

BA, Gannon University, 1984
MA, George Washington University, 1988
PhD, George Washington University, 1992

Danner, Horace G.*Communication Studies*

BA, University of the Philippines–Diliman, 1955
MRE, New Orleans Baptist Theological Seminary, 1961
PhD, American University, 1973

Dao, Hung*Computer and Information Science*

BS, University of Houston, 1986
MS, University of Maryland, College Park, 1990
PhD, University of Maryland, College Park, 1996

Daston, Melissa G.*Marketing*

BA, Duke University, 1976
MA, University of Maryland, College Park, 1978
MBA, University of Maryland, College Park, 1980
MS, University of Maryland, College Park, 1987

Daumit, Richard*Computer and Information Science*

BEE, Catholic University of America, 1962
MS, George Washington University, 1969
MBA, University of Maryland, College Park, 1973

Davies, Diane*Mathematics*

BS, Boston University, 1980
MBA, Boston University, 1982

Davis, Cynthia A.*English*

BA, University of Texas at Austin, 1968
MA, University of Wisconsin–Madison, 1969
PhD, University of Wisconsin–Madison, 1972

Davis, Eunice M.*Behavioral and Social Science*

BS, Niagara University, 1978
EdM, State University of New York at Buffalo, 1980
PhD, State University of New York at Buffalo, 1988

Davis, Ralph*Legal Studies*

BA, Claremont McKenna College, 1973
JD, Santa Clara University, 1976

Davis, Roger W.*Statistics and Probability*

BA, University of Maryland Eastern Shore, 1991
MS, Coppin State College, 1993
EdD, Morgan State University, 1998

Dawson, David T.*Business and Management*

BS, University of Maryland, College Park, 1975
JD, Thomas M. Cooley Law School, 1979

Dean, Michael*Information Systems Management*

BS, Christian Brothers University, 1971
MS, University of Arkansas, 1978
MS, George Mason University, 1997

Dean, Robert L.*Criminology/Criminal Justice*

BA, Amherst College, 1973
JD, Villanova University, 1976

Dean, Ronald O.*Computer and Information Science*

BS, University of Maryland, College Park, 1968
BS, University of Maryland, College Park, 1976
MA, University of Maryland, College Park, 1982

Dean Smith, Marva W.*Information Systems Management*

BA, Trinity College (Washington, D.C.), 1990
MPA, University of Oklahoma, 1995

DeGross, Robert L.*History*

BA, St. Bonaventure University, 1967
MA, Villanova University, 1968
PhD, Miami University, 1974

Deming, William J.*Information Systems Management*

BS, University of Maryland University College, 1981
MGA, University of Maryland University College, 1991

DePauw, John*Business and Management*

BA, Swarthmore College, 1959
MA, American University, 1964
PhD, American University, 1977

Deppe, John B.*Mathematics*

BS, Drexel University, 1986
MS, University of California, Irvine, 1990
PhD, University of California, Irvine, 1990

Derr, Nancy R.*Humanities*

BA, Oberlin College, 1968
PhD, George Washington University, 1979

Dharamsi, Manoj*Computer Science*

BE, Jabalpur University (India), 1959
MS, Illinois Institute of Technology, 1967
PhD, Southern Methodist University, 1972

Dhillon, Harpal S.*Information Systems Management*

BA, Punjab University (India), 1958
BS, Punjab University (India), 1962
MS, Oklahoma State University, 1969
PhD, University of Massachusetts Amherst, 1973

Dickens, David R.*Psychology*

BS, University of Baltimore, 1988
MPA, University of Baltimore, 1991
PhD, University of Maryland, College Park, 1997

Didier, Michelle*Communication Studies*

BA, University of Toledo, 1977
BS, University of Toledo, 1977
MA, Bowling Green State University, 1983

Diedrich, Paul O.*Computer Studies*

BS, Baldwin Wallace College, 1966
MS, Naval Postgraduate School, 1971

Dietz, Elaine M.*Computer Studies*

BA, Michigan State University, 1970
MEd, Virginia State University, 1992

Dillinger, James J.*Art*

BA, University of Maryland, College Park, 1964
MA, University of Maryland, College Park, 1966

Dillon, Peggy M.*English*

BA, University of Massachusetts Amherst, 1983
MS, Ohio University, 1994
PhD, Ohio University, 1997

Dinsoreanu, Mihaela*Computer and Information Science*

BS, Universitatea Tehnica Cluj Napoca (Romania), 1993
MS, Universitatea Tehnica Cluj Napoca (Romania), 1994

Drasner, Steven*Computer Studies*

BS, State University of New York at Albany, 1977
MS, University of Maryland, College Park, 1979

Drew, Lashawn R.*Biology*

BS, Spelman College, 1991
PhD, Howard University, 1998

Dronamraju, Murali*Computer and Information Science*

MBA, Osmania University (India), 1989
MS, University of Regina (Canada), 1992
PhD, Tulane University, 1994

Dua, Patrick*Philosophy*

MA, Ruprecht-Karls-Universität Heidelberg (Germany), 1978
PhD, Ruprecht-Karls-Universität Heidelberg (Germany), 1980

Du Bro, Jean C.*English*

BA, University of Virginia, 1991
MA, University of Illinois at Urbana-Champaign, 1996

Duchon, Nicholas*Computer and Information Science*

BS, University of California, Berkeley, 1974
PhD, University of Maryland, College Park, 1982

Duda, Heather L.*English*

BA, Lycoming College, 1998
MA, University of Maryland, College Park, 2001

Durmowicz, Meredith C.*Biology*

BS, Marquette University, 1992
PhD, Johns Hopkins University, 1998

Eastburn-Gallo, Amorette A.*Computer Studies*

BS, University of Maryland University College, 1997
MS, University of Maryland University College, 2001

Eckhart, Richard A.*Computer Studies*

BS, Lehigh State University, 1957
MS, Pennsylvania State University, 1961
PhD, Pennsylvania State University, 1964

Edds-Walton, Peggy L.*Biology*

BS, University of Maryland, College Park, 1972
MS, University of Maryland, College Park, 1980
PhD, University of Maryland, College Park, 1994

Edmiston, Dawn*Marketing*

BS, Rensselaer Polytechnic Institute, 1990
MBA, Columbia University, 1995

Edwards, Anne M.*Philosophy*

BA, Wells College, 1992
MA, University of Oklahoma, 1990
PhD, University of Oklahoma, 1993

Edwards, Steven T.*Fire Science*

BS, University of Maryland University College, 1983
MGA, University of Maryland University College, 1991

Eftekhari, Abe*Computer and Information Science*

BS, Tehran University (Iran), 1977
MS, Massachusetts Institute of Technology, 1979
PhD, University of Texas at Arlington, 1982

Ehoff, Clemense E.*Accounting*

BA, Loyola College in Maryland, 1970
MBA, Regis College, 1981
PhD, Golden Gate University, 1993

Ehrenstein, Gerald*Natural Science*

BEE, Cooper Union for the Advancement of Science and Art, 1952
MA, Columbia University, 1958
PhD, Columbia University, 1962

Ehresmann, Elaine C.*Human Resource Management*

BS, Salve Regina University, 1984
MHSA, Salve Regina University, 1985
PhD, George Mason University, 1995

Elias, Andrew*Information Systems Management*

BS, University of Oxford (England), 1970
MS, University of Surrey (England), 1973
PhD, University of Hull (England), 1977

Ellis, George J.*Human Resource Management*

BA, Yale University, 1956
MS, George Washington University, 1967
PhD, George Washington University, 1990

Ellison-Potter, Patricia A.*Psychology*

BS, Towson State University, 1990
MA, Towson State University, 1993
PhD, Colorado State University, 1997

Elmoghazy, Elsayed A.*Economics*

BA, Florida International University, 1977
MS, Florida State University, 1981
PhD, Florida State University, 1986

Elson, Omowale T.*Business and Management*

BA, Howard University, 1994
MA, Howard University, 1996
PhD, Howard University, 2000

England, Lenore A.*Library Skills*

BA, Washington University (Missouri), 1979
MBA, George Mason University, 1989
MLIS, San Jose State University, 1998

English, Gary C.*Human Resource Management*

BA, Florida Southern College, 1962
MA, University of Pennsylvania, 1963
MA, Emory University, 1967
PhD, Emory University, 1968

Ericson, Mark D.*History*

BA, University of Washington, 1970
MA, University of Hawaii at Manoa, 1972
PhD, University of Hawaii at Manoa, 1978

Ervin, Kelly*Psychology*

BA, Hampton Institute, 1983
MA, Bowie State University, 1988
PhD, Michigan State University, 1993

Everetts, Roxanne B.*Information Systems Management*

BA, George Washington University, 1995
MS, University of Maryland University College, 1998

Ezeka, Hyacinth A.*Accounting*

BS, Alabama Agricultural and Mechanical University, 1985
MBA, Alabama Agricultural and Mechanical University, 1987

Fansler, Vince F.*Business and Management*

BA, University of Maryland, College Park, 1975
BS, University of Maryland University College, 1997
MS, University of Maryland University College, 1999

Farrell, Megan C.*Legal Studies*

BA, Loyola College in Maryland, 1990
JD, Widener University, 1993
MBA, University of Maryland, College Park, 2001

Farroha, Bassam S.*Information Systems Management*

BS, Florida Institute of Technology, 1986
MS, Florida Institute of Technology, 1988
PhD, Florida Institute of Technology, 1996

Faux, Elkanah E.*Business and Management*

BS, Fourah Bay College (Sierra Leone), 1980
MA, Université de Paris-Sorbonne (France), 1984
PhD, Université de Paris-Sorbonne (France), 1987

Feigenbaum, Kenneth D.*Psychology*

BA, Queens College (New York), 1953
MA, University of Chicago, 1958
PhD, University of Chicago, 1961

Fekade, Abeba*Psychology*

BA, Metropolitan State College of Denver, 1984
BA, Metropolitan State College of Denver, 1987
MS, Howard University, 1992
PhD, Howard University, 1995

Ferandez, Dan V.*Natural Science*

BS, U.S. Naval Academy, 1981
MS, Naval Postgraduate School, 1993

Ferguson, James E.*Information Systems Management*

BA, Brigham Young University, 1965
MEd, Our Lady of the Lake University, 1975
MA, Webster University, 1989

Fettig, Lydia M.*English*

BS, Portland State University (Oregon), 1998
MFA, American University, 2000

Fierston, Suzanne B.*Communication Studies*

BS, University of Massachusetts Amherst, 1983
MA, Northwestern University, 1988

Files, William E.*Speech*

BS, Lincoln Memorial University, 1968
MA, University of Maine, 1973
EdS, College of William and Mary, 1986

Findsen, Leonore A.*Computer and Information Science*

BS, Michigan State University, 1980
PhD, Carnegie Mellon University, 1987

Finkel, Leonard J.*Accounting*

BS, Temple University, 1961
MBA, Southern Illinois University at Edwardsville,
1983

Finley, Diane L.*Psychology*

BA, College of Notre Dame of Maryland, 1974
MA, Louisiana State University, 1980
PhD, University of Maryland, College Park, 1990

Fisher, Pauline*Gerontology*

BA, Temple University, 1975
MA, George Washington University, 1978

Fisher-Stewart, Gayle*Criminology/Criminal Justice*

BS, University of Maryland, College Park, 1974
MS, American University, 1979
PhD, University of Maryland, College Park, 1992

Fitzsimmons, Charles F.*Business and Management*

MLA, Johns Hopkins University, 1965
EdD, George Washington University, 1975

Fitzsimmons, Theodora J.*English*

BA, University of Maryland University College, 1982
BA, University of Maryland University College, 1984
MEd, University of Maryland, College Park, 1995

Flaherty, Stephen*Communication Studies*

BA, University of Massachusetts Amherst, 1975
MA, Ohio State University, 1981

Flaisher, Harvey*Computer Studies*

BE, Northwestern University, 1981
MS, Weizmann Institute of Science (Israel), 1984
PhD, Weizmann Institute of Science (Israel), 1987

Fletcher, Charles*Mathematics*

BS, Purdue University, 1969
MA, University of Maryland, College Park, 1980
PhD, University of Maryland, College Park, 1990

Flynn, David E.*Mathematics*

BS, Pennsylvania State University, 1987
MS, University of Maryland, College Park, 1992

Foltin, Kathryn M.*Communication Studies*

BA, Towson State University, 1991
MA, University of Baltimore, 1995

Ford, John M.*Psychology*

BS, Brigham Young University, 1985
PhD, Brigham Young University, 1993

Francois, Olga*Library Skills*

BA, Smith College, 1989
MLS, University of Pittsburgh, 1996

Frank, Barbara J.*Behavioral and Social Sciences*

BA, State University of New York at Binghamton
PhD, University of South Carolina Columbia
MS, American University

Franke, Irving F.*Sociology*

BS, Wilson Teachers College, 1954
MEd, University of Maryland, College Park, 1955
PhD, University of Maryland, College Park, 1968

Franklin, April I.*Communication Studies*

BA, Loyola Marymount University, 1991
MA, Purdue University, 1995
PhD, University of Oklahoma, 1999

Fraser, Michael R.*Sociology*

BA, Oberlin College, 1991
MA, University of Massachusetts Amherst, 1994
PhD, University of Massachusetts Amherst, 1999

Fratte-Hill, Sharon A.*Information Systems Management*

BS, James Madison University, 1975
MEd, University of Maryland, College Park, 1979
PhD, University of Maryland, College Park, 1990

Frohnhofer, Frank*Accounting*

BA, Catholic University of America, 1963
MBA, University of Pennsylvania, 1978

Fu, Sabrina*Natural Science*

BA, Carleton College, 1986
PhD, University of California, Berkeley, 1991

Fulcher, Debra P.*Mathematics*

BS, Salisbury State College, 1960
MEd, Loyola College in Maryland, 1963
AA, Prince George's Community College, 1984

Furrow, Nancy*Communication Studies*

BA, Louisiana Tech University, 1987
MA, Louisiana State University, 1991
PhD, University of Southern Mississippi, 2002

Gabello, David P.*Computer and Information Science*

BS, Pennsylvania State University, 1979
MS, George Washington University, 1988

Gabriel, Kez*Sociology*

BA, University of Nigeria, 1981
MEd, University of Nigeria, 1986
PhD, University of Alberta (Canada), 1991

Gaetjens, Lesley A.*Environmental Management*

BS, American University, 1980
MS, Columbia University, 1982

Gagnon, Sharon L.*Computer Studies*

BS, University of Maryland University College, 1997
MS, University of Maryland University College, 2000

Gaines, David*Music*

BA, Northwestern University, 1984
MA, American University, 1987
DMA, Johns Hopkins University, 1998

Gallardo, Ximena C.*English*

BA, Pontificia Universidad Católica de Valparaíso (Chile), 1989
MA, Louisiana State University, 1993
PhD, Louisiana State University, 1997

Galonis, Peter*Computer and Information Science*

BA, University of Maryland, 1966
MA, State University of New York at Binghamton, 1971
PhD, State University of New York at Binghamton, 1977

Gannon, Michael*Journalism*

BS, South Dakota State University, 1971
MA, Oklahoma University, 1976

Gao, Shaojian*Computer Studies*

BS, Shandong University (China), 1984
PhD, University of Kentucky, 1994

Gardner, Leland L.*Marketing*

BS, University of Maryland, College Park, 1970
MBA, University of Maryland, College Park, 1976

Garvey, Tara L.*Biology*

BA, Rutgers College, 1994
PhD, George Washington University, 2001

Gates, John L.*Computer Studies*

BS, University of Maryland, College Park, 1973
MBPA, Southeastern University, 1983

Gaugler, Joseph E.*Gerontology*

BA, Gustavus Adolphus College, 1995
MS, Pennsylvania State University, 1996
PhD, Pennsylvania State University, 1999

Gay, Billy F.*Computer Systems Management*

BS, Morehouse College, 1962
MS, American University, 1973
PhD, University of California, Santa Barbara, 1980

Gelfand, Donald*Gerontology*

BA, Queens College, 1965
MA, Washington University (Missouri), 1967
PhD, Washington University (Missouri), 1969

George, Eva M.*History*

MA, Ohio State University, 1993
PhD, University of Maryland, College Park, 2003

Georgiou, George C.*Economics*

BA, Drew University, 1973
MPh, George Washington University, 1978
PhD, George Washington University, 1979

Ghent, Robert C.*Computer and Information Science*

BA, University of Oregon, 1964
MA, Harvard University, 1970

Ghosh, Jaideep*Computer and Information Science*

BS, University of Calcutta (India), 1986
PhD, University of Pittsburgh, 1996
MS, University of Pittsburgh, 1999

Gibbons, Youlanda*Sociology*

BA, Mercer University, 1990
MS, Boston University, 1992
MS, University of Massachusetts Amherst, 1995
MEd, University of Massachusetts Amherst, 1999
PhD, University of Massachusetts Amherst, 2003

Gilday, Mark A.*Legal Studies*

BA, University of Maryland, College Park, 1982
JD, Catholic University of America, 1985

Giles, Inez*Human Resource Management*

BA, Carlow College, 1972
MA, Duquesne University, 1978
MBA, Southern Illinois University at Edwardsville, 1983
PhD, Virginia Polytechnic Institute and State University, 1999

Gill, Janet A.*Computer and Information Science*

BS, University of West Florida, 1985
MS, Naval War College, 1989
MS, Naval Postgraduate School, 1990

Gilman, Todd*English*

BA, University of Michigan–Ann Arbor, 1987
MA, University of Toronto, 1988
PhD, University of Toronto, 1994

Gilmore, Jennifer*Information Systems Management*

BA, Brooklyn College, 1978
MA, Brooklyn College, 1984
BBA, Baruch College, 1986
MS, Baruch College, 1993
MBA, Long Island University, 1994
PhD, Walden University, 2001

Gitlin, Heather L.*Psychology*

BA, State University of New York at Binghamton, 1988
MA, Queens College, City University of New York, 1991
MA, Queens College, City University of New York, 1994
PhD, Queens College, City University of New York, 1997

Gittelman, Richard C.*Accounting*

BS, Temple University, 1961
MS, American University, 1990

Glasco, Jeffrey*History*

BA, University of Arizona, 1991
MA, University of Arizona, 1994
PhD, University of Arizona, 2001

Glickman, Mortimer M.*Business and Management*

BBA, St. John's University (New York), 1942
MA, New York University, 1971
PhD, Walden University, 1996

Gohari, Shahrzad*Economics*

BS, University of London (England), 1973
MA, George Washington University, 1981
MPh, George Washington University, 1983

Goldberg, Robert J.*Communication Studies*

BA, Florida State University, 1987
MA, Florida State University, 1990

Golden, Jim B.*Computer Studies*

BS, Central State University (Ohio), 1983
MS, University of Maryland University College, 1998

Gondles, Elizabeth D.*Criminology/Criminal Justice*

BS, Oklahoma City University, 1995
PhD, Union Institute and University, 2000

Gonzalez, Joe E.*Statistics and Probability*

BS, St. Mary's University (Texas), 1970
MS, George Washington University, 1982

Gooch, Melinda J.*Information Systems Management*

BS, Strayer College, 1991
MS, Strayer College, 1994

Goodman, Alan P.*Business and Management*

BA, Rutgers University, 1971
MEd, Ohio University, 1972
PhD, Ohio State University, 1984

Gordon, Diane R.

History

BA, Valparaiso University, 1959
MA, University of Wisconsin–Madison, 1964
PhD, University of Wisconsin–Madison, 1968

Gordon, Martin K.

History

BA, University of Notre Dame, 1963
MA, University of Wisconsin–Madison, 1965
PhD, George Washington University, 1975

Gorman, C. Jade

English

BA, East Carolina University, 1980
MA, University of Maryland, College Park, 1984

Gortcheva, Elena

Computer Science

BS, Kharkov State Polytechnic University (Ukraine), 1977
MS, Kharkov State Polytechnic University (Ukraine), 1977
PhD, Academia de Ciencias de Cuba, 1993

Goyal, Shiv N.

Accounting

BS, Agra University (India), 1957
MS, Agra University (India), 1959
LLB, Agra University (India), 1961
MBA, University of Maryland, College Park, 1980
PhD, University of Maryland, Baltimore, 1993

Goyal, Swarn L.

Business and Management

MA, University of Delhi (India), 1963
MBPA, Southeastern University, 1977

Gravett, Erika Y.

Human Resource Management

BA, Howard University, 1994
JD, University of Georgia, 1996
MA, Marymount University, 2000

Gray, Christine R.

English

BA, George Washington University, 1982
MA, University of Maryland, College Park, 1986
PhD, University of Maryland, College Park, 1995

Greenblatt, Lonnie

Business and Management

BA, University of Maryland, College Park, 1979
JD, Widener University, 1982
LLM, George Washington University, 1988

Greene, Mary M.

Communication Studies

BA, Mount Holyoke College, 1965
MA, State University of New York at Binghamton, 1969

Greene, Melvin A.

Business and Management

BA, University of Maryland, College Park, 1974
MS, Howard University, 1976

Greschak, John P.

Computer and Information Science

BS, State University of New York at Buffalo, 1980
MS, Massachusetts Institute of Technology, 1982
PhD, Massachusetts Institute of Technology, 1985

Gretch, Alice K.

Information Systems Management

BS, University of Pittsburgh, 1988
MBA, Robert Morris College (Illinois), 1995

Groce, Thomas C.

Human Resource Management

BS, Delaware State University, 1956
MS, University of Wisconsin–Milwaukee, 1968
MBA, Naval Postgraduate School, 1971
PhD, American University, 1976

Grzesik, Benedict F.

Human Resource Management

BA, National-Louis University, 1986
MSA, Central Michigan University, 1997

Grzesik, Nancy T.

Accounting

BS, Gwynedd-Mercy College, 1970
MEd, Suffolk University, 1975

Guan, Xiaobin

Computer Information Technology

BS, Nantong Medical College (China), 1982
MS, Shanghai Second Military Medical University (China), 1986
PhD, Kent State University, 1993

Gudsruk, Joseph

Information Systems Management

BA, Southern Connecticut State University, 1966
BA, University of Connecticut, 1968
MBA, New York Institute of Technology, 1986
MAS, Johns Hopkins University, 1990

Guha Roy, Pallabi

Statistics and Probability

BS, University of Calcutta (India), 1985
MS, University of Calcutta (India), 1988
PhD, University of Maryland, College Park, 1999

Gupta, Amit

Computer and Information Science

BS, University of Delhi (India), 1993
MS, Himachal Pradesh University (India), 1996

Guss, Edward Jon

Business and Management

BS, Seton Hall University, 1960
MA, University of Maryland, College Park, 1973

Gussin, Louise Bailey

Legal Studies

BS, University of Maryland University College, 1988
BS, University of Maryland University College, 1991
JD, University of Baltimore, 1995

Gustafson, John W.

Psychology

BA, University of California, Berkeley, 1966
PhD, University of Rochester, 1972

Guster, Dennis C.

Computer and Information Science

BS, Bemidji State University, 1973
MS, Bemidji State University, 1974
EdD, University of Missouri, 1981

Guthrie, Sally A.

Communication Studies

BS, University of Tennessee, 1961
MS, University of Tennessee, 1992
PhD, University of Tennessee, 1995

Habermacher, Andrew L.

Anthropology

BA, Bucknell University, 1965
MA, Catholic University of America, 1970
PhD, University of Florida, 1986

Haiman, Arnold J.

Business and Management

BA, City College of New York, 1967
JD, New York University, 1970
LLM, George Washington University, 1983

Haine, W. Scott

History

BA, University of California, Berkeley, 1976
MA, University of Wisconsin–Madison, 1980
PhD, University of Wisconsin–Madison, 1984

Hale, Julie L.

Business and Management

BS, Mount St. Mary's College (Maryland), 1979
MBA, Kent State University, 1981

Hall, Bryant

Gerontology

BA, State University of New York at Stony Brook, 1974
BS, State University of New York at Stony Brook, 1974
MPS, Long Island University, 1977

Hallion, Marie E.

Government and Politics

BA, University of Maryland, College Park, 1963
MA, University of Maryland, College Park, 1964
PhD, University of Maryland, College Park, 1968

Hanahoe-Dosch, Patricia

English

BA, Richard Stockton College of New Jersey, 1982
MFA, University of Arizona, 1987

Hancock, Merodie A.*Business and Management*

BA, Scripps College, 1987
MBA, Claremont Graduate College, 1988
PhD, Old Dominion University, 1998

Hansen, Kristen M.*Legal Studies*

BA, University of Rochester, 1992
JD, Georgetown University, 1996

Harasti, Gina M.*Legal Studies*

BS, University of Maryland, College Park, 1986
JD, University of Baltimore, 1991

Harden, Patricia J.*Communication Studies*

BS, University of Maryland, College Park, 1982
MA, St. John's College (Maryland), 1988

Hardin, William E.*Communication Studies*

BA, Ohio University, 1984
MA, Miami University (Ohio), 1987
PhD, University of North Carolina at Chapel Hill, 1995

Harper, Rita L.*Human Resource Management*

ME, University of North Texas, 1977
MSEd, University of North Texas, 1981
PhD, University of North Texas, 1981

Harrell, William W.*Communication Studies*

BA, University of North Carolina at Chapel Hill, 1983
MA, University of Georgia, 1986

Harrigan, Patricia M.*Spanish*

BA, University of Maryland, Baltimore County, 1999
MA, University of Maryland, Baltimore County, 2001

Harrington, Donna J.*English*

BA, State University of New York at Stony Brook, 1978
MFA, University of Maryland, College Park, 1990

Harris, Jennifer*Business and Management*

BA, University of Michigan–Ann Arbor, 1987
MBA, George Washington University, 1991

Harris, Justin U.*Business and Management*

BA, Bigard Memorial Seminary (Nigeria), 1976
MA, Marquette University, 1979
PhD, Marquette University, 1983
MBA, Marquette University, 1985

Harris, Reece T.*Computer and Information Science*

BA, Reed College, 1955
MA, University of Illinois at Urbana, 1956
PhD, University of Illinois at Urbana, 1959

Hart, John J.*Computer Studies*

BS, Northeastern University, 1958
MS, Northeastern University, 1960
MS, American University, 1984

Harter, Thomas R.*Business and Management*

BS, Washington University (Missouri), 1964
MBA, Washington University (Missouri), 1966
PhD, Northwestern University, 1972

Hart-Gonzalez, Lucinda*Communication Studies*

BA, University of Massachusetts Boston, 1975
MS, Georgetown University, 1978
PhD, Georgetown University, 1980

Hartnett, Belinda*Human Resource Management*

MA, Troy State University, 1985
MA, Fielding Graduate Institute, 1997
PhD, Fielding Graduate Institute, 2000

Hartsock, James R.*Human Resource Management*

BS, Frostburg State University, 1981
MGA, University of Maryland University College, 1995

Harvan, Jill*Sociology*

BS, Keene State College, 1991
MA, Barry University, 1997
PhD, University of Georgia, 2001

Haseltine, Reginald Y.*Computer and Information Science*

BS, Cornell University, 1972
MS, George Washington University, 1976

Hashimoto, Hidetoshi*Government and Politics*

BA, Shimane University (Japan), 1976
MA, University of Southern California, 1985
PhD, University of Maryland, College Park, 2000

Hassan, Sardar Q.*Business and Management*

BS, Gubkin State Academy of Oil and Gas (Russia), 1978
MS, Gubkin State Academy of Oil and Gas (Russia), 1978
PhD, University of Cincinnati, 1988

Hassig, Ralph C.*Psychology*

BA, Albion College, 1968
PhD, University of California, Los Angeles, 1974
MBA, University of San Francisco, 1987

Hastings, Nelson E.*Information Systems Management*

BS, University of Missouri, 1990
MS, Western Michigan University, 1994
PhD, Iowa State University, 1999

Hause, Spedden A.*Business and Management*

BA, Hood College, 1984
MS, Johns Hopkins University, 1986
PhD, University of Maryland, College Park, 1993

Hawala, Sam*Statistics and Probability*

BS, San Francisco State University, 1986
MA, San Francisco State University, 1988
PhD, University of California, Davis, 1994

Hawkins, Anita S.*Health Services Management*

BS, Georgetown University, 1976
MHS, Lincoln University (Pennsylvania), 1985

Hayhoe, Jeremy D.*History*

BA, University of New Brunswick (Canada), 1995
MA, York University, 1996
PhD, University of Maryland, College Park, 2001

Heath, Robert W.*Communication Studies*

BA, Bethany Nazarene College, 1964
MA, University of Oklahoma, 1969
PhD, University of Oklahoma, 1973

Hebert, Sherri C.*Business and Management*

BS, University of Maryland, College Park, 1994
MS, Johns Hopkins University, 1997
PhD, Capella University, 2003

Hecht, Sheldon J.*Criminology/Criminal Justice*

BA, St. Joseph's College (New York), 1978
MPS, Long Island University, 1979

Hecker, Barbara J.*Computer Studies*

BS, San Jose State University, 1989
MS, Nova Southeastern University, 2000
PhD, Nova Southeastern University, 2003

Hehl, Eric*Biology*

MS, Fordham University, 1993
 MS, Albert Einstein College of Medicine of Yeshiva University, 1996
 PhD, Albert Einstein College of Medicine of Yeshiva University, 2001

Heineman, Paul*History*

BA, University of Notre Dame, 1982
 MA, Georgetown University, 1982
 PhD, Georgetown University, 2000

Henderson, Joyce*Human Resource Management*

BA, University of North Texas, 1970
 MBA, University of North Texas, 1972
 EdD, George Washington University, 2001

Henley, Carol D.*Computer and Information Science*

BA, Fisk University, 1969
 MS, University of Miami, 1976

Henley, Eugene D.*Marketing*

BS, University of Maryland, College Park, 1969
 MBA, University of Maryland, College Park, 1970

Henry, Paul D.*Information Systems Management*

BS, William Paterson College of New Jersey, 1976
 MA, Rutgers University, 1978
 PhD, New York University, 1997

Hens, Julie R.*Biology*

BA, Canisius College, 1991
 MS, Pennsylvania State University, 1994
 PhD, University of Maryland, College Park, 2001

Hernandez, Gema G.*Gerontology*

BA, University of Florida, 1971
 MA, Louisiana State University, 1973
 DPA, Nova University, 1981

Heurich, Charles M.*Criminology/Criminal Justice*

BS, Slippery Rock University of Pennsylvania, 1987
 MA, George Washington University, 1993

Hibler Tuchrello, Anita*Communication Studies*

BA, University of Dayton, 1968
 MA, University of Wisconsin-Madison, 1970
 PhD, George Washington University, 1987

Hicks, Maurice R.*Criminology/Criminal Justice*

BS, University of Maryland, College Park, 1997
 MS, Johns Hopkins University, 2000

Higgins, Bernard E.*Business and Management*

BS, Canisius College, 1963
 JD, University of Baltimore, 1975
 MA, Pepperdine University, 1981
 MBA, Golden Gate University, 1982

Higgins, Nancy B.*Human Resource Management*

BBA, Westminster College, 1967
 MA, Westminster College, 1970
 MA, Pepperdine University, 1979
 PhD, Vanderbilt University, 1990

Hildebrand, JoAnne E.*Fire Science*

BA, University of Maryland, College Park, 1978
 MA, University of Maryland, College Park, 1984

Hill, Randolph L.*Business and Management*

BA, University of California, San Diego, 1983
 MPP, University of California, Berkeley, 1986
 JD, University of California, Berkeley, 1987

Hilosky, Alexandra E.*Natural Science*

BS, Cabrini College, 1974
 MS, West Chester University, 1985
 EdD, Temple University, 1995

Hirschhorn, Daniel*Communication Studies*

BA, Johns Hopkins University, 1978
 MS, Johns Hopkins University, 1980
 JD, Touro College, 1983

Hirschfelder, John*Computer and Information Science*

BS, University of Notre Dame, 1965
 MS, University of Notre Dame, 1966
 PhD, University of Notre Dame, 1968

Hirshfield, Deborah A.*History*

BA, Rutgers University, 1978
 MA, University of California, Irvine, 1981
 PhD, University of California, Irvine, 1987

Hirz, Lee J.*Information Systems Management*

BBA, George Washington University, 1976
 MS, University of Maryland University College, 1999

Hoagland, Nancy L.*Communication Studies*

BA, Athens College (Alabama), 1963
 MS, Jacksonville State University, 1968
 EdD, Virginia Polytechnic Institute and State University, 1984

Hoffman, Carolyn F.*History*

BA, University of Maryland, College Park, 1975
 MA, University of Maryland, College Park, 1978
 PhD, University of Maryland, College Park, 1988

Hoffmann, Rosemary B.*German*

BA, University of North Carolina at Greensboro, 1965
 MA, University of Illinois at Urbana-Champaign, 1968
 PhD, University of Illinois at Urbana-Champaign, 1971
 MArch, North Carolina State University, 1989

Hoffmann, Theresa A.*Experiential Learning*

BGS, University of Maryland, College Park, 1982
 MA, University of Maryland, College Park, 1986

Hoffmon, Sherri D.*Criminology/Criminal Justice*

BA, University of Arkansas, 1994
 MA, University of Arkansas, 1998

Holden, Dennis W.*Communication Studies*

BA, Ohio University, 1969
 MS, Ohio University, 1973

Holladay, Gae*Communication Studies*

BA, University of Nevada, Las Vegas, 1970
 MA, University of Nevada, Las Vegas, 1973
 PhD, Arizona State University, 1979
 MEd, Temple University, 1996

Holloway, Lorenzo*Legal Studies*

BA, University of Pennsylvania, 1986
 JD, Temple University, 1989

Hollowell, Gail P.*Biology*

BS, North Carolina Central University, 1990
 MS, Howard University, 1996
 PhD, Howard University, 1998

Holman, Lucy*Library Skills*

BA, University of North Carolina at Chapel Hill, 1983
 MA, University of North Carolina at Charlotte, 1987
 MLS, University of North Carolina at Chapel Hill, 1999

Holt, Timothy*Computer and Information Science*

BS, Howard University, 1987
 BS, Bowie State University, 1987
 MAS, Johns Hopkins University, 1991
 MS, Johns Hopkins University, 1995

Homann, Karen*English*

BA, University of Maryland, College Park, 1990
MA, American University, 1993
JD, University of Maryland, Baltimore, 2001

Horacek, Robert C.*Accounting*

BA, University of California, Los Angeles, 1973
MA, California State University, Northridge, 1980

Horn, Robert C.*Business and Management*

BA, University of Massachusetts Amherst, 1956
MS, University of Massachusetts Amherst, 1957
EdS, New Mexico State University, 1963
EdD, New Mexico State University, 1971

Horton, Clifton N.*Accounting*

BA, University of Maryland University College, 1976
BS, University of Maryland University College, 1978
MS, George Washington University, 1978
MBA, George Washington University, 1982

Howson, Ursula*Biology*

BS, Lebanon Valley College, 1987
MS, University of Arizona, 1991
PhD, University of Delaware, 2001

Hrutka, Joseph M.*Marketing*

BS, Northwestern University, 1962
MBA, Roosevelt University, 1970

Hrutka, Joseph P.*Legal Studies*

BS, Marquette University, 1995
JD, University of Maryland, Baltimore, 2001

Hrutka, Mary Ellen*Business and Management*

BA, Southern Connecticut State University, 1968
MA, University of Maryland, College Park, 1970
PhD, University of Miami, 1983

Hubbard, Mark*Fire Science*

BS, University of Maryland University College, 1992
MBA, Loyola College in Maryland, 1997
JD, University of Maryland, Baltimore, 2003

Hubbell, Anne-Marie*English*

BA, University of Michigan, 1989
MA, Northwestern University, 1995
PhD, Northwestern University, 2002

Hudak, Daniel K.*Business and Management*

BS, The Citadel, 1964
MSIA, Carnegie Mellon University, 1972

Hudak, Seth*Information Systems Management*

BS, U.S. Military Academy, 1962
MBA, Babson College, 1970
MEd, Rivier College, 1972
PhD, Boston College, 1976
MPA, Golden Gate University, 1986
MA, Naval War College, 1999

Huff, Clarence E.*Computer and Information Science*

BS, University of Maryland, College Park, 1981
MS, Boston University, 1985
PhD, Texas A&M University, 2001

Huffman, Tom*Philosophy*

BA, State University of New York at Albany, 1986
MA, University of Missouri, 1987
PhD, University of Missouri, 1991

Huggins, Teresa S.*Psychology*

BA, Stephen F. Austin State University, 1978
PhD, University of North Carolina at Chapel Hill, 1983

Hughes, Todd C.*Philosophy*

BA, State University of New York College at Geneseo, 1994
MA, University of Wisconsin–Madison, 1997
PhD, University of Wisconsin–Madison, 2001

Hullet, Deborah E.*History*

BA, University of Maryland University College, 1987
MA, Boston University, 1989
MS, Defense Intelligence College, 1993

Hume, Wendy A.*Computer Studies*

BA, Chadron State College, 1992
MA, Chadron State College, 1995

Hundemer, Mary Sue*Behavioral and Social Sciences*

BA, Salisbury State College, 1964
MEd, University of Maryland, College Park, 1976
MA, University of Maryland, College Park, 1978
PhD, University of Maryland, College Park, 1982

Hunt, J. Christopher*Astronomy*

BS, Murray State University, 1987
MS, University of Maryland, College Park, 1990
MA, University of Maryland, College Park, 1996

Hurley, Megan M.*Psychology*

BS, Ithaca College, 1991
MA, Pennsylvania State University, 1993
PhD, Pennsylvania State University, 1998

Huseonica, Arthur K.*Computer Studies*

BS, University of Maryland University College, 1987
MS, University of Southern California, 1989

Hutton, Leon W.*Human Resource Management*

BBA, Northwood Institute, 1978
MA, Central Michigan University, 1980
MBA, Florida Institute of Technology, 1987

Hylton, Kevin K.*Psychology*

BS, State University of New York College at Buffalo, 1992
MS, State University of New York College at Buffalo, 1993
PhD, Howard University, 1999

Inman, James*Communication Studies*

BA, Valdosta State University, 1993
MA, Valdosta State University, 1995
PhD, University of Michigan–Ann Arbor, 1999

Inukai, Connie*Communication Studies*

BA, Ohio State University, 1970
MA, Columbia University, 1974

Ipolito, Dorothy A.*Criminology/Criminal Justice*

BA, State University of New York at Buffalo, 1973
MLS, State University of New York at Buffalo, 1979
JD, University of Baltimore, 1990

Isherwood, Alex C.*Business and Management*

BA, San Diego State University, 1973
MA, San Diego State University, 1975
PhD, University of Maryland, College Park, 1986

Ittner, Penny L*Business and Management*

BS, Johns Hopkins University, 1985
MAS, Johns Hopkins University, 1989

Ivanova, Marina*Business and Management*

BS, St. Petersburg State University of Economics and Finance (Russia), 1984
PhD, St. Petersburg State University (Russia), 1990
MA, American University, 1996

Ivy, Shalisha H.*Legal Studies*

BA, Wake Forest University, 1991
JD, Rutgers University, 1994

Iyer, Sridhar S.*Computer Science*

BS, Madras Institute of Technology (India), 1974
BS, University of Delhi (India), 1977
MS, University of New South Wales (Australia), 1987
PhD, University of Sydney (Australia), 1992

Jackson, Gustav E.*Geology*

BS, Northern Illinois University, 1969
MS, University of Chicago, 1972
PhD, Union Institute, 1974

Jackson, Jacqueline G.*Psychology*

BME, Howard University, 1978
MS, Howard University, 1985
PhD, Howard University, 1992

Jacobi, John H.*Computer and Information Science*

BS, Rose-Hulman Institute of Technology, 1959
MS, University of Maryland, College Park, 1969

Jacox, Kevin*Computer and Information Science*

BS, American University, 1990
MS, American University, 1997

James, A. Deloris*Communication Studies*

MA, Ohio State University, 1974
MEd, Miami University (Ohio), 1980
JD, University of Baltimore, 1987
PhD, Indiana University of Pennsylvania, 2000

Jamshidi, Ahmad*Economics*

BA, National University of Iran, 1974
MA, Catholic University of America, 1978
PhD, Howard University, 1987

Jansheski, Beverly L.*Gerontology*

BS, Columbia Union College, 1968
MA, George Washington University, 1986

Jarc, Duane J.*Computer and Information Science*

BS, Case Western Reserve University, 1970
MS, Case Western Reserve University, 1979
DSc, George Washington University, 1999

Jesian, Roman V.*Environmental Management*

MS, Villanova University, 1970
BA, University of Wisconsin–Stevens Point, 1977
PhD, University of Maryland, College Park, 1989

Jessar, Kevin L.*English*

BA, University of Pennsylvania, 1984
JD, University of Pennsylvania, 1987
MA, University of Maryland, College Park, 1994

Ji, Rui-Ru*Computer and Information Science*

BS, University of Science and Technology of China, 1991
PhD, Purdue University, 1999
MS, Purdue University, 2000

Johnson, Allison B.*Communication Studies*

BA, University of North Florida, 1989
MS, Mercer University, 1998

Johnson, David Patrick*Computer Studies*

BA, University of Maryland, College Park, 1982
MS, University of Maryland University College, 1996
PhD, University of Georgia, 2002

Johnson, Eric M.*Criminology/Criminal Justice*

BS, University of Maryland University College, 1973
JD, University of Maryland, Baltimore, 1981

Johnson, Jeffery L.*Communication Studies*

BS, University of Georgia, 1989
MA, University of Central Florida, 1996

Johnson, Patrick*English*

BA, University of Washington, 1988
MA, University of Washington, 1990
PhD, University of Washington, 1993

Johnston, Amy Ann*Business and Management*

BA, St. Mary's College (Indiana), 1977
MBA, Loyola University Chicago, 1982
MA, University of Chicago, 1986

Johnston, Anne*Business and Management*

BS, University of Maryland, College Park, 1966
MEd, Bowie State University, 1975

Jones, Dionne J.*Psychology*

BS, Howard University, 1974
MSW, Howard University, 1976
PhD, Howard University, 1987

Jones, Gabriele D.*Psychology*

BS, Georgia State University, 1992
MA, James Madison University, 1995
PhD, University of Southern Mississippi, 2000

Jones, Sheila Y.*Sociology*

BS, Howard University, 1977
MBA, Southeastern University, 1987
PhD, Howard University, 1997

Jones, Stephen M.*Criminology/Criminal Justice*

BA, Villanova University, 1974
MS, Youngstown State University, 1977

Jones, Thomas L.*Business and Management*

BS, Tougaloo College, 1963
JD, Howard University, 1971

Jurca, Ioan*Computer and Information Science*

MS, Universitatea Politehnica din Timisoara (Romania), 1970
PhD, Technische Universiteit Delft (Netherlands), 1977

Kaba, Brahim*Sociology*

BA, Université de Caen (France), 1968
MA, Boston University, 1974
PhD, Boston University, 1976

Kadlec, Keith*Humanities*

BA, University of North Carolina at Chapel Hill, 1991
JD, University of North Carolina at Chapel Hill, 1994

Kalkay, Yvette S.*Computer Studies*

BS, University of Tennessee, 1995
MSED, University of Tennessee, 1998

Kalupa, Frank B.*Communication Studies*

BS, University of Wisconsin–Madison, 1969
MA, University of Southern California, 1971
PhD, University of Southern California, 1979

Kammel, Frank J.*Mathematics*

BS, St. John's University (New York), 1957
MA, Georgetown University, 1960

Kann, Charles W.*Computer Science*

BChE, University of Delaware, 1980
MS, New Jersey Institute of Technology, 1989
DSc, George Washington University, 1998

Kariotis, Theodore C.*Economics*

BA, University of Calgary (Canada), 1972
MA, American University, 1974
PhD, Aristotelian University (Greece), 1989

Karpel, Wendy B.*Legal Studies*

BA, Haverford College, 1989
JD, Tulane University, 1992

Kase, Kevin P.*Communication Studies*

BS, Clarion University of Pennsylvania, 1980
MA, Central Michigan University, 1981

Kashatus, Gerard P.*Natural Science*

BS, Pennsylvania State University, 1984
MS, Texas A&M University, 1986

Kasper, Marvin*Statistics and Probability*

BS, Brooklyn College, 1963
MA, University of Maryland, College Park, 1970

Kasunic, Diane K.*Business and Management*

MS, Michigan State University, 1978
PhD, Wayne State University, 1989

Kaynak, Katherine*Behavioral and Social Sciences*

BA, Yale University, 1993
MS, Rutgers University, 1996
PhD, Rutgers University, 1998

Keating, Richard S.*Communication Studies*

BA, The Citadel, 1981
MA, University of South Carolina, 1987
PhD, University of North Carolina at Chapel Hill, 1993

Keen, Judith C.*Biology*

BS, Gettysburg College, 1992
MS, Johns Hopkins University, 1997
PhD, Bloomberg School of Public Health, Johns Hopkins University, 2002

Keller, William K.*Business and Management*

BA, University of Colorado, 1981
MPA, University of Baltimore, 1984

Kemp, Richard D.*English*

BA, University of Maryland, Baltimore County, 1998
MFA, University of Miami, 2001
MA, Johns Hopkins University, 2002

Kendall, Walter A.*Business and Management*

BA, University of Texas at Arlington, 1974
MA, Naval Postgraduate School, 1980

Kenner, Mary Ellen*Marketing*

BS, Marquette University, 1963
MBA, University of West Florida, 1988

Kerby, Rodney B.*Mathematics*

BS, University of Maryland, College Park, 1981
MA, University of Maryland, College Park, 1988
PhD, University of Maryland, College Park, 1990

Khilji, Anjum*Humanities*

MA, University of the Punjab (Pakistan), 1980
PhD, University of the Punjab (Pakistan), 1983

Khilji, Nahid*Information Systems Management*

BS, University of North Carolina at Chapel Hill, 1989
MS, American University, 1997

Khoshand, Mehrdad*Computer Science*

BS, Memorial University of Newfoundland (Canada), 1990
MS, George Washington University, 1992

Kim, Pilkyu*Government and Politics*

BA, Hankuk University of Foreign Studies (South Korea), 1968
MA, East Carolina University, 1976
PhD, University of Arizona, 1985

Kimbrough, Natalie*German*

BA, Universität Hamburg (Germany), 1994
MA, Universität Hamburg (Germany), 1994
MA, George Mason University, 1996

King, Ivan L.*Human Resource Management*

BS, State University of New York at Stony Brook, 1976
MA, Central Michigan University, 1980
PhD, Union Institute & University, 1997

King, Michelle Davis*Legal Studies*

BA, Boston University, 1974
JD, State University of New York at Buffalo, 1977

Kingsley, Roger P.*Government and Politics*

BA, University of Southern California, 1970
MA, Rutgers University, 1972
MPh, Rutgers University, 1974
PhD, Rutgers University, 1977

Kirby, Patricia*Psychology*

BA, Trinity College (Washington, D.C.), 1961
MA, Catholic University of America, 1964
EdD, Catholic University of America, 1982

Kistler, Michael*Natural Science*

BS, Pennsylvania State University, 1997
MS, Massachusetts Institute of Technology, 1999

Klayman, Douglas*Sociology*

BA, American University, 1987
MA, University of Massachusetts Boston, 1991
PhD, American University, 1998

Klemens, Melissa Lin*Computer Studies*

BA, St. Bonaventure University, 1991
JD, State University of New York at Buffalo, 1994

Knapp, James L.*Sociology*

BBA, Harding University, 1987
MA, Harding University, 1990
PhD, University of North Texas, 1995

Knight, William E.*Business and Management*

BS, Old Dominion University, 1973
MA, Old Dominion University, 1974
MA, University of Maryland, College Park, 1984

Knott, Bradley T.*Human Resource Management*

BA, University of Iowa, 1981
MA, University of Iowa, 1982
JD, Catholic University of America, 1990

Koeningshofer, Kenneth*Psychology*

BA, University of California, Riverside, 1969
MA, University of California, Riverside, 1972
PhD, University of California, Riverside, 1979

Kolker, Jeanette I.*Psychology*

BA, Clemson University, 1987
MA, University of North Carolina at Greensboro, 1990
PhD, University of North Carolina at Greensboro, 1994

Koller, Carolyn C.*Legal Studies*

BS, Roanoke College, 1981
MS, Virginia Commonwealth University, 1984
PhD, Virginia Commonwealth University, 1988

Koponen, Timothy M.*Sociology*

BS, Aquinas College (Michigan), 1988
MS, Michigan State University, 1989
MA, Northwestern University, 1993
PhD, Northwestern University, 1998

Koroma, Barba*Biology*

MS, University of Edinburgh (Scotland), 1985
PhD, North Carolina State University, 1992

Kothari, Rupal G.*Legal Studies*

BA, Johns Hopkins University, 1991
JD, Washington College of Law, American University,
1996

Kouyate, Alain*Information Systems Management*

BA, Howard University, 1988
MS, Carnegie Mellon University, 1997

Kouzis, Anthony C.*Sociology*

BA, Old Dominion University, 1970
MA, Old Dominion University, 1975
PhD, Syracuse University, 1985

Krafft, Amy E.*Biology*

BS, Mary Washington College, 1977
PhD, Medical College of Virginia, Virginia
Commonwealth University, 1989

Kreger, Alan K.*Business and Management*

BS, Temple University, 1959
MBA, Temple University, 1965

Kreiser, Jeanette*Experiential Learning*

BA, University of Chicago, 1965
MAT, University of Chicago, 1969
EdD, University of Rochester, 1980

Kreitzman, Horace*Business and Management*

BS, Fairleigh Dickinson University, 1961
MS, George Washington University, 1978

Kroliczak, Alice*Behavioral and Social Sciences*

BA, Holy Family College, 1980
MA, Catholic University of America, 1984
PhD, Catholic University of America, 1987

Kronheim, Steven*Psychology*

BA, University of Cincinnati, 1975
MA, University of Maine, 1977
MA, University of Maine, 1979
PhD, American University, 1990

Kuang, Lin*Computer Studies*

BS, Heilongjiang University (China), 1984
MS, Harbin Institute of Technology (China), 1989
MS, Southeastern University, 1996

Kulansky, Michael A.*Business and Management*

BS, Towson State University, 1970
MEd, University of Maryland, College Park, 1972
MBA, University of Maryland, College Park, 1981

Kumar, Veena*Communication Studies*

MA, Karnataka University (India), 1971
PhD, Lucknow University (India), 1976
PhD, Université de Paris-Sorbonne (France), 1985

Kushner, Michael P.*Business and Management*

BS, University of Pittsburgh, 1969
MBA, University of Dayton, 1979

Kwiatkowski, Karen U.*Information Systems Management*

BS, University of Maryland, College Park, 1982
MS, University of Arkansas, 1987
MA, Harvard University, 1991

Kwon, Okyun*Sociology*

BA, Kookmin University (South Korea), 1986
MA, City College of New York, City University of
New York, 1991
PhD, Graduate School and University Center, City
University of New York, 2000

Lacienski, Stanley J.*Experiential Learning*

BS, American International College, 1984
MGA, University of Maryland University College,
1995

Lacourciere, Karen A.*Biology*

BA, University of Massachusetts Amherst, 1991
BS, University of Massachusetts Amherst, 1991
PhD, Johns Hopkins University, 1997

Lagnese, Adelaide A.*Legal Studies*

BA, St. John's University (New York), 1965
MA, Hofstra University, 1968
JD, Catholic University of America, 1976
MA, Antioch School of Law, 1979

Lampel, Keith A.*Biology*

BA, Rutgers College, 1975
PhD, University of Miami, 1979

Lancaster, Morris S.*Computer Science*

BS, North Carolina State University, 1972
MS, University of Tennessee, 1976

Lanzer, Francis P.*Computer Studies*

BSEE, U.S. Naval Academy, 1973
MSBA, Boston University, 1983
MSEE, University of Maryland, College Park, 1984

Largen, Kim D.*Natural Science*

BA, University of Georgia, 1980
MS, George Mason University, 1988
PhD, George Mason University, 2000

Larsen, Lana C.*Psychology*

BA, Southwest Texas State University, 1975
MA, Chapman College, 1983
MA, Southern Illinois University at Edwardsville,
1991
PhD, Saint Louis University, 1997

Lasane, Terrell P.*Psychology*

BS, Howard University, 1990
MA, University of Delaware, 1993
PhD, University of Delaware, 1995

Laska, William D.*Information Systems Management*

BS, Kent State University, 1974
MS, Virginia Polytechnic Institute and State
University, 1993

Lass, Terry*English*

BA, University of Missouri-Columbia, 1974
MA, University of Missouri-Columbia, 1975
PhD, University of Missouri-Columbia, 1986

Lathrop, Elizabeth Laura*Anthropology*

BA, Hollins College, 1957
MA, Inter American University of Puerto Rico, 1966
PhD, University of Maryland, College Park, 1982

La Verne, Lorna G.*Communication Studies*

BA, Michigan State University, 1972
MA, Michigan State University, 1974
PhD, Michigan State University, 1981

Lawless, Sue*Legal Studies*

BA, Western Maryland College, 1988
JD, University of Baltimore, 1993

Lazarus, Ferdinand F.*Computer Studies*

BEE, City University of New York, 1951
MS, Florida Institute of Technology, 1979

Leahy, Ronald A.*Human Resource Management*

PhB, Loyola College in Maryland, 1954
BS, Johns Hopkins University, 1960
MBA, George Washington University, 1963

Leake, Charles R.*Information Systems Management*

BS, New York University, 1963
MS, New York University, 1965
PhD, New York University, 1969

Leberre, Maria L.*Administration*

BA, University of Virginia, 1986
MA, Ohio State University, 1988
PhD, George Mason University, 1997

Lee, Calinda N.*History*

BA, Spelman College, 1992
MA, Emory University, 2000
PhD, Emory University, 2002

Lee, Chinkook*Economics*

BA, Union Christian College (South Korea), 1961
MA, Vanderbilt University, 1966
PhD, Washington State University, 1974

Lee, Eugene Y.*Economics*

BA, Southwest University of Finance and Economics (China), 1982
MA, University of California, Santa Cruz, 1992
PhD, University of California, Santa Cruz, 1994

Leerburger, Marian*Business and Management*

BA, Colby College, 1984
MA, American University, 1986
MA, American University, 1988
PhD, University of Maryland, College Park, 1996

Lehman, Charles D.*Marketing*

BS, Miami University (Ohio), 1960
MBA, University of Cincinnati, 1962

Leigh, Oliver W.*Criminology/Criminal Justice*

BA, City College of New York, 1973
JD, Columbia University, 1976

Leitner, Kina D.*Psychology*

BS, University of Denver, 1970
MS, Bank Street College of Education, 1977
PhD, Columbia University, 1992

LeMaster, John D.*Experiential Learning*

BA, Indiana University of Pennsylvania, 1985
MA, University of Maryland, College Park, 1989

Lesser, Lawrence M.*Business and Management*

BS, American University, 1965
MBA, American University, 1968

Letarte, Michele E.*Cooperative Education*

BA, Wesleyan University, 1992
MEd, University of Massachusetts Amherst, 1998

Leung, Kenneth W.*Accounting*

BS, University of Maryland University College, 2000
MS, University of Maryland University College, 2002

Levin, Sharon L.*Accounting*

BS, University of Maryland, Baltimore County, 1979
MBA, Loyola College in Maryland, 1992
EdD, George Washington University, 1999

Levin, Tobe*English*

BA, Ithaca College, 1970
MA, New York University, 1973
PhD, Cornell University, 1977

Levine, Andrew H.*Legal Studies*

BA, Brown University, 1983
MA, Georgetown University, 1984
JD, Washington College of Law, American University, 1989

Lewis, Dawn K.*Psychology*

BA, Spelman College, 1989
MS, State University of New York at Albany, 1990
MS, Virginia Commonwealth University, 1995
PhD, Virginia Commonwealth University, 1999

Li, Zhenping*Computer and Information Science*

BS, Jilin University (China), 1982
PhD, University of Tennessee, 1991
MS, Johns Hopkins University, 2003

Liebermann, Roxanne J.*Information Systems Management*

BS, University of Pittsburgh, 1987
MS, University of Maryland University College, 1994

Lindsay, Elizabeth B.*Library Skills*

BA, University of Dayton, 1991
MLS, Indiana University Bloomington, 1993
MA, Indiana University Bloomington, 1995

Litzky-Maddox, Sara R.*Legal Studies*

BS, Pennsylvania State University, 1990
JD, University of Baltimore, 2000

Liu, Lawrence W.*Computer and Information Science*

BS, Tamkang University (Taiwan), 1980
MBA, University of Dallas, 1985

Lloyd, Timothy*Information Systems Management*

BA, University of Maryland, Baltimore County, 1982
MS, University of Maryland University College, 1987

Lopiano, Anne D.*Legal Studies*

BA, University of Maryland, College Park, 1974
JD, American University, 1984

Loss, Roderick*Information Systems Management*

BS, Rollins College, 1967
MBA, Roosevelt University, 1978

Loughlin, Brian C.*Accounting*

BBA, Manhattan College, 1965
MBA, University of Maryland, College Park, 1988

Lowe, William A.*Fire Science*

BS, Shorter College (Georgia), 1996
MBA, Brenau University, 1997
BS, University of Cincinnati, 1999
PhD, Nova Southeastern University, 2000

Lucas, Beverly S.*Education: Counseling and Personnel Services*

BA, State University of New York at Buffalo, 1987
EdM, State University of New York at Buffalo, 1991

Luke, Andrea G.*Career Planning*

BS, Tuskegee University, 1967
MS, Morgan State University, 1976

Luna Escudero-Alie, Maria Elvira*Spanish*

BA, Pontificia Universidad Católica del Peru, 1983
BA, Pontificia Universidad Católica del Peru, 1985
MA, Pontificia Universidad Católica del Peru, 1987

Lundregan, Christine C.*Marketing*

BS, University of Maryland, College Park, 1976
MS, University of Maryland University College, 1988

Lyke, Robert F.*Accounting*

BA, Swarthmore College, 1963
MA, Yale University, 1965
PhD, Yale University, 1969

Lyman, Jaquelyn S.*Communication Studies*

BA, West Virginia University, 1982
MA, West Virginia University, 1986

Lynk, Julie A.*Experiential Learning*

BS, University of Detroit, 1980
MSPH, Meharry Medical College, 1982

Mack, Nanette G.*Mathematics*

BA, Michigan State University, 1978
MS, Michigan State University, 1980

Macol, Christine P.*Biology*

BS, Fairfield University, 1995
PhD, Boston College, 2002

Mahmud, Atm G.*Computer and Information Science*

BA, Dhaka University (Bangladesh), 1976
MA, Dhaka University (Bangladesh), 1977
MS, Iowa State University, 1991

Maina, Nyambura S.*Business and Management*

BEd, University of Nairobi (Kenya), 1985
MEd, University of Alberta (Canada), 1994
PhD, Iowa State University, 1999

Mainka, Christina*Natural Science*

MS, Ruprecht-Karls-Universität Heidelberg
(Germany), 1989
PhD, Ruprecht-Karls-Universität Heidelberg
(Germany), 1994

Majeski, Robin*Behavioral and Social Sciences*

BSN, Catholic University of America, 1983
MA, Catholic University of America, 1991
PhD, University of Maryland, College Park, 1998

Malik, Ned*Information Systems Management*

BS, George Washington University, 1989
JD, George Mason University, 1997
MS, Johns Hopkins University, 1998

Malloy, Dorothea C.*Accounting*

BS, University of Massachusetts Boston, 1987
MS, University of Baltimore, 1993

Malmi, Carol*Communication Studies*

BA, Dickinson College, 1969
MA, Northwestern University, 1970
PhD, Northwestern University, 1974

Mangold, Sanford D.*Business and Management*

BS, University of Florida, 1969
MS, Air Force Institute of Technology, 1973
MA, Naval War College, 1987

Mannina, Debra*Mathematics*

BS, University of Maryland, College Park, 1987
MEd, University of Maryland, College Park, 1989

Manno, Joseph R.*Cooperative Education*

BA, Pennsylvania State University, 1949
MA, American University, 1958
PhD, University of Maryland, College Park, 1989

Mantel, Wendy*Communication Studies*

BA, Ramapo College of New Jersey, 1983
MS, Johns Hopkins University, 1999

Mardesich, Michael A.*Computer Studies*

BS, California State University, Dominguez Hills,
1985
MS, University of Maryland University College, 1999

Marin, Noemi*Speech*

MEd, Universitatea din Bucuresti (Romania), 1977
MA, California State University, Northridge, 1994
PhD, University of Maryland, College Park, 1999

Marschall, Sabrina I.*Human Resource Management*

BS, University of Maryland, College Park, 1985
MEd, University of Maryland, College Park, 1990
PhD, University of Maryland, College Park, 1995

Marsick, Daniel J.*Environmental Management*

BA, Case Western Reserve University, 1969
MS, American University, 1975
PhD, American University, 1985

Martin, Dennis J.*Philosophy*

BS, Georgia Institute of Technology, 1972
MA, Emory University, 1976
PhD, Emory University, 1983

Martinez, Rodolfo J.*Computer and Information Science*

BS, George Washington University, 1976
MS, George Washington University, 1980

Martner-Hewes, Patricia M.*Biology*

BS, University of California, Los Angeles, 1979
MS, University of California, Los Angeles, 1981
DrPH, University of California, Los Angeles, 1984

Mashayekhi, Mehrdad*Sociology*

BA, Case Western Reserve University, 1976
MA, American University, 1979
PhD, American University, 1986

Matsakis, Aphrodite T.*Psychology*

MA, Stanford University, 1969
MA, University of Maryland, College Park, 1972
PhD, University of Maryland, College Park, 1975

Matten, Amy E.*Speech*

BS, Boston University, 1988
MEd, Pennsylvania State University, 1989
PhD, University of Minnesota, Twin Cities, 1999

Matteson, Miriam*Library Skills*

BS, Indiana University Bloomington, 1992
MLS, Indiana University Bloomington, 1995

Matthews, Marybeth*English*

BA, California State University, Hayward, 1983
MA, California State University, Hayward, 1985
PhD, University of South Florida, 1994

Maun, Carolyn*English*

BA, Eckerd College, 1990
MA, North Carolina State University, 1992
PhD, University of Tennessee, 1998

Maurer, Donna J.*Sociology*

BA, University of Massachusetts Dartmouth, 1985
MA, East Tennessee State University, 1989
PhD, Southern Illinois University, 1997

Maurer, Ruth A.*Economics*

BS, Colorado State University, 1961
MS, Colorado State University, 1963
PhD, Colorado School of Mines, 1978

Mauro, Benjamin C.*Psychology*

BA, Temple University, 1980
MA, Temple University, 1984
PhD, Temple University, 1991

Mayeske, Betty Jo*Humanities*

BA, University of Illinois at Urbana, 1956
MA, University of Illinois at Urbana, 1958
PhD, University of Maryland, College Park, 1972

Mazerooff, Paul*Psychology*

BA, Western Maryland College, 1967
MA, University of Maryland, College Park, 1968
EdD, Peabody College, Vanderbilt University, 1977

Mazzola, Steven Scott*Theatre*

BA, Vassar College, 1993
MFA, State University of New York at Stony Brook,
1997

McBride, Christopher*English*

BA, University of Connecticut, 1990
MA, Trinity College (Connecticut), 1993
PhD, Claremont Graduate University, 2001

McCaffrey, William E.

Information Systems Management

BS, Siena College, 1973
MBA, University of Notre Dame, 1987

McCallister, Myrna

Library Skills

BA, University of California, Los Angeles, 1968
MA, Michigan State University, 1971
MLS, University of Michigan–Ann Arbor, 1980

McCauley, Louis W.

English

BA, George Mason University, 1974
MA, George Mason University, 1978

McCauley, Susan Diane

Communication Studies

BA, University of Maryland, College Park, 1982
BS, University of Maryland, College Park, 1984
MA, Saint Louis University, 1985
PhD, American University, 2002

McClean, Philip M.

Statistics and Probability

BS, Loras College, 1959
MS, University of Iowa, 1967

McCotter-Jacobs, Verjeana C.

Criminology/Criminal Justice

BA, University of Maryland, College Park, 1989
JD, University of the District of Columbia, 1996

McDermitt, Edward V.

Humanities

BA, Georgetown University, 1975
MA, Georgetown University, 1978
JD, University of Santa Clara, 1980
LLM, University of Pennsylvania, 1984

McEwen-Cambosos, Elaine B.

Human Resource Management

BA, Cheyney State College, 1970
JD, Howard University, 1973
MBA, Howard University, 1982
MA, Marymount University, 1998

McFarland, Ronald D.

Computer and Information Science

MBA, University of Phoenix, 1991
MEd, Northern Arizona University, 1997
PhD, Nova Southeastern University, 1997

McGinty, Patrick

History

BA, University of Omaha, 1961
MA, Georgetown University, 1975
PhD, Georgetown University, 1983

McGowan, Jill F.

Mathematics

BA, Bryn Mawr College, 1977
JD, Georgetown University, 1980
PhD, University of Maryland, College Park, 1991

McKalip, Donna H.

Information Systems Management

BA, University of the Philippines–Manila, 1976
MA, Central Michigan University, 1978
MS, University of Maryland University College, 2000

McKeldin, William H.

Criminology/Criminal Justice

BS, University of Maryland University College, 1987
MBA, Frostburg State University, 1996

McKelvy, Rayolyn L.

Speech

BS, U.S. Air Force Academy, 1970
MA, State University of New York College at
Plattsburgh, 1977
MPh, University of Cambridge (England), 1995

McKenzie, Ross A.

Information Systems Management

BS, Lock Haven State University, 1982
MS, Missouri State University, 1985

McLaughlin, Debra F.

Psychology

BS, Clark College, 1986
PhD, University of North Carolina at Chapel Hill,
1994

McLaughlin, William H.

Computer Studies

BS, University of Maryland, College Park, 1988
MA, Webster University, 1998

McMillan, Michael G.

Accounting

BA, University of Pennsylvania, 1979
MBA, Stanford University, 1983
PhD, George Washington University, 2002

McNamara, Lynne

English

BA, University of Colorado at Boulder, 1967
MA, University of Colorado at Boulder, 1969
PhD, Southern Illinois University at Carbondale,
1998

McNeal, Bernard G.

Accounting

BS, Morgan State College, 1975
MSM, Purdue University, 1977

Meek, Steve

Business and Management

BS, University of Alabama, 1966
MS, University of California, Los Angeles, 1982

Mehalick, Michael R.

Information Systems Management

BA, University of Rochester, 1984
MS, University of Maryland University College, 1999

Melley, Christopher

English

BA, Marist College, 1977
MA, Columbia University, 1983
PhD, Universität des Saarlandes (Germany), 1991

Melton-Celsa, Angela R.

Biology

BS, Loyola Marymount University, 1982
PhD, Virginia Commonwealth University, 1991

Memon, Altaf A.

Environmental Management

BECE, University of Karachi (Pakistan), 1972
ME, Asian Institute of Technology (Thailand), 1975
MPW, University of Pittsburgh, 1979
MSCE, University of Pittsburgh, 1979
PhD, University of Pittsburgh, 1980

Merriman, Scott

History

BA, College of Wooster, 1991
MA, University of Cincinnati, 1995
PhD, University of Kentucky, 2003

Metlapalli, Prabhakar

Computer and Information Science

BS, University of Baroda (India), 1990
MS, Indian Institute of Technology (India), 1992
PhD, West Virginia University, 1996

Meyers, Ann

Psychology

BME, Wittenberg University (Ohio), 1978
MA, Ball State University, 1980
PhD, Walden University, 1999

Michel, Kevin A.

Accounting

BS, Pace University, 1979
MBA, Pace University, 1986
EdD, Nova Southeastern University, 1999

Michelson, Bruce K.

Accounting

BS, University of Maryland, College Park, 1971
MBA, George Washington University, 1972

Mikhail, Nabil S.

Government and Politics

BA, American University in Cairo (Egypt), 1986
MA, American University in Cairo (Egypt), 1988
PhD, University of Virginia, 1996

Mikulski, George R.

Computer Studies

BS, King's College (Pennsylvania), 1985
MS, George Mason University, 1991

Milhouse, Virginia

Communication Studies

MS, University of Houston, 1979
MEd, University of Central Oklahoma, 1981
PhD, University of Oklahoma, 1986

Miller, Tammie A.*Computer Studies*

BS, Norfolk State University, 1986
MBA, Southeastern University, 1999

Milman, Frank L.*Human Resource Management*

BS, University of Maryland, College Park, 1970
MBA, University of Maryland, College Park, 1973

Minetree, James L.*Experiential Learning*

BGS, University of Nebraska, 1971
MA, University of Southern California, 1973

Minikon, Patricia B.*Legal Studies*

BA, Howard University, 1988
JD, University of Maryland, Baltimore, 1992

Minto, Deonne*English*

BA, Florida Atlantic University, 1997
MA, Florida Atlantic University, 1999

Misra, Nidhi*Information Systems Management*

BS, Allahabad University (India), 1991
MS, Allahabad University (India), 1999

Mitchell, Alice*Mathematics*

BM, Heidelberg College (Ohio), 1978
MA, Bowling Green State University, 1982
PhD, University of Maryland, College Park, 1997

Mobasheran, Amir*Environmental Management*

BS, Tehran University (Iran), 1976
MS, University of Tennessee, Knoxville, 1981
PhD, University of Tennessee, Knoxville, 1990

Modak, Anand R.*Computer and Information Science*

BA, Carleton College, 1979
MS, Hood College, 1993

Monaco, Pamela J.*English*

BBA, George Washington University, 1981
MA, Catholic University of America, 1987
PhD, Catholic University of America, 1995

Monroe, Susan M.*Criminology/Criminal Justice*

BS, Birmingham Southern College, 1993
MS, University of Alabama, 1995

Moore, Thomas*English*

BA, Towson State University, 1973
MA, Pennsylvania State University, 1975
PhD, University of Maryland, College Park, 1983

Morad, Osama*Computer and Information Science*

BS, Cairo University (Egypt), 1977
MS, University of Virginia, 1985
PhD, George Mason University, 1993
ME, University of Virginia, 2082

Mostaghimi, Siroos*Environmental Management*

BS, Pahlavi University (Iran), 1974
MS, Texas A&I University, 1978
PhD, Ohio State University, 1982
MS, Virginia Polytechnic Institute and State University, 1990

Motes, Michael J.*Accounting*

BS, Cornell University, 1975
MA, Central Michigan University, 1979

Mousalimas, Terry A.*Computer Studies*

MDiv, College of the Holy Cross, 1980
MST, Oxford University (England), 1986
PhD, Oxford University (England), 1992

Moye, Jim R.*Legal Studies*

BA, University of Southern California, 1995
JD, Columbus School of Law, Catholic University, 1999

Mulherrin, Elizabeth A.*Library Skills*

BA, University of New Hampshire, 1985
MLIS, University of South Carolina, 1993

Munger, Peter G.*Business and Management*

BS, Indiana University Bloomington, 1970
JD, University of Cincinnati, 1973

Munshell, Cynthia D.*Psychology*

BA, St. Olaf College, 1985
MA, University of North Carolina at Chapel Hill, 1988
PhD, University of North Carolina at Chapel Hill, 1991

Muren, Gary P.*Computer Information Technology*

BS, Illinois State University, 1966
MA, University of Illinois at Urbana-Champaign, 1968
PhD, University of Illinois at Urbana-Champaign, 1972
BA, University of Maryland University College, 1983

Murphy, Jean*Communication Studies*

BA, Portland State University (Oregon), 1981
MA, Portland State University (Oregon), 1983

Murray, Darryl*Biology*

BA, Alabama State University, 1984
MS, Alabama State University, 1986
PhD, Johns Hopkins University, 1999

Murray, Teresa*Communication Studies*

BA, Mount Vernon College, 1988
MA, University of Baltimore, 1995

Murray, Teresa W.*Business and Management*

BA, Howard University, 1994
JD, George Washington University, 1997

Musavi, Hamid*Computer and Information Science*

BS, Clemson University, 1980
MS, Johns Hopkins University, 1992

Muse, Herbert E.*Information Systems Management*

BS, Frostburg State University, 1972
MMS, Loyola College in Maryland, 1975
MS, University of Maryland University College, 1990
PhD, Nova Southeastern University, 2003

Nacev, Vladimir*Psychology*

MA, California School of Professional Psychology, 1974
PhD, U.S. International University, 1977

Nadelman, Cindi A.*Information Systems Management*

BS, Slippery Rock University of Pennsylvania, 1985
BS, University of Tampa, 1985
MA, Georgia College & State University, 1988

Narayan, Krishnaswami*Computer Studies*

MA, University of Madras (India), 1980

Nass, Ggisela*Biology*

BA, George Washington University, 1972
MA, University of Wisconsin-Madison, 1976
PhD, University of Wisconsin-Madison, 1979

Nassirdaftari, Saied*Computer Studies*

BS, American University, 1981
MS, American University, 1985

Navarra, Joseph L.*Environmental Management*

BS, University of Maryland, College Park, 1985
MS, National-Louis University, 1994

Nayak, Nick

Marketing

BS, University of Maryland, College Park, 1986
MS, Florida Institute of Technology, 1988
PhD, Walden University, 2002

Ndubuisi, Samuel C.

Sociology

BA, University of Ibadan (Nigeria), 1975
MA, Georgetown University, 1979
PhD, Howard University, 1986

Neal, Kim D.

Legal Studies

BS, Georgetown University, 1989
JD, University of Baltimore, 1997

Neary, John J.

Information Systems Management

BS, University of Maryland University College, 1976
MS, Strayer University, 1998

Nedevschi, Sergiu

Computer and Information Science

BS, Universitatea Tehnica Cluj Napoca (Romania), 1975
MS, Universitatea Tehnica Cluj Napoca (Romania), 1975
PhD, Universitatea Tehnica Cluj Napoca (Romania), 1993

Neimeyer, Charles

History

BA, University of Maryland, College Park, 1976
MA, Georgetown University, 1983
MA, Naval War College, 1991
PhD, Georgetown University, 1993

Nerad, Thomas, A.

Biology

BS, University of Michigan–Ann Arbor, 1970
MS, University of Michigan–Ann Arbor, 1972
MPH, University of Michigan–Ann Arbor, 1974
PhD, University of Maryland, College Park, 1990

Neuder, Stanley M.

Mathematics

BS, Brooklyn College, 1955
MS, University of Maryland, College Park, 1960
PhD, Catholic University of America, 1978

Newman, John M.

History

BA, George Washington University, 1973
MA, George Washington University, 1978
PhD, George Washington University, 1991

Nickens, Shelton

History

BA, North Carolina Wesleyan College, 1966
MA, East Carolina University, 1967
MA, University of London (England), 1971

Nickols, Jacqueline

Information Systems Management

BA, University of Maryland, College Park, 1993
AA, Community College of the Air Force, 1994
MS, Central Michigan University, 1999

Nieberding, Stephen A.

Computer Information Technology

BS, University of Maryland, Baltimore County, 1988
MS, Johns Hopkins University, 1998

Nielsen-Bohlman, Lynn

Psychology

BA, California State University, Long Beach, 1983
PhD, University of California, Davis, 1994

Nielson, Michael L.

English

BA, University of Maryland University College, 1981
MA, George Washington University, 1983

Nodvin, Stephen C.

Biology

BS, Emory University, 1975
PhD, Cornell University, 1983

Nolan, Eve N.

Marketing

BA, University of Maryland, College Park, 1988
MS, University of Maryland University College, 1996

Noone, Patricia A.

English

BA, University of Maryland, College Park, 1980
MA, University of Maryland, College Park, 1985

Norflus, Francine

Biology

BA, Duke University, 1985
MS, Virginia Commonwealth University, 1991
PhD, George Washington University, 1999

North, Diane

History

BA, Trinity College (Washington, D.C.), 1966
MA, State University of New York College at Oneonta, 1975
PhD, University of California, Davis, 2001

Nulman, Andrew D.

Business and Management

BA, Tulane University, 1990
MBA, Georgetown University, 1998
BS, University of Maryland University College, 2001

Nutter, Kathleen B.

History

BA, Smith College, 1990
MA, University of Massachusetts Amherst, 1993
PhD, University of Massachusetts Amherst, 1998

Nwaka, Charles U.

Economics

BS, St. Joseph's University (Pennsylvania), 1975
MA, Minnesota State University, Mankato, 1982
PhD, Howard University, 1994

Nye, Michael W.

Business and Management

JD, University of Nebraska, 1971
LLM, George Washington University, 1980

Oakcrum, Gloria H.

Business and Management

BS, University of Maryland, College Park, 1983
MS, Golden Gate University, 1987

Oakcrum, Lewis M.

Business and Management

BS, University of Maryland, College Park, 1982
MS, Golden Gate University, 1986

Obenhuber, Donald C.

Biology

BS, Rensselaer Polytechnic Institute, 1977
MS, University of Hawaii at Manoa, 1982
PhD, University of Hawaii at Manoa, 1986

O'Connell, Walter R.

Business and Management

BS, Rutgers University, 1964
MBA, University of Virginia, 1972

O'Donnell, Nancy E.

English

BS, St. John Fisher College, 1977
MA, University of Maryland, College Park, 1989

Ogg, Sherry L.

Biology

BS, Delaware Valley College, 1984
MS, California State University, Chico, 1988
PhD, University of Maryland, College Park, 1994

Olden-Stahl, Susan K.

History

BA, University of Wisconsin–Madison, 1971
MA, University of Illinois at Urbana-Champaign, 1973

Oleru, George U.

Environmental Management

BA, College of the Holy Cross, 1968
MS, University of Rhode Island, 1970
DrPH, Columbia University, 1971

Oliva, Linda M.

Psychology

BS, University of Maryland, College Park, 1981
MEd, Boston University, 1984
EdD, Boston University, 1993

Olson, Mary E.

Communication Studies

BA, Colby College, 1969

MA, University of Arizona, 1971

MA, University of Minnesota Twin Cities, 1986

Olson, Susan M.

Library Skills

MA, Fordham University, 1966

PhD, University of Illinois at Urbana-Champaign, 1976

MLS, University of Maryland, College Park, 1994

O'Malley, Sharon R.

Journalism

BA, University of Maryland University College, 1989

MA, University of Maryland, College Park, 1991

O'Neill, David J.

Biology

BS, Towson State College, 1970

MS, University of Maryland Eastern Shore, 1974

PhD, University of Maryland Eastern Shore, 1998

Orkand, Kim L.

Information Systems Management

BS, DeVry Institute of Technology, 1986

MBA, Mercer University, 1990

MS, Keller Graduate School of Management of DeVry University, 1996

O'Rourke, Thomas

Business and Management

BA, Alfred University, 1970

MA, Webster University, 1975

Orum, Thomas T.

History

BA, Rutgers University, 1967

MA, University of Arizona, 1967

PhD, New York University, 1975

Oti, Donna

Speech

BS, Tennessee Technological University, 1989

MA, American University, 1994

PhD, Howard University, 1998

Otiji, Sylvester N.

Computer Studies

BA, University of Minnesota Twin Cities, 1984

MUP, San Jose State University, 1986

MGA, University of Maryland University College, 1994

Ottesen, Bodil B.

Art History

BA, Goucher College, 1979

MA, University of Maryland, College Park, 1980

PhD, University of Maryland, College Park, 1987

Overly, Marge A.

Legal Studies

BA, Lycoming College, 1985

JD, Seton Hall University, 1989

Page, Norbert

Environmental Management

DVM, Ohio State University, 1956

MS, University of Rochester, 1963

Pailen, Loyce B.

Computer Studies

BS, University of Maryland University College, 1990

MGA, University of Maryland University College, 1996

Palm, Sylvia C.

Information Systems Management

BS, University of Maryland, College Park, 1975

MIM, University of Maryland University College, 1999

Pandit, Vijay A.

Accounting

BS, University of Bombay (India), 1966

MS, University of Bombay (India), 1968

MBA, University of Maryland, College Park, 1979

Pang, Leslie

Computer Systems Management

BS, University of Hawaii at Manoa, 1974

MS, University of Nebraska-Lincoln, 1979

PhD, University of Utah, 1983

MBA, University of Maryland, College Park, 1988

Pannah, Em

Computer Information Technology

MS, Dhaka University (Bangladesh), 1973

BS, University of Maryland, Baltimore, 1997

MS, University of Maryland, Baltimore, 1999

Parker, Mark L.

Communication Studies

BA, Florida State University, 1989

MA, Florida State University, 1991

Patel, Manish

Computer Information Technology

BA, Georgia Institute of Technology, 1996

MBA, Mercer University, 1999

Patterson, James G.

Communication Studies

BA, University of Arizona, 1977

MA, Eastern Michigan University, 1981

EdS, Valdosta State University, 2001

Patterson, Thomas H.

Library Skills

BA, St. Andrews Presbyterian College, 1966

MA, University of Pittsburgh, 1969

MLS, University of Pittsburgh, 1970

Patterson, William V.

Speech

BFA, University of Oklahoma, 1970

MFA, University of Utah, 1972

Payne, Jerald E.

Business and Management

BS, Troy State University, 1969

MEd, Loyola College in Maryland, 1979

PhD, University of Maryland, College Park, 1995

Payne, Twanna M.

Information Systems Management

BS, Virginia State University, 1994

MS, University of Maryland University College, 1999

Peirce, William P.

Communication Studies

BA, Westminster College (Pennsylvania), 1960

MA, University of Maryland, College Park, 1963

Pelletier, Jane D.

Accounting

BA, Colby College, 1980

MBA, University of Pittsburgh, 1982

Pennington, Elizabeth E.

Humanities

BA, Florida State University, 1975

MA, Florida State University, 1976

Perkins, Wendy B.

English

BA, Stockton State College, 1985

MA, Rutgers University, 1988

PhD, University of Delaware, 1996

Perrin, Donald

Human Resource Management

BA, University of Southern California, 1960

MA, University of Southern California, 1962

PhD, University of Southern California, 1969

Perrin, Elizabeth

Business and Management

BA, Barnard College, 1946

MA, Columbia University, 1951

PhD, University of Southern California, 1976

Persaud, Motee

Business and Management

BA, University of Wisconsin-La Crosse, 1966

MA, Howard University, 1970

JD, George Washington University, 1974

PhD, American University, 1978

Persh, Michael G.

Accounting

BA, Washington University (Missouri), 1973

MBA, George Washington University, 1977

Pertillar-Brevard, Lisa A.

English

BA, Smith College, 1991
MA, Emory University, 1994
PhD, Emory University, 1995

Peters, Erica

History

BA, Harvard University, 1991
MA, University of Chicago, 1994
PhD, University of Chicago, 2000

Peters, James M.

Business and Management

BA, University of Illinois at Urbana-Champaign, 1984
JD, University of Illinois at Urbana-Champaign, 1987

Peterson, Tommy

Communication Studies

BA, University of Virginia's College at Wise, 1995
MA, University of Memphis, 1998

Peterson, Victoria M.

Business and Management

BA, Tennessee Wesleyan College, 1972
MBA, European University (France), 1994

Petrone, Joseph M.

Marketing

BS, University of Pittsburgh, 1973
MS, University of Pittsburgh, 1976
DEd, University of Maryland, College Park, 1986

Phifer, Bettina

Library Skills

BA, Mary Washington College, 1999
MLS, University of Maryland, College Park, 2002

Philip, Deborah D.

Biology

BS, City College of New York, 1989
MS, Graduate School and University Center, City University of New York, 1999
PhD, Graduate School and University Center, City University of New York, 2000

Phillips, Janet B.

Humanities

BS, University of Maryland, College Park, 1971
MEd, University of Maryland, College Park, 1972
PhD, University of Maryland, College Park, 1981

Pickering, Andrew J.

Computer and Information Science

BA, University of Essex (England), 1980
MS, University of Essex (England), 1982

Pierce, Barbara L.

Biology

BA, University of Rochester, 1959
MS, University of Rochester, 1962
PhD, University of Rochester, 1966

Pinto-Orton, Nancy L.

Experiential Learning

BA, Barnard College, 1971
MS, Kansas State University, 1974
PhD, University of Pennsylvania, 2001

Pitocco, Nickolas J.

Computer and Information Science

BS, University of Maryland, College Park, 1986
MS, Troy State University, 1991
MS, University of Maryland University College, 1993

Pitts, Charles D.

Information Systems Management

BS, University of Kansas, 1968
MS, University of Southern California, 1976
MSED, Marymount University, 1992

Pitts, David D.

Computer Studies

BE, Vanderbilt University, 1986
MBA, University of Maryland, College Park, 1995

Pointer, Sharron K.

Information Systems Management

BS, University of California, San Bernadino, 1986
MS, Bowie State University, 1995

Poltilove, Rachel

Biology

BS, University of Maryland, College Park, 1996
MA, George Washington University, 2000
PhD, George Washington University, 2001

Pomea, Neal F.

Library Skills

BA, University of Louisiana at Lafayette, 1976
BA, University of Louisiana at Lafayette, 1982
MLS, University of Maryland, College Park, 1997

Pomietto, Robert J.

Information Systems Management

BS, Duquesne University, 1970
MS, University of Maryland, College Park, 1989

Ponds, Laveen

Human Resource Management

BS, Ohio State University, 1974
MA, Central Michigan University, 1978
JD, Capital University, 1983

Porter, Yvette T.

Information Systems Management

BS, University of Maryland University College, 1988
MS, Johns Hopkins University, 1996

Potolea, Rodica

Computer and Information Science

BS, Universitatea Tehnica Cluj Napoca (Romania), 1986
PhD, Universitatea Tehnica Cluj Napoca (Romania), 1988

Potucek, Lorinda S.

Marketing

BA, Marylhurst College, 1970
MS, Vanderbilt University, 1976

Powell, Catherine

Psychology

BS, University of Pittsburgh, 1972
MS, University of Pittsburgh, 1973
JD, Antioch School of Law, 1986
LLM, American University, 1987

Powell, Vicky L.

Health Services Management

BA, Howard University, 1988
JD, Georgetown University, 1995

Powers, Norma J.

Humanities

BS, Loyola University Chicago, 1976
MS, Naval Postgraduate School, 1983

Powroznik, Daniel L.

Business and Management

BA, Allegheny College, 1971
MA, University of Maryland, College Park, 1972
PhD, University of Maryland, College Park, 1980
MBA, George Washington University, 1982

Prasad, Surya S.

Environmental Management

BS, Andhra Pradesh Agricultural University (India), 1970
MA, Sam Houston State University, 1971
PhD, Rutgers University, 1977

Preston-Dillon, Dee

Psychology

BEd, University of Hawaii at Manoa, 1972
MA, University of Northern Colorado, 1976
PhD, Saybrook Graduate School and Research Center, 1999

Prineas, Matthew L.

English

BA, Carleton College, 1987
MA, University of Michigan—Ann Arbor, 1990
PhD, University of Rochester, 1995

Profozich, Richard P.

Communication Studies

BS, Pennsylvania State University, 1970
MS, Rensselaer Polytechnic Institute, 1972
PhD, University of Maryland, College Park, 1989

Pu, Fan-Tao

Computer Science

BS, National Chiao Tung University (Taiwan), 1986
MA, National Chiao Tung University (Taiwan), 1988
PhD, University of Maryland, College Park, 1998

Puffer, Barbara W.*Communication Studies*

BA, University of Bridgeport, 1972
MA, Fairfield University, 1976

Pugh, Marilyn B.*Economics*

BS, Ohio State University, 1969
MA, Ohio State University, 1971
PhD, George Mason University, 1994

Pullen, Jeffrey D.*Accounting*

BS, University of Maryland University College, 1992
MGA, University of Maryland University College, 1996

Puma, Daniel R.*Marketing*

BA, University of Maryland, College Park, 1973
BS, University of Maryland, College Park, 1973
MA, Bowie State University, 1982

Purvis, Catrina D.*Information Systems Management*

BS, Southern Illinois University, 1994
MA, Webster University, 2000

Quinn, Maureen*Business and Management*

BS, American University, 1982
JD, Temple University, 1987

Rabinovich, Beth*Psychology*

BA, George Washington University, 1973
MA, George Washington University, 1975
PhD, University of Maryland, College Park, 1983

Rader, Barbara L.*Computer Studies*

MPA, University of Washington, 1982
PhD, University of Washington, 1992

Radja, James E.*Business and Management*

BS, Virginia Polytechnic Institute and State University, 1983
MBA, George Mason University, 1989

Radnofsky, Mary L.*Astronomy*

BA, University of Houston, 1980
MS, Université de Provence (France), 1983
PhD, Vanderbilt University, 1992

Raftery, Susan R.*Sociology*

BA, Ohio State University, 1974
MS, Ohio State University, 1980
PhD, Ohio State University, 1987

Rajagopal, Doraiswamy*Computer and Information Science*

BS, Indian Institute of Science (India), 1978
MS, Indian Institute of Science (India), 1980
MBA, George Washington University, 1990

Raleigh, Cheryl*Communication Studies*

BA, University of Maryland, College Park, 1971
MA, Pennsylvania State University, 1975
EdD, Rutgers University, 1988

Ramabadran, Chitra*Computer and Information Science*

BS, University of Bombay (India), 1984
MS, Shippensburg University of Pennsylvania, 1992

Ramabadran, Venkatesh*Computer and Information Science*

MS, Shippensburg University of Pennsylvania, 1987

Ramamoorthy, Nagarajan*Business and Management*

MA, University of Madras (India), 1982
MBA, Xavier Labor Relations Institute (India), 1986
PhD, University of Maryland, College Park, 1996

Ramhoff, Ralph*Computer and Information Science*

BS, Frostburg State University, 1980
MEng, Loyola College in Maryland, 1993

Ramon, Eric*Business and Management*

BA, Nasson College, 1969
MA, Adelphi University, 1978
BS, State University of New York Regents College, 1995

Ranade, Mary*Computer and Information Science*

BA, St. Xavier College, 1964
MS, Illinois Institute of Technology, 1967
PhD, Illinois Institute of Technology, 1974

Ratnapala, Narendra D.*Art*

BA, University of Maryland, College Park, 1987
HND, Reigate School of Art and Design (England), 1987
MFA, University of Maryland, College Park, 1990

Rau, Pilar K.*Spanish*

BA, University of Maryland, Baltimore County, 1996
MA, University of Maryland, Baltimore County, 2001

Ray, Loye L.*Information Systems Management*

BS, University of Alabama, 1983
MBA, Embry Riddle University, 1987
MS, La Salle University, 1996
PhD, La Salle University, 1996

Reck, Robert O.*Economics*

BA, Temple University, 1966
MA, University of Maryland, College Park, 1970
PhD, University of Maryland, College Park, 1971

Recuber, Timothy*Sociology*

BA, University of Maryland, College Park, 2000
MA, University of Maryland, College Park, 2003

Redcay, Miriam R.*Business and Management*

BA, Colby College, 1985
MA, University of Illinois at Urbana-Champaign, 1988
MBA, Johns Hopkins University, 2000

Redding, John L.*Computer Science*

BS, Antioch College, 1966
MS, University of Maryland, College Park, 1973

Redman, George W.*English*

BS, Black Hills State University, 1966
MS, Black Hills State University, 1968
PhD, University of Northern Colorado, 1974

Reed, Dale R.*Information Systems Management*

BA, Hope College, 1972
MS, Frostburg State University, 1977

Reed, David*Computer and Information Science*

BS, Pennsylvania State University, 1983
BS, State University of New York at Albany, 1987
MBA, University of Edinburgh (Scotland), 1998

Rees, Thomas G.*Accounting*

BS, Arizona State University, 1983
MBA, University of Delaware, 1993

Reinke, Gary W.*Business and Management*

BS, University of Wisconsin-Parkside, 1970
MS, Central Michigan University, 1985

Reis, Richard*Computer and Information Science*

BE, State University of New York at Stony Brook, 1967
MS, California State University, Northridge, 1975
MS, Johns Hopkins University, 1987

Reston, Rocky R.*Business and Management*

BS, U.S. Air Force Academy, 1984
MS, Air Force Institute of Technology, 1988
PhD, Air Force Institute of Technology, 1992

Revels, Mark A.

Information Systems Management

BBA, University of Kentucky, 1988
MS, University of Denver, 1991

Reynolds, Carolyn B.

English

BA, University of Maryland, Baltimore County, 1977
MA, University of Maryland, College Park, 1981

Rhoades, Jeffrey A.

Gerontology

BA, University of California, Davis, 1978
MS, University of Alabama, 1981
PhD, Johns Hopkins University, 1995

Rhodes, Thurman H.

Legal Studies

BA, Morgan State University, 1972
JD, Catholic University of America, 1975

Rice, Linda D.

Psychology

BA, Loyola College in Maryland, 1974
MA, Loyola College in Maryland, 1980
PhD, Loyola University Chicago, 1987

Richardson, Emily

Humanities

BA, Sweet Briar College, 1957
MA, American University, 1979
PhD, American University, 1987

Riddick, Carol C.

Gerontology

BA, Florida State University, 1970
MS, Florida State University, 1972
PhD, Pennsylvania State University, 1980

Riddle, Mark S.

Biology

BS, University of California, Davis, 1992
MD, Tulane University, 1997
MPh, Tulane University, 1997

Rider, Donald G.

Human Resource Management

BS, Cornell University, 1969
MA, University of Maine, 1973
JD, American University, 1987

Riege, Dennis

Biology

BA, Manchester College, 1970
MS, University of Wisconsin–Madison, 1976
PhD, University of Washington, 2000

Riley, James B.

Business and Management

BS, University of Maryland, College Park, 1954
JD, University of Maryland, Baltimore, 1962

Rinaldi, James V.

Accounting

BS, University of Scranton, 1966
MPA, American University, 1972

Ring, Elizabeth J.

Information Systems Management

BBA, James Madison University, 1986
MS, Johns Hopkins University, 1998

Rio, Daniel

Computer Science

BA, University of South Florida, 1974
MA, University of South Florida, 1981
PhD, University of Florida, 1984

Rizzo, Philip L.

Communication Studies

BA, University of Pennsylvania, 1948
MA, University of Pennsylvania, 1949
PhD, University of Pennsylvania, 1959

Roberts, Elizabeth

Library Skills

BA, University of Virginia, 1989
MLS, University of Kentucky, 1999

Robertson, James A.

Computer and Information Science

BS, University of Houston–Clear Lake, 1989
MS, University of Dayton, 1995

Robinson, Donita

Information Systems Management

BS, Morgan State University, 1988
MS, University of Maryland University College, 1993

Robinson, Keith E.

Business and Management

BS, Bowie State University, 1989
MSA, Central Michigan University, 1998

Robison, J. Kelly

History

BA, Kenyon College, 1988
MA, University of Montana, 1992
PhD, Oklahoma State University, 1997

Robson, Gwyn N.

Communication Studies

BA, Sacramento State University, 1970
MA, University of California, Davis, 1975
PhD, American University, 1985

Rogers, Gregory T.

Criminology/Criminal Justice

BS, University of Maryland University College, 1993
JD, John Marshall Law School, 1997

Rolle, Joann D.

Business and Management

BBA, University of Miami, 1974
MA, Southern Illinois University at Edwardsville, 1975
PhD, Howard University, 1984

Romano, Robert R.

Environmental Management

BS, Southwest Texas State University, 1968
MS, University of Michigan, 1971
MPH, University of Michigan, 1972
PhD, Purdue University, 1976

Rosman, Martin

Statistics and Probability

BEE, City College of New York, 1963
MS, Johns Hopkins University, 1969

Ross, Jeffrey M.

Criminology/Criminal Justice

BA, St. Joseph's College Seminary (New York), 1992
MA, Graduate Theological Union, 1994
PhD, Catholic University of America, 1999
JD, George Washington University, 2001

Rosser, Lisa K.

Communication Studies

BA, University of North Carolina at Greensboro, 1991
MA, Bowie State University, 1996

Ross-Nazzal, James A.

History

MA, University of Washington, 1987
BA, University of Washington, 1996
PhD, Washington State University, 2001

Roth, Ellen

Communication Studies

BA, University of London (England), 1953
MS, Catholic University of America, 1971
PhD, University of Maryland, College Park, 1978

Rothman, Norman C.

History

BA, Dickinson College, 1966
MA, Northwestern University, 1969
PhD, Northwestern University, 1972
PhD, Georgia State University, 1981

Rott, Christopher A.

Human Resource Management

BS, Flagler College, 1989
MA, Nova Southeastern University, 1994

Rowson, David J.

Information Systems Management

BS, University of Maine, 1983
MS, University of Denver, 1992

Rowson, Rebecca R.

Computer and Information Science

BA, North Carolina State University, 1975
MS, North Carolina State University, 1977
MS, University of Southern Mississippi, 1985

Roy, Atul N.

Statistics and Probability

MS, Allahabad University (India), 1976
PhD, Allahabad University (India), 1988
MS, Rutgers University, 1989

Rubin, Samuel B.

Speech

BA, University of Maryland, College Park, 1978
MA, University of Maryland, College Park, 1980
BS, University of Maryland, College Park, 1987

Ruggles, Linda R.

History

BFA, Windham College, 1976
MA, George Mason University, 1990

Ruh, Lawrence A.

Computer and Information Science

BS, Pennsylvania State University, 1965
BA, Pennsylvania State University, 1966
MS, Pennsylvania State University, 1973

Ruohomaki, Connie K.

Marketing

BS, University of Nebraska, 1966
MA, American University, 2000

Russell, Atiya N.

Computer Studies

BS, Philadelphia University, 1996
ME, Great Valley School of Graduate Professional
Studies, Pennsylvania State University, 2000

Russo, Rosemarie C.

Environmental Management

BS, Rutgers University, 1983
MS, Vermont Law School, 1986

Ryschka, Andreas

German

MA, Johannes Gutenberg-Universität Mainz
(Germany), 1986

Sadowski, Susan T.

Accounting

BM, Peabody Conservatory of Music, 1977
MAS, Johns Hopkins University, 1988
PhD, George Washington University, 1994

Sager, Robert J.

Natural Science

BS, University of Wisconsin–Superior, 1964
MS, University of Wisconsin–Madison, 1966
JD, Western State University College of Law, 1977

Salomie, Ioan

Computer and Information Science

MS, Universitatea Politehnica din Bucuresti
(Romania), 1978
PhD, Universitatea Tehnica Cluj Napoca (Romania),
1994

Salomon, Amnon M.

Computer Studies

BS, Purdue University, 1979
MBA, George Mason University, 1992

Samuel, Lesleyann V.

Business and Management

BS, Rensselaer Polytechnic Institute, 1979
MS University of Pennsylvania, 1998

Sanchez, Amparo Rosa

Spanish

MS, Universidad de Salamanca (Spain), 1990

Sanchez, Loreto

Spanish

BA, Universidad de Salamanca (Spain), 1987
BA, Universidad Nacional de Educación a Distancia,
1993
MA, Howard University, 1997

Sander, Kathleen W.

History

BS, Ohio State University, 1969
MA, University of Maryland, College Park, 1981
PhD, University of Maryland, College Park, 1994

Sands, Suzanne E.

Mathematics

BA, Goucher College, 1975
MA, University of Maryland, College Park, 1978
PhD, University of Maryland, College Park, 1981

Sanocki, Jack M.

Computer Studies

BS, Westfield State College, 1974
MS, University of Southern California, 1991
PhD, Walden University, 1995

Santiago-Blay, Jorge A.

Biology

BS, Universidad de Puerto Rico, Recinto de Río
Piedras, 1985
MS, Universidad de Puerto Rico, Recinto de Río
Piedras, 1985
MA, University of California, Berkeley, 1990
PhD, University of California, Berkeley, 1990

Santo, Adam D.

Computer Studies

BA, American University, 1995
MPA, American University, 1999

Sapp, Edwin G.

Communication Studies

BA, University of North Carolina at Chapel Hill,
1960
JD, University of North Carolina at Chapel Hill,
1962
MLA, Johns Hopkins University, 1973

Sarracino, Jaylene M.

Criminology/Criminal Justice

BA, University of New Mexico, 1992
JD, University of New Mexico, 1996

Sauer, Nancy G.

Biology

MS, Colorado State University, 1968
PhD, Clemson University, 1975

Sax, Christina M.

Biology

BS, University of Rochester, 1982
PhD, Medical College of Virginia, Virginia
Commonwealth University, 1987

Scarpinato, F. J.

Business and Management

BS, University of South Florida, 1975
MS, Pepperdine University, 1977

Schachter, Leon

Government and Politics

BS, University of Illinois at Urbana, 1964
JD, Northwestern University, 1967

Scheffler, Elizabeth R.

Accounting

BS, University of Maryland University College, 1980
MGA, University of Maryland University College,
1995
BS, University of Maryland University College, 1997

Schmider, Mary Ellen

History

BA, St. Olaf College, 1960
MA, University of Southern California, 1962
PhD, University of Minnesota Twin Cities, 1983

Schmitter, Anthony V.

Computer and Information Science

BA, Le Moyne College, 1973
MA, University of Cincinnati, 1980
MS, University of Cincinnati, 1982
MS, Johns Hopkins University, 1994

Schoen, Steven C.

Information Systems Management

BA, University of Virginia, 1975
MA, University of Hawaii at Manoa, 1981
MBA, University of Hawaii at Manoa, 1983

Scholten, Jenny*Library Skills*

BA, University of Maryland, College Park, 1992
MA, New College of California, 1996
MLS, San Jose State University, 2003

Schultz, Jason P.*Mathematics*

BS, State University of New York at Binghamton, 1990
MA, University of Maryland, College Park, 1996
PhD, University of Maryland, College Park, 1998

Schumaker, Richard*English*

BA, University of California, Davis, 1970
MA, Université de Paris–Sorbonne (France), 1974
PhD, Université de Paris–Sorbonne (France), 1976

Schwartz, Debra*Speech*

BA, Roosevelt University, 1984
MS, National-Louis University, 1996

Schwartz, Gretchen N.*Biology*

BS, University of Pittsburgh, 1972
MS, University of Pittsburgh, 1976
PhD, University of Pittsburgh, 1980

SchWeber, Claudine*Speech*

BA, Hunter College, City University of New York, 1968
MA, State University of New York at Buffalo, 1970
PhD, State University of New York at Buffalo, 1978

Searsmith, Kelly*English*

BA, Case Western Reserve University, 1987
MA, Case Western Reserve University, 1990
PhD, University of Illinois at Urbana-Champaign, 1999

Secrest, Wayland M.*Psychology*

BA, University of California, Santa Cruz, 1970
MA, University of Oregon, 1973
PhD, University of Oregon, 1980

Selvage, Robin*Information Systems Management*

BS, University of Idaho, 1969
MS, Butler University, 1972
MS, Purdue University, 1974
MBA, Florida Institute of Technology, 1990

Sera, Wendy*Biology*

BA, Earlham College, 1987
PhD, University of Kansas, 1992

Seymour, Thomas H.*Environmental Management*

BS, University of Maryland, College Park, 1965
BS, University of Maryland, College Park, 1972
MS, George Washington University, 1978

Shade, Temmie*Psychology*

BSEd, University of Houston, 1971
MEd, University of Houston, 1974
PhD, Texas Woman's University, 1989

Shapiro, Lawrence E.*Psychology*

BA, University of Maryland, College Park, 1969
MS, University of Maryland, College Park, 1976
PhD, University of Florida, 1987

Sharoff, Steven A.*History*

BA, State University of New York College at Plattsburgh, 1967
MA, State University of New York at Binghamton, 1975
MAT, State University of New York at Binghamton, 1976

Sharpe, John P.*Psychology*

BS, West Virginia Wesleyan College, 1993
MA, Southern Illinois University at Carbondale, 1996
PhD, Southern Illinois University at Carbondale, 1999

Shea, Gordon F.*Communication Studies*

BA, Syracuse University, 1950
MA, George Washington University, 1961

Shearin-Cotton, Kimberly M.*Legal Studies*

BA, St. Mary's College of Maryland, 1986
MS, Boston University, 1987
JD, George Washington University, 1997

Shender, Barry S.*Information Systems Management*

BA, Temple University, 1977
MS, Drexel University, 1985
PhD, Drexel University, 1988

Sheppard, Dana G.*Legal Studies*

BS, Bowie State University, 1988
JD, University of Texas at Austin, 1991

Shore, Nina A.*Legal Studies*

BA, Alfred University, 1976
JD, Antioch School of Law, 1984

Short, Sara D.*Spanish*

BA, University of Maryland, Baltimore County, 1972
MA, University of Maryland, College Park, 1974
MS, University of Maryland, College Park, 1981

Shoukat, Mary V.*Behavioral and Social Sciences*

BS, Park College, 1989
MA, Southern Illinois University at Edwardsville, 1992

Siarnicki, Ronald J.*Fire Science*

BS, University of Maryland University College, 1994
MS, University of Maryland University College, 1999

Siegel, Michael E.*Criminology/Criminal Justice*

BA, American University, 1972
MA, Tufts University, 1975
PhD, Tufts University, 1976

Sigafoos, Ann D.*Psychology*

BA, University of North Carolina, 1979
PhD, George Washington University, 1983

Sikora, Todd D.*Natural Science*

BS, Pennsylvania State University, 1990
MS, Pennsylvania State University, 1992
PhD, Pennsylvania State University, 1996

Sikorski, Grace*Communication Studies*

BA, Queens College, 1991
MA, Pennsylvania State University, 1993
PhD, Pennsylvania State University, 2000

Silenas, Rima V.*Legal Studies*

BA, American University, 1982
JD, George Washington University, 1988

Silk, Julian*Economics*

BA, University of Maryland, College Park, 1980
PhD, Columbia University, 1988

Simmons, Denise Perry*Biology*

BA, University of Texas at Austin, 1976
PhD, University of Texas at Austin, 1998

Simpson, Thomas H.*Criminology/Criminal Justice*

BA, University of Maryland, Baltimore County, 1974
MA, University of Baltimore, 1984

Singh, Raj K.*Business and Management*

BS, Allahabad University (India), 1973
MS, University of Southern California, 1990
PhD, University of Southern California, 1992

Siraj, Shoeb*Computer Information Technology*

BS, Catholic University of America, 1993
MS, George Washington University, 1997

Skovbjerg, Kelly*Library Skills*

BA, Southwestern University, 1992
MSLS, University of North Texas, 1996

Slaff, Sara*Legal Studies*

BA, Brown University, 1983
JD, American University, 1988

Sloan, Nicholas A.*Computer Studies*

BS, University of Maryland, College Park, 1956
MS, George Washington University, 1967
DSc, George Washington University, 1971

Small, Darien C.*Computer Studies*

BA, George Mason University, 1993
MA, George Mason University, 1998
MS, Johns Hopkins University, 1998

Smerin, Lawrance B.*Business and Management*

BA, Knox College, 1972
MA, Columbia University, 1976
MBA, Rutgers University, 1979

Smith, Barry D.*Psychology*

BA, Pennsylvania State University, 1962
MA, Bucknell University, 1964
PhD, University of Massachusetts Amherst, 1967

Smith, Joyce*Criminology/Criminal Justice*

BA, Adelphi University, 1993
JD, Howard University, 1996

Smith, Judith M.*Communication Studies*

BA, Mississippi State University, 1985
MS, Trinity College (Washington, D.C.), 1994
PhD, American University, 2000

Smith, Maggie*Information Systems Management*

BA, Northeastern University, 1976
MA, University of Miami, 1977

Smith, Phillip*Environmental Management*

BS, Brigham Young University, 1984
MPH, University of California, Berkeley, 1987
PhD, Utah State University, 1998

Smith, W. Wayne*History*

BS, Salisbury State University, 1958
MA, University of Maryland, College Park, 1961
PhD, University of Maryland, College Park, 1967

Smucny, Darlene A.*Natural Science*

BA, Lake Erie College, 1981
MS, Cleveland State University, 1986
PhD, University of California, Los Angeles, 1999

Snigurowicz, Diana C.*History*

MA, University of British Columbia (Canada), 1988
MA, University of Maryland, College Park, 1993
PhD, University of Chicago, 2000

Snyder, Donald C.*Economics*

BA, Alma College, 1966
MA, Miami University (Ohio), 1968
PhD, University of Maryland, College Park, 1981

Sondervan, William W.*Criminology/Criminal Justice*

BS, Trenton State College, 1974
EdM, Boston University, 1976
MPA, Jacksonville State University, 1980
EdD, Virginia Polytechnic Institute and State University, 1995

Spaulding, Jeff*Art*

BA, Central Michigan University, 1970
MFA, Pennsylvania State University, 1974

Spear, Mary Helen C.*Behavioral and Social Sciences*

BS, Saint Louis University, 1967
MA, University of Maryland, College Park, 1969
PhD, University of Maryland, College Park, 1971

Spear, Robert*Information Systems Management*

BA, University of Notre Dame, 1967
MS, Georgetown University, 1970
PhD, George Mason University, 1993

Spencer, John W.*Gerontology*

BA, Drake University, 1965
MA, University of Nebraska, 1970
PhD, University of Oklahoma, 1974

Spinner, Henrietta*Information Systems Management*

BS, Virginia State University, 1984
MBA, University of the District of Columbia, 1989
DBA, California Coast University, 1999

Spraggins, Renee*Sociology*

BA, Hampton University, 1992
MA, Syracuse University, 1995
PhD, Syracuse University, 1998

Stairs, Allen*Philosophy*

BA, University of New Brunswick (Canada), 1973
MA, University of Western Ontario (Canada), 1975
PhD, University of Western Ontario (Canada), 1978

Standish, Rachel A.*History*

BA, University of Oregon, 1989
MA, University of Oregon, 1992
PhD, University of Southern California, 2000

Stanger, Cary D.*Humanities*

BA, State University of New York College at Fredonia, 1973
MA, George Washington University, 1978
MS, Columbia University, 1979

Stankiewicz-Gabel, Rebecca L.*Biology*

BS, University of Connecticut, 1990
MS, University of Connecticut, 1998
PhD, University of Connecticut, 2000

Starcher, Mark L.*Information Systems Management*

BS, West Virginia University, 1977
JD, West Virginia University, 1979
LLM, Georgetown University, 1982
MS, Johns Hopkins University, 1996

Statler, Lance S.*Marketing*

BA, Gettysburg College, 1983
MBA, University of Maryland, College Park, 1987

Steffes, Jeanne*Business and Management*

BA, Marquette University, 1984
MA, Ohio State University, 1986
PhD, University of Maryland, College Park, 2000

Stein, Shelly K.*Speech*

BA, University of Georgia, 1985
MA, San Jose State University, 1988
PhD, University of Maryland, College Park, 1999

Sterin, J. Charles*Communication Studies*

BS, University of Oregon, 1971
MS, University of Oregon, 1973
PhD, International College, University of California, Los Angeles, 1978

Stoff, David M.*Psychology*

BA, State University of New York at Buffalo, 1966
PhD, Yeshiva University, 1973

Stover, Merrily*Anthropology*

BA, Kansas State University, 1970
MA, University of Hawaii at Manoa, 1974
MA, University of Hawaii at Manoa, 1983
PhD, University of Hawaii at Manoa, 1990

Strasser, Kimberly C.*Legal Studies*

BA, University of Baltimore, 1991
JD, University of Maryland, Baltimore, 1994

Straub, John M.*Computer Studies*

BA, University of Wisconsin–Madison, 1968
MS, University of Wisconsin–La Crosse, 1971
PhD, Indiana University Bloomington, 1978

Strauss, Betty M.*Accounting*

BS, University of Baltimore, 1970
MBA, Morgan State University, 1972
PhD, University of Maryland, College Park, 1986

Subramanian, Srividya*Biology*

BPharm, Tamil Nadu Dr. M. G. R. Medical
University (India), 1995
PhD, University of Pittsburgh, 2002

Suciu, Alin D.*Computer and Information Science*

BS, Universitatea Tehnica Cluj Napoca (Romania),
1995
MS, Universitatea Tehnica Cluj Napoca (Romania),
1997

Sugarman, Helene C.*Business and Management*

BS, Kent State University, 1965
MA, Case Western Reserve University, 1969

Sullivan, Brian D.*Information Systems Management*

BS, Central Connecticut State University, 1965
MS, Central Connecticut State University, 1972
MS, University of Connecticut, 1975

Sullivan, William*Mathematics*

BA, City College of New York, 1961
MA, University of California, Long Beach, 1965
PhD, University of Maryland, College Park, 1999

Sumter, Robert L.*Information Systems Management*

BA, Limestone College, 1992
MA, Webster University, 1994
PhD, Walden University, 2003

Svoboda, Cyril P.*Psychology*

BPh, Pontificia Università Gregoriana (Italy), 1959
LPh, Pontificia Università Gregoriana (Italy), 1960
PhD, University of Wisconsin–Madison, 1973

Swartz, James M.*Accounting*

BS, Rochester Institute of Technology, 1968
MBA, State University of New York at Buffalo, 1970

Swartz, Richard W.*Information Systems Management*

BS, University of Maryland, College Park, 1976
MS, Johns Hopkins University, 1981

Sweo, Jennie*Art*

BA, California State University, Northridge, 1986
MFA, University of North Texas, 1994

Sweo, Robert*Business and Management*

BA, California State University, Northridge, 1985
MA, California State University, Northridge, 1988
PhD, University of North Texas, 1995

Sypeck, Jeffrey C.*English*

BA, University of Delaware, 1993
MA, University of New Hampshire, 1994
MA, Catholic University of America, 1998

Szporer, Michael M.*Communication Studies*

BA, Hunter College, 1969
MA, Indiana University Bloomington, 1980
PhD, Indiana University Bloomington, 1980

Tadmor, Gil*Information Systems Management*

BS, Israel Institute of Technology, 1985
MS, Johns Hopkins University, 1994

Takacs, George J.*Business and Management*

BA, Mount Carmel College (Canada), 1966
MA, University of Notre Dame, 1971

Tamashasky, Adam*English*

BA, University of Dayton, 1999
MFA, American University, 2002

Tapus, Nicolae*Computer and Information Science*

BS, Universitatea Politehnica din Bucuresti (Romania),
1972
MS, Universitatea Politehnica din Bucuresti
(Romania), 1972
PhD, Universitatea Politehnica din Bucuresti
(Romania), 1982

Tarbox, Judy*Communication Studies*

BS, State University of New York College at
Plattsburgh, 1979
MS, Rensselaer Polytechnic Institute, 2001

Tarpley, Alice*Sociology*

BS, Ohio State University, 1975
MS, Florida State University, 1976
PhD, Florida State University, 1986

Tarquinio, Michael*Computer and Information Science*

BS, University of Maryland, College Park, 1986
MS, Johns Hopkins University, 1991

Tawil, Mohamad A.*Computer Studies*

BA, Pittsburg State University (Kansas), 1989
MS, Rochester Institute of Technology, 1992

Taylor, David L.*Computer Studies*

BS, University of Maryland University College, 1993
MA, Webster University, 1996

Taylor, Elliott S.*Criminology/Criminal Justice*

BA, Howard University, 1997
JD, Howard University, 2001

Taylor, Kasia J.*Business and Management*

BA, Pennsylvania State University, 1981
MA, University of Maryland, College Park, 1988

Tepfer, Diane*Art History*

BA, University of Washington, 1968
MA, University of Washington, 1972
PhD, University of Michigan–Ann Arbor, 1989

Terry, Raymond*Gerontology*

BS, Morgan State University, 1972
PhD, University of Maryland, College Park, 1983

Tervala, Debra J.*Legal Studies*

BA, University of Maryland, College Park, 1975
MEd, University of Maryland, College Park, 1982
JD, University of Maryland, Baltimore, 1986

Terwilliger, Douglas L.*Business and Management*

BS, University of Maryland, College Park, 1989
MS, University of Maryland University College, 1997

Thacker, Joann K.*Psychology*

BA, University of Maryland, College Park, 1965
MA, American University, 1969
PhD, Catholic University of America, 1981

Thies, Mary Carolyn*Business and Management*

BS, James Madison University, 1986
MA, Marymount University, 1991

Thomas, Jennifer A.*Library Skills*

BA, St. Mary's College of Maryland, 1995
MLS, University of Maryland, College Park, 2000

Thomas, Katya*Communication Studies*

BA, University of Michigan—Ann Arbor, 1980
MA, University of California, Berkeley, 1983
MBA, Saint Xavier University, 1993

Thompson, Harvey W.*Humanities*

BS, Wayne State University, 1966
MFA, Columbia University, 1972

Thompson, Thomas G.*Business and Management*

BS, University of Illinois at Urbana, 1963
MS, University of Illinois at Urbana, 1965

Thoren, John A.*Information Systems Management*

MBA, University of Southern Maine, 1973
MS, Rensselaer Polytechnic Institute, 1989

Thorn, Virgelean J.*Information Systems Management*

BS, Bowie State University, 1989
MS, Bowie State University, 1990
PhD, Nova Southeastern University, 2000

Thuotte, Lawrence*Information Systems Management*

BS, Embry-Riddle Aeronautical University, 1994
MS, Troy State University, 1999
MS, Central Michigan University, 2001

Timko, Thomas J.*Computer and Information Science*

BA, University of Dayton, 1965
MA, Georgetown University, 1969
AA, Montgomery College, 1981

Toplin, Marc B.*Business and Management*

BA, Temple University, 1975
MA, University of Maryland, College Park, 1977
MBA, American University, 1986

Tray, Jim Q.*Computer and Information Science*

BS, Zhejiang University (China), 1982
MS, University of Maryland, College Park, 1985
PhD, University of Maryland, College Park, 1989

Tschechtelin, James D.*Business and Management*

BA, University of Kansas, 1965
MA, Ohio University, 1967
EdD, George Washington University, 1977

Tuamokumo, Francois O.*Mathematics*

BS, University of Kansas, 1978
MS, University of Southwestern Louisiana, 1980
MS, University of West Florida, 1986
PhD, University of Alabama, 1993

Tucker, Irving*Psychology*

BA, University of Massachusetts Amherst, 1959
MA, University of Iowa, 1961
PhD, University of Iowa, 1962

Tudose, Florin Catalin*Information Systems Management*

BS, Universitatea Politehnica din Bucuresti (Romania), 1997
MS, Universitatea Politehnica din Bucuresti (Romania), 1998
BS, Academia de Studii Economice din Moldova (Romania), 1999

Tulay, Preston M.*Information Systems Management*

BBA, Howard University, 1991
MS, University of Maryland University College, 1999

Tunon, Johanna R.*Library Skills*

BA, Valparaiso University, 1971
MLS, Texas Woman's University, 1989
EdD, Nova Southeastern University, 1999

Turner, Earnest L.*Business and Management*

BS, Mercy College, 1988
MS, Fordham University, 1990
EdD, Fordham University, 1991

Turner, Marvin W.*Business and Management*

BBA, Howard University, 1981
MBA, George Washington University, 1988
JD, Georgetown University, 1998

Tuzmen, Sukru*Biology*

BS, Boğaziçi University (Turkey), 1990
MS, Boğaziçi University (Turkey), 1992
PhD, Boğaziçi University (Turkey), 1995

Ulmer, Steven*Accounting*

BS, Miami University (Ohio), 1976
MA, University of Illinois at Urbana-Champaign, 1978

Underwood, Danny R.*Information Systems Management*

BS, Washington University (Missouri), 1987
MA, University of Chicago, 1974
PhD, Nova Southeastern University, 2001

Urubshurow, Victoria K.*Humanities*

BA, University of Chicago, 1972
MA, University of Chicago, 1974
PhD, University of Chicago, 1984

Van Brunt, John E.*Experiential Learning*

BS, Fairleigh Dickinson University, 1965
PhD, University of Maryland, College Park, 1972

Vanison, Shirley B.*Information Systems Management*

BS, University of Maryland, College Park, 1995
MS, University of Maryland, College Park, 1997

Van Knowe, Glenn E.*Natural Science*

MS, Saint Louis University, 1990
PhD, Saint Louis University, 1996

Vecchiollo, Dominic J.*Communication Studies*

BS, University of Evansville, 1996
MA, University of Baltimore, 1999

Vener, Patricia C.*Astronomy*

BS, State University of New York Empire State College, 1988
MS, Rensselaer Polytechnic Institute, 1991

Vergamini, Didier*Computer and Information Science*

BS, Ecole Polytechnique (France)
PhD, Ecole des Mines de Paris (France), 1988

Vlasova, Irina P.*Business and Management*

BS, Moscow State University (Russia), 1980
BS, Moscow State University (Russia), 1983
MS, Moscow State University (Russia), 1983
PhD, Moscow State University (Russia), 1988

Vocke, Robert D.*Astronomy*

BS, University of Washington, Seattle, 1973
PhD, State University of New York at Stony Brook, 1983

Volkov, Marina L.*Psychology*

BS, University of Pennsylvania, 1983
MA, New York University, 1986
PhD, New York University, 1991

Vonk, Tom*Business and Management*

BA, Kalamazoo College, 1977
MBA, University of Michigan–Ann Arbor, 1981
PhD, Northwestern University, 1994

Voss, Lisa J.*English*

BS, University of Maryland, College Park, 1988
MA, Johns Hopkins University, 1998

Wadbrook, William P.*Economics*

BS, Georgetown University, 1959
MA, Fletcher School of Law and Diplomacy, Tufts University, 1959
PhD, Fletcher School of Law and Diplomacy, Tufts University, 1970

Waldman, Jean M.*Education: Counseling and Personnel Services*

BA, University of Maryland, College Park, 1981
MEd, University of Maryland, College Park, 1988

Waldorf, Gerard*Sociology*

BA, Fordham University, 1956
MA, Fordham University, 1960
PhD, City University of New York, 1973
MA, Fordham University, 1986

Walker, Danna*Journalism*

BA, Northeast Louisiana University, 1975
MA, Georgetown University, 1989
PhD, University of Maryland, College Park, 2003

Walker, Nathaniel L.*Computer Studies*

BS, University of Maryland, College Park, 1995
MA, Webster University, 1999

Walker, Thomas L.*Human Resource Management*

BS, Hampton University, 1979
MBA, Florida Institute of Technology, 1981

Walker, William F.*Behavioral and Social Sciences*

MA, Southern Christian University, 1986
MS, Texas A&M University, 1990
EdD, Texas A&M University, 1996

Walsh, Mary P.*Sociology*

BA, Boston University, 1965
MA, Catholic University of America, 1969
MA, Catholic University of America, 1977
PhD, Catholic University of America, 1984

Walthall, Margaret A.*Human Resource Management*

BA, University of Maryland, Baltimore, 1992
MS, University of Maryland University College, 1998

Walton, Spring J.*Business and Management*

BS, University of Missouri, 1967
MA, East Tennessee State University, 1971
JD, University of Maryland, Baltimore, 1990

Wang, Xindong*Computer and Information Science*

BS, Beijing University (China), 1988
PhD, Iowa State University, 1994

Ward, Jackie*Journalism*

BA, Temple University, 1984
MA, University of Baltimore, 2001

Ward, Maurice S.*Criminology/Criminal Justice*

BA, University of Maryland, College Park, 1972
MA, Coppin State University, 1976
MA, George Washington University, 1981

Warner, Kathleen*Natural Science*

BS, Washington College (Maryland), 1977
PhD, University of Kentucky, 1984

Warren, Wayne H.*Astronomy*

BA, Fairleigh Dickinson University, 1968
MA, Indiana University Bloomington, 1970
PhD, Indiana University Bloomington, 1975

Washington, Michele A.*Information Systems Management*

BA, Howard University, 1979
MS, Central Michigan University, 1989
MS, Syracuse University, 1997

Watanabe, Ken*Astronomy*

BS, Tohoku University (Japan), 1987
MS, University of Iowa, 1991
PhD, Clemson University, 1996

Watts, Geneva*Business and Management*

BA, University of Maryland, College Park, 1975
MA, University of Maryland, College Park, 1979
EdD, George Washington University, 1984

Weatherford, Claudine*Business and Management*

BA, University of Wisconsin–Madison, 1967
MA, Washington State University, 1971
MA, State University of New York College at Oneonta, 1978
PhD, George Washington University, 1985

Weaver, John J.*Communication Studies*

BA, St. Francis College (New York), 1964
MA, University of Denver, 1974

Weaver, Rhonda L.*Legal Studies*

BA, Syracuse University, 1991
JD, Georgetown University, 1994

Wei, Kun-Yao*Computer Information Technology*

BA, National Central University (Taiwan), 1975
MA, National Taiwan University, 1979

Weinberg, Ira*Human Resource Management*

BS, Wharton School of Business, University of Pennsylvania, 1957
MS, New York University, 1962
MS, Columbia University, 1973
PhD, Columbia University, 1975

Weiner, Gioconda*Information Systems Management*

BA, University of Maryland, College Park, 1982
MA, University of Maryland, College Park, 1984
PhD, Nova Southeastern University, 2002

Weingarten, Barry E.*Spanish*

BA, George Washington University, 1972
MA, University of Pennsylvania, 1974
PhD, University of Pennsylvania, 1978

Weir, Gary E.*History*

BA, Manhattan College, 1973
MA, University of Tennessee, 1975
PhD, University of Tennessee, 1982

West, Anthony D.*Information Systems Management*

BA, Bowie State University, 1974
MS, Central Michigan University, 1991
MS, University of Maryland University College, 1998

Whalen, Michael P.*Legal Studies*

BA, University of Maryland, College Park, 1969
JD, University of Baltimore, 1973

Wharton, Arthur L.*Business and Management*

BA, Howard University, 1980
MA, George Washington University, 1989

Wheeler, Frederick O.*Information Systems Management*

BS, University of Baltimore, 1969
MBA, Loyola College in Maryland, 1971

Whelan, Joseph M.*Accounting*

BS, University of Maryland, College Park, 1977
MBA, George Washington University, 1980
MS, George Washington University, 1988

Whitesel, Cynthia H.*Communication Studies*

BA, University of Maryland, College Park, 1970
MA, University of Maryland, College Park, 1973

Whitford, Dennis J.*Natural Science*

MS, Naval Postgraduate School, 1979
PhD, Naval Postgraduate School, 1988

Whitney, Raymond J.*Information Systems Management*

BS, Pennsylvania State University, 1964
MBA, Wharton School of Business, University of Pennsylvania, 1971
MS, Iona College, 1979

Wilk, Cynthia A.*Fire Science*

BA, Bucknell University, 1974
JD, Rutgers University, 1982

Williams, Joy A.*Biology*

BA, Oberlin College, 1984
MS, University of Maryland, College Park, 1992
PhD, University of Maryland, College Park, 1998

Williams, Victoria R.*Information Systems Management*

BA, University of Maryland University College, 1994
MS, University of Maryland University College, 2000

Williams, Yul*Computer and Information Science*

BS, Southern University and A&M College, 1984
MS, George Washington University, 1991
DSc, George Washington University, 2000

Williams-Forsen, Psyche A.*History*

BA, University of Virginia, 1987
MA, University of Maryland, College Park, 1994
PhD, University of Maryland, College Park, 2003

Williamson, Nancy*Legal Studies*

BA, American University, 1992
JD, University of Baltimore, 1995

Willis, Barbara Y.*Humanities*

BA, University of the District of Columbia, 1980
MA, Howard University, 1985
PhD, American University, 1993

Wilson, Alvin W.*Information Systems Management*

BS, University of Maryland University College, 1985
MS, Johns Hopkins University, 1992
MS, Defense Intelligence College, 1993

Wilson, Connie D.*Speech*

BS, Saint Paul's College (Virginia), 1975
MEd, University of Maryland, College Park, 1988

Wilson, Karen*Behavioral and Social Sciences*

BA, Texas A&M University, 1978
MS, Texas A&M University, 1985
PhD, Texas A&M University, 1992

Windapo, Adeyinka O.*Computer Information Technology*

BS, Morgan State University, 1994
MS, George Washington University, 1997

Winslow, Anna C.*Accounting*

BS, Skidmore College, 1976
MS, Georgetown University, 1982

Winters, Benjamin H.*Mathematics*

BS, Saint Peter's College, 1955
MS, University of Delaware, 1957
PhD, Catholic University of America, 1963

Winterstein, David*Communication Studies*

BA, University of California, San Diego, 1993
MA, University of Washington, 1997
PhD, University of Washington, 2001

Wisn, Gail*Business and Management*

BA, Hunter College, 1966
MA, University of Illinois at Urbana-Champaign, 1969
PhD, University of Illinois at Urbana-Champaign, 1972

Wise, Bryan*Information Systems Management*

BS, Brigham Young University, 1996
MS, Brigham Young University, 1998

Witcher, Pamela M.*Behavioral and Social Sciences*

BA, University of Southern California, 1979
MA, University of Maryland, College Park, 1982
PhD, George Washington University, 1992

Witz, Jean C.*Biology*

BS, George Washington University, 1981
MS, George Washington University, 1985
JD, George Washington University, 1994

Wolf, Patricia D.*Information Systems Management*

BA, James Madison University, 1986
MS, Johns Hopkins University, 1992
DM, University of Maryland University College, 2004

Wolvin, Andrew D.*Communication Studies*

BA, University of Nebraska, 1962
MA, University of Nebraska, 1963
PhD, Purdue University, 1968

Wong, Yui K.*Computer Science*

BS, University of California, Los Angeles, 1990
MS, Yale University, 1992
PhD, Yale University, 1995

Wong-Gleysteen, Marilyn*Art History*

BA, Princeton University, 1964
PhD, Mount Holyoke College, 1983

Wood, Donald H.*Fire Science*

BS, University of the District of Columbia, 1982
BA, University of the District of Columbia, 1986
MA, Bowie State University, 1994

Wood, E. Gaynell*Communication Studies*

BA, University of Illinois at Urbana, 1963
MA, San Francisco State University, 1967

Wood, James G.*Information Systems Management*

BS, U.S. Military Academy, 1957
MBA, Harvard College, 1963
PhD, Temple University, 1993

Wood, Kenneth A.*Environmental Management*

BA, Wabash College, 1966
MA, Northeast Missouri State College, 1970
MS, Ohio University, 1973

Wood, Marjorie A.*Mathematics*

BS, Drexel University, 1968
MS, University of Southern California, 1986

Wood, Robert L.*Economics*

BS, Sophia University (Tokyo), 1955
MA, George Washington University, 1958
BS, Georgetown University, 1960

Worsham, James B.*Journalism*

BS, Central Missouri State College, 1965
MA, University of Iowa, 1967

Worthington, Lucia A.*Business and Management*

BA, California State Polytechnic University, Pomona, 1975
BA, California State Polytechnic University, Pomona, 1976
MA, Claremont Graduate University, 1998

Wortman, Kristin A.*Computer and Information Science*

BS, University of Maryland University College, 1979
MS, University of Maryland University College, 2000

Wright, Brian K.*Computer Studies*

BS, U.S. Coast Guard Academy, 1983
MS, Naval Postgraduate School, 1992

Wu, Huei-Fen*Computer and Information Science*

BS, Tunghai University (Taiwan), 1987
MS, George Washington University, 1990
PhD, George Washington University, 1997

Wulu, John T.*Mathematics*

BS, University of Liberia, 1981
MA, Western Michigan University, 1984
MS, Michigan State University, 1989
PhD, University of Alabama, 1999

Wussow, John M.*Marketing*

BS, University of Wisconsin–Madison, 1957
MS, University of Wisconsin–Madison, 1960

Xenakis, William*Statistics and Probability*

BA, Boston University, 1961
MA, University of Southern California, 1970
EdD, University of Southern California, 1982

Xiang, Dan*Computer and Information Science*

BS, Tsinghua University (China), 1985
PhD, Tsinghua University (China), 1990
MS, Johns Hopkins University, 2001

Xiong, Xiaoxiong*Computer Studies*

BS, Beijing Institute of Technology (China), 1980
MS, Southern Massachusetts University, 1986
PhD, University of Maryland, College Park, 1991

Yang, Zhongwei*Computer and Information Science*

BS, Fudan University (China), 1991
MS, Fudan University (China), 1994
MS, Wayne State University, 1998

Yeatman, Carol*Legal Studies*

BA, Washburn University, 1985
JD, Northwestern School of Law of Lewis & Clark College, 1993

Young, Leon R.*Experiential Learning*

BA, Roanoke College, 1965
MA, University of Maryland, College Park, 1969

Yu, Lijia*Computer Information Technology*

BS, Shenyang College of Pharmacy (China), 1982
MS, Shenyang College of Pharmacy (China), 1987
PhD, Albert Einstein College of Medicine of Yeshiva University, 1993

Yuan, Bill P.*Business and Management*

BS, University of Maryland, College Park, 1984
MS, Université Catholique de Louvain (Belgium), 1987

Yurcik, William J.*Computer and Information Science*

BS, University of Maryland, College Park, 1984
MS, Johns Hopkins University, 1990
MA, George Washington University, 1992

Zhang, Peter*Computer and Information Science*

PhD, Florida State University, 1995
MS, Florida State University, 1997

Zimmer, Janet M.*Information Systems Management*

BA, Briar Cliff College (Iowa), 1970
MS, Johns Hopkins University, 1989

Zubritsky, John*Communication Studies*

BA, University of Maryland, College Park, 1964
MA, George Washington University, 1972
PhD, George Washington University, 1981

STATEMENTS ON POLICIES AND PROCEDURES

Appendix A

Policy on Student Classification for Admission, Tuition, and Charge Differential Purposes

(Approved by the Board of Regents August 28, 1990; Amended July 10, 1998; Amended November 27, 2000; Amended April 11, 2003)

I. Policy

It is the policy of the Board of Regents of the University System of Maryland (USM) to recognize the categories of in-state and out-of-state students for the purpose of admission, tuition, and charge differentials at those institutions where such differentiation has been established.

A. An in-state student is a student whom the university determines to be a permanent resident of the state of Maryland. For the purposes of this policy, "permanent resident" is defined as a person who satisfies all the following conditions and has done so for at least twelve (12) consecutive months immediately prior to and including the last date available to register for courses in the semester/term for which the person seeks in-state status:

1. Is not residing in the state of Maryland primarily to attend an educational institution;
2. Owns and continuously occupies or rents and continuously occupies living quarters in Maryland. There must exist a genuine deed or lease in the individual's name reflecting payments/rents and terms typical of those in the community at the time executed. Persons not having such a lease may submit an affidavit reflecting payments/rents and terms, as well as the name and address of the person to whom payments are made that may be considered as meeting this condition. As an alternative to ownership or rental of living quarters in Maryland, a student may share living quarters in Maryland that are owned or rented and occupied by a parent, legal guardian, or spouse;
3. Maintains within Maryland substantially all personal property;
4. Pays Maryland income tax on all earned taxable income, including all taxable income earned outside the state;

5. Registers all owned motor vehicles in Maryland in accordance with Maryland law;
 6. Possesses a valid Maryland driver's license, if licensed, in accordance with Maryland law;
 7. Is registered in Maryland, if registered to vote;
 8. Receives no public assistance from a state other than the state of Maryland or from a city, county or municipal agency other than one in Maryland; and
 9. Has a legal ability under federal and Maryland law to live permanently without interruption in Maryland.
- B. In addition, persons with the following status shall be accorded the benefits of in-state status for the period in which they hold such status:
1. A full-time or part-time (at least 50-percent-time) regular employee of the USM.
 2. The spouse or financially dependent child of a full-time or part-time (at least 50-percent-time) regular employee of the USM.
 3. A full-time active member of the Armed Forces of the United States whose home of residency is Maryland or one who resides or is stationed in Maryland, or the spouse or a financially dependent child of such a person.
 4. For UMUC, a full-time active member of the Armed Forces of the United States on active duty, or the spouse of a member of the Armed Forces of the United States on active duty.
 5. A graduate assistant appointed through the USM for the semester/term of the appointment. Except through prior arrangement, this benefit is available only for enrollment at the institution awarding the assistantship.
- C. Students not entitled to in-state status under the preceding paragraphs shall be assigned out-of-state status for admission, tuition, and charge-differential purposes.
- D. Assignment of in-state or out-of-state classification will be made by the university upon an assessment of the totality of facts known or presented to it. The person seeking in-state status shall have the burden of proving that he or she satisfies all requirements.
- E. Either of the following circumstances raise a presumption that the student is residing in the state of Maryland primarily for the purpose of attending an educational institution:

1. The student was attending high school or residing outside Maryland at the time of application for admission to a USM institution, or
2. The student is both (a) not financially independent and (b) is financially dependent upon a person who is not a resident of Maryland.

The burden shall be on the student to rebut the presumption.

II. Procedures

- A. An initial determination of in-state status will be made by the university at the time a student's application for admission is under consideration. The determination made at that time, and any determination made thereafter, shall prevail for each semester/term until the determination is successfully challenged in a timely manner.
- B. A change in status must be requested by submitting a USM "Petition for Change in Classification for Admission, Tuition, and Charge Differential." A student applying for a change to in-state status must furnish all required documentation with the petition by the last published date to register for the forthcoming semester/term for which the change in classification is sought.
- C. The student shall notify the institution in writing within fifteen (15) days of any change in circumstances that may alter in-state status.
- D. In the event incomplete, false, or misleading information is presented, the institution may, at its discretion, revoke in-state status and take disciplinary action provided for by the institution's policy. Such action may include suspension or expulsion. If in-state status is gained due to false or misleading information, the university reserves the right to retroactively assess all out-of-state charges for each semester/term affected.
- E. Each institution of the USM shall develop and publish additional procedures to implement this policy. Procedures shall provide that on request the president or designee has the authority to waive any residency criterion set forth in Section I if it is determined that the student is indeed a permanent resident and the application of the criteria creates an unjust result. These procedures shall be filed with the Office of the Chancellor.

III. Definitions

- A. Financially Dependent: For the purposes of this policy, a financially dependent student is one who is claimed as a dependent for tax purposes or who receives more than one-half of his or her support from another person during the twelve- (12-) month period immediately prior to the last published date for registration for the semester or session. If a student receives more than one-half of his or her support in the aggregate from more than one person, the student shall be considered financially dependent on the person providing the greater amount of support.
- B. Financially Independent: A financially independent student is one who (1) declares himself or herself to be financially independent as defined herein; (2) does not appear as a dependent on the federal or state income tax return of any other person; (3) receives less than one-half of his or her support from any other person or persons; and (4) demonstrates that he or she provides through self-generated support one-half or more of his or her total expenses.
- C. Parent: A parent may be a natural parent, or, if established by a court order recognized under the law of the state of Maryland, an adoptive parent.
- D. Guardian: A guardian is a person so appointed by a court order recognized under the law of the state of Maryland.
- E. Spouse: A spouse is a partner in a legally contracted marriage.
- F. Child: A child is a natural child or a child legally adopted pursuant to a court order recognized under the law of Maryland.
- G. Self-Generated: Self-generated describes income that is derived solely from compensation for an individual's own efforts as evidenced, for example, by federal or state W-2 forms or IRS Form 1099, where interest income is based upon finances created from one's own efforts. For the purposes of this policy, grants, stipends, awards, benefits, loans, and gifts (including federal and state aid, grants, and loans) may not be used as self-generated income.
- H. Regular Employee: A regular employee is a person employed by the USM who is assigned to a state budget line or who is otherwise eligible to enroll in a state retirement system. Examples of categories *not* considered regular employees are graduate students, contingent employees, and independent contractors.

IV. Implementation

This policy as amended by the Board of Regents on November 27, 2000, shall be applied to all student residency classification decisions made on or after this date.

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,
Chapter 01)

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.

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 compositionor
 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.

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.

XI. Periodic Review

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, 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.

Degree-seeking students who have completed 6 semester hours at UMUC with a grade-point average of at least 2.0 may request an official evaluation of transfer credit from an advisor. (More information on credit evaluation is given on p. 238.)

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 60 of the 90 semester hours may be accepted from two-year institutions (details on p. 19).

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 p. 17).
- 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. 20).
- Up to 15 semester hours of cooperative education credit; however, no more than 6 of the 15 semester hours may be applied to an academic major and minor combined (details on p. 18). Students seeking a second bachelor's degree may receive up to 9 semester hours of cooperative education credit; however, no more than 6 of the 9 semester hours may be applied to the academic major and minor combined.
- 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. 19).

- 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. 20).
- Up to 21 semester hours of coherently related vocational and technical credit from regionally accredited institutions, applicable as elective credit only toward the BS or BTPS, but not toward the BA (details on p. 20).

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. As part of that minimum, students must earn at least one-half of the credits required for the major through graded coursework, including at least one course taken through UMUC. 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 www.umuc.edu/students/ugp_ss/artsys.html 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).
- 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 course work.
- 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 the GPA calculation 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 course work 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.

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 (except the Mannheim Campus): the registrar located in Heidelberg, Germany.
4. For Mannheim: the assistant to the dean located in Mannheim, 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 50 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 and vice provost, Student Affairs. 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 and vice provost, Student Affairs, 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 and vice provost, Student Affairs, will notify the student in writing of his decision. The written decision will include a summary of the evidence and the reasons for the decision.

- a. If the university registrar and vice provost, Student Affairs, 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 and vice provost, Student Affairs, will inform the student of the amendment in writing.
- b. If, as a result of the hearing, the university registrar and vice provost, Student Affairs, 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.
12. 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 Graduate Council, and the Undergraduate Curriculum Committee. 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.

COMMUNITY COLLEGE ALLIANCES

UMUC has formed alliances with several area community colleges to allow adult, part-time students to move seamlessly into a bachelor's degree program within their communities, through integrated curricula. Students may be concurrently admitted to their local community college and UMUC through a single application, and may take advantage of any of UMUC's locations for their upper-level coursework. Students may also complete upper-level coursework through UMUC online. Advisors both at UMUC and the community college provide academic advising, financial aid coordination, and library services information.

More academic alliances are currently in the planning stages.

Maryland Alliances

AACC–UMUC Alliance

UMUC conveniently offers classes throughout Anne Arundel County at the AACC Arundel Mills Center, the UMUC Annapolis Center, and Fort Meade. Students participating in the Anne Arundel Community College–University of Maryland University College Alliance may complete bachelor's degrees in accounting, business administration, computer and information science, computer science, computer studies, information systems management, and management studies.

CCBC–UMUC Alliance

The Community College of Baltimore County–University of Maryland University College Alliance offers students in the Baltimore region a seamless transition from the associate's to the bachelor's degree. Students enrolled at CCBC's Catonsville, Dundalk, or Essex campuses can take advantage of linked degree programs in accounting, biotechnology, business administration, communication studies, computer and information science, computer studies, criminal justice, information systems management, legal studies, and management studies, as well as secondary education pathways in English, history, and social science. Students can take classes online, any time, anywhere.

CCC–UMUC Alliance

The Carroll Community College–University of Maryland University College Alliance offers students in Carroll County the ability to use their associate's degree programs as the foundation to complete their bachelor's degrees. CCC programs in computer information systems, computer graphics, or computer-aided design are all linked with UMUC's bachelor's degree in computer studies. Additionally, articulated programs leading to majors in psychology and communication studies are available. Carroll County students will find it convenient to complete their programs online.

CSM–UMUC Alliance

In Southern Maryland, the College of Southern Maryland and University of Maryland University College have formed the CSM–UMUC Alliance. The Waldorf Center for Higher Education offers students a state-of-the-art education facility. Instructional technology (including computer labs) and distance learning capabilities support the academic programs of both institutions. Coordinated student and academic services are available at the Center. Students also may be admitted to the alliance at any of CSM's and UMUC's other locations. The articulated programs include accounting, business administration, communication studies, computer and information science, computer science, computer studies, criminal justice, environmental management, information systems management, legal studies, and management studies, as well as secondary education pathways in English, history, and social science.

FCC–UMUC Alliance

The Frederick Community College–University of Maryland University College Alliance allows students in Frederick County to complete both associate's and bachelor's degrees in the county. FCC associate's degrees in several disciplines are linked to the related UMUC bachelor's degrees in computer and information science, computer studies, criminal justice, fire science, history, information systems management, legal studies, psychology, and social science.

HCC–UMUC Alliance

The Hagerstown Community College–University of Maryland University College allows Washington County students to complete both associate's and bachelor's degrees in the county. HCC associate's degrees in several disciplines are linked to the related UMUC bachelor's degrees in business administration, computer and information science, computer information technology, computer studies, information systems management, legal studies, and social science. With the opening of the USM Hagerstown Education Center in January 2005, HCC students will have the ability to complete accounting and information systems management majors conveniently at the downtown center.

MC–UMUC Alliance

The Montgomery College–University of Maryland University College Alliance offers students articulated bachelor's degree programs in accounting, biotechnology, business administration, communication studies, computer and information science, computer information technology, computer studies, fire science, information systems management, and management studies. Students at the Montgomery College campuses in Rockville and Germantown may find it most convenient to take UMUC classes at the University System of Maryland Shady Grove Center, while students at the Montgomery College Takoma Park campus may take advantage of UMUC offerings at nearby College Park.

PGCC–UMUC Alliance

Students in Prince George's County who participate in the Prince George's Community College–University of Maryland University College Alliance may complete their bachelor's degree in Prince George's County at the UMUC sites of College Park, Andrews Air Force Base, and Prince George's Community College. The curricula include articulated bachelor's degree programs in accounting, business administration, communication studies, computer and information science, computer studies, criminal justice, information systems management, legal studies, management studies, and psychology, as well as secondary education pathways in English, history, and social science. Since the alliance is designed to serve part-time students, most classes are offered in the evening or on weekends.

Out-of-State Collaborations

UMUC also reaches out to students from community colleges outside Maryland who want to complete their bachelor's degree online. It has developed policies on transfer credit and materials that help community colleges and their students plan for transfer to UMUC to complete the bachelor's degree. Collaborations with community colleges nationwide include UMUC assistance in comparison of general education requirements and outreach to transferring students.

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APPLICATION FOR ADMISSION TO THE SCHOOL OF UNDERGRADUATE STUDIES

Undergraduate Admissions
University of Maryland University College
3501 University Boulevard East
Adelphi, MD 20783-8076 USA

A \$30 nonrefundable fee must accompany this application. You may mail this application and a check or money order for the fee to the above address, or you may fax it to 301-985-7978 and pay the application fee by credit card (see p. 4 of this application). Please print your name and Social Security number on each page of this application.

Check the semester for which you are applying.

- ☐ Fall 2004
☐ Midfall 2004
☐ Spring 2005
☐ Midspring 2005
☐ Summer 2005

1. Social Security number _____ - _____ - _____
2. Name (last, first, middle) _____
Any other name under which your educational records may be held _____
3. Current address _____ Apt. no. _____
City _____ County _____ State _____ Zip+4/Postal code _____ Country _____
☐ Own ☐ Rent How long have you lived at this address? Yrs _____ Mos _____
If you have lived less than one year at this address, please provide the following information:
Previous address _____ Apt. no. _____
City _____ County _____ State _____ Zip+4/Postal code _____ Country _____
☐ Owned ☐ Rented How long did you live at this address? Yrs _____ Mos _____
4. Daytime phone number (_____) _____ Evening phone number (_____) _____
Fax number (_____) _____ E-mail address _____
5. Employer _____ Employer's zip+4/Postal code _____
6. Gender ☐ Male ☐ Female 7. Date of birth (Mo/Day/Yr) _____ / _____ / _____
8. Racial/ethnic category (Optional) *Submission of this information is voluntary. This information will not be used to determine your admissibility to UMUC; it is being compiled for statistical purposes only.*
☐ African American ☐ Asian/Pacific Islander ☐ Hispanic ☐ Native American ☐ White ☐ Other _____
9. Are you currently or have you ever been a member of the U.S. Armed Forces? ☐ Yes ☐ No ***If yes, complete service information below. If currently on active duty, please attach a copy of most recent assignment orders.***
☐ Active duty ☐ Veteran ☐ Reserve component
Home state of record _____ Dates of service _____ Duty station _____
Branch of the military _____ Separation date (Mo/Day/Yr) _____ / _____ / _____
10. Are you the spouse or dependent of a full-time, active-duty member of the U.S. Armed Forces?
☐ No ☐ Yes (spouse) ☐ Yes (dependent)
If yes, complete service information below and attach a copy of servicemember's most recent assignment orders.
Home state of record _____ Dates of service _____ Duty station _____
Branch of the military _____ Separation date (Mo/Day/Yr) _____ / _____ / _____
11. Are you a U.S. citizen? ☐ Yes ☐ No
If no, please provide the following information and supply copies of all supporting documentation.
Country of birth _____ Current citizenship _____
Type of visa _____ Expiration date (Mo/Day/Yr) _____ / _____ / _____
Alien registration no. _____ Date issued (Mo/Day/Yr) _____ / _____ / _____
Note: UMUC issues I-20s only for F-1 visa holders who are admitted from an alliance community college or from The Universities at Shady Grove.
12. Is English your native language? ☐ Yes ☐ No *(If no, you must demonstrate college-level proficiency in written English before admission to UMUC. See the Admission section of the Schedule of Classes for more information.)*

DO NOT WRITE BELOW THIS LINE

☐ MS ☐ Citz ☐ Res ☐ Race ☐ FA ☐ DS ☐ GID ☐ DE ☐ Geog ☐ Cert

Name _____ Social Security number _____ - _____ - _____

13. Are you applying for any of the following types of aid?Financial aid ☐ Yes ☐ No Veterans benefits ☐ Yes ☐ No Golden ID benefits ☐ Yes ☐ No**14.** Have you already earned a college-level degree? ☐ Yes ☐ No

a. If yes, indicate below any degree you have already earned.

☐ Associate's degree ☐ Master's degree ☐ Professional degree (MD, JD)
☐ Bachelor's degree ☐ Doctoral degree ☐ Other _____

b. Have you earned an associate's degree from or completed more than 45 credits from a Maryland community college? ☐ Yes ☐ No**15.** What is your academic goal in attending UMUC?

☐ I plan to earn a bachelor's degree at UMUC. ☐ I am undecided about my academic goal.
☐ I plan to earn a certificate in one of UMUC's specialized programs. ☐ I am interested in taking courses, but I am not seeking a degree at UMUC.

16. If you plan to earn a degree or certificate at UMUC, please select the appropriate choices below.a. ☐ AA (for active-duty military only) ☐ BA ☐ BS ☐ BTPS (for Montgomery College graduates with AAS only) ☐ Certificate

b. Major _____

Minor _____

c. Certificate area of study _____

17. Please indicate below how you completed your secondary school education.☐ High school

Name of high school _____

Location (City/State/Country) _____ Date of graduation (Mo/Yr) ____/____

☐ GED

Date of exam (Mo/Yr) ____/____

If you took the GED before January 2002, do your scores total at least 225, with no individual score lower than 40? ☐ Yes ☐ NoIf you took the GED after January 2002, do your scores total at least 2250, with no individual score lower than 410? ☐ Yes ☐ No☐ Study abroad

Name of exam/certificate _____ Date (Mo/Yr) ____/____

- 18.** List all colleges and universities previously attended, including other University System of Maryland (USM) institutions. If you attended UMUC overseas, please list overseas attendance here as well and indicate where. *We may deny transfer credit from any institution not listed below.* To be eligible for transfer credit for previous college work, you must submit an official transcript from *all* colleges attended. To receive transfer credit for military experience, professional training, and credit by examination, you must submit appropriate documentation.

Full name of college or institution previously attended	City, State, Country	From	To	Number of credits earned	Type of degree earned	Date awarded
Example: University of MD, College Park	College Park, MD, USA	6/97	12/99	18	none	N/A

DO NOT WRITE BELOW THIS LINE

☐ New ☐ Readmit ☐ Regular ☐ Provisional ☐ Semester only

☐ Owes Fee ☐ Fee Not Required ☐ Fee Paid \$ _____

 Sign _____ Date _____ Letter _____ Type ☐ Decision ☐ ☐ ☐

 Sign _____ Date _____ Letter _____ Change of Decision ☐ ☐ ☐

Name _____ Social Security number _____ - _____ - _____

19. If you have previously attended UMUC, please indicate where and list dates of attendance.
☐ In the United States ☐ In Europe ☐ In Asia Dates _____
 If you attended UMUC courses on a military base, please indicate the base where you most recently attended class.

20. Are you currently admitted to another USM institution or the UMUC Graduate School?
☐ No ☐ Yes If yes, indicate which institution. _____
21. Indicate your status at the last institution you attended.
☐ In good academic standing ☐ Received academic dismissal in the past two years ☐ Received disciplinary dismissal in the past three years
22. Do you have at least a 2.0 grade-point average (GPA) from your last institution? ☐ Yes ☐ No
23. Have you ever been convicted in court for other than a misdemeanor or a minor traffic violation? ☐ Yes ☐ No
 If yes, please explain separately and submit with your application.
24. **Determination of Maryland Residency:** Do you wish to be considered for in-state tuition status? ☐ Yes ☐ No
 If yes, you must complete the following questions. If no, skip to #36.
25. If any of the statements below apply to you, please check the appropriate box and provide the requested information. If none of the statements are applicable, skip to #26.
- ☐ I am a part-time (50%) or full-time regular employee of the USM *or* I am the spouse or financially dependent child of a regular USM employee. *Please indicate your USM status or relationship to the USM employee.* _____
Please attach a letter of employment verification from the Office of Human Resources at the appropriate USM institution.
- ☐ I am *or* my spouse is a full-time, active-duty member of the U.S. Armed Forces.
Please attach a copy of the most recent assignment orders and indicate date of expected separation from the military. _____
- ☐ I am the financially dependent child of a full-time, active-duty member of the U.S. Armed Forces who claims Maryland as his/her home of residency or resides in or is stationed in Maryland. *Please attach a copy of the servicemember's most recent assignment orders and either the servicemember's deed (or lease) or verification from the military that the servicemember has declared Maryland as his/her home of residency. Also, please indicate date of expected separation from the military.* _____
26. If you are seeking in-state status and did not select one of the statements in #25, you must complete the following questions. Failure to complete all of the required items may result in a non-Maryland resident classification and out-of-state charges being applied. Residency classification information is evaluated in accordance with the USM residency policy. If UMUC discovers that false or misleading information has been provided, you may be billed retroactively to recover the difference between in-state and out-of-state tuition. You may be contacted for additional information, if necessary.
 Please indicate your financial status:
- ☐ **I am financially independent.** I have earned taxable income that covered one-half or more of my total expenses for the past 12 months, and I have not been claimed as a dependent on another person's most recent income tax returns. *Go to #27.*
- ☐ **I am financially dependent** on another person who has provided me with one-half or more of my total expenses for the past 12 months and/or has claimed me as a dependent on his/her most recent income tax returns *or* I am a ward of Maryland. *If you are a ward of Maryland, please attach documentation verifying your status and go to #36; otherwise, please supply the following information.*
- Provider's name _____ Relationship to applicant _____
- a. Length of time you have been financially dependent on provider (Yrs/Mos) _____
- b. Is the provider a resident of Maryland? ☐ Yes ☐ No
- c. Provider's address _____
- d. Is the provider a U.S. citizen? ☐ Yes ☐ No
 If no, type of visa _____ Expiration date (Mo/Day/Yr) _____
 Alien registration no. _____ Date issued (Mo/Day/Yr) _____
- e. Has the provider filed a Maryland income tax return for the most recent year on all earned income, including taxable income earned outside the state? ☐ Yes ☐ No
 If yes, list the year(s) in which a Maryland income tax return has been filed within the past three years. _____
 If a Maryland tax return has not been filed within the last 12 months, state the reason(s). _____

- f. Signature of provider _____

Name _____ Social Security number _____ - _____ - _____

The student applicant is responsible for completing #27–36.

- 27.** Are you residing in Maryland primarily to attend an educational institution? ☐ Yes ☐ No
- 28.** Permanent address _____ Apt. no. _____
 City _____ County _____ State _____ Zip+4/Postal code _____ Country _____
 How long have you lived at this address? Yrs _____ Mos _____
 If you have lived less than one year at this address, please provide the following information.
 Previous address _____ Apt. no. _____
 City _____ County _____ State _____ Zip+4/Postal code _____ Country _____
 How long did you live at this address? Yrs _____ Mos _____
- 29.** Are all, or substantially all, of your possessions in Maryland? ☐ Yes ☐ No
- 30.** Do you have a valid driver's license? ☐ Yes ☐ No
 a. If yes, provide the original date of issue for your current license _____
 From which state was the license issued? _____
 b. Were you previously licensed to drive in another state? ☐ Yes ☐ No
- 31.** Do you own a motor vehicle? ☐ Yes ☐ No
 a. If yes, provide the original registration date _____ In which state? _____
 b. Was your motor vehicle previously registered in another state? ☐ Yes ☐ No
- 32.** Are you registered to vote? ☐ Yes ☐ No
 If yes, in which state? _____ Provide the original voter registration date (Mo/Yr) _____
 Were you previously registered to vote in another state? ☐ Yes ☐ No
- 33.** Have you filed a Maryland income tax return for the most recent year? ☐ Yes ☐ No
 a. List the year(s) in which you filed a Maryland income tax return within the past three years _____
 b. If you did not file a tax return in Maryland within the past 12 months, state the reason(s) _____

- 34.** Are you currently paying Maryland income tax, either through payroll deduction or quarterly estimated payments? ☐ Yes ☐ No
 If no, why not? _____
- 35.** Do you receive public assistance from a state or local agency other than one in Maryland? ☐ Yes ☐ No
 If yes, please explain. _____
- 36.** I hereby certify that I have completed all questions and that the information given above is complete and accurate, and I understand that summary dismissal is the penalty for falsification of that information. • Provision of my Social Security number is voluntary; if I so desire, I may request that another number be assigned to me for purposes of identification. • I understand and agree that, if I enroll in classes offered at military sites, my name, student identification number, and other personal information may be released for security purposes. • In addition, I authorize the release of my e-mail address to participants in online classes for which I register. • UMUC distributes an annual information report, including campus security information, which is available to prospective students. If I so desire, I may contact the vice provost for Student Affairs for additional information. • By signing below, I agree that the information in this application and all my records from any institution in the USM may be released (at the discretion of the releasing institution) to any other institution in the System, in accordance with the System-wide policy on academic integrity. • In making this application, I accept and agree to abide by UMUC's policies and regulations concerning drug and alcohol abuse and understand that the unlawful use of alcohol or drugs will subject me to the penalties contained in those policies and regulations. • If my circumstances change, affecting my residency status, I agree to notify UMUC in writing within 15 days.

Signature of applicant _____ Date of application (Mo/Day/Yr) _____

A \$30 nonrefundable fee must accompany this application (unless you have attended UMUC before). If you pay by check or money order, please write your Social Security number on the check. If you wish to pay by credit card, please fill out the information below.

☐ MasterCard ☐ Visa Customer acct. no. _____ Exp. date (Mo/Yr) _____

C U R R I C U L U M P L A N N I N G W O R K S H E E T

This worksheet is designed to help you plan for your degree; it lists all of the graduation requirements. Full descriptions of courses and bachelor's degree programs are given in this catalog.

Requirement	Completed	In Progress	To Take	Notes
General Education Requirements (41 s.h.)				Courses applied to general education requirements may not be used to satisfy major requirements.
Communications (12 s.h.): • ENGL 101 or equivalent • Other writing • Writing, speech, or communications • Upper-level intensive writing				No more than 3 s.h. in writing may be earned through credit by exam. For other writing, choose from COMM (except 300, 380, 400, 486A, 486B, 493); ENGL 102, 278F, 291, 294, 303, 391, 391X, 480, 482, 483, 485, 493; JOUR 201. For writing/speech/communications, choose from COMM and SPCH (except 486A, 486B); ENGL 102, 278F, 281, 281X, 291, 294, 303, 384, 391, 391X, 480, 482, 483, 485, 493; JOUR 201. For upper-level intensive writing courses, choose from COMM 390, 393, 393X, 394, 394X; ENGL 303, 391, 391X; LGST 401.
Social and Behavioral Sciences (6 s.h.)				Choose from two areas: ANTH, BEHS, CCJS (105, 330, 350, 360, 432, 451, 452, 453, 454, 461 only), ECON, GEOG, GERO (except 341, 342, 351, 353), GVPT, PSYC, SOCY.
Arts and Humanities (6 s.h.)				Choose from two areas: ARTH, ARTT, HIST, HUMN, MUSC, PHIL, THET, dance, literature, foreign language.
Math (3 s.h.)				MATH 105, MATH 107, or higher. (Check requirements of individual major.)
Biological and Physical Sciences (7 s.h.)				• One 3-s.h. lecture course plus related 1-s.h. lab course, or one 4-s.h. lecture/lab course. • Any other 3-s.h. science course. Choose from the following areas: ASTR, BIOL, BSCI, CHEM, GEOL, NSCI, PHYS, botany, entomology, general science, zoology.
Emerging Issues (7 s.h.): • Information literacy (1 s.h.) • Information technology (6 s.h.)				• LIBS 150. • Non-computer majors: 1. IFSM 201 2. Another 3 s.h. computing course (Check requirements of individual major.) • Computer majors: Cross-curricular courses in civic responsibility and international perspective.

Requirement	Completed	In Progress	To Take	Notes
Requirements for Major (30–38 s.h., at least half must be in upper-level courses)				
____ s.h. See Bachelor's Degree Curricula (pp. 32–85) for required courses for your major.	_____ _____ _____ _____ _____ _____ _____ _____ _____ _____ _____ _____ _____ _____	_____ _____ _____ _____ _____ _____ _____ _____ _____ _____ _____ _____ _____ _____	_____ _____ _____ _____ _____ _____ _____ _____ _____ _____ _____ _____ _____ _____ _____	
Minor Requirements (15–19 s.h.) See requirements of individual minor. Minor is strongly recommended but optional. If no minor is selected, these credits are available for electives.	_____ _____ _____ _____ _____ _____	_____ _____ _____ _____ _____ _____	_____ _____ _____ _____ _____ _____	If a course required for the minor is used to satisfy the major requirement, substitute another course in the same discipline. An upper-level course must be replaced by an upper-level course.
Cross-Curricular Perspective Requirements (9 s.h.): • Historical (3 s.h.) • International (3 s.h.) • Civic responsibility (3 s.h.)	_____ _____ _____	_____ _____ _____	_____ _____ _____	See Bachelor's Degree Requirements (pp. 21–25) for more information. If cross-curricular requirements are satisfied elsewhere in the degree, these credits are available as electives.
Electives and Related Requirements (at least 9 s.h. must be upper level) ____ s.h. Choose additional electives to meet 120 s.h. minimum.	_____ _____ _____ _____ _____	_____ _____ _____ _____ _____	_____ _____ _____ _____ _____	12 s.h. of foreign language recommended for BA.

Additional Degree Requirements:

- 30 s.h. at UMUC, which must include half the credit earned for the major and 15 s.h. of upper-level coursework.
- 45 s.h. of upper-level coursework, which must include half the credit earned for the major.
- At least half of the total credits for the major and minor earned through graded coursework.

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NONDISCRIMINATION

University of Maryland University College welcomes applications from prospective students and employees regardless of race, religion, color, creed, gender, marital status, age, national origin, political affiliation, veteran status, mental or physical disability, or sexual orientation.

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