

University of $M$ aryland University College
2001-2002 U ndergraduate C atalog

## University Policy Statements

This publication and its provisions do not constitute a contract between UM UC and any party or parties. At the time of publication, reasonable effort was made to ensure the factual accuracy of the information. H owever, this publication is not a complete statement of all policies, procedures, rules, regulations, and academic requirements applicable to UM UC, its students, or its programs. In addition, changes or additions may be made to the policies, procedures, rules, regulations, academic requirements, and tuition and fees set out in this publication. UM UC reserves the right to make these changes and additions to the information in this publication without prior notice. W hen a curriculum or graduation requirement is changed, it is not made retroactive unless the change is to the student's advantage and can be accommodated within the span of years normally required for graduation.

## Accreditation

University of $M$ aryland University College is accredited by the Commission on Higher Education of the M iddle States Association of Colleges and Schools, 3624 M arket Street, Philadelphia, PA 19104 (215-662-5606).

## Nondiscrimination

University of M aryland U niversity C ollege welcomes applications from prospective students and employees regardless of race, religion, color, creed, gender, marital status, age, national origin, political affiliation, mental or physical disability, or sexual orientation.

University of Maryland University College is a member of the University System of Maryland.

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## OVERVIEW

University of M aryland University College (UM UC) is the global university known for offering high-quality academic programs, products, and services independent of the constraints of time and place. For more than 50 years, UM UC has served primarily adult, parttime students through both traditional and innovative instruction. Today U M UC offers degree programs from the associate of arts through the doctor of management, undergraduate and graduate certificates, and leadership development programs that respond to the needs of the lifelong learner. Undergraduate degree programs are offered in the arts and humanities, behavioral and social sciences, business and management, computing, and technology; graduate programs are avail able in education, management, and technology.
In its official mission statement (which may be read online at www.umuc.edu/gen/vision), UM UC proclaims its statewide goal "to extend access to opportunities for postsecondary education to individuals who combine work with study" and in particular to satisfy the educational needs of $M$ aryland's professional workforce. Globally, the university's mission is "to sustain international eminence by extending access to American postsecondary degrees and noncredit programs worldwide." In fulfilling this mission, UM UC strives to serve U.S. citizens and their families overseas and to expand into international markets that, in turn, will enhance M aryland's economic development as a center for global commerce.

University of Maryland University College is one of 11 degreegranting institutions within the University System of Maryland:

Bowie State U niversity
Coppin State C ollege
Frostburg State University
Salisbury State University
Towson University
University of Baltimore
University of M aryland, Baltimore
University of $M$ aryland, Baltimore C ounty
University of M aryland, College Park
University of M aryland Eastern Shore
University of M aryland University College
In addition to these 11 institutions, there are two University System of Maryland research and service units:

University of $M$ aryland Biotechnology Institute
University of M aryland C enter for Environmental Science

## ACADEMIC QUALITY

UM UC pursues its mission through its commitment to mecting students' needs for lifelong learning, innovative delivery of high-quality educational programs, and substantive and relevant curricula.

Students choose UM UC because of the excellence of its academic programs, which combine educational breadth with the skills and competencies
 needed by adults in the workforce. Undergraduate degree students gain a solid foundation in general education as well as effective writing skills, global and historical awareness, competence in information technology, and understanding of the responsibilities of adult citizenship. For their core academic studies, students may choose one of 21 academic majors and one of 36 minors. Recognizing the importance of lifelong learning, U M UC offers a wide range of undergraduate certificate programs; courses taken for a certificate may also be applied toward the bachelor's degree. (A chart showing options for majors, minors, and certificates is on pp. 22-23.) In keeping with its undertanding of the needs of adult tsudents, U M UC also provides innovative approaches to learning, such as interdisciplinary programs, cooperative education (details on p. 12), and portfolio assessment (details on p. 12).
UM UC's commitment to academic strength, currency, 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 currency and relevance of its curricula. The university's academic degrees and programs have the same structure and require ments whether they are offered in M aryland classrooms, at overseas locations, or through distance delivery.
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## GLOBAL UNIVERSITY

Almost from its inception, U M U C looked beyond state boundaries to serve a global audience, bringing classes to servicemembers in Europe (since 1949) and Asia (since 1956). Today, students take UM UC courses in classrooms at more than 25 locations in $M$ aryland and the national capital region; at morethan 160 military installations throughout Europe and Asia through long-standing partnerships with overseas military commands; at residential campuses in $M$ annheim and Schwäbisch Gmünd, Germany; and at work sites through contractual arrangements with employers.
Students anywhere in the United States and throughout the world also take U M U C courses via the Internet. By January 2001, U M U C had served more than 40,000 students through nearly 300 courses offered via the Internet, making U M UC the largest online university in the country. The numbers continue to grow.

## VIRTUAL UNIVERSITY

UM UC is a "virtual university," recognized as a leader in distance education, particularly in courses delivered online via the Internet. $H$ aving provided open and alternative education opportunities to adult learners for over 25 years, U M U C became an early leader in distance education and has won many awards for innovations in that area. Fifteen of U M U C's 21 majors for the bachelor's degree, 16 of its 36 minors, and 11 of its 41 undergraduate certificates are available entirely online. UM UC continues to innovate in the online environment by adding to its online programs and courses.
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. U M U C offers its 70,000 students full Web-based services from orientation to registration, from financial aid counseling to career advising, and from book ordering to grade retrieval. Through the 0 ffice of Information and Library Services, U M U C provides a state-of-theart digital library, with electronic reserves, online databases (many of which are full text), and online help. O ther services are available through the Interactive Registration and Information System (IRIS), which may be accessed via touch-tone telephone. All these services enable students to sample an online course, meet the faculty, access student services, register, and obtain the syllabus without ever coming to a U M UC site.

## ACADEMIC RELATIONSHIPS

UM UC is dedicated to the fundamental tenets of collaboration and cooperation with other M aryland educational institutions, both public and private, and actively seeks partnerships with those institutions to benefit M aryland citizens. Indeed, U M UC is an "academic inte-
grator," bringing other M aryland institutions into its half-century partnership with the U S. military in Europe and Asia.
In support of the university's mission to extend access to educational opportunities, U M UC has formed alliances with seven M aryland 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 UM UC. Participating colleges include Anne Arundel Community College, C arroll Community College, College of Southern M aryland, Frederick Community College, H agerstown Community College, M ontgomery College, and Prince George's C ommunity C ollege. These alliances offer students dual admission, simultaneous enrollment, seamless transition between curricula, and convenient locations to complete associate's and bachelor's degrees throughout M aryland and the Washington, D.C ., metropolitan region. UM UC has also developed articulation agreements with a number of community colleges across the nation to enable students to complete their bachelor's degrees wherever they may live. (M ore information on community college alliances is provided on p . 290.) UM UC is also a charter member of M arylandO nline, a consortium of $M$ aryland community colleges and universities formed to encourage collaboration among institutions across M aryland and to extend resources for the development and offering of online courses.
U M U C also works to develop strong strategic partnerships with local leaders in business and industry, government, and nonprofit organizations and is an important partner in the region's economic development. The university has developed a certificate program with the N ational Volunteer Firefighter Council and other customized pro-

grams for employers and organizations. Consistent with its mission of bringing convenient and relevant learning opportunities to the workforce, U M UC has developed strong relationships with many prominent area businesses to assure that their education and training needs and those of their employees will be met.

## SCHOLARSHIP AND RESEARCH

UMUC is committed to advancing scholarship, particularly in adult and distance education. The university participates actively in educational associations and conferences to contribute its own expertise in adult and distance education, as well as to maintain staff and faculty academic contacts and scholarship. UM UC's O ffice of Distance Education and Lifelong Learning (ODELL) hosts conferences and workshops, develops resource materials, and seeks grants to further the technologies and pedagogies associated with lifelong learning. OD ELL houses the C enter for Teaching and

Learning, the Institute for Research and Assessment in Higher Education (IRAHE), the Center for Intellectual Property and Copyright in the Digital Environment, and the Institute for D istance Education.

## DELIVERING THE VISION

UM UC 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 70,000 students around the world. It is a substantive institution, committed to lifelong learning and education of adults in the workforce.

Under the leadership of U M UC President Gerald A. H eeger, the university enters the millennium prepared to deliver its vision even more effectively and to enable students in $M$ aryland and worldwide to reach their academic goals.


## GENERAL INFORMATION AND ORIENTATION

At the beginning of each semester, UM UC holds open houses and orientations for new and prospective students. These events offer an opportunity to learn about UM UC and its programs, student services; academic, career, and self-improvement workshops; 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 the Information and Enrollment Team at 301-985-7000 (or 1-800-283-6832 for out-of-region students). M ost offices are open weekdays from 8:30 a.m. to 5 p.m. eastern time. The Information and Enrollment Team may be reached $M$ onday through T hursday from 8:30 a.m. to 8 p.m., Friday from 8:30 a.m. to 5 p.m., and Saturday from 8 a.m. to 12 noon.

## ADMISSION

## Admission Requirements

The admission procedures of UM UC were designed to meet the needs of adult, part-time students. M ost applicants who have a high school diploma or the equivalent can be admitted and register for an undergraduate course either by mail, 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 UM UC must make sure that official transcripts have been sent from each institution previously attended.

## Student Status

U pon being admitted to U M UC, 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. 6.

## 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 UM UC. Admission as a regular student is granted to applicants who fulfill the following academic requirements that apply to their educational leve:

- Graduation from a regionally accredited or state-approved high school in the United States
or
A total score of at least 225 on the $G$ eneral Education Development (GED) examination and no score below 40 on any of the five tests.
- 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 M aryland institutions.
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. H owever, 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. D uring their first semester of enrollment at UM UC, provisional students must submit transcripts from all colleges and universities they have attended.
If a provisional student's gradepoint average at U M UC 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 gradepoint 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, J-1, or B visa holders (except in the circumstances described below).

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. W hile 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 U M UC's alliance schools or students in a UM UC program at the Universities at Shady Grove must request an I-20 from UM UC.
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, at any time before or during registration. The admission form is available on p. 299 of this Catalog, in the Undergraduate Schedule of Classes, and on theWeb at www.umuc.edu/studserv/isis/ugradappn.html.
To allow time for processing, applicants who wish to take advantage of touch-tone or Web registration must ensure that their applications reach Undergraduate Admissions at least one week before the touchtone and Web registration deadlines.

## 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. 9.

## Reenrollment

Students who have not attended UM UC for two years and students who previously attended UM UC overseas must file a new applica tion with Undergraduate Admissions before they will be allowed to register. H owever, they need not pay another application fee.

## Forwarding of Overseas Students' Records

Records of students formerly enrolled in U M U C-Europe, U M U C-Asia, at the Schwäbisch G münd campus, or at the twoyear residential campus in Germany (now located in $M$ annheim) are retained in the $O$ ffice of Admission and Registration of that program or campus.
If such a student later enrolls in UM UC stateside, the student's records are then requested by Undergraduate Student Affairs.

## Admission of College Graduates

A student who has received a bachelor's degree from a U .S. institution is automatically admissible to UM UC as a regular (undergraduate) student upon submission of the admission application and fee. A former graduate student in the U niversity System of $M$ aryland whose time limit in a program has expired may also be admitted as a regular (undergraduate) student. Students who have been admitted to UM U C 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 $M$ aryland may take undergraduate courses without applying to UM U C. Instead, they must either submit a letter of permission from their department or complete a "N otification of Registration with University of $M$ aryland U niversity C ollege" form, certifying good standing and eligibility to return to the last institution attended. Graduate students from other institutions of the U niversity System of $M$ aryland may also take undergraduate courses without applying to UM UC, but must pay graduate tuition and related fees. Transferability of academic work completed at UM UC is determined by the student's home institution. U ndergraduate 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 TO EFL (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 credential agencies (listed online at www.umuc.edustudserv/ credeval.html)
or
- O fficial transcripts showing completion of the U.S. GED exam with a total score of at least 225 and no score below 40 on any of the five tests.
Until this verification is received by UM UC, 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 a copy of either the permanent resident card, visa and I-94 departure card, or employment authorization card and I-94 departure card with the admission application.

## 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. H owever, all students previously dismissed from U M UC 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. D etails are given on p. 5.
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 UM UC 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

W ith the recommendation of a high school guidance counselor, an academically gifted high school senior may carry a maximum of 7 credits per semester at UM UC while finishing work toward a high school diploma. At least a month before a term begins, U M U C 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 ( $\mathrm{B}+$ ) 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 C ard. Participants in the Golden Identification C ard program may register for 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 lateregistration fee is waived for senior citizens, they must pay all other fees. Credits and fees associated with EXCEL T hrough Experiential Learning are excluded.
To qualify for the Golden Identification C ard, the prospective student must meet the following criteria:

- Be a resident of $M$ aryland,
- 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 UM UC.
Students who previously obtained a Golden Identification C ard at another institution in the U niversity System of M aryland should present that card before registration, and must complete two forms and have them approved:

- A new certification of eligibility for a Golden Identification C ard, and
- A notification of registration with UM UC.


## Ways to Register

Registration begins each semester as soon as the course schedule becomes avail able on the Web and continues through the first week of classes. 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.
UM UC 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 U M UC as an undergraduate. (N ote: 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 301-985-7499 daily from 6 a.m. to 9 p.m. eastern time. D etailed instructions on IRIS registration are available each semester in the Undergraduate Schedule of Classes and online at www.umuc.edu/studserv/iris/irisindex.html.

## By Mail

Students may mail their registration to University of $M$ aryland University College, 3501 University Boulevard East, Adelphi, M D 20783. Forms are available in the Undergraduate Schedule of Classes and online at www.umuc.edu/register.

## By Fax

Students may fax their registration to 301-985-7364. Forms are available in the Undergraduate Schedule of Classes and online at www.umuc.edu/register.
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 M asterC ard.

## Online

Students may register online at www.umuc.edu/register. N ote: The process is not yet fully automated and requires manual processing by UM UC to complete.

## On Site

## During Advising

Resource teams can 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 resource team 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 avail able, 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 $M$ asterC ard) 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 U M UC. N ever 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. 219). 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 three methods:

- Students may call IRIS at 301-985-7499 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 resource team. The withdrawal becomes effective the date the form is filed with UM UC.
- 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 the student's resource team, University of M aryland University C ollege, 3501 University Boulevard East, Adelphi, M D 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.

U M U C 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 rewards.

## Tuition and Fees

All tuition and applicable fees must be paid in full at registration, unless the student is enrolled in UM UC'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 is canceledunless the student is a financial aid recipient.)
Payment may be made by cash, check, money order, or M asterC ard or VISA credit cards. Checks should be payable to U niversity of M aryland University C ollege. 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 M anagement Services (AM S), should contact AM S at 1-800-635-0120 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 whether any 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. 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.

N o 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 paye's bank (whether because of insufficient funds, stopped payment, postdating, or drawing against uncollected items), UM UC 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 U M UC must clear them to be permitted to register. Requests for transcripts and diplomas are denied until all debts have been paid. O utstanding debts are collected against refunds due the student. After a reasonable period of time, uncollected debts are forwarded to the Central C ollection Unit of the State Attorney G eneral's O ffice.
The Board of Regents has authorized U M UC to charge students' delinquent accounts for all collection costs incurred by UM UC. The normal collection fee is 17 percent plus attorney and/or court costs. D elinquent 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, lateregistration 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. UM UC 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 C enter when charging books.
D ocuments that restrict payment or are in any way conditional will not be accepted. If the employer does not pay UM UC within 75 days of the date on the bill, the student is responsible for payment.

## WAYS OF EARNING CREDIT

UM UC 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. N ote 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 onehalf of the total credits required for the degree.

## Classroom and Online Study

UM UC uses every feasible instructional delivery mechanism or platform to extend degree opportunities to students. Students take UM UC courses in classrooms at locations in M aryland 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 arrange ments with employers. Students also can "attend clas" from anywhere in the world by connecting electronically via the Internet.
UM UC 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.


| Classroom Locations | Tuzla M ain | Iceland | Iwakuni |
| :---: | :---: | :---: | :---: |
| M ajor administrative centers are indicated by an asterisk. | Tuzla West | Keflavik | M isawa |
|  | Egypt | Israel | Sasebo |
|  | Cairo | Tel Aviv | Tokyo (N ew Sanno H otel) |
| Stateside | Sinai | Italy | Yokohama |
|  |  |  | Yokosuka |
| Maryland | GermanyAnsbach | G aeta | Yokota* |
| Adelphi (UM UC headquarters)* |  | G hedi | Zama |
|  | Babenhausen |  |  |
| Andrews Air Force Base | Bad Aibling | La M addalena | Guam |
| Annapolis Center* | Bad K reuznach | Livorno | Andersen |
| Anne Arundel Community College | Bamberg | $N$ aples | COM NAVAR |
| Carroll Community College | Baumholder | Sigonella | NCTS |
| Fort D etrick | Böblingen | U.S. Embassy, Rome | Malaysia |
| Fort M eade | Bonn | Verona | U.S. Embassy, Kuala Lumpur |
| Frederick Community College | Büdingen <br> D armstadt | Vicenza | Marshall Islands |
| Frostburg State University Center at H agerstown |  | Kosovo Bondsteel | Kwajalein |
|  |  |  |  |
| Glen Burnie Town Center <br> H agerstown Community College | D exheim | M ontieth | Okinawa |
|  | Friedberg Geilenkirchen | Kuwait <br> Kuwait City |  |
| Higher Education \& Applied Technology Center |  |  | C amp Foster |
|  | Giebelstadt | Macedonia | Camp Kinser |
| Howard Community College |  |  | Camp Lester |
| H oward High School <br> Patuxent River N aval Air Warfare Center | Grafenwöhr | Skopje | Camp Schwab |
|  |  | Netherlands AFCENT | Camp Shields |
| Prince George's Community College | Heidelberg* |  | Futenma |
| Shady Grove Center* | H ohenfels Idar O berstein | Portugal | Futenma |
| Southern M aryland Higher <br> Education Center <br> University of M aryland, College Park <br> Waldorf Center for Higher Education* |  |  | Kadena* |
|  | Illesheim | Lisbon | Torii Station |
|  | K aiserslautern |  |  |
|  | Kitzingen | U.S. Embassy, M oscow | Singapore <br> 497th Combat Training Squadron |
| District of Columbia and Virginia | M ainz-W ackernheim M annheim* | Saudi Arabia Riyadh |  |
|  |  |  | Camp Carroll |
| Bolling Air Force BaseFort Belvoir | M iesau | $\begin{aligned} & \text { Spain } \\ & \text { Rota } \end{aligned}$ | Camp Casey |
|  | M ünchweiler |  | Camp Colbern |
| Q uantico M arine Corps Base | 0 berursel | Turkey Incirlik | Camp Garry O wen |
| U.S. Department of Labor | Rhein-M ain Schweinfurt |  | Camp Greaves |
| Walter Reed Army M edical Center |  | Izmir | Camp H enry |
|  |  |  | Camp Hialeah |
| European Campus (Nonmilitary) | Schwetzingen Sembach | United Kingdom Alconbury | Camp H ovey |
|  |  |  | Camp H owze |
| Schwäbisch G münd* | Spangdahlem Stuttgart | Froughton | Camp Humphreys |
|  |  | Fairford | Camp Long |
| European Military Sites | Vaihingen | Larrogate | Camp Page |
|  | W iesbaden <br> W ürzburg | Lakenheath | Camp Red Cloud |
| Austria U.S. Embassy, Vienna |  | London* | Camp Stanley |
|  |  |  | Chinhae |
|  | Greece Araxos | St. M awgan | K-16 |
| Bahrain M anama |  |  | Kunsan |
| Belgium Brussels | Souda Bay | Asian Military Sites | 0 san |
|  |  |  | Pilsong Range |
|  |  | Australia | Suwon |
| SH APE |  | Alice Springs | Yongsan* |
|  | $\begin{aligned} & \text { Hungary } \\ & \text { Taszar } \end{aligned}$ | Central Japan | Thailand |
| Demi |  | Atsugi | JUSM AGT/U.S.Embassy |
|  |  | Camp Fuji |  |

* Administrative center.


## Learning Gained Through Experience

Learning acquired outside the college classroom may be assessed for credit toward a degree at UM UC. There are two ways students can make use of life experience for possible college credit: Prior Learning and Cooperative Education. D etails 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 examina tions and EXCEL and applied toward either a first or second bachelor's degree. H owever, no morethan 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. 14). Any additional credits are awarded where appropriate in the student's program of study.

## Course-Challenge Examinations

UM UC credit can be earned for any undergraduate course for which UM UC can prepare and administer a suitable examination (called a course-challenge examination). D egree-seeking students at U M U C who have satisfactorily completed at least 6 semester hours of coursework at UM UC, have a cumulative grade-point average of at least 2.0 in UM UC coursework, and have received an official evaluation may contact their resource team to begin the process. Students may then contact the Prior Learning office for an application.
Credit may be applied toward a first or second bachelor's degree. Students may earn 3 credits in writing through coursechallenge examination, but may earn credit for EN GL 101 or upper-level intensive writing only in the classroom or through EXCEL. Sixcredit courses, because of their extensive requirements, also may not be challenged by examination. Furthermore, credit by course challenge examination may not be awarded for courses for which a student has registered previously.
M ore information on course-challenge examinations may be obtained by calling 301-985-7755.

## 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 eval uate 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 graded on an S/D/F basis (explained on p. 218). 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. C redit 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.

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 UM UC resident credit and may be applied toward a major or minor, as long as they relate to the student's educational and career goals. H owever, 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. EXCL 301 and any awarded EXCEL credit cannot be used to satisfy this requirement.
It is possible to earn EXCEL credit to satisfy the EN GL 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.) There is some coursework for which credit cannot be earned through the EXCEL program. Students should see an advisor.

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 appeals. 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 and attend an orientation. Prior Learning orientations are available online at www.umuc.edu/priorlearning, in a classroom setting, or by phone. Prospective students may call 301-985-7755 for information.

## Cooperative Education

Cooperative Education (Co-op) extends education beyond the traditional classroom experience and into the workplace. By integrating career-related work opportunities and academic theory, students earn upper-level credit toward a bachelor's degree. Credit is based on the successful completion of specific academic requirements and the new learning outlined in a learning contract. Students can enroll in Co-op at any time during the year. A variety of course formats permits UM UC students, regardless of location, to participate in C ooperative Education.
To be eligible to apply to the program, a student must be seeking a degree from UM UC and be employed in a position directly related to the student's field of study. The position must offer an opportunity for significant new learning. Co-op positions may be paid or unpaid, part time or full time. For students pursuing a new position or a career change, the Co-op staff provides assistance in conducting a job search
and locating professional opportunities through the job development program. Students may also earn C 0-op credit if they recently started a new job, received a promotion, were assigned new responsibilities, or initiated new projects in a current position.
To apply, students must meet the following criteria:

- H ave completed 30 semester hours toward a degree, 6 of which must have been completed at UM UC.
- H ave completed at least 9 semester hours of credit in the discipline in which the student plans to gain Co-op experience.
- H ave a GPA of 2.5 or better at UM UC.

D uring the 15 -week C o-op course, students are required to communicate with their faculty sponsor and complete five academic assignments, as well as fulfill the objectives developed in a learning contract. Either 3 or 6 semester hours of upper-level credit may be earned during the 15 -week C 0 -op session. For 3 credits, at least 12 hours per week must be devoted to tasks providing new learning, totaling 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. For 6 credits, at least 20 hours per week must be devoted to new tasks, totaling a minimum of 300 hours during the C o-op session; five to eight new tasks must be delineated in the Learning Proposal; and the course require ments must be completed. A letter grade is awarded for successful completion of the course. A maximum of $15 \mathrm{Co}-\mathrm{op}$ credits may be applied toward the completion of a first bachelor's degree and 9 semester hours toward a second bachelor's degree.
C redit for Co-op is charged at the current tuition rate; an administrative fee is charged each time a student enrolls. Students who participate in the job development program are charged a fee.
Approval and registration information may be obtained from the C areer and Cooperative Education Center. The office may be reached by phone at 301-985-7780 or 1-800-283-6832, ext. 7780; by fax at 301-985-7725; or via email at coop@info.umuc.edu. Students may view the Web page at $w w w . u m u c . e d u / c o o p$.

## External Sources of College Credit

(Further details and regulations are given in Appendix B and Appendix C.)
UM UC will not award credit for courses that repeat work done else where. Students who have earned credit at other colleges or universities are responsible for determining whether courses they plan to take at UM UC would duplicate any previously earned credit. In certain disciplines, some of the content of community college courses may overlap that of beginning upper-level UM UC courses. Students who are in doubt should consult an advisor before registering.

## Credit by Transfer

Credit toward a U M UC 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 U M UC should request a review of previous credit from the Information and Enrollment Team to determine the applicability of those credits to a degree from UM UC. No transfer credit is accepted without official transcripts.
C redits earned at other institutions during a period of disciplinary suspension or dismissal from UM UC are not accepted in transfer.

## Credit from Other Colleges and Universities

W hen 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 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 semeter hours of credit from two-year institutions (junior colleges or community colleges) may be applied toward a bachelor's degree at UM UC. 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 UM UC.
A student who initially enrolled in the public community colleges of M aryland will be admitted to UM UC in conformance with the policy developed and approved by the M aryland Higher Education C ommission. (D etails are given in the section on transfer policies in the appendices.) Students participating in one of the community college alliances with UM UC 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

U M UC grants credit for study completed in service schools and in M ilitary O ccupational Specialties (M OSs) 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. UM UC 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

UM UC 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 UM UC, must meet other UM UC 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 D ecember 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 UM UC 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 0 pportunity College (SOC), UM UC 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 SO C institutions have also developed a series of degree networks that correspond to Army, Nawy, and M arine career specialties and lead to associate's degrees (SO CAD -2, SO CN AV-2, and SOCM AR-2 programs) and bachelor's degrees (SOCAD -4, SO CN AV-4, and SOCM AR-4 programs). The SO C concept itself was developed jointly by educational representatives from each of the military services, from the U.S. D epartment of D efense, 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 C ouncil 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 require ments. This credit may be applied toward a degree at UM UC, 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 only (not the BA).


## Noncollegiate Courses

U M UC 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 N oncollegiate Sponsored Instruction (if listed in its College Credit Recommendations).

## Credit by Examination

UM UC may award as many as 60 semeter 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 UM UC standards.
Examinations may include the Advanced Placement examinations administered by the College Board, the CollegeLevel Examination Program (CLEP), D efense Activity for Non-Traditional Education Support (DANTES) examinations, and Excelsior College Examina tions. UM UC 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 who enter UM UC directly from a secondary school, on the basis of scores on a C ollege Board Advanced Placement (AP) examination. These examinations are normally administered to eligible high school seniors during the M ay preceding matriculation in college.
A student intending to transer AP credit that was awarded at another college or similar institution must have a transcript of those scores sent directly to UM UC from the College Board. When those scores have been received, an advisor will determine whether they meet the standards established at U M UC 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 C ollege-Level Examination Program (CLEP). The scores must meet UM UC standards. UM UC 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 DAN TES (formerly known as U SAFI). Advisors have information on which tests are acceptable.

## Excelsior College Examinations

Students may earn credit for succesfully 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 UM U C standards. Advisors can furnish details.

At the undergraduate level, UM UC offers the Bachelor of Arts (BA) and Bachelor of Science (BS) degrees, as well as 41 certificates. The Associate of Arts degree and several other certificates are available only to active duty military personnel.
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

UM UC 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 UM UC offers a multidimensional experience, combining a solid educational foundation with cross-curricular breadth and focused study in an academic discipline. Through that experience, U M UC 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.
UM UC demands that students demonstrate the ability to learn and to apply that learning to career and life experience. The UM UC 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.

C ross-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, competence in information technology, historical and international perspectives, civic responsibility, and information literacy ensure that students are able to

- D efine problems, develop and articulate informed judgments, and think critically and systematically.
- Function in professional roles requiring an appreciation and understanding of the interdependency among all disciplines in the global workplace.
- Put learning in the context of historical events and achievements through time.
- 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 U M UC student acquires mastery of a considerable body of knowledge in a specific subject area or group of related subjects, with the focused exploration of an academic subject through a major course of study. Each major has clearly articulated objectives for the knowledge, skills, and abilities a student achieves in completing the major.


## REQUIREMENTS

In general, the UM UC 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 $M$ aryland. If a student has not been continuously enrolled, the requirements that apply are those in effect at UM UC when the student resumes continuous enrollment. To be considered continuously enrolled, degree seeking students must be, or have been, enrolled at a M aryland public institution of higher education and have had no more than two sequential years of nonenrollment. When a continuously enrolled student chooses to change degree program, the student may be subject to the degree requirements in effect at the time of the change.
The following requirements for the $B A$ and $B S$ are applicable to students who enroll on or after August 1, 2001.

## A. Communications (12 s.h.)

- EN GL 101 or EN GL 101X (3 s.h.) M ust be completed within first 15 s.h. Placement test required. M ay not be earned through credit by examination.
- Another writing course (3 s.h.) All COM M courses (except COM M 380 and COM M 493) and EN GL 278F, 291, 294, 303, 391, 391X, 396*, 493, 498, 499, and 499N apply.
- A third course in writing or a course in speech (3 s.h.)

All COM M and SPCH courses and EN GL 278F, 281, 281X, 291, 294, 303, 384, 391, 391X, 396*, 493, 498, 499, and 499N apply.

- An upper-level intensive writing course ( 3 s.h.) EN GL 303, 391, 391X, and 396*; COM M 390, 393, 393X, 394, and 394X; and LGST 401 apply. M ay not be earned through credit by examination.

No more than 3 semester hours of writing credit may be earned through credit by examination.
B. Arts and Humanities (6 s.h.)

O ne course each in two of the following disciplines: ARTH, ART T, H IST, H UM N , M USC, PH IL, THET, dance, literature, or foreign language
C. Behavioral and Social Sciences (6 s.h.)

O ne course each in two of the following disciplines: ANTH, BEH S, CCJS, ECO N, GEOG, GERO, GVPT, PSYC, or SOCY N ot all CCJS or GERO courses apply; eligible courses are CCJS 105, 330, 350, 360, 432, 451, 452, 453, 454, and 461, and GERO 210, 220, 302, 304, and 415.
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.)

C ourses from the following disciplines satisfy both requirements: ASTR, BCH M , BIOL, CHEM, GEOL, MICB, NSCI, PH YS, botany, entomology, general science, and zoology.

## E. Mathematics (3 s.h.)

M ATH 105, M ATH 107, or a course at or above the level of college algebra
M ust be completed within first 15 s.h. Placement test required.
N ote: M ATH 107 or any higher-level mathematics course is required for majors in accounting, business administration, computer and information science, computer information technology, computer science, computer studies, or information systems management.

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

- For all students: O ne course in information literacy and research methods (1 s.h.) LIBS 100 and LIBS 150 apply.
- For computing majors: O ne course satisfying the international perspective requirement and one course satisfying the civic responsibility requirement (6 s.h.)
Applicable courses are listed on p. 20.
- For noncomputing majors: A total of 6 s.h. in computing courses Courses in CMIS, CMIT, CM SC, CM ST, and IFSM ; LGST 360 and 363A; and BM GT 301 apply.

[^1]U nless otherwise specified, these requirements may be satisfied anywhere in the degree (within general education requirements, major, minor, or elective courses).
A. Historical Perspective (3 s.h.)

O ne course that offers a historical perspective (3 s.h.)
A list of approved historical perspective courses is found on p. 20.
B. International Perspective (3 s.h.)

O ne course that offers an international perspective (3 s.h.)
The international perspective requirement may be met by 3 semester hours of a foreign language. A list of other approved international perspective courses is found on p. 20. Computing majors must satisfy this requirement within the general education requirements.
C. Civic Responsibility (3 s.h.)

O ne course that offers a perspective on civic responsibility (3 s.h.)
A list of approved civic responsibility courses is found on p. 21 . Computing majors must satisfy this requirement within the general education requirements.

Total General Education and Cross-Curricular 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. At least 15 semester hours must be earned through U M U C. No grade may be lower than C. Specific coursework is prescribed for each major and is described in the following section. Students may receive a dual major on completion of all requirements for both majors, including the required minimum number of semester hours for each major.
B. Academic Minor (15-19 s.h.)

Students are strongly encouraged to select a minor. Completion of an academic minor is optional except for 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 credit. No grade may be lower than C. Specific coursework is prescribed for each minor and is described in the following section.
C. Electives (15-49 s.h.)

Electives may be taken in any academic discipline and must include at least 9 semester hours of upper-level coursework. No more than 21 semester hours may consist of vocational or technical credit; such credit is applicable only toward the BS and not toward the BA. Pass/fail credit may be used for electives only.

## Building the D egree



## General Bachelor's Degree Requirements

In addition to the general education and cross-curricular requirements and the major, minor, and elective requirements listed above, the following general requirements pertain to all bachelor's degrees:

1. Completion of a minimum of 120 semester hours of credit.
2. A minimum gradepoint average of 2.0 (C) overall, and a minimum grade of $C$ (2.0) for any course to be applied to the academic major or minor.
3. Within the required 120 semester hours, coursework taken with UM UC as follows:

- 30 semester hours (normally the final 30 )
- 15 semester hours within the major
- 15 semester hours at the upper level, preferably within the major or minor

4. At least 45 semester hours of upper-level credit (i.e., credit earned in courses numbered 300 to 499), including

- At least onehalf of the semester hours required for the major
- 3 semester hours in intensive writing
- 9 semester hours in electives

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

## Summary of Bachelor's Degree Requirements

1. Bachelor's $D$ egree $G$ eneral Education Requirements...... 41 s.h.
2. Cross-Curricular Requirements....................................... 9 s.h.
3. Academic M ajor $\qquad$ 30-38 s.h.
4. Academic M inor (optional)...................................15-19 s.h.
5. Electives ............................................................15-49 s.h.
$\qquad$

W ithin these requirements, students must also

- $M$ aintain a cumulative grade point average of at least 2.0 (C).
- Complete a minimum of 45 s.h. of upper-level credit, of which 15 s.h. must be taken with UM UC.
- Complete a minimum of 30 s.h. at UM UC, of which 15 s.h. must be earned in the major and 15 must be upper level.


## Second Bachelor's Degree

At UM UC, students who have al ready received a bachelor's degree from UM UC or from another regionally accredited institution can broaden their education by earning a second bachelor's degree with a different 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 UM UC after com-
pleting 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 writing course, a computing course, an international perspective course, and a civic responsibility 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 U M U C after being admitted into the second undergraduate degree program. As with other degrees, continuous enrollment is required. A minimum gradepoint average of 2.0 in all courses taken through UM UC is required for graduation.
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 a resource team advisor. Advisors will be glad to explain the requirements for a second bachelor's degree and clarify its limitations.

## Historical Perspective

| ARTH |  | Any 3-credit course (except ARTH 100) |
| :---: | :---: | :---: |
| COMM | 380 | Language in Social Contexts |
| ECON | 307 | D evelopment of Economic Ideas: Social and Political |
| ECON | 311 | American Economic D evelopment |
| ENGL | 201 | Western World Literature: Homer to the Renaissance |
| ENGL | 202 | Western World Literature: The Renaissance to the Present |
| ENGL | 222 | American Literature: 1865 to the Present |
| ENGL | 310 | M edieval and Renaissance British Literature |
| ENGL | 312 | Romantic to M odern British Literature |
| ENGL | 313 | American Literature |
| ENGL | 350 | English and American Literature: Blake to Conrad |
| ENGL | 362 | African American Slave N arratives and the O ral Tradition |
| ENGL | 363 | African American Literature to 1900 |
| ENGL | 364 | 20th-Century African American Literature: The Fictional Vision |
| ENGL | 377 | M edieval M yths and M odern $N$ arrative |
| ENGL | 419 | M ajor British Writers After 1800 |
| ENGL | 425 | M odern British Literature |
| ENGL | 433 | American Literature: 1914 to the Present |
| ENGL | 439 | M ajor American Writers |
| GVPT | 401A | International Political Terrorism |
| GVPT | 444 | American Political Theory |
| GVPT | 451 | Foreign Policy of Russia and the States of the Former Soviet Union |
| GVPT | 453 | Recent East Asian Politics |
| GVPT | 455 | Contemporary M iddle Eastern Politics |
| GVPT | 457 | American Foreign Relations |
| HIST |  | Any 3-credit course |
| HUMN | 119 | American Adventure |
| HUMN | 120 | America in Perspective |
| HUMN | 280 | This Constitution: A History |
| HUMN | 301 | Crossing Cultures: World Views in the H umanities |
| HUMN | 336 | Ideas Shaping the 21st Century |
| HUMN | 350 | The Religious Q uest |
| HUMN | 351 | $M$ yth and Culture |
| HUMN | 370 | Humanity of Language |
| HUMN | 375 | Social History of Washington, D.C. |
| IFSM | 204 | History and Future Trends of Computing |
| JOUR | 410 | History of M ass Communication |
| PHIL | 320 | M odern Philosophy |
| PSYC | 415 | History of Psychology |
| SOCY | 311 | The Individual and Society |

## International Perspective

Any foreign language course of 3 or more credits (including courses in ARAB, CHIN, CROA, DTCH, FREN, GERM, HGRN, ICLD, ITAL, JAPN, KORN, M ACE, M GRK, N O RW, PORT, SERB, SPAN, RUSS, or TURK) applies.

| ACCT | 425 | International Accounting |
| :--- | :--- | :--- |
| AN TH | 102 | Introduction to Anthropology: <br> Cultural Anthropology and Linguistics |
| AN TH | 340 | Outlooks in Anthropology |


| ANTH | 398B | M edicine, H ealth, and Culture |
| :---: | :---: | :---: |
| ANTH | 417 | Peoples and Cultures of the Far East |
| ARTH | 200 | Art of the Western World to 1300 |
| ARTH | 201 | Art of the Western World from 1300 |
| ARTH | 370 | History of World Art I |
| ARTH | 371 | History of World Art II |
| ARTH | 380 | M asterpieces of Painting |
| ASTD |  | Any 3-credit course |
| BEH S | 336 | The M iddle East: An Interdisciplinary Perspective |
| BEH S | 361 | Global Environmental Change |
| BM GT | 392 | International Business M anagement |
| BM GT | 446 | International Finance |
| BM GT | 482 | Business and Government |
| BM GT | 491 | Exploring the Future |
| BM GT | 496 | Business Ethics and Society |
| BM GT | 4980 | The Global M anager and Public Policy |
| BM GT | 498P | International Business Law |
| COMM | 380 | Language in Social Contexts |
| ECON | 380 | Comparative Economic Systems |
| ECON | 440 | International Economics |
| ENGL | 201 | Western World Literature: H omer to the Renaissance |
| ENGL | 202 | Western W orld Literature: The Renaissance to the Present |
| ENGL | 304 | The M ajor W orks of Shakespeare |
| ENGL | 310 | M edieval and Renaissance British Literature |
| ENGL | 312 | Romantic to M odern British Literature |
| ENGL | 350 | English and American Literature: Blake to Conrad |
| ENGL | 377 | $M$ edieval $M$ yths and $M$ odern $N$ arrative |
| ENGL | 406 | Shakespeare: Power and Justice |
| ENGL | 419 | M ajor British Writers After 1800 |
| ENGL | 425 | M odern British Literature |
| ENGL | 446 | Postmodern British and American Poetry |
| ENGL | 454 | M odern D rama |
| ENGL | 457 | The M odern N ovel |
| ENGL | 466 | The Arthurian Legend |
| GVPT | 200 | International Political Relations |
| GVPT | 240 | Political Ideologies |
| GVPT | 282 | The Government and Politics of theThird World |
| GVPT | 306 | Global Ecopolitics |
| GVPT | 335 | Foreign Policy and the N ew World O rder |
| GVPT | 401 | Problems of World Politics |
| GVPT | 451 | Foreign Policy of Russia and the States of the Former Soviet Union |
| GVPT | 453 | Recent East Asian Politics |
| GVPT | 455 | Contemporary M iddle 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 M iddle East |
| HIST | 141 | Western Civilization I |
| HIST | 142 | Western Civilization II |
| HIST | 284 | East Asian Civilization I |
| HIST | 285 | East Asian Civilization II |
| HIST | 305 | The Pacific Century |
| HIST | 324 | Classical Greece |
| HIST | 325 | Alexander the Great and the H ellenistic Age |
| HIST | 326 | The Roman Republic |
| HIST | 327 | The Roman Empire |
| HIST | 330 | Europe in the Early M iddle Ages: 300 to 1000 |


| H IST | 331 | Europe in the H igh M iddle Ages: 1000 to 1450 |
| :---: | :---: | :---: |
| HIST | 332 | Europe D uring the Renaissance and Reformation I |
| HIST | 333 | Europe D uring the Renaissance and Reformation II |
| HIST | 334 | The Age of Absolutism |
| HIST | 335 | Revolutionary Europe |
| HIST | 336 | Europe in the 19th C entury: 1815 to 1919 |
| HIST | 337 | Europe in the World Setting of the 20th Century |
| HIST | 341 | African Civilization to 1800 |
| HIST | 342 | Sub-Saharan Africa Since 1800 |
| HIST | 380 | American Relations with China and Japan: 1740 to the Present |
| HIST | 381 | America in Vietnam |
| HIST | 392 | History of the C ontemporary M iddle East |
| HIST | 436 | The French Revolution and N apoleon |
| H IST | 437 | M odern France Since 1815 |
| HIST | 441 | Germany in the 20th Century: 1914 to the Present |
| HIST | 443 | M odern Balkan History |
| HIST | 448 | 20th-Century Russia |
| H IST | 481 | H istory of M odern China |
| HIST | 482 | History of Japan to 1800 |
| HIST | 483 | History of Japan Since 1800 |
| HIST | 485 | History of Chinese Communism |
| HM GT | 498C | Comparative International H ealth Systems Analysis: A M anagerial Perspective |
| HUMN | 126 | The Cosmos |
| HUMN | 301 | Crossing Cultures: World Views in the H umanities |
| HUMN | 350 | The Religious Q uest |
| HUMN | 351 | M yth and Culture |
| HUMN | 360 | Global Environmental Change |
| MRKT | 454 | G lobal M arketing |
| MUSC | 210 | The Impact of M usic on Life |
| NSCI | 361 | Global Environmental Change |
| PHIL | 236 | Philosophy of Religion |
| PHIL | 307 | Asian Philosophy |
| PHIL | 320 | M odern Philosophy |
| PSYC | 354 | Cross-Cultural Psychology |
| SOCY | 311 | The Individual and Society |
| SOCY | 423 | Ethnic M inorities |
| SPCH | 482 | Intercultural Communication |

## Civic Responsibility

| ACCT | 411 | Ethics and Professionalism in Accounting <br> AN TH |
| :--- | :--- | :--- |
| 102 | Introduction to Anthropology: |  |
| Cultural Anthropology and Linguistics |  |  |


| BM GT | 498J | Law and Technology in the Information Age |
| :---: | :---: | :---: |
| BM GT | 4980 | The Global M anager and Public Policy |
| BM GT | 498P | International Business Law |
| ECON | 307 | D evelopment of Economic Ideas: Social and Political |
| ECON | 315 | Economic D evelopment of Underdeveloped Areas |
| ECON | 380 | Comparative Economic Systems |
| EDPA | 210 | Historical and Philosophical Perspectives in Education |
| ENMT | 301 | Environment and Ecosystems M anagement |
| ENMT | 325 | The Biosphere, Energy, and Sustainable D evelopment |
| ENMT | 495 | Environmental M anagement Issues and Solutions |
| GEOL | 120 | Environmental Geology |
| GVPT | 200 | International Political Relations |
| GVPT | 282 | The Government and Politics of theThird World |
| GVPT | 306 | Global Ecopolitics |
| GVPT | 335 | Foreign Policy and the N ew World O rder |
| GVPT | 401 | Problems of World Politics |
| GVPT | 403 | Law, M orality, and War |
| HMGT | 415 | Ethical Considerations in H ealth Services |
| HMGT | 498C | Comparative International H ealth Systems Analysis: A M anagerial Perspective |
| HIST | 372 | Legacy of the Civil Rights M ovement |
| HIST | 407 | Technology and Social Change in History |
| HRMN | 365 | Conflict M anagement in Organizations |
| HRMN | 408 | Employment Law for Business |
| HRMN | 490 | International Human Resource M anagement |
| HUMN | 102 | Classical Foundations |
| HUMN | 300 | M odern M oral Choices |
| HUMN | 310 | Business and Professional Ethics |
| HUMN | 336 | Ideas Shaping the 21st Century |
| HUMN | 360 | Global Environmental Change |
| HUMN | 370 | Humanity of Language |
| IFSM | 304 | Ethics in the Information Age |
| LGST | 204 | Legal Ethics |
| LGST | 327 | Alternative Dispute Resolution |
| MUSC | 210 | The Impact of M usic on Life |
| NSCI | 361 | Global Environmental Change |
| PHIL | 140 | Contemporary M oral Issues |
| PHIL | 208 | D eath and D ying |
| PHIL | 209 | Law and Society |
| PHIL | 236 | Philosophy of Religion |
| PHIL | 309 | The Philosophies of $M$ ahayana Buddhism |
| PHIL | 340 | M aking Decisions |
| PHIL | 341 | Introduction to Ethical Theory |
| PHIL | 342 | M oral Problems in M edicine |
| PHIL | 343 | Sexual M orality |
| 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 D emography |
| SOCY | 423 | Ethnic M inorities |
| SOCY | 425 | Gender Roles and Social Institutions |
| SPCH | 324 | Communication and Gender |
| SPCH | 426 | N egotiation and Conflict M anagement |
| SPCH | 482 | Intercultural Communication |
| W M ST | 200 | Introduction to Women's Studies: Women and Society |

## PROGRAM CHOICES

| Discipline | Major | Minor | Certificate(s) |
| :---: | :---: | :---: | :---: |
| Accounting | p. 25 | p. 26 | Introductory accounting, p. 73 |
|  |  |  | Advanced accounting, p. 73 |
| African American studies |  | p. 26 |  |
| American studies |  | p. 27 |  |
| Art |  | p. 28 | Computer graphics and design, p. 74 |
|  |  |  | Web design, p. 84 |
| Art history |  | p. 28 |  |
| Asian studies |  | p. 29 |  |
| Business administration | p. 29 | p. 32 | Business project management, p. 73 |
|  |  |  | E-commerce in small business, p. 76 |
|  |  |  | M anagement foundations, p. 80 |
|  |  |  | Women in business, p. 85 |
| Business law and public policy |  | p. 32 |  |
| Communication studies | p. 33 | p. 35 | Negotiation and conflict management, p. 80 |
|  |  |  | Workplace communications, p. 85 |
| Computer and information science | p. 35 |  | D atabase design and implementation, p. 75 |
|  |  |  | O bject-oriented design and programming, p. 81 |
|  |  |  | Software engineering, p. 83 |
|  |  |  | Visual Basic programming, p. 84 |
|  |  |  | Web programming, p. 84 |
|  |  |  | W indows programming, p. 84 |
| Computer information technology | p. 36 |  |  |
| Computer science | p. 37 |  | O bject-oriented programming using Java, p. 81 |
| Computer studies | p. 38 | p. 39 | Computer applications, p. 74 |
|  |  |  | Computer graphics and design, p. 74 |
|  |  |  | Desktop publishing, p. 76 |
|  |  |  | Internet technologies, p. 79 |
|  |  |  | Technology and management, p. 83 |
|  |  |  | Visual Basic programming, p. 84 |
|  |  |  | Web design, p. 84 |
| Criminal justice | p. 39 | p. 40 | Security management, p. 82 |
|  |  |  | Security operations, p. 82 |
| Customer service management |  | p. 41 | Customer service communications, p. 74 |
|  |  |  | Customer service management, p. 74 |
| E-commerce and technology management |  | p. 41 | E-commerce in small business, p. 76 |
|  |  |  | E-commerce management, p. 76 |
| Economics |  | p. 42 |  |
| English | p. 42 | p. 43 |  |

## PROGRAM CHOICES (continued)

| Discipline | Major | Minor | Certificate(s) |
| :---: | :---: | :---: | :---: |
| Environmental management | p. 44 | p. 45 | Environmental and occupational health and safety management, p. 77 |
| Finance |  | p. 45 | Financial management, p. 77 |
| Fire science | p. 46 | p. 47 | Public fire protection management and administration, p. 82 Systems approach to fire safety, p. 83 |
| General studies | p. 47 |  |  |
| Gerontology |  | p. 48 |  |
| Government and politics |  | p. 49 |  |
| H ealth care administration |  | p. 49 | H ealth practice management, p. 78 <br> H ealth services management, p. 78 |
| History | p. 50 | p. 51 |  |
| Humanities | p. 52 | p. 54 |  |
| Human resource management | p. 54 | p. 55 | H uman resource management, p. 78 |
| Information systems management | p. 56 |  | D atabase management, p. 75 <br> E-commerce for IT professionals, p. 76 <br> Information management, p. 79 <br> Project management for IT professionals, p. 82 <br> Technology and management, p. 83 <br> UNIX system administration, p. 83 |
| International business management |  | p. 57 |  |
| Journalism |  | p. 58 |  |
| Legal studies | p. 58 |  | Paralegal studies, p. 81 |
| M anagement studies | p. 59 | p. 60 | Business project management, p. 73 <br> M anagement foundations, p. 80 <br> Negotiation and conflict management, p. 80 <br> Technology and management, p. 83 |
| M arketing | p. 61 | p. 62 | Customer service communications, p. 74 <br> Customer service management, p. 74 |
| M athematical sciences |  | p. 63 |  |
| M icrobiology |  | p. 63 | Laboratory management, p. 80 |
| $N$ atural science |  | p. 64 | Laboratory management, p. 80 |
| Psychology | p. 65 | p. 66 |  |
| Social science | p. 66 |  |  |
| Sociology |  | p. 67 |  |
| Speech communication |  | p. 68 | Negotiation and conflict management, p. 80 |
| Spanish |  |  | Workplace Spanish, p. 85 |
| Strategic and entrepreneurial management |  | p. 69 | E-commerce in small business, p. 76 |
| Women's studies |  | p. 70 | Women in business, p. 85 |

## MAJORS AND MINORS

The academic major requires 30 to 38 semester hours of credit, while the minor (optional) requires 15 to 19 semester hours. H alf of the credit applied toward any major or minor must be upper level, and at least half of the credit for any major must be taken at UMUC. A maximum of six 1-semester-hour courses may be applied to a major or minor.
$M$ ajors and minors are described in the following section.

## Majors

Each major is available only for the Bachelor of Arts or the Bachelor of Science degree.

## Available for the $B A$

Communication studies
English
H istory
Humanities

## Available for the $B S$

Accounting
Business administration
Computer and information science
Computer information technology
Computer science
Computer studies
Criminal justice
Environmental management
Fire science
General studies*
H uman resource management
Information systems management
Legal studies
M anagement studies
$M$ arketing
Psychology
Social science

## Minors

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

## Accounting

African American studies
American studies
Art
Art history
Asian studies
Business administration
Business law and public policy
Communication studies
Computer studies
Criminal justice
Customer service management
E-commerce and technology management
Economics
English
Environmental management
Finance
Fire science
Gerontology
Government and politics
H ealth care administration
History
Humanities
H uman resource management
International business management
Journalism
M anagement studies
M arketing
$M$ athematical science
M icrobiology
N atural science
Psychology
Sociology
Speech communication
Strategic and entrepreneurial management
Women's studies

[^2]
## DESCRIPTIONS OF MAJORS AND MINORS

## 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

- Think critically, analyze information, solve problems, and provide insight in dealing with complex business situations and related accounting issues.
- Effectively communicate financial and nonfinancial information, both orally and in writing, to enable the intended audience to make informed decisions and take appropriate action.
- Utilize technology (computers, accounting software, information databases, and the World Wide Web) to enhance accounting and financial reporting processes.
- Understand the managerial and business issues involved in analyzing accounting and other information in order to identify and assess opportunities and risks, develop organizational plans, allocate resources, and accomplish objectives.
- Assess, understand, and apply functional and technical knowledge of accounting principles and standards to specific business activities and workplace situations.
- Address accounting and business issues from both a national and international perspective.
- Identify ethical issues and apply principles of ethics and social responsibility to accounting and business situations.
- Use analytical and research tools to monitor evolving accounting standards and practices and to maintain professional skills in the 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 these semester hours must be earned in courses numbered 300 or above. An additional 18 semester hours of related business coursework are required. Specific course requirements are listed below.

For a listing of all the requirements for the bachelor's degree, students should refer to p. 16.
Accounting Coursework (36 s.h.)
Required Courses (24 s.h.)
Students must take the following courses:
ACCT 220 Principles of Accounting I (3)

Supplemental Major Courses (12 s.h.)
Students must choose four of the following courses for a total of 12 semester hours:
ACCT 326 Accounting Information Systems (3)
ACCT 328 Accounting Software (3)
ACCT 410 Accounting for Government and $N$ ot-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)

## Related Business Coursework (18 s.h.)

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

| BM G T | 230 | Business Statistics (3) |
| :--- | :--- | :--- |
| BM G T | 340 | Business Finance (3) |
| BM G T | 364 | M anagement and Organization T heory (3) |
| BM G T | 380 | Business Law I (3) |
| M RKT | 310 | Marketing Principles and O rganization (3) |

Students must choose one of the following ethics courses:
BM GT 496 Business Ethics and Society (3)
ACCT 411 Ethics and Professionalism in Accounting (3)

## Additional Required Coursework (9 s.h.)

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

| M ATH | 107 | College Algebra (3) |
| :--- | :--- | :--- |
| ECON | 201 | Principles of Economics I (3) |
| ECON | 203 | Principles of Economics II (3) |

## Recommendations

The following courses are recommended to fulfill general education requirements or as additional electives.
Students are encouraged to take one of the following courses with an interna tional focus:

| BM GT | 392 | International Business M anagement (3) |
| :--- | :--- | :--- |
| ACCT | 425 | International Accounting (3) |

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

| ACCT | 326 | Accounting Information Systems (3) |
| :--- | :--- | :--- |
| CM ST | 340 | Computer Applications in M anagement (3) |
| IFSM | 300 | Information Systems in O rganizations (3) |

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

| COM M | 390 | Writing for M anagers (3) |
| :--- | :--- | :--- |
| COM M | 393 | Technical Writing (3) |
| COM M | $393 X$ | Technical Writing (3) |
| COM M | 394 | Business Writing (3) |
| COM M | $394 X$ | Business Writing (3) |

## Minor in Accounting

The accounting minor complements the skills the student gains in his or her major discipline through the 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

Students should refer to the objectives listed under $M$ ajor in Accounting.

## Requirements for the Minor

A minor in accounting requires the completion of 15 semester hours of coursework in accounting; at least 9 of these semester hours must be earned in courses numbered 300 or above. Specific course require ments 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 upper level.

## Accounting Coursework (15 s.h.)

Required Courses (9 s.b.)
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 choose two accounting courses from the lists of required and supplemental accounting courses for the accounting major for a total of 6 semester hours.

## 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

- Understand the diversity and the historical development of the African American experience.
- Explain aspects of the cultural and historical expression of the African American experience.
- Understand fundamental interdisciplinary methods, research, and topics relevant to African American studies.


## Requirements for the Minor

A minor in African American studies requires the completion of 15 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 on the next page. 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 upperlevel course should also be upper level.
For a listing of all the requirements for the bachelor's degree, students should refer to p .16.

African American Studies Coursework (15 s.h.)<br>Required Foundation Course (3 s.b.)<br>Students must take the following course:

AASP 201 Introduction to African American Studies (3)

Supplemental Minor Courses (12 s.h.)
Students must choose four of the following courses for a total of 12 semester hours. No more than 6 semester hours may be earned within any single discipline.

| CCJS | 370 | Race, Crime, and Criminal Justice (3) <br> African American Slave N arratives and the O ral |
| :--- | :--- | :--- |
| EN GL | 362 |  |
| Tradition (3) |  |  |

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

## American Studies

Students may seek an academic minor in American studies.

## Minor in American Studies

The American studies minor complements the skills the student gains in his or her major discipline through interdisciplinary study of the life, history, and culture of the U nited States.

## Objectives

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

- Understand aspects of the diversity and the historical development of the American experience.
- Understand and discuss aspects of the cultural expression of the American experience.
- Understand fundamental interdisciplinary methods, research, and topics relevant to American studies.


## Requirements for the Minor

A minor in American studies requires the completion of 15 semester hours of coursework focusing on American social and historical 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 upper level.

For a listing of all the requirements for the bachelor's degree, students should refer to $p .16$.

American Studies Coursework (15 s.h.)
Required Foundation Course (3 s.h.)
Students must take the following course:
AM ST 201 Introduction to American Studies (3)
Supplemental Minor Courses (12 s.h.)
Students must take four of the following courses for a total of 12 semester hours. No more than 6 semester hours may be earned within any single discipline.

| ARTH | 361 | American Art Since 1876 (3) |
| :--- | :--- | :--- |
| BEH S | 364 | Alcohol in American Society (3) |
| BEH S | 383 | Humor in American Society (3) |
| COM M | 380 | Language in Social Contexts (3) |
| ECO N | 301 | Current Issues in American Economic Policy (3) |
| EN GL |  | All American literature courses |
| GERO | 304 | Aging, Public Policy, and the Law (3) |
| GERO | 415 | Aging in America (3) |
| GVPT |  | All courses specifically related to the United States |
| H IST |  | All American history courses |
| H UM N | 119 | American Adventure (3) |
| H UM N | 120 | America in Perspective (3) |
| H UM N | 280 | This Constitution: A History (3) |
| H UM N | 375 | Social H istory of Washington, D.C. (3) |
| SOCY | 300 | American Society (3) |
| SOCY | 325 | The Sociology of Gender (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 different media, including drawing, painting, or graphics and design.
- Articulate the language of art as a continuation of the development of aesthetic sensibilities, individual goals, and personal syles.
- 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 upper level.
For a listing of all the requirements for the bachelor's degree, students should refer to p .16.

## Art Coursework (15 s.h.)

Art Theory Course (3 s.h.)
Students must choose one art theory course from the following list:

| ARTT | 100 | Two-D imensional Art Fundamentals (3) |
| :--- | :--- | :--- |
| ARTT | 150 | Introduction to Art Theory (3) |
| ARTT | 200 | Elements of ThreeDimensional Form and Space (3) |
| ARTT | 220 | Color in Composition (3) |
| ART T | 250 | Elements of Commercial D esign (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 media area (drawing, painting, and graphics and design), for a total of 12 semester hours:

## Drawing

| ART T | 110 | Elements of D rawing I (3) |
| :--- | :--- | :--- |
| ART T | 210 | Elements of D rawing II (3) |
| ARTT | 418 | Drawing (3) |
| Painting |  |  |
| ART T | 320 | Elements of Painting (3) |
| ARTT | 428 | Painting (3) |
| ART T | 470 | Watercolor (3) |

## Graphics and Design

| ART T | 351 | Elements of Graphic D esign (3) |
| :--- | :--- | :--- |
| ART T | 354 | Elements of Computer Graphics (3) |
| ART T | 479 | Advanced Computer Graphics (3) |
| COM M | 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 historical and cultural interpretation and critical analysis of works of architecture, sculpture, painting, and the allied arts.

## Objectives

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

- Develop 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 their 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 course focusing on each of the following periods: ancient world (pre-C ommon Era), pre modern (Common Era to 1850), and modern (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 upperlevel course should also be upper level.
For a listing of all the requirements for the bachelor's degree, students should refer to p .16 .

## Asian Studies

Students may seek an academic minor in Asian studies.

## 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

- Understand aspects of the historical development of Asian life and culture.
- Discuss aspects of the cultural expression of the Asian experience.
- Understand 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 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 upperlevel course should also be upper level.
For a listing of all the requirements for the bachelor's degree, students should refer to p. 16 .

## Asian Studies Coursework ( $\mathbf{1 5}$ s.h.)

Foundation Course (3 s.b.)
Students must choose 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.b.)
Students must choose four 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.

| AN TH | 417 | Peoples and Cultures of the Far East (3) |
| :--- | :--- | :--- |
| GVPT | 453 | Recent East Asian Politics (3) |
| GVPT | 483 | Government and Politics of Asia (3) |
| HIST | 381 | America in Vietnam (3) |
| H UM N | 350 | The Religious Q uest (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


## 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, 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, ecommerce and technology management, 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

- Think critically and constructively and perform research in business and management.
- Understand and apply analytical and problem-solving methods in resolving business management problems and issues.
- Understand and apply key concepts and theories in business and management.
- Understand the domestic and global dimensions of and influences on business and management.
- D evelop effective written and oral communications consistent with the business and professional environment.
- Understand and apply current computer applications and technology in the workplace.
- Understand and appreciate 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.


## Requirements for the Major

A major in business administration requires the completion of 36 semester hours in courses 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 require ments are listed below.
For a listing of all the requirements for the bachelor's degree, students should refer to p. 16 .

## Business Administration Coursework (36 s.h.)

Foundation Courses (9-12 s.h.)
Students without previous business experience must take the following course:

BM GT $110 \quad$ Introduction to Business and $M$ anagement (3)
Students must take the following accounting courses:
$\begin{array}{lll}\text { ACCT } & 220 & \text { Principles of Accounting I (3) } \\ \text { ACCT } & 221 & \text { Principles of Accounting II (3) }\end{array}$
Students must choose one of the following statistics courses:

| BM GT | 230 | Business Statistics (3) |
| :--- | :--- | :--- |
| GN ST | 201 | Introductory Statistics (3) |
| STAT | 250 | Intermediate Statistics and Probability (3) |

Required Core Courses (18 s.h.)
Students must take the following core courses:

| BM GT | 340 | Business Finance (3) |
| :--- | :--- | :--- |
| BM GT | 364 | M anagement and Organization Theory (3) |
| BM GT | 380 | Business Law I (3) |
| BM GT | 495 | Business Policies and Strategic M anagement (3)* |
| H RM N | 300 | H uman Resource M anagement (3) |
| M RKT | 310 | M arketing Principles and O rganization (3) |

Supplemental Major Courses (6-9 s.h.)
Students must choose two or more courses from the following lists to complete the 36 semester hours required for the major. C ourses are organized by topic area. For related academic minors, more information is listed on the following pages: business law and public policy (p. 32), customer service man-
agement (p. 41), ecommerce and technology management (p. 41), finance (p. 45), health care administration (p. 49), human resource management (p. 54), marketing ( $p .61$ ), and strategic and entrepreneurial management ( $p .69$ ).

Business Law, International Business, and Public Policy
BM GT 381 Business Law II (3)
BM GT 392 International Business M anagement (3)
BM GT 481 Public Utilities and Public Policy (3)
BM GT 482 Business and Government (3)
BM GT 496 Business Ethics and Society (3)
BM GT 498F Environmental $M$ anagement and Business (3)
BM GT 498 Law and Technology in the Information Age (3)
BM GT 498L International Business Contract M anagement (3)
BM GT 4980 The G lobal M anager and Public Policy (3)
BM GT 498P International Business Law (3)
HRM N 462 Labor Relations Law (3)
Customer Service and Operations Management
BM GT $309 \quad 0$ perations Research for M anagement D ecisions (3)
BM GT 370 Introduction to Transportation M anagement (3)
BM GT 372 Introduction to Logistics M anagement (3)
BM GT 375 Procurement $M$ anagement (3)
BM GT 383 Planning and Control of Services (3)
BM GT 384 M anaging for Quality (3)
BM GT 385 Production and 0 perations $M$ anagement (3)
BM GT 393 Real Estate Principles I (3)
BM GT 394 Real Estate Principles II (3)
BM GT 395 Customer Service M anagement (3)
BM GT 396 Customer Consultation and $N$ eeds Analysis (3)
E-Commerce and Technology Management
BM GT 301 Computer Systems for Business (3)
BM GT 304 M anaging E-Commerce in 0 rganizations (3)
BM GT 305 Knowledge $M$ anagement (3)
BM GT 317 Problem Solving (3)
BM GT 366 M anaging in the Public Sector (3)
BM GT 388B Virtual Management (1)
BM GT 411 Systems Performance (3)
BM GT 412 Program Analysis and Evaluation (3)
BM GT 487 Project M anagement I (3)
BM GT 488 Project $M$ anagement II (3)
BM GT 491 Exploring the Future (3)
Finance
BM GT 341 Finance for the N onfinancial M anager (3)
BM GT 342 Fundamentals of Building Wealth (3)
BM GT 343 Investments (3)
BM GT 345 Property and Liability Insurance (3)
BM GT 346 Risk M anagement (3)
BM GT 347 Life Insurance (3)
BM GT 440 Financial $M$ anagement (3)
BM GT 443 Security Analysis and Valuation (3)
BM GT 444 Futures C ontracts and 0 ptions (3)
BM GT 445 Commercial Bank M anagement (3)
BM GT 446 International Finance (3)
BM GT 498Q Financial Analysis (3)

[^3]| Health Care Administration |  |  |
| :---: | :---: | :---: |
| HM GT | 310 | H ealth Services Policies (3) |
| HMGT | 320 | H ealth Services M anagement (3) |
| HMGT | 322 | H ealth Services Financial M anagement (3) |
| HMGT | 325 | H ealth Services Economics (3) |
| HM GT | 330 | Issues in H ealth Services M anagement (3) |
| HMGT | 398C | Research Issues and M ethods in H ealth Services M anagement (3) |
| HMGT | 398D | $M$ anaged $C$ are in $H$ ealth Services $M$ anagement (3) |
| HM GT | 398E | H ealth Communications (3) |
| HMGT | 398F | Regulation of H ealth Services Professionals and D elivery Systems (3) |
| HM GT | 398G | M anagement of TeleH ealth Programs (3) |
| HM GT | 398H | Pharmacy Practice M anagement (3) |
| HMGT | 3981 | Integrated H ealth Systems M anagement (3) |
| HMGT | 410 | Introduction to H ealth Services Planning (3) |
| HM GT | 415 | Ethical Considerations in Health Services (3) |
| HM GT | 416 | Legal Aspects of H ealth Services Administration (3) |
| HMGT | 430 | H ealth Services M arketing and Strategic M anagement (3) |
| HM GT | 498B | M anaging Q uality in H ealth Services Systems (3) |
| HMGT | 498C | C omparative International H ealth Systems Analysis: A M anagerial Perspective (3) |
| HM GT | 498D | H ealth Insurance Analysis and Issues in H ealth Systems $M$ anagement (3) |
| HM GT | 498E | Practice M anagement (3) |
| HMGT | 498V | Health Information-Systems M anagement (3) |
| Human Resource Management |  |  |
| BM GT | 312 | Women in Business (3) |
| BM GT | 313 | Women as Entrepreneurs (3) |
| BM GT | 314 | Women as Leaders (3) |
| BM GT | 3982 | Creative Problem Solving (1) |
| BM GT | 484 | M anaging Teams in Organizations (3) |
| HRMN | 302 | Organizational Communication (3) |
| HRMN | 362 | Labor Relations (3) |
| HRMN | 390 | C ontemporary Compensation M anagement (3) |
| HRMN | 392 | Stress M anagement in Organizations (1) |
| HRMN | 400 | Human Resource M anagement: Analysis and Problems (3) |
| HRMN | 404 | $M$ anaging Diversity in O rganizations (3) |
| HRMN | 406 | Employee Training and D evelopment (3) |
| HRMN | 408 | Employment Law for Business (3) |
| HRMN | 463 | Public-Sector Labor Relations (3) |
| HRMN | 490 | International H uman Resource M anagement (3) |
| HRMN | 494 | Strategic H uman Resource M anagement (3) |


| Marketing |  |  |
| :--- | :--- | :--- |
| M RKT | 312 | Services M arketing (3) |
| M RKT | 314 | N onprofit M arketing (3) |
| M RKT | 318 | Exploring Internet M arketing (1) |
| M RKT | 323 | Fundamentals of D irect M arketing (1) |
| M RKT | 353 | Retail M anagement (3) |
| M RKT | 354 | Integrated M arketing Communications (3) |
| M RKT | 357 | M arketing Public Relations (3) |
| M RKT | 371 | Professional Selling (3) |
| M RKT | 373 | M arketing Channels (3) |
| M RKT | 410 | Consumer Behavior (3) |


| M RKT | 412 | M arketing Research Applications (3) |
| :--- | :--- | :--- |
| M RKT | 454 | Global M arketing (3) |
| M RKT | 456 | Advertising (3) |
| M RKT | 457 | Web M arketing (3) |
| M RKT | 471 | Business M arketing (3) |
| M RKT | 475 | Sales M anagement (3) |
| M RKT | 495 | M arketing Policies and Strategies (3) |

Strategic and Entrepreneurial Management
ACCT 301 Accounting for Nonaccounting M anagers (3)
BM GT 324 HomeBased Business (1)
BM GT 325 The Small-Business Plan (1)
BM GT 327 Financial Analysis and Planning for Entrepreneurs (1)
BM GT 330 Entrepreneurship and New Venture Planning (3)
BM GT 334 Managing $N$ ew Ventures (3)
BM GT 336 M anaging Strategic Venture G rowth and Industry (3)
BM GT 337 Building the Entrepreneurial Team (3)
BM GT 339 Government and Business C ontracting (3)
BM GT 365 Leadership and Change (3)
BM GT $368 \quad$ M anaging 0 rganizational Change (3)
BM GT 388D M anaging a Culturally D iverse O rganization (1)
BM GT 388E Managing M ulticultural Teams (1)
BM GT 388G Effective Business Presentations (1)
BM GT 436 M anaging Entrepreneurial Ventures (3)
BM GT 464 Organizational Behavior (3)
BM GT 465 Organizational D evelopment and C hange (3)
BM GT 497 Implementing Business Strategy (3)
HRM N 302 Organizational Communication (3)
HRM N 363 Negotiation Strategies (3)
HRM N 365 Conflict M anagement in Organizations (3)
HRM N 367 Organizational Culture (3)
HRM N 394 Motivation, Performance, and Productivity (3)

## Additional Required Coursework (9 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.
M ATH 107 College Algebra (3)
or

A higher-numbered mathematics course from mathematics sequence I (listed on p . 192)

| ECON | 201 | Principles of EconomicsI (3) |
| :--- | :--- | :--- |
| ECON | 203 | Principles of Economics II (3) |

## Recommendations

The following courses are recommended to fulfill general education requirements or as additional electives:

| CM ST | 340 | Computer Applications in M anagement (3) |
| :--- | :--- | :--- |
| CO M M | 390 | Writing for M anagers (3) |
| CO M M | $393 / 393 X$ | Technical Writing (3) |
| CO M M | $394 / 394 X$ | Business Writing (3) |
| EN M T | 301 | Environment and Ecosystems M anagement (3) |
| IFSM | 300 | Information Systems in Organizations (3) |

## Minor in Business Administration

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

## Objectives

Students should refer to the objectives listed under M ajor in Business Administration.

## 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 semeter hours must be earned in courses numbered 300 or above. Specific course require ments 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 upper level.

## Business Administration Coursework (15 s.h.)

Foundation Course(s) (3-6 s.h.)
Students without previous business experience must take the following course:
BM GT 110 Introduction to Business and $M$ anagement (3)
Students must take the following course:
BM GT $364 \quad$ M anagement and O rganization Theory (3)
Supplemental Minor Courses (9-12 s.h.)
Students must choose three or more courses from those listed as fulfilling the major in business administration to complete the 15 semester hours required for the minor.

## 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 through the study and analysis of 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

- Understand and functionally apply, identify, and interpret legal theories, concepts, and issues involving the conduct of business transactions.
- Appreciate and comprehend the integral and complex interactions among law, business, and public policy variables and their significant societal and ethical considerations.
- Develop critical-thinking, analytic, and effective communication and writing skills through case briefings, presentations, and discussions.
- Participate in collaborative strategies via group assignments to encourage cooperative team efforts and enhance problemsolving skills.
- Undertake pertinent research at a professional level using multiple capabilities and technologies, including computer-based technology aimed at promoting information literacy.


## 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; 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 upper level.
For a listing of all the requirements for the bachelor's degree, students should refer to p. 16 .

Business Law and Public Policy Coursework (15 s.h.)
Required Courses ( 6 s.h.)
Students must take the following courses:

| BM GT | 380 | Business Law I (3) |
| :--- | :--- | :--- |
| BM GT | 496 | Business Ethics and Society (3) |

Supplemental Minor Courses (9 s.h.)
Students must choose three of the following courses for a total of 9 semester hours. Courses strongly recommended for the minor are indicated by an asterisk.

| BM GT | 378 | Legal Environment of Business (3) |
| :--- | :--- | :--- |
| BM GT | 381 | Business Law II (3) |
| BM GT | 481 | Public Utilities and Public Policy (3) |
| BM GT | 482 | Business and Government (3)* |
| BM GT | 498 F | Environmental M anagement and Business (3) |
| BM GT | 498 J | Law and Technology in the Information Age (3) |
| BM GT | 4980 | The Global M anager and Public Policy (3) |
| BM GT | $498 P$ | International Business Law (3) |
| H RM N | 408 | Employment Law for Business (3)* |
| H RM N | 462 | Labor Relations Law (3) |

[^4]
## 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

- Understand the history of communication theory and how principles apply to particular types of communication, including mass communication.
- Apply effective communication strategies within various types of communication.
- G ather information from a variety of sources and critically identify, examine, and present issues associated with information communicated to diverse audiences.
- Learn about and 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 legally and ethically responsible.
- Understand 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.
- Assess a particular communication environment and evaluate the communication skills needed for that environment.
- D evelop communication products and processes appropriate to a given audience.
- Demonstrate an understanding of the elements of typography, layout, and design and be able to apply them effectively to various kinds of communications.
- Apply appropriate media and techniques to the solution of any given communication problem.
- Work as a capable communication professional within a specific communication fied.
- 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.
For a listing of all the requirements for the bachelor's degree, students should refer to p . 16.

## Communication Studies Coursework (30 s.h.)

## Required Foundation Course (3 s.h.)

Students must take the following course:
COM M 300 Communication Theory (3)
Writing Course (3-6 s.h.)
Students must choose one of the following writing courses:

| COM M | 390 | Writing for M anagers (3) |
| :--- | :--- | :--- |
| COM M | 393 | Technical Writing (3) |
| COM M | $393 X$ | Technical Writing (3) |
| COM M | 394 | Business Writing (3) |
| COM M | $394 X$ | Business Writing (3) |
| EN GL | 303 | Critical Approaches to Literature (3) |
| EN GL | 391 | Advanced Composition (3) |
| EN GL | $391 X$ | Advanced Composition (3) |
| EN GL | 396 | Critical Analysis in Reading and Writing (6) |
| LGST | 401 | Advanced Legal Writing (3) |

Speech or English Language Course (3 s.h.)
Students must choose one of the following speech or English language courses:
COM M 380 Language in Social Contexts (3)
ENGL 278F Introduction to Principles of Text Editing (3)
EN GL 281 Standard English Grammar, Usage, and Diction (3)
EN GL 281X Standard English Grammar, Usage, and Diction (3)
EN GL 384 Advanced Grammar and Style (3)
SPCH Any 300- or 400-level course
Capstone Course (3 s.h.)
Students must choose one of the following capstone courses, as appropriate to their track of study, in the last 30 semester hours of study:

## Business Communication Track

COM M 495 Seminar in Workplace Communication (3)
General Study or Journalism Track
COM M 490 Seminar in Technical Communication (3)
COM M 495 Seminar in Workplace Communication (3)

## Speech Communication Track

SPCH 397 Organizational Presentations (3)
Technical Communication Track
COM M 490 Seminar in Technical Communication (3)
Supplemental Major Courses (15-18 s.b.)
Students must choose four or more of the following courses to complete the
30 semester hours required for the major:

| COMM | 293 | Technical Report Writing (3) |
| :---: | :---: | :---: |
| COMM | 380 | Language in Social Contexts (3) |
| COMM | 390 | Writing for M anagers (3) |
| COMM | 393 | Technical Writing (3) |
| COMM | 393X | Technical Writing (3) |
| COMM | 394 | Business Writing (3) |
| COMM | 394X | Business Writing (3) |
| COMM | 395 | Writing in the H ealth Professions (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 N ewsletter (3) |
| COMM | 495 | Seminar in Workplace C ommunication (3) |
| COMM | 496 | Writing for the C omputer 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 M ass M edia (3) |
| JOUR | 202 | Editing for the M ass M edia (3) |
| JOUR |  | All 300- and 400-level courses |
| PSYC | 462 | The Psychology of Advertising (3) |
| SPCH | 100 | Foundations of Speech Communication (3) |
| SPCH | 100X | Foundations of Speech Communication (3) |
| SPCH | 107 | Speech Communication: Principles and Practice (3) |
| SPCH | 125 | Introduction to Interpersonal Communication (3) |
| SPCH | 222 | Interviewing (3) |
| SPCH |  | All 300- and 400-level courses |

## Track Options

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 al ready listed, as well as those listed for their selected track, within the 30 semester hours for the major.

## 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 with a track in business communication must take the following track courses:

| COM M | 390 | Writing for M anagers (3) |
| :--- | :--- | :--- |
| COM M | 492 | Proposal Writing (3) |
| COM M | 495 | Seminar in Workplace Communication (3) |
| SPCH | 470 | Listening (3) |

Students must take one of the following courses:
COM M 394 Business Writing (3)
COM M 394X Business Writing (3)
Students must choose one of the following organizational communication courses: HRM N 302 Organizational Communication (3)
SPCH 424 Communication in Complex Organizations (3)

## Journalism Track

Journalism (mass communication) concerns the processes and principles of how to gather information, process it, and disseminate it 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. 58.

Journalism Track Requirements (18 s.h.)
In fulfilling the requirements for the communication studies major, students with a track in journalism must complete the following requirements:

## Required Courses (6 s.h.)

Students must take the following courses:

| JOUR | 201 | Writing for the M ass M edia (3) |
| :--- | :--- | :--- |
| JOUR | 202 | Editing for the M ass M edia (3) |

Supplemental Courses ( $\mathbf{1 2}$ s.h.)
Students must choose an additional four of the following courses for a total of 12 semester hours:

| JOUR | 320 | News Reporting (3) |
| :--- | :--- | :--- |
| JOUR | 330 | Public Relations T heory (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 M agazines and N ewspapers (3) |
| JOUR | 400 | Law of M ass Communication (3) |
| JOUR | 410 | History of M ass Communication (3) |
| JOUR | 459 | Special Topics in M ass Communication (3) |

## Speech Communication Track

The speech communication track is designed to enable students to develop a specialized background and skills in dimensions of speaking and listening that relate to the workplace. This track provides students with principles and practice to enable them to function as
oral communication specialists in a variety of communication positions within organizations. N ote: Speech communication is also available as a minor; details are on p. 68.
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 with a track in speech communication must choose six of the following track courses:

| SPCH | 324 | Communication and Gender (3) |
| :--- | :--- | :--- |
| SPCH | 397 | Organizational Presentations (3) |
| SPCH | 420 | Group Discussion and D ecision M aking (3) |
| SPCH | 424 | Communication in Complex Organizations (3) |
| SPCH | 426 | N egotiation and Conflict M anagement (3) |
| SPCH | 470 | Listening (3) |
| SPCH | 482 | Intercultural Communication (3) |

## Technical Communication Track

The track in technical communication helps students to develop specialized skills in writing and designing text and graphics, and to become knowledgeable in 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 with a track in journalism must take the following track courses:

| COM M | 490 | Seminar in Technical Communication (3) |
| :--- | :--- | :--- |
| COM M | 491 | Technical Editing (3) |
| COM M | 493 | Graphics/Text Integration (3) |
| SPCH | 470 | Listening (3) |

Students must take one of the following courses:

| COM M | 393 | Technical Writing (3) |
| :--- | :--- | :--- |
| COM M | $393 X$ | Technical Writing (3) |

Students must choose one of the following courses:
COM M 492 Grant and Proposal Writing (3)
COM M 496 Writing for the Computer Industry (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

Students should refer to the objectives listed under M ajor in Communication Studies.

## 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 require ments 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 upper level.

## Communication Studies Coursework ( 15 s.h.)

Required Foundation Course (3 s.b.)
Students must take the following course:
COMM 300 Communication Theory (3)
Supplemental Minor Courses (12 s.h.)
Students must choose four courses from those listed as fulfilling the requirements for the major in communication studies to complete the 15 semester hours required for the minor.

## 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, methods of study, and 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, languages, and systems for developing computer-based solutions to practical problems.
- Effectively use object-oriented programming languages such as C ++ or Java in developing computer-based solutions to practical problems.
- Pursue careers in UNIX system administration or computer networking or as programmer/analysts or software engineers working with programming languages such as $\mathrm{C}++$ or Java, operating systems such as UN IX or Windows, or relational database systems using O racle.
- Effectively use software products, such as Perl, CO RBA, and O racle, that have become integral parts of the modern technical workplace.
- Use oral and written communication skills in problem definition, application development, and presentation of solutions.
- Apply knowledge of concepts and principles to facilitate the responseto and management of changes in computer technology.


## Requirements for the Major

A major in computer and information science requires the comple tion 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 require ments are listed below.
For a listing of all the requirements for the bachelor's degree, students should refer to p .16 .

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

Required Core Courses (12 s.h.)
Students must take the following courses:
CM IS
CM $\quad$ Introductory Programming (3)

Breadth Courses (9 s.h.)
Students must choose at least one course in three of the following areas for a total of 9 semester hours:

## Computer Networking

| CM IS | 370 | D ata C ommunications (3) |
| :--- | :--- | :--- |
| CM IS | 435 | Computer N etworking (3) |
| CM IS | 445 | D istributed Systems (3) |

Programming Languages and Operating Systems

| C I IS | 325 | UNIX with Shell Programming (3) |
| :--- | :--- | :--- |
| CM IS | 340 | Programming in Java (3) |
| CM IS | 398 P | Programming in Perl (3) |
| C IS | 390 | UNIX System Administration (3) |
| C IS | 342 | Windows U ser Interface Programming (3) |
| CM IS | 415 | Advanced UN IX and C (3) |
| C IS | 440 | Advanced Programming in Java (3) |
| C IS | 442 | Windows Systems Programming (3) |
| CM IS | 490 | Advanced UNIX System Administration (3) |
| CM IS | 498 P | Advanced Programming in Perl (3) |


| Software Engineering |  |  |  |
| :--- | :---: | :---: | :---: |
| CM IS |  |  |  |
| CM |  |  |  |
| CM IS |  |  |  |
| 330 |  |  |  |$\quad$ Software Engineering Principles and Techniques (3)

Supplemental Major Courses (9 s.h.)
Students must choose at least two 400 -level computer and information science courses and one 300- or 400 -level course in computer and information science, computer information technology, computer science, computer studies, or information systems management to complete the 30 semester hours required for the major.

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.
M ATH 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-theart computer technology. Students become technically competent, but also learn to write well-organized and clear memos and reports. The computer information technology curriculum integrates technical skill with communication skills, supe rior 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

- Use technical skills in network engineering or administration and/or database development or administration.
- Use decision-making skills and problem-solving capabilities, including client needs assessment.
- Use technical writing skills to produce proposals, reports, briefings, and documentation.
- Communicate effectively using oral and computer-based presentation techniques.
- Apply effective information research techniques.
- Perceive situations through a global and historical information technology perspective.


## Requirements for the Major

A major in computer information technology requires 33 semester hours of coursework in computer information technology; at least 17 semester hours must be earned in courses numbered 300 or above. Required courses vary according to individual track, but each requires a minimum of 15 semester hours in technical certification courses.
The following requirements are for the networking track; a database track is under development.
For a listing of all the requirements for the bachelor's degree, students should refer to p .16.

## Computer Information Technology Coursework (33 s.h.)

Networking Track Courses (24 s.h.)
In fulfilling the requirements for the computer information technology major, students with a track in networking must take the following track courses.

Required Technical Certification Courses (12 s.h.)
Students must take the following technical certification courses:*

| CM IT | 366 M | Windows 2000 Professional (3) |
| :--- | :--- | :--- |
| CMIT | 367 M | Windows 2000 Server (3) |
| CM IT | 376 M | Windows 2000 N etwork Infrastructure (3) |
| CM IT | 377 M | Windows 2000 Directory Services Infrastructure (3) |

Required Computing Courses (9 s.h.)
Students must take the following computing courses:

| CM IS | 310 | Computer Systems and Architecture (3) |
| :--- | :--- | :--- |
| CM IS | 370 | Data C ommunications (3) |
| CM IS | 435 | Computer N etworking (3) |

Supplemental Technical Certification Course(s) ( $\mathbf{3}$ s.h.)
Students must choose one or more of the following courses for a total of 3 semester hours:

| CM IT | 476 M | Designing a W indows 2000 N etwork Infrastructure (2) |
| :--- | :--- | :--- |
| CM IT | 477 M | D esigning a W indows 2000 D irectory Services <br> Infrastructure (2) |
| CM IT | 480 M | Designing Security for a W indows 2000 N etwork (3) |

Supplemental Major Courses (9 s.b.)
Regardless of track, students must choose three or more upper-level courses from offerings in computer information technology, computer and information science, computer science, computer studies, or information systems management for a total of 9 semester hours. Students may also apply CM IT 486A or 486B Internship in C omputer Information Technology Through C 0-op toward this requirement.

[^5]
## 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: M ATH 107 College Algebra (3)
or
A higher-numbered mathematics course

## Computer Science

Students may seek an academic major in computer science.

## Major in Computer Science

The computer science major is intended for students with 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 for careers in computer software or computer system design, including careers as software engineers, application software designers, system programmers, or system engineers.

## Objectives

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

- Understand the effect of computerization on the global workplace.
- Convey computer software and system designs effectively, both in speaking and in writing.
- Design and develop computer software using a variety of programming languages.
- Apply the theory of computer organization and computer system architecture.
- Apply the theory of data structures and algorithm design and efficiency.
- Apply the mathematical foundations of computer science.
- Use information resources to assist with projects or research.


## 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 19 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 p . 16.

## Computer Science Coursework (38 s.h.)

Required Mathematics Courses (8 s.b.)
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.

| M ATH | 140 | Calculus I (4) |
| :--- | :--- | :--- |
| M ATH | 141 | Calculus II (4) |

Required Foundation Courses (9 s.h.)
Students must take the following foundation courses:

| CM SC | 130 | Introductory Computer Science (3) |
| :--- | :--- | :--- |
| CM SC | 150 | Introduction to D iscrete Structures (3) |
| CM SC | 230 | Elementary D ata Structures (3) |

Core Courses ( 6 s.h.)
Students must choose two of the following core courses:

| CM SC | 311 | Computer Organization (3) |
| :--- | :--- | :--- |
| CM SC | 330 | Advanced Programming Languages (3) |
| CM SC | 335 | O bject-O riented and Concurrent Programming (3) |

Supplemental Major Courses (15 s.h.)
Students must choose five of the following courses for a total of 15 semester hours:

| CM SC | 411 | Computer System Architecture (3) |
| :--- | :--- | :--- |
| CM SC | 412 | O perating Systems (3) |
| CM SC | 420 | D ata Structures (3) |
| CM SC | 421 | Introduction to Artificial Intelligence (3) |
| CM SC | 424 | D atabase D esign (3) |
| CM SC | 430 | Theory of Language Translation (3) |
| CM SC | 450 | Logic for C omputer Science (3) |
| CM SC | 451 | D esign and Analysis of Computer Algorithms (3) |
| CM SC | 452 | Elementary Theory of Computing (3) |
| CM SC | 475 | Combinatorics and Graph Theory (3) |
| CM SC | $498 D$ | Topics in Software Systems Engineering (3) |
| CM SC | $498 G$ | Image Processing and Computer Graphics (3) |
| CM SC | 498j | Internet Programming in Java (3) |

## Recommendations

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

| IFSM | 303 | H uman Factors in Information Systems (3) |
| :--- | :--- | :--- |
| IFSM | 304 | Ethics in the Information Age (3) |
| M ATH | 240 | Introduction to Linear Algebra (4) |
| M ATH | 241 | C alculus III (4) |
| M ATH | 381 | O perations Research (3) |
| M ATH | 390 | M athematics of Communication (3) |
| M ATH | 402 | Algebraic Structures (3) |
| M ATH | 466 | N umerical 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 of computer studies helps prepare students for a variety of entrylevel 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 knowledge, concepts, and principles to facilitate the handling of changes in computer technology.
- Conceptualize and manage the design and implementation of high-quality information systems.
- D esign and develop computer software using a programming language.
- Use technology to research information and provide a critical analysis of alternatives to produce informed decisions for organizations.
- 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 fear sibility studies to end-user documentation and manuals.
- Contrast information technology needs from historical and international perspectives with regard to the 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 p. 16.

## Computer Studies Coursework (30 s.h.)

Introductory Course (3 s.h.)
Students must choose one of the following introductory courses:

| CM IS | 102 | Introduction to Problem Solving and Algorithm D esign (3) |
| :--- | :--- | :--- |
| CM ST | 300 | Concepts in Computing (3) |
| IFSM | 201 | Introduction to Computer-Based Systems (3) |

Foundation Courses (6 s.h.)
Students must choose two of the following foundation courses:

| CM IS | 240 | D ata Structures and Abstraction (3) |
| :--- | :--- | :--- |
| IFSM | 300 | Information Systems in O rganizations (3) |
| IFSM | 310 | Software and H ardware Concepts (3) |

Programming Language Course (3 s.h.)
Students must choose one of the following programming language courses (or another suitable programming language course):

| CM IS | 140 | Introductory Programming (3) |
| :--- | :--- | :--- |
| CM ST | 305 | Introduction to Visual Basic Programming (3) |
| IFSM | 296 | COBOL Programming I (3) |

Supplemental Major Courses (18 s.h.)
Students must choose six courses from offerings in computer and information science, computer information technology, computer science, computer studies, and information systems management to complete the 30 semester hours required for the major.

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.

```
M ATH 107 College Algebra (3)
or
```

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 studying principles and techniques for developing computer-related solutions to practical problems.

## Objectives

Students should refer to the objectives listed under M ajor in Computer Studies.

## 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. C ourses may not duplicate those used to satisfy requirements for the major.

## 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, and 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.
- $M$ eet the challenges confronting security professionals in ways that are cost-effective.
- Understand principles of effective law enforcement and security administration.
- Effectively explain criminal behavior, treatment, and law enforcement in written and oral argument.
- Analyze patterns of crime in American society.
- Understand the role of the courts in the administration of justice.
- Understand techniques of prevention and treatment of crime.
- Understand the causes of criminal behavior.
- Acquire a cohesive base of job-related skills, techniques, and principles related to criminal justice.
- Use the computer for literature review and the analysis of criminal behavior.


## 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 cross-cultural and world issues coursework and 3 semester hours in developmental and historical period coursework. 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 p . 16 .

## Criminal Justice Coursework (30 s.h.)

Statistics Course (3 s.b.)
Students must choose one of the following statistics courses:

| GN ST | 201 | Introductory Statistics (3) |
| :--- | :--- | :--- |
| STAT | 100 | Elementary Statistics and Probability (3) |

Introductory Courses (6 s.h.)
Students must choose two of the following introductory 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.b.)
Students must choose three or more of the following core courses for a total of 9 semester hours:

| CCJS | 234 | Criminal Procedure and Evidence (3) |
| :--- | :--- | :--- |
| CCJS | 320 | Introduction to Criminalistics (3) |
| CCJS | 340 | Law-Enforcement Administration (3) |
| CCJS | 357 | Industrial and Retail Security Administration (3) |
| CCJS | 360 | Victimology (3) |
| CCJS | 498 C | Computer Crime and Security (3) |
| CCJS | $498 G$ | Introduction to Security M anagement (3) |
| CCJS | 498 | Selected Topics in Criminology/C riminal Justice (1-3)* |

Issues in Criminal Justice Courses (6-9 s.b.)
Students must choose at least one course from each of the following categories:

| Cro | ral | Oorld Issues (3-6 s.h.) |
| :---: | :---: | :---: |
| BEHS | 336 | The M iddle East: An Interdisciplinary Perspective (6) |
| CCJS | 351 | Issues in Criminal Justice (6) |
| ECON | 440 | International Economics (3) |
| GVPT | 200 | International Political Relations (3) |
| GVPT | 306 | Global Ecopolitics (3) |
| GVPT | 401 | Problems of World Politics (3) |
| GVPT | 401A | International Political Terrorism (3) |
| GVPT | 401B | State Terrorism (3) |
| GVPT | 451 | Foreign Policy of Russia and States of the Former Soviet Union (3) |
| GVPT | 481 | Government and Administration of Russia and States of the Former Soviet Union (3) |
| GVPT | 482 | Government and Politics of Latin America (3) |
| GVPT | 483 | Government and Politics of Asia (3) |
| GVPT | 484 | Government and Politics of Africa (3) |
| GVPT | 485 | Government and Politics of the M iddle East (3) |
| SOCY | 311 | The Individual and Society (6) |

Developmental and Historical Period (3 s.h.)

| GVPT | 442 | History of Political Theory: M iddle Ages to <br> the Present (3) |
| :--- | :--- | :--- |
| GVPT | 443 | Contemporary Political T heory (3) |
| GVPT | 444 | American Political Theory (3) |
| GVPT | 452 | Inter-American Relations (3) |
| GVPT | 453 | Recent East Asian Politics (3) |
| GVPT | 455 | Contemporary M iddle Eastern Politics (3) |
| H IST | 266 | The United States in World Affairs (3) |
| H IST | 319 A | A History of Terrorism (3) |

* Students may apply only one special topics course toward the core requirement.

| HIST | 319 B | History of Violence in America (3) |
| :--- | :--- | :--- |
| HIST | 319 L | History of D rug Use in America (3) |
| H IST | 372 | Legacy of the Civil Rights M ovement (3) |

Supplemental Major Courses (3-6 s.h.)
Students must choose one or two additional upper-level courses in criminal justice to complete the 30 semester hours required for the major.

## Minor in Criminal Justice

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

## Objectives

Students should refer to the objectives listed under $M$ ajor in Criminal Justice.

## 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 upper level.

## Criminal Justice Coursework (15 s.h.)

## Foundation Courses (6 s.h.)

Students must choose 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 choose two of the following core courses:

| CCJS | 320 | Introduction to Criminalistics (3) |
| :--- | :--- | :--- |
| CCJS | 340 | Law-Enforcement Administration (3) |
| CCJS | 350 | Juvenile Delinquency (3) |
| CCJS | 400 | Criminal Courts (3) |
| CCJS | 432 | Law of Corrections (3) |
| CCJS | 453 | White-C ollar and O rganized Crime (3) |

Supplemental Minor Course (3 s.h.)
Students must choose one of the following courses:
CCJS 351 Issues in Criminal Justice (6)

CCJS 357 Industrial and Retail Security Administration (3)
CCJS 498C Computer Crime and Security (3)
CCJS 498F Legal and Ethical Issues in Security M anagement (3)
GVPT 399 H Counterterrorism (3)
GVPT 401A International Political Terrorism (3)
GVPT 433 TheJudicial Process (3)

## Customer Service $M$ anagement

Students may seek a 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 through the 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

- Understand and apply key concepts in customer service planning and management.
- Understand the relation of customer service activities and proce dures to the organization as a whole.


## 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 require ments 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 upper level.
For a listing of all the requirements for the bachelor's degree, students should refer to p. 16.

Customer Service Management Coursework (15 s.h.)
Required Foundation Course (3 s.h.)
Students must take the following foundation course:
BM GT 395 Customer Service M anagement (3)
Supplemental Minor Courses (12 s.h.)
Students must choose four of the following courses to complete the 15 semester hours required for the minor:

| ACCT | 301 | Accounting for Nonaccounting M anagers (3) |
| :--- | :--- | :--- |
| BM GT | 230 | Business Statistics (3) |
| BM GT | 309 | Operations Research for M anagement D ecisions (3) |
| BM GT | 317 | Problem Solving (3) |
| BM GT | 364 | M anagement and Organization Theory (3) |
| BM GT | 370 | Introduction to Transportation M anagement (3) |
| BM GT | 372 | Introduction to Logistics M anagement (3) |


| BM GT | 375 | Procurement M anagement (3) |
| :--- | :--- | :--- |
| BM GT | 378 | Legal Environment of Business (3) |
| BM GT | 383 | Planning and Control of Services (3) |
| BM GT | 384 | M anaging for Q uality (3) |
| BM GT | 396 | Customer Consultation and N eeds Analysis (3) |
| BM GT | 487 | Project M anagement I (3) |
| H RM N | 302 | Organizational Communication (3) |
| H RM N | 406 | Employee Training and Development (3) |

## E-Commerce and Technology M anagement

Students may seek a minor in e-commerce and technology management.

## Minor in E-Commerce and Technology Management

The ecommerce and technology management minor complements the skills the student gains in his or her major discipline through study of the basic concepts of technology and management, the use of management and leadership principles in technology-based organizations, and current developments in ecommerce and technology management.

## Objectives

The student who graduates with a minor in ecommerce and technology management will be able to

- Understand and discuss current topics such as ecommerce, knowledge management, virtual management, Internet infrastructure, Web technology, computer-based systems, project management, systems performance, and futurology.
- Understand technology, business, and management issues and their relation to professional workplace requirements.


## Requirements for the Minor

A minor in ecommerce and technology management requires the completion of 15 semester hours of coursework in ecommerce and technology management; 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 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 upper level.
For a listing of all the requirements for the bachelor's degree, students should refer to p. 16 .

## E-Commerce and Technology Management Coursework (15 s.h.)

Required Courses (6 s.b.)
Students must take the following courses:

| BM GT | 304 | M anaging E-Commerce in Organizations (3) |
| :--- | :--- | :--- |
| BM GT | 317 | Problem Solving (3) |

Supplemental Minor Courses (9 s.h.)
Students must choose three or more of the following courses to complete the 15 semester hours required for the minor. C ourses strongly recommended for the minor are indicated by an asterisk.

| BM GT | 301 | Computer Systems for Business (3) |
| :--- | :--- | :--- |
| BM GT | 305 | Knowledge M anagement (3) |
| BM GT | 330 | Entrepreneurship and N ew Venture Planning (3) |
| BM GT | 364 | M anagement and Organization Theory (3)* |
| BM GT | 366 | M anaging in the Public Sector (3) |
| BM GT | 383 | Planning and Control of Services (3) |
| BM GT | 388 B | Virtual M anagement (1) |
| BM GT | 395 | Customer Service M anagement (3) |
| BM GT | 412 | Program Analysis and Evaluation (3) |
| BM GT | 487 | Project M anagement I (3)* |
| BM GT | 491 | Exploring the Future (3) |
| M RKT | 318 | Exploring Internet M arketing (1) |
| M RKT | 457 | Web M arketing (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 through 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.
- Understand the relation of economic concepts to a variety of current social problems such as poverty, divorce, social stratification, and unemployment.
- Analyze economic and social problems and 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 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 upper level.
For a listing of all the requirements for the bachelor's degree, students should refer to p . 16 .

## Economics Coursework (18 s.h.)

## Required Foundation Courses (9 s.h.)

Students must take the following foundation courses:

| ECON | 201 | Principles of EconomicsI (3) |
| :--- | :--- | :--- |
| ECON | 203 | Principles of Economics II (3) |

Students must choose one of the following statistics courses (or equivalent):

| GN ST | 201 | Introductory Statistics (3) |
| :--- | :--- | :--- |
| STAT | 100 | Elementary Statistics and Probability (3) |

Supplemental Minor Courses (9 s.h.)
Students must choose three upper-level economics courses to complete the 18 semester hours required for the minor.

## 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, analyze, and appreciate English and American literature and representative works from the literatures of other countries and cultures.
- Critically examine intellectual, moral, and ethical issues.
- Apply techniques of independent 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.
* Strongly recommended.
- Formulate ideas and convey them in clear English prose.
- Write effectively and demonstrate superior understanding of the writing process and writing techniques.
- Communicate abstract ideas clearly in oral presentation.


## Requirements for the Major

A major in English requires the completion of 33 semester hours of coursework in English, including 9 semester hours each in particular genres (drama, the novel, and poetry), historical periods (before and after 1800), and major authors (American and British); at least 17 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 p .16 .

## English Coursework (33 s.h.)

Required Foundation Course (3 s.h.)
Students must take the following foundation course:
EN GL 303 Critical Approaches to Literature (3)
Genre Courses (9 s.b.)
Students must choose three of the following courses for a total of 9 semester hours. Choices must include at least one course covering each of the three genres: fiction, poetry, and drama. EN GL 240 or EN GL 340 may be substituted for only one of the genres.

| EN GL | 240 | Introduction to Fiction, Poetry, and D rama (3) |
| :--- | :--- | :--- |
| EN GL | 241 | Introduction to the N ovel (3) |
| EN GL | 244 | Introduction to D rama (3) |
| EN GL | 246 | The Short Story (3) |
| EN GL | 250 | Introduction to Literature by Women (3) |
| EN GL | 340 | Studies in Fiction, Poetry, and Drama (3) |
| EN GL | 377 | M edieval M yth and M odern Narrative (3) |
| EN GL | 434 | American D rama (3) |
| EN GL | 441 | The Novel in America Since 1914 (3) |
| EN GL | 446 | Postmodern British and American Poetry (3) |
| EN GL | 454 | Modern Drama (3) |
| EN GL | 456 | The English N ovel (3) |
| EN GL | 457 | The M odern Novel (3) |
| EN GL | 476 | Modern Fantasy and Science Fiction (3) |

Historical Period Courses (9 s.h.)
Students must choose three of the following courses, including at least one course focusing on literature written before 1800 (courses marked with an asterisk):

| EN GL | 201 | Western World Literature: H omer to the Renaissance (3)* |
| :--- | :--- | :--- |
| EN GL | 202 | Western World Literature: Renaissance to the Present (3) |
| EN GL | 211 | English Literature: Beginning to $1800(3)^{*}$ |
| EN GL | 212 | English Literature: 1800 to the Present (3) |
| EN GL | 221 | American Literature: Beginning to 1865 (3)* |
| EN GL | 222 | American Literature: 1865 to the Present (3) |
| EN GL | 310 | M edieval and Renaissance British Literature (3)* |

[^6]| EN GL | 312 | Romantic to M odern British Literature (3) |
| :--- | :--- | :--- |
| EN GL | 313 | American Literature (3) |
| EN GL | 345 | Modern Poetry (3) |
| EN GL | 350 | English and American Literature: Blake to Conrad (3) |
| EN GL | 362 | African American Slave N arratives and the <br> Oral Tradition (3) |
| EN GL | 363 | African American Literature to 1900 (3) |
| EN GL | 364 | 20th-Century African American Literature: The <br>  <br> Fictional Vision (3) |
| EN GL | 425 | M odern British Literature (3) |
| EN GL | 433 | American Literature: 1914 to the Present (3) |
| EN GL | 437 | Contemporary American Literature (3) |
| EN GL | 466 | TheArthurian Legend (3) |

Major Author Courses (9 s.h.)
Students must choose three of the following courses, including at least one course focusing on an English author or authors and one on an American author or authors:

| EN GL | 205 | Introduction to Shakespeare (3) |
| :--- | :--- | :--- |
| EN GL | 304 | The M ajor Works of Shakespeare (3) |
| EN GL | 354 | 20th-Century American Women Writers (3) |
| EN GL | 358 | 20th-C entury British Women Writers (3) |
| EN GL | 402 | Chaucer (3) |
| EN GL | 403 | Shakespeare: The Early Works (3) |
| EN GL | 404 | Shakespeare: The Later Works (3) |
| EN GL | 406 | Shakespeare: Power and Justice (3) |
| EN GL | 419 | M ajor British Writers After 1800 (3) |
| EN GL | 439 | Major American Writers (3) |

Supplemental Major Course (3 s.h.)
Students may choose one of the following courses to complete the 33 semester hours required for the major:

| COM M | 380 | Language in Social Contexts (3) |
| :--- | :--- | :--- |
| EN GL | 384 | Advanced Grammar and Style (3) |
| EN GL | 391 | Advanced Composition (3) |
| EN GL | $391 X$ | Advanced Composition (3) |
| EN GL | 396 | Critical Analysis in Reading and Writing (6) |
| EN GL | 444 | Feminist Critical Theory (3) |
| EN GL | 480 | Creative Writing (3) |
| EN GL | 493 | Advanced Expository Writing (3) |

Except for the required foundation course (EN GL 303), students may apply three 1-semester-hour courses within a single category toward the required 9 semester hours for any category. No more than six 1 -semester-hour courses may be applied toward the major. EN GL 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 through literary analysis, critical thinking and reading, and study of the relationship of literature to contemporary intellectual issues.

## Objectives

Students should refer to the objectives listed under M ajor in English.

## Requirements for the Minor

A minor in English requires the completion of 15 semester hours of English coursework; 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 upperlevel course should also be upper level.

English Coursework ( 15 s.h.)
Required Foundation Course (3 s.b.)
Students must take the following foundation course:
ENGL 303 Critical Approaches to Literature (3)
Supplemental Minor Courses (12 s.b.)
Students must choose at least four English courses for a total of 12 semester hours, 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 $M$ anagement

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

## Major in Environmental Management

The major in environmental management educates environmental managers who not only understand all aspects of the environmental industry but also have "new work skills," including critical thinking, problem solving, project management, interpersonal relations, and team building. The major in environmental management pre pares 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 for environmental management.
- D emonstrate 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., critical thinking, problem solving, project management, interpersonal relations, and team building.
- Appreciate and incorporate information technology, international perspectives, and an understanding of the new environmental paradigm of management and prevention in addition to control and remediation.
- Demonstrate breadth and understanding of multimedia environmental contexts, the development of cutting-edge technologies, and the application of existing and emerging environmental technologies in cost-effective and work-efficient ways.
- Understand and integrate multimedia environmental management, regulatory compliance, recent technological changes, emergency management, health and safety management, global resource conservation, and sustainable development.


## 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 p .16.

## Environmental Management Coursework (30 s.h.)

Required Courses (18 s.b.)
Students must take the following courses:
EN M T 301 Environment and Ecosystems M anagement (3)
EN M T 320 Environmental and O ccupational H ealth and Safety $M$ anagement (3)
ENM T 340 Environmental Technology (3)
EN M T 405 Pollution Prevention and Other Strategies (3)
EN M T 493 Environmental Regulations and Policy (3)
EN M T 495 Environmental M anagement Issues and Solutions (3)
Supplemental Major Courses (12 s.h.)
Students must choose four of the following courses:
EN M T $305 \quad H$ azardous M aterials Toxicology (3)
ENM T $310 \quad$ Emergency Planning and $O$ perations $M$ anagement (3)
ENM T 315 Environmental Audits and Permits (3)
EN M T 325 The Biosphere, Energy, and Sustainable D evelopment (3)
EN M T 330 Environmental M onitoring and Investigations (3)
ENMT 350 Integrated Waste M anagement (3)
ENM T 360 Water Environment M anagement and Use (3)
EN M T 370 Environmental Communications
and Information Systems (3)
EN M T $380 \quad$ O utdoor and Indoor Air Q uality M anagement (3)
EN M T 390 Environmental Risk Assessment (3)

Additional Required Coursework (20-21 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) |
| :--- | :--- | :--- |
| BM GT | 230 | Business Statistics (3) |
| CHEM | 103 | General Chemistry I (4) |
| CH EM | 104 | Fundamentals of O rganic and Biochemistry (4) |
| M ATH | 115 | PreCalculus (3) |

Students must choose one of the following physics courses:

| N SCI | 100 | Introduction to Physical Science (3) |
| :--- | :--- | :--- |
| PH YS | 121 | Fundamentals of Physics I (4) |

## Recommendations

The following courses are recommended to fulfill general education require ments or as additional electives:

| BM GT | 317 | Problem Solving (3) |
| :--- | :--- | :--- |
| BM GT | 364 | M anagement and Organization Theory (3) |
| BM GT | 487 | Project M anagement I (3) |
| CM ST | 303 | Advanced Features of M icrocomputer |
|  |  | Applications Software (3) |
| COM M | 293 | Technical Report Writing (3) |
| COM M | 390 | Writing for M anagers (3) |
| COM M | $393 / 393 X$ | Technical Writing (3) |
| COM M | $394 / 394 X$ | Business Writing (3) |
| IFSM | 201 | Introduction to Computer-Based Systems (3) |
| IFSM | 300 | Information Systems in Organization (3) |

## Minor in Environmental Management

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

## Objectives

Students should refer to the objectives listed under M ajor in Environmental M anagement.

## 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 at right. If a specific course required for the minor is taken instead to satisfy require ments 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 upper level.

## Environmental Management Coursework (15 s.h.)

Required Foundation Course (3 s.b.)
Students must take the following foundation course:
ENM T 301 Environmental and Ecosystems M anagement (3)
Supplemental Minor Courses (12 s.h.)
Students must choose four environmental management courses from those listed as fulfilling the requirements for the major in environmental management to complete the 15 semester hours required for the minor.

## Finance

Students may seek an academic minor in finance.

## Minor in Finance

The finance minor complements the skills the student gains in his or her major discipline through the study of the institutions, the ory, and practice involved in the allocation of financial resources within the private sector.

## Objectives

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

- Understand the latest methods for analyzing, interpreting, and reporting financial data.
- D evelop 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.
- Value potential acquisitions and analyze competitors.
- Determine the role of derivatives in the financial process.
- Understand 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 in dealing with complex financial issues.
- Use computers, financial software, and databases.


## Requirements for the Minor

A minor in finance requires the completion of 15 semester hours of coursework in finance; 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 upper level.
For a listing of all the requirements for the bachelor's degree, students should refer to p .16 .

Finance Coursework (15 s.h.)
Required Foundation Courses (6 s.h.)
Students must take the following foundation courses:

| BM GT | 340 | Business Finance (3) |
| :--- | :--- | :--- |
| BM GT | 343 | Investments (3) |

Supplemental Minor Courses (9 s.h.)
Students must choose three of the following courses to complete the 15 semester hours required for the minor:

| BM GT | 342 | Fundamentals of Building Wealth (3) |
| :--- | :--- | :--- |
| BM GT | 345 | Property and Liability Insurance (3) |
| BM GT | 346 | Risk M anagement (3) |
| BM GT | 347 | Life Insurance (3) |
| BM GT | 440 | Financial M anagement (3) |
| BM GT | 443 | Security Analysis and Valuation (3) |
| BM GT | 444 | Futures C ontracts and Options (3) |
| BM GT | 445 | Commercial Bank M anagement (3) |
| BM GT | 446 | International Finance (3) |
| BM GT | $498 Q$ | 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 administra tion of fire protection services, encompassing all areas of incendiaryfire management. Developed in conjunction with the $N$ ational Fire Academy of the Federal Emergency M anagement Agency, the major serves fireservice 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, Iaw 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 modern 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 firerisk assessment.
- Apply project management strategies to design disaster and firedefense planning.
- Apply design principles to detect, control, and suppress fires in buildings and other structures and use fire modeling to analyze fire propagation.
- Apply systems analysis to problems of incendiary-fire investigation and fire protection.
- Apply risk assessment to analyze pre and post-occurrence factors.
- Apply skills in human resource management to deal with the psychological effects of emergency situations.
- Evaluate techniques, procedures, programs, and agencies involved in preventing fires.
- 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.
- Understand and apply analytical and problem-solving methods in resolving fire or emergency problems and issues.
- Understand the domestic and global dimensions of and influences on fire science.
- Develop effective written and oral communications consistent with the fireservice and related professional environment.
- Understand and apply current computer applications and technology in the workplace.
- D evelop innovative leadership and team-management skills necessary for success in a diverse and changing workplace.


## Requirements for the Major

A major in fire science requires the completion of 30 semester hours of coursework in fire science; at least 15 semester hours must be earned in courses numbered 300 or above. Specific course require ments are listed below.
For a listing of all the requirements for the bachelor's degree, students should refer to $p$. 16.

## 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 | FirePersonnel M anagement (3) |
| FSCN | 305 | FirePrevention Organization and M anagement (3) |
| FSCN | 403 | M anagerial Issues in H azardous M aterials (3) |
| FSCN | 412 | Political and Legal Foundations of Fire Protection (3) |

Supplemental Major Courses ( 15 s.h.)
Students must choose five of the following courses to complete the 30 semester hours required for the major:

| FSC N | 303 | Analytic Approaches to Public Fire Protection (3) |
| :--- | :--- | :--- |
| FSCN | 306 | Incendiary-Fire Analysis and Investigation (3) |
| FSCN | 401 | Disaster and Fire D efense Planning (3) |
| FSCN | 402 | FireRelated H uman Behavior (3) |
| FSC N | 411 | Fire Protection Structure and Systems D esign (3) |
| FSCN | 413 | The Community and Fire Threat (3) |
| FSCN | 414 | Fire D ynamics (3) |
| FSCN | 415 | Application of Fire Research (3) |

## Recommendations

The following courses are recommended to fulfill general education requirements or as additional electives:
Students are encouraged to take one of the following computing courses:

| CM ST | 340 | Computer Applications in M anagement (3) |
| :--- | :--- | :--- |
| IFSM | 300 | Information Systems in O rganizations (3) |

Students are encouraged to take one or more of the following writing courses:
COM M $390 \quad$ Writing for M anagers (3)
COMM 393/393X Technical Writing (3)
COM M 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 how fire-service managers make informed decisions regarding organization, planning, operating procedures, management, and allocation of limited resources

## Objectives

Students should refer to the objectives listed under M ajor in Fire Science.

## Requirements for the Minor

A minor in fire science requires the completion of 15 semester hours of coursework in fire science; 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. Any course used to replace an upper-level course should also be upper level.

## Fire Science Coursework (15 s.h.)

Foundation Course (3 s.b.)
Students must choose one of the following foundation courses:

| FSCN | 302 | Advanced Fire Administration (3) |
| :--- | :--- | :--- |
| FSCN | 304 | Fire-Personnel M anagement (3) |

Supplemental Minor Courses (12 s.h.)
Students must choose four fire science courses listed as fulfilling the requirements for the major to complete the 15 semester hours required for the minor.

## General Studies

Students may seek an academic major in general studies.

## Major in General Studies

The general studies major is an interdisciplinary option allowing students to build courses around a particular focus area and related discipline or an interdisciplinary combination. It allows the student to construct a combination of disciplines that provides a body of knowledge appropriate to a specific focus (for example, a cultural, historical, or geographical area). 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 focus disciplines.
- Develop effective written and oral communication skills consistent with the focus areas.
- Apply skills and concepts to principles and problems of modern life.
- D efine an approach grounded in the focus disciplines and appropriate to the study of a specific topic, area, or theme.
- D evelop 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 focus 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. Students should consult an advisor before selecting the general studies major. ( N ote: The individual studies option requires the prior approval of a UM UC advisor.) Distribution requirements for each option are listed below.

For a listing of all the requirements for the bachelor's degree, students should refer to p . 16 .

## Major Options

Students must choose one of the following options for the general studies major:

## In-Depth Focus

With an 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 semeter hours in the supporting area, as well as 3 semester hours in related elective courses, 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

With the interdisciplinary breadth option, students combine courses from three disciplines, with a minimum of 12 semeter 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 combining offerings from more than one discipline. With the prior approval of a UM UC advisor, the student may design a program of study around an interdisciplinary focus and clearly defined academic goal that cannot reasonably be satisfied in an existing curriculum at the university.

## 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 covering issues related to caring for an aging population, including long-term care, health, elder abuse, and financial support.

## Objectives

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

- Understand physiological and psychological aspects of the aging process.
- Understand social and family issues related to aging.
- Understand legal, economic, and policy implications of an aging population.
- Counter myths associated with the aging process and provide positive examples of aging.
- Understand institutional and community-based systems for the care of older people and how these can affect the health and well-being of older individuals and their families.


## Requirements for the Minor

A minor in gerontology requires the completion of 15 semester hours of coursework in gerontology; at least 9 semester hours must be earned in courses numbered 300 or above. Specific course require ments 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 upper level.

For a listing of all the requirements for the bachelor's degree, students should refer to p . 16.

## Gerontology Coursework ( 15 s.h.)

Required Courses (6 s.h.)
Students must take the following courses:

| GERO | 210 | Social Gerontology (3) |
| :--- | :--- | :--- |
| GERO | 220 | Psychological Aspects of Aging (3) |

## Core Courses ( 6 s.h.)

Students must choose one of the following course sequences:

| - GERO | 302 | Health and Aging (3) |
| ---: | :--- | :--- |
| GERO | 304 | Aging, Public Policy, and the Law (3) |
| - GERO | 341 | Long-Term-C are Administration I (3) |
| GERO | 342 | Long-Term-C are Administration II (3) |
| - GERO | 351 | M anagement of Senior H ousing Environment (3) |
| GERO | 353 | Financial M anagement of Retirement Housing (3) |

Supplemental Minor Course (3 s.b.)
Students must choose one other course in gerontology to complete the 15 semester hours required for the minor.

## 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 through 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

- Understand political science terminology and explanations.
- Understand a variety of approaches to the study and practice of politics.
- Understand the scope of political science, government, political process, law, and international politics.
- Articulate informed judgments 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 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 upper level.
For a listing of all the requirements for the bachelor's degree, students should refer to p. 16.

## Government and Politics Coursework (15 s.h.)

Foundation Courses (6 s.b.)
Students must choose two of the following foundation courses:

| GVPT | 100 | Principles of G overnment and Politics (3) |
| :--- | :--- | :--- |
| GVPT | 170 | American Government (3) |
| GVPT | 200 | International Political Relations (3) |

Supplemental Minor Courses (9 s.b.)
Students must choose at least one government and politics course in each of 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.

## H ealth Care Administration

Students may seek an academic minor in health care administration.

## Minor in Health Care Administration

The health care administration minor complements the skills the student gains in his or her major discipline by studying how the health care administration 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 health care administration will be able to

- Understand the scope and complexity of the health services industry.
- Understand the domestic and global dimensions of the health services industry.
- Think critically and constructively and perform research on health services management issues and problems.
- Appreciate philosophies of ethics and social responsibility relevant to health services management.
- Understand legal issues and law related to the health services industry.
- Understand and apply current knowledge and practices in accounting, finance, law, research, planning, marketing, and human resource management in the health services industry.


## Requirements for the Minor

A minor in health care administration requires the completion of 15 semester hours of coursework in health services 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 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 upper level.
For a listing of all the requirements for the bachelor's degree, students should refer to p. 16.

## Health Care Administration Coursework (15 s.h.)

Required Foundation Course (3 s.h.)
Students must take the following foundation course:
H M GT 320 H ealth Services M anagement (3)
Supplemental Minor Courses (12 s.b.)
Students must choose four of the following courses to complete the 15 semester hours required for the minor. Courses strongly recommended are marked with an asterisk.

| HMGT | 310 | H ealth Services Policies (3) |
| :---: | :---: | :---: |
| HMGT | 322 | H ealth Services Financial M anagement (3) |
| HMGT | 325 | H ealth Services Economics (3) |
| HM GT | 330 | I ssues in H ealth Services M anagement (3) |
| HMGT | 398C | Research Issues and M ethods in H ealth Services $M$ anagement (3) |
| HM GT | 398D | $M$ anaged C are in H ealth Services M anagement (3)* |
| HMGT | 398E | H ealth Communications (3) |
| HM GT | 398F | Regulation of H ealth Services Professionals and Delivery Systems (3) |
| HM GT | 398G | M anagement of TeleH ealth Programs (3) |
| HM GT | 398H | Pharmacy Practice M anagement (3) |
| HM GT | 3981 | Integrated H ealth Systems M anagement (3)* |
| HM GT | 410 | Introduction to H ealth Services Planning (3) |
| HM GT | 415 | Ethical Considerations in H ealth Services (3) |
| HM GT | 416 | Legal Aspects of H ealth Services Administration (3) |
| HM GT | 430 | H ealth Services M arketing and Strategic M anagement (3)* |
| HM GT | 498B | M anaging Q uality in Health Services Systems (3) |
| HM GT | 498C | C omparative International H ealth Systems Analysis: A M anagerial Perspective (3) |
| HM GT | 498D | H ealth Insurance A nalysis and Issues in H ealth Systems M anagement (3) |
| HM GT | 498E | Practice M anagement (3)* |
| HM GT | 498V | H ealth Information-Systems M anagement (3) |

## H istory

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 in 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

- D emonstrate an understanding of historical methods and appreciate how history has been written and interpreted over recorded time.
- Understand 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.
- D emonstrate 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.
- U se 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 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 $p .16$.

[^7]| History Coursework (33 s.h.) |  |  |
| :---: | :---: | :---: |
| Required U.S. History Sequence (6 s.h.) |  |  |
| Students must take the following course sequence: |  |  |
| HIST | 156 | History of the U |
| HIST | 157 | History of the |

World History Sequence (6 s.h.)
Students must choose one of the following two-course sequences:

| - H IST | 141 | Western Civilization I (3) |
| ---: | :--- | :--- |
| H IST | 142 | Western Civilization II (3) |
| - H IST | 115 | World H istory I (3) |
| H IST | 116 | World History II (3) |
| - H IST | 284 | East Asian Civilization I (3) |
| H IST | 285 | East Asian Civilization II (3) |

Required Methodology Course (3 s.h.)
Students must take the following methodology course:
HIST 309 Introduction to H istorical Writing (3)
Geographic Distribution Courses (18 s.h.)
Students must choose two courses in each of the following three areas: U nited
States, Europe, and world regions (Asia, Africa, Latin America).
United States (6 s.h.)

| H IST | 255 | African American History (3) |
| :---: | :---: | :---: |
| H IST | 266 | The United States in World Affairs (3) |
| HIST | 306 | H istory of Religion in America (3) |
| HIST | 360 | America in the Colonial Era: 1600 to 1763 (3) |
| H IST | 361 | America in the Revolutionary Era: $1763 \text { to } 1815 \text { (3) }$ |
| HIST | 362 | Ante-Bellum America: 1815 to 1861 (3) |
| H IST | 363 | Civil War and the New Industrial Society in the United States: 1860 to 1900 (3) |
| HIST | 364 | Emergence of M odern America: 1900 to 1945 (3) |
| HIST | 365 | Recent America: 1945 to the Present (3) |
| HIST | 372 | Legacy of the Civil Rights M ovement (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 | 451 | Economic History of the U nited States Since 1865 (3) |
| HIST | 452 | D iplomatic H istory of the U nited States to 1914 (3) |
| HIST | 453 | D iplomatic H istory of the U nited 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 | 467 | History of M aryland (3) |

Europe (6 s.h.)

| HIST | 141 | Western Civilization I (3) |
| :--- | :--- | :--- |
| HIST | 142 | Western Civilization II (3) |
| HIST | 224 | M odern M ilitary H istory: 1494 to 1815 (3) |
| HIST | 225 | M odern M ilitary H istory: 1815 to the Present (3) |
| HIST | 324 | Classical Greece (3) |
| HIST | 325 | Alexander the G reat and the H ellenistic Age (3) |


| H IST | 326 | The Roman Republic (3) |
| :--- | :--- | :--- |
| H IST | 327 | The Roman Empire (3) |
| H IST | 330 | Europe in the Early M iddle Ages: 300 to 1000 (3) |
| H IST | 331 | Europe in the High M iddle Ages: |
|  |  | looo to 1450 (3) |
| H IST | 332 | Europe D uring the Renaissance and Reformation I (3) |
| H IST | 333 | Europe D uring the Renaissance and Reformation II (3) |
| H IST | 334 | The Age of Absolutism (3) |
| H IST | 335 | Revolutionary Europe (3) |
| H IST | 336 | Europe in the 19th C entury: 1815 to 1919 (3) |
| H IST | 337 | Europe in the World Setting of the 20th Century (3) |
| H IST | 414 | History of European Ideas I (3) |
| H IST | 415 | History of European Ideas II (3) |
| H IST | 430 | Tudor England (3) |
| H IST | 431 | Stuart England (3) |
| H IST | 432 | Britain in the 18th Century (3) |
| H IST | 433 | Victorian Britain (3) |
| H IST | 434 | Britain Since World War II (3) |
| H IST | 436 | The French Revolution and N apoleon (3) |
| H IST | 437 | M odern France Since 1815 (3) |
| H IST | 440 | Germany in the 19th Century: 1815 to 1914 (3) |
| H IST | 441 | Germany in the 20th Century: 1914 to the Present (3) |
| H IST | 443 | M odern Balkan History (3) |
| H IST | 448 | 20th-Century Russia (3) |

World Regions (6 s.h.)

| H IST | 115 | World H istory I (3) |
| :--- | :--- | :--- |
| H IST | 116 | World H istory II (3) |
| H IST | 284 | East Asian Civilization I (3) |
| H IST | 285 | East Asian Civilization II (3) |
| H IST | 305 | The Pacific Century (3) |
| H IST | 341 | African Civilization to 1800 (3) |
| H IST | 342 | Sub-Saharan Africa Since 1800 (3) |
| H IST | 353 | Latin American H istory I (3) |
| H IST | 354 | Latin American H istory II (3) |
| H IST | 383 | Korean H istory (3) |
| H IST | 391 | History of the Ottoman Empire (3) |
| HIST | 392 | History of the Contemporary M iddle East (3) |
| H IST | 480 | History of Traditional China (3) |
| H IST | 481 | History of M odern China (3) |
| H IST | 482 | History of Japan to 1800 (3) |
| H IST | 483 | History of Japan Since 1800 (3) |
| H IST | 485 | History of Chinese Communism (3) |
| H IST | 496 | Africa Since Independence (3) |
| H IST | 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 required for the major.

## Minor in History

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

## Objectives

Students should refer to the objectives listed under M ajor in H istory.

## Requirements for the Minor

A minor in history requires the completion of 15 semester hours of coursework in history; 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 upper level.

History Coursework (15 s.h.)
Required Methodology Course (3 s.h.)
Students must take the following methodology course:
HIST 309 Introduction to H istorical Writing (3)
Supplemental Minor Courses (12 s.h.)
Students must choose an additional four history courses to complete the 15 semester hours required for the minor. These must include at least one upper-level course each in the three geographic areas (United States, Europe, and world regions). Applicable courses are listed under the appropriate headings under M ajor in H istory.

## H umanities

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

## Major in Humanities

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

## Objectives

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

- H ave knowledge of and appreciation for the cultural traditions, major ideas, and historical developments of the human experience.
- Understand the interrelationships of philosophy, language, literature, history, and the arts and explain and critically assess these forms of human expression.
- Understand the major historical and cultural forces that influence and control European, Asian, and American societies.
- Develop interdisciplinary and multicultural perspectives for analyzing and comparing philosophies, languages, literatures, histories, and the arts.
- 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 12 semester hours in each of two content areas and 6 semester hours in a third content area. Content areas include philosophy and religion; language and culture; literature; history; and music, art history, and theatre. At least 15 semester hours (including 3 semester hours in each of the three content areas) must be earned in courses numbered 300 or above. Students following specific tracks must choose from more limited course lists (details follow).
For a listing of all the requirements for the bachelor's degree, students should refer to p. 16.

## Humanities Coursework (30 s.h.)

Students must choose 12 semester hours of coursework in two of the following content areas and another 6 semester hours in a third content area. Courses listed in more than one content area may only be counted once toward degree requirements.

Philosophy and Religion Courses
Students may choose from the following courses:

| HUM N | 126 | The Cosmos (3) |
| :--- | :--- | :--- |
| HUM N | 310 | Business and Professional Ethics (6) |
| HUM N | 336 | Ideas Shaping the 21st C entury (6) |
| HUM N | 350 | The Religious Q uest (6) |
| HUM N | 351 | Myth and Culture (3) |
| HUM N | 360 | Global Environmental Change (6)* |
| HUM N | 380 | Technology and the Individual (3) |
| PHIL |  | All courses |

## Language and Culture Courses

Students may choose from among any foreign language courses and the following courses:

| AN TH | 102 | Introduction to Anthropology: Cultural Anthropology and <br> Linguistics (3) |
| :--- | :---: | :--- |
| AN TH | 401 | Cultural Anthropology: Principles and Processes (3) <br> AN TH 402 | | Cultural Anthropology: World Ethnography (3) |
| :--- |
| AN TH |
| 417 | | People and Cultures of the Far East (3) |
| :--- |
| ASTD |
| BEH S |
| All courses |

[^8]| H U M N | 301 | Crossing Cultures: World Views in the Humanities (6) |
| :--- | :--- | :--- |
| H UM N | 360 | Global Environmental Change (6)* |
| H UM N | 370 | Humanity of Language (3) |
| SPCH | 324 | Communication and Gender (3) |
| SPCH | 482 | Intercultural Communication (3) |
| WM ST | 200 | Introduction to Women's Studies: Women and |
|  | Society (3) |  |

## Literature Courses <br> Students may choose any English literature or foreign-language literature course.

## History Courses

Students may choose from the following courses:

| HIST |  | All courses |
| :--- | :--- | :--- |
| HUM N | 280 | This C onstitution: A H istory (3) |
| HUM N | 375 | Social H istory of Washington, D.C. (3) |

Music, Art History, and Theatre Courses
Students may choose from the following courses:

| ARTH | All courses |
| :--- | :--- |
| HUM N | 334 |
| MUSC | Understanding M ovies (3) |
| THET | All courses |
| All courses |  |

## Track Options

W ithin the humanities major, students may choose general study that integrates study in humanities from across the world or a study of the humanities of a particular geographic area through a more structured track in American studies, European studies, or Asian studies. Students choosing any of the tracks must complete the distribution requirements al ready listed by selecting from the more limited course lists below. Courses listed in more than one content area may only be counted once toward degree requirements.

## American Studies Track (30 s.h.)

In fulfilling the distribution requirements for the humanities major, students with a track in American studies must choose from among the following courses:

Philosophy and Religion Courses

| HUM N | 310 | Business and Professional Ethics (6) |
| :--- | :--- | :--- |
| HUM | 336 | Ideas Shaping the 21st Century (6) |
| HUM N | 350 | The Religious Quest (6) |
| HUM N | 351 | M yth and Culture (3) |
| HUM N | 360 | Global Environmental Change (6)* |
| HUM N | 380 | Technology and the Individual (3) |
| PHIL |  | All courses in philosophy of America |

Language and Culture Courses

| COM M | 380 | Language in Social Contexts (3) |
| :--- | :--- | :--- |
| HUM N | 119 | American Adventure (3) |
| H UM N | 120 | America in Perspective (3) |
| HUM N | 370 | Humanity of Language (3) |
| SPCH | 324 | Communication and Gender (3) |
| WM ST | 200 | Introduction to Women's Studies: Women and Society (3) |


| Literature Courses |  |
| :--- | :--- |
| EN GL | All courses on American literature |
| History Courses |  |
| H IST |  |
| H U M N $\quad 280$ | This Courses on American history |
| HUM N 375 | Social History of Washington, D.C. (3) |
| Music, Art History, | and Theatre Courses |
| ARTH | All courses on American art history |
| M USC | All courses on American music |
| TH ET | All courses on American theatre |

## Asian Studies Track (30 s.h.)

In fulfilling the requirements for the humanities major, students with a track in Asian studies must choose from among the following courses:

## Pbilosophy and Religion Courses

| HUM N | 350 | The Religious Q uest (6) |
| :--- | :--- | :--- |
| HUM N | 351 | Myth and Culture (3) |
| HUM N | 360 | Global Environmental Change (6)* |
| PHIL |  | Any course in Asian philosophy |

## Language and Culture Courses

All Asian language or language and culture courses

| AN TH | 417 | People and Cultures of the Far East (3) |
| :--- | :---: | :--- |
| ASTD |  | All courses |
| H IST | 305 | The Pacific Century (3) |
| H UM N | 370 | H umanity of Language (3) |

## Literature Courses

All Asian literature courses, in translation or the original text

## History Courses

HIST All courses on Asian history

| Music, Art, Art | History, and Theatre Courses |
| :--- | :--- |
| ART T | All courses on Asian art |
| ARTH | All courses on Asian art history |
| M USC | All courses on Asian music |
| THET | All courses on Asian theatre |

## European Studies Track (30 s.h.)

In fulfilling the requirements for the humanities major, students with a track in European studies may choose from among the following courses:

Philosophy and Religion Courses

| HUM N | 336 | Ideas Shaping the 21st Century (6) |
| :--- | :--- | :--- |
| HUM N | 350 | The Religious Q uest (6) |
| HUM N | 351 | Myth and Culture (3) |
| HUM N | 360 | Global Environmental Change (6)* |
| PHIL |  | All courses on philosophy of the Western World |

## Language and Culture Courses

All courses on European life and culture
All European language courses
HUM N $370 \quad$ Humanity of Language (3)

* Also listed as BEHS 361 and NSCI 361.

| Literature Courses <br> All European literature courses in translation or in the original langua |  |
| :---: | :---: |
| ENGL | All literature courses except American |
| History Courses |  |
| HIST | All courses on the history of Europe |
| Music, Art History, and Theatre Courses |  |
| ARTH | All courses on European art history |
| MUSC | All courses on music of the Western World |
| THET | All courses on European theatre |

## 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

Students should refer to the objectives listed under M ajor in Humanities.

## Requirements for the Minor

A minor in humanities requires the completion of 15 semeter hours of coursework in the humanities, including 9 semester hours in one of the five major content areas (philosophy and religion; language and culture; literature; history; and music, art history, and theatre) and 6 semester hours in another. At least 9 semester hours must be earned in courses numbered 300 or above, and at least one course in each content area must be numbered 300 or above. Courses listed in more than one content area may be counted only once toward degree requirements. C ourses for the minor may not duplicate those used to satisfy the requirements for the major.

## H uman Resource M anagement

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 or publicsector organizational settings. These functions include human resources planning; recruiting, selecting, and placing employees; orienting new employees; training employees in the context of their career development plans; developing and supporting performance
appraisal systems; managing labor relations; managing compensation and benefit programs; and implementing 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 preparefor the examinations for H uman Resource Professional, Senior H uman Resource Professional, and International Human Resource Professional certification, which are offered by the Society of H uman Resource M anagement. 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

- Demonstrate effective human resource planning for technological innovation in a global environment.
- Describe the importance of internal and external organizational environments and their interrelationships for human resource functions.
- Explain the processes of job analysis, staffing, appraising and compensating, career training, and development.
- Critically evaluate the use of performance appraisal systems and identify different performance appraisal systems.
- Work as a team member to demonstrate cohesive team managerial skills in decision making, communications, motivation, and interpersonal behavior by focusing on 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.
- D evelop effective written and oral communications consistent with the business and professional environment.
- Understand and apply contemporary computer applications and technology in the workplace.
- Interpret and apply human resource principles in a global setting.


## 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 p .16.

| Human Resource Management Coursework (36 s.h.) |  |  |
| :---: | :---: | :---: |
| Foundation Courses (9-12 s.b.) |  |  |
| Students without previous business experience must take the following course: |  |  |
| BM GT | 110 | Introduction to Business and M anagement (3) |
| Students must take the following foundation courses: |  |  |
| ACCT | 220 | Principles of Accounting I (3) |
| ACCT | 221 | Principles of Accounting II (3) |
| Students must take one of the following statistics courses: |  |  |
| BM GT | 230 | Business Statistics (3) |
| GNST | 201 | Introductory Statistics (3) |
| STAT | 250 | Intermediate Statistics and Probability (3) |
| Required Core Courses (18 s.h.) |  |  |
| Students must take the following core courses: |  |  |
| BM GT | 364 | M anagement and Organization Theory (3) |
| BM GT | 495 | Business Policies and Strategic M anagement (3) |
| HRMN | 300 | Human Resource M anagement (3) |
| HRMN | 362 | Labor Relations (3) |
| HRMN | 400 | Human Resource M anagement: Analysis and Problems (3) |
| HRMN | 408 | Employment Law for Business (3) |

Supplemental Major Courses (6-9 s.h.)
Students must choose two or more of the following courses to complete the required 36 semester hours for the major:

| BM GT | 312 | Women in Business (3) |
| :--- | :--- | :--- |
| BM GT | 314 | Women as Leaders (3) |
| BM GT | 380 | Business Law I (3) |
| BM GT | 464 | Organizational Behavior (3) |
| BM GT | 465 | Organizational D evelopment and Change (3) |
| BM GT | 484 | M anaging Teams in Organizations (3) |
| H RM N | 302 | Organizational Communication (3) |
| H RM N | 363 | N egotiation Strategies (3) |
| H RM N | 365 | C onflict M anagement in O rganizations (3) |
| H RM N | 367 | Organizational Culture (3) |
| H RM N | 390 | Contemporary Compensation M anagement (3) |
| H RM N | 392 | Stress M anagement in Organizations (1) |
| H RM N | 394 | M otivation, Performance, and Productivity (3) |
| H RM N | 404 | M anaging Diversity in O rganizations (3) |
| H RM N | 406 | Employee Training and D evelopment (3) |
| H RM N | 463 | Public-Sector Labor Relations (3) |
| H RM N | 494 | Strategic H uman Resource M anagement (3) |

## Additional Required Coursework (9 s.h.)

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

| M ATH | 107 | College Algebra (3) |
| :--- | :--- | :--- |
|  | or |  |

A higher-numbered mathematics course from mathematics sequencel (listed on p . 192)
ECON $201 \quad$ Principles of Economics I (3)
ECON 203 Principles of Economics II (3)

## Track Option in Labor Relations

W ithin the human resource management major, an optional track in labor relations is available.

## Labor Relations Track Requirements (9 s.h.)

In fulfilling the requirements for the major, students with a track in labor relations must complete three or more of the following courses for a total of 9 semester hours:

| HRM N | 362 | Labor Relations (3) |
| :--- | :--- | :--- |
| HRM N | 363 | Negotiation Strategies (3) |
| HRM N | 365 | Conflict M anagement in Organizations (3) |
| HRM N | 463 | Public-Sector Labor Relations (3) |

## Recommendations

The following courses are recommended to fulfill general education requirements or as additional electives:

| CM ST | 340 | Computer Applications in M anagement (3) |
| :--- | :--- | :--- |
| COM M | 390 | Writing for M anagers (3) |
| COM M | $393 / 393 X$ | Technical Writing (3) |
| COM M | $394 / 394 X$ | Business Writing (3) |
| IFSM | 300 | Information Systems in Organizations (3) |

## Minor in Human Resource Management

The human resource management minor complements the skills the student gains in his or her major discipline by illustrating 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; managing labor relations; and developing a human resource department implementation plan.

## Objectives

Students should refer to the objectives listed under M ajor in Human Resource $M$ anagement.

## 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 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 upperlevel course should also be upper level.

Human Resource Management Coursework (15 s.h.)
Required Foundation Courses (6 s.h.)
Students must take the following foundation courses:

| H RM N | 300 | Human Resource M anagement (3) |
| :--- | :--- | :--- |
| H RM N | 400 | Human Resource M anagement: Analysis and Problems (3) |

Supplemental Minor Courses (9 s.b.)
Students must choose three or more of the following courses to complete the 15 semester hours required for the minor:

| BM GT | 312 | Women in Business (3) |
| :--- | :--- | :--- |
| BM GT | 314 | Women as Leaders (3) |
| BM GT | 364 | M anagement and Organization Theory (3) |
| BM GT | 392 | International Business M anagement (3) |
| BM GT | 464 | Organizational Behavior (3) |
| BM GT | 465 | Organizational D evelopment and Change (3) |
| BM GT | 484 | M anaging Teams in Organizations (3) |
| HRM N | 302 | Organizational Communication (3) |
| HRM N | 362 | Labor Relations (3) |
| HRM N | 363 | Negotiation Strategies (3) |
| HRM N | 365 | Conflict M anagement in O rganizations (3) |
| HRM N | 367 | Organizational Culture (3) |
| HRM N | 390 | Contemporary Compensation M anagement (3) |
| HRM N | 392 | Stress M anagement in Organizations (1) |
| HRM N | 394 | M otivation, Performance, and Productivity (3) |
| HRM N | 404 | M anaging Diversity in Organizations (3) |
| HRM N | 406 | Employee Training and Development (3) |
| HRM N | 408 | Employment Law for Business (3) |
| HRM N | 463 | Public-Sector Labor Relations (3) |
| HRM N | 490 | International H uman Resource M anagement (3) |

## Information Systems $M$ anagement

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 succesfully 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.
- $M$ anage change in the dynamic and global environments of automated systems.
- Use technology to research information needed to produce informed decisions for organizations.
- Distinguish relationships between programming languages and information systems.
- Develop skills in systems analysis appropriate to the manage ment of information systems projects.
- D evelop 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 in the areas of information systems, work productivity, and human factors.


## Requirements for the Major

A major in information systems management requires the comple tion of 30 semester hours of coursework in information systems 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 p. 16.

## Information Systems Management Coursework (30 s.h.)

## Required Foundation Courses (15 s.b.)

Students must take a course in a programming language (COBOL, $\mathrm{C}+\mathrm{C}, \mathrm{C}$, Java, or Visual Basic) and the following foundation courses:
IFSM 300 Information Systems in Organizations (3)
IFSM $310 \quad$ Software and $H$ ardware Concepts (3)
IFSM 410 D atabase Concepts (3)
IFSM 460 Systems Analysis (3)

Core Courses (9 s.b.)
Students must take one of the following core courses:

| IFSM | 302 | Workplace Productivity (3) |
| :--- | :--- | :--- |
| IFSM | 303 | H uman Factors in Information Systems (3) |
| IFSM | 304 | Ethics in the Information Age (3) |
| IFSM | 320 | Office Automation (3) |
| Students must take two of the following core courses: |  |  |
| IFSM | 425 | D ecision Support and Expert Systems (3) |
| IFSM | 430 | Information Systems and Security (3) |
| IFSM | 438 | Project M anagement (3) |
| IFSM | 450 | Telecommunication Systems in M anagement (3) |

Supplemental Major Courses (6 s.h.)
Students must choose two upper-level courses from offerings in computer and information science, computer information technology, computer science, computer studies, and information systems management to complete the 30 semester hours required for the major. Students should be careful to ensure that all prerequisites have been met before choosing these courses.

Additional Required Coursework (6 s.h.)
Students 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:

| M ATH | 107 | College Algebra |
| :--- | :--- | :--- |
| STAT | 100 | Elementary Statistics and Probability (3) |

## International Business $M$ anagement

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 encompassing the general institutional, environmental, functional, and strategic framework in the conduct of 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 among the domestic, international, and foreign environments.
- Demonstrate an understanding of the role of government, multinational corporations, global institutions, and regional organizations in international business transactions, including trade, foreign investment, and economic development.
- Identify and evaluate global strategic issues and decisions based on case analysis and solutions.
- D evelop critical-thinking, analytic, and effective communication and writing skills through case analyses, research, presentations, and class discussions.
- 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 comple tion of 15 semester hours of coursework in international business 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 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 upper level.
For a listing of all the requirements for the bachelor's degree, students should refer to p. 16 .

International Business Management Coursework (15 s.h.)
Required Foundation Course (3 s.h.)
Students must take the following foundation course:
BM GT 392 International Business M anagement (3)
Supplemental Minor Courses (12 s.b.)
Students must choose four of the following courses to complete the 15 semester hours required for the minor:

| ACCT | 425 | International Accounting (3) |
| :--- | :--- | :--- |
| BM GT | 446 | International Finance (3) |
| BM GT | 498 L | International Business Contract M anagement (3) |
| BM GT | 4980 | The G lobal M anager and Public Policy (3) |
| BM GT | $498 P$ | International Business Law (3) |
| BM GT | $498 R$ | M ultinational M anagement (3) |
| BM GT | 4985 | Global C ommerce (3) |
| HRM N | 490 | International Human Resource M anagement (3) |
| MRKT | 454 | Global M arketing (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 processes and principles of how 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

- Understand communication theory and how it applies to particular types of communication, including mass communication.
- Understand fundamental concepts and techniques in public rela tions theory and practice and in news writing and editing for print media, broadcast writing, magazine writing, 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, examine, and present issues associated with information communicated to diverse audiences.
- Learn about and 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 journalism requires the completion of 15 semeter hours of coursework in journalism; 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 upper level.
For a listing of all the requirements for the bachelor's degree, students should refer to p .16 .

## Journalism Coursework (15 s.h.)

Required Foundation Courses (9 s.h.)
Students must take the following foundation courses:

| COM M | 300 | Communication Theory (3) |
| :--- | :--- | :--- |
| JOUR | 201 | Writing for the M ass M edia (3) |
| JOUR | 202 | Editing for the M ass M edia (3) |

Supplemental Minor Courses (6 s.h.)
Students must choose four of the following courses to complete the 15 semester hours required for the minor:

| JOUR | 320 | News Reporting (3) |
| :--- | :--- | :--- |
| JOUR | 330 | Public Relations T heory (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 D igital Age (3) |
| JOUR | 371 | Magazine Article and Feature Writing (3) |
| JOUR | 380 | Science Writing for M agazines and N ewspapers (3) |
| JOUR | 400 | Law of M ass Communication (3) |
| JOUR | 410 | History of M ass Communication (3) |
| JOUR | 459 | Special Topics in M ass Communication (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 work in the legal environment. The curriculum is relevant and current for work in various legal settings that use paralegals 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 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.
- D escribe 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.
- D raft 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 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 $p .16$.
Legal Studies Coursework (33 s.h.)
Required Foundation Courses (12 s.h.)
Students must take the following foundation courses:
LGST
LGST
LGST $\quad 201 \quad$ Introduction to Law (3)

[^9]Substantive Law Courses (9 s.h. )
Students must take three of the following substantive law courses:*

| LGST | 312 | Torts (3) |
| :--- | :--- | :--- |
| LGST | 315 | D omestic 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 Law (3) |
| LGST | 420 | Immigration Law (3) |
| LGST | 431 | Government Information Practices (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)
Students must choose one additional course, to be selected either from the two lists above or from the following courses in related disciplines:

| CCJS | 432 | Law of Corrections (3) |
| :--- | :--- | :--- |
| CCJS | 453 | White-Collar and Organized Crime (3) |
| EN M T | 493 | Environmental Regulations and Policy (3) |
| FSCN | 412 | Political and Legal Foundations of Fire Protection (3) |
| GERO | 304 | Aging, Public Policy, and the Law (3) |
| GVPT | $399 B$ | The Legislative Process and Lobbying Techniques (3) |
| GVPT | 402 | International Law (3) |
| GVPT | 434 | Race Relations and Public Law (3) |
| HM GT | 416 | Legal Aspects of H ealth Services Administration (3) |
| JOUR | 400 | Law of M ass Communication (3) |
| PHIL | 447 | Philosophy of Law (3) |

## M anagement Studies

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

## Major in Management Studies

The management studies major provides a multidisciplinary approach to management and problem solving, 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. The management studies 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. It prepares students for a variety of management-related careers.

## Objectives

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

- Apply a multidisciplinary approach to the task of researching organizational problems, issues, and opportunities.
- Analyze information, solve problems, and make decisions across a broad range of management positions from a holistic, global orientation.
- Understand and apply important management concepts and theories from several disciplines.
- Effectively compare different strategies and operations for business es, not-for-profit, and governmental organizations in determining the best alternative from a number of possibilities.
- Understand various global dimensions of managing business, not-for-profit, and governmental organizations, including appreciating key theories, concepts, and processes; 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.
- Understand and use the benefits of a multicultural, multinational organization, including the incressed talent pool of a fully integrated organization; the greater insight gained from considering international political customs and protocols, communicating across cultures, developing relationships with key government departments and officials, and working with national and international law and regulations; and the increased organizational synergies of intimate business and organizational relationships, alliances, joint ventures, and partnerships.


## 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 p .16 .

[^10]Students must take one of the following statistics courses:

| BM GT | 230 | Business Statistics (3) |
| :--- | :--- | :--- |
| GN ST | 201 | Introductory Statistics (3) |
| STAT | 250 | Intermediate Statistics and Probability (3) |

Required Foundation Courses ( 6 s.h.)
Students must take the following foundation courses:

| BM GT | 364 | M anagement and Organization Theory (3) |
| :--- | :--- | :--- |
| HRM N | 302 | Organizational Communication (3) |

Supplemental Major Courses (18-21 s.h.)
To complete the remainder of the 36 semester hours required for the major, students must choose courses from the following disciplines: accounting, business and management, environmental management, fire science, health services management, human resource management, management studies, and marketing. Recommended courses are listed below, with strongly recommended courses indicated by an asterisk.

| BM GT | 330 | Entrepreneurship and N ew Venture Planning (3) |
| :--- | :--- | :--- |
| BM GT | 340 | Business Finance (3) |
| BM GT | 365 | Leadership and Change (3) |
| BM GT | 378 | Legal Environment of Business (3)* |
| BM GT | 380 | Business Law I (3)* |
| BM GT | 381 | Business Law II (3) |
| BM GT | 392 | International Business M anagement (3) |
| BM GT | 464 | Organizational Behavior (3)* |
| BM GT | 482 | Business and Government (3)* |
| BM GT | 495 | Business Policies and Strategic M anagement (3) |
| BM GT | 496 | Business Ethics and Society (3) |
| H RM N | 300 | Human Resource M anagement (3)* |
| M GST | 310 | Managerial Leadership (3)* |
| M RKT | 310 | Marketing Principles and Organization (3) |

## Recommendation

The following course is recommended to fulfill general education require ments or as an additional elective:
COM M $390 \quad$ Writing for M anagers (3)

## Minor in Management Studies

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

## Objectives

Students should refer to the objectives listed under M ajor in $M$ anagement Studies.

## 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 on the next page. C ourses may not duplicate those used to satisfy the requirements for the major.

[^11]
## Management Studies Coursework (15 s.h.)

Required Course (3 s.b.)
Students must take the following course:
BM GT $364 \quad$ M anagement and $O$ rganization Theory (3)
Supplemental Minor Courses (12 s.h.)
Students must choose four courses from accounting, business and management, environmental management, fire science, health services management, human resource management, management studies, or marketing to complete the 15 semester hours required for the minor.

## Recommendation for the Minor

The following course is strongly recommended as a foundation course for those with less than two years of managerial experience:
BM GT 110 Introduction to Business and $M$ anagement (3)

## M arketing

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. M arketing 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.
- Understand 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 valuechain management; (7) integrated marketing communication; and (8) relationship building.
- Understand the significance of the evolution of global markets and how to apply the eight universal marketing processes to develop global marketing plans.
- Understand and apply technology to enhance the eight universal marketing processes.

[^12]- Understand the complex nature of corporate ethics and social responsibility of organizations in the conduct of marketing activities.
- Develop effective written and oral communications consistent with the marketing professional environment.
- D evelop 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 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 p .16.

## Marketing Coursework (36 s.h.)

Required Business Courses (15 s.h.)
Students must take the following business courses:
ACCT 301 Accounting for Nonaccounting M anagers (3)
BM GT 230 Business Statistics (3)
BM GT 364 M anagement and O rganization Theory (3)
BM GT 380 Business Law I (3)
BM GT 496 Business Ethics and Society (3)
Required Marketing Courses (12 s.h.)
Students must take the following marketing courses:

| M RKT | 310 | M arketing Principles and Organization (3) |
| :--- | :--- | :--- |
| M RKT | 410 | Consumer Behavior (3) |
| M RKT | 412 | Marketing Research Applications (3) |
| M RKT | 495 | Marketing Policies and Strategies (3)* |

Supplemental Major Courses (9 s.h.)
Students must choose three or more of the following courses to complete the required 36 semester hours for the major:

| M RKT | 312 | Services M arketing (3) |
| :--- | :--- | :--- |
| M RKT | 314 | N onprofit M arketing (3) |
| M RKT | 353 | Retail M anagement (3) |
| M RKT | 354 | Integrated M arketing Communications (3) |
| M RKT | 357 | M arketing Public Relations (3) |
| M RKT | 371 | Professional Selling (3) |
| M RKT | 373 | M arketing C hannels (3) |
| M RKT | 374 | Small-Business M arketing (3) |
| M RKT | 415 | Independent Study in M arketing (3)** |
| M RKT | 454 | Global M arketing (3) |
| M RKT | 456 | Advertising (3) |
| MRKT | 457 | Web M arketing (3) |
| M RKT | 471 | Business M arketing (3) |
| M RKT | 475 | Sales M anagement (3) |

Students may elect to substitute three 1-semester-hour courses selected from the following list for one 3-semester-hour course:

| M RKT | 317 | Issues in Pricing (1) |
| :--- | :--- | :--- |
| M RKT | 318 | Exploring Internet M arketing (1) |


| M RKT | 319 | Contemporary Issues in M arketing (1) |
| :--- | :--- | :--- |
| M RKT | 320 | N ew Product D evelopment (1) |
| M RKT | 321 | Analyzing the Competition (1) |
| M RKT | 322 | Evaluating M arketing Programs (1) |
| M RKT | 323 | Fundamentals of Direct M arketing (1) |
| M RKT | 324 | D eveloping M arket Segments (1) |
| M RKT | 325 | Developing Channels for Relationship M arketing (1) |

## Additional Required Coursework (9 s.h.)

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

| M ATH | 107 | College Algebra (3) |
| :--- | :--- | :--- |
| ECON | 201 | Principles of Economics I (3) |
| ECON | 203 | Principles of Economics II (3) |

## Track Options

W ithin the marketing major, students may choose general study or a more structured track in promotion, sales, or marketing management. Students in all tracks must complete the business and marketing requirements already listed, as well as those listed below.

## Promotion Track (9 s.h.)

In fulfilling the requirements for the marketing major, students with a track in promotion must take the following courses within their supplemental major courses:

| M RKT | 354 | Integrated M arketing Communications (3) |
| :--- | :--- | :--- |
| M RKT | 456 | Advertising (3) |

Students must take one of the following courses within their supplemental major courses:

| M RKT | 357 | M arketing Public Relations (3) |
| :--- | :--- | :--- |
| M RKT | 457 | Web M arketing (3) |

## Sales Track (9 s.h.)

In fulfilling the requirements for the marketing major, students with a track in sales must take the following courses within their supplemental major courses:

| M RKT | 371 | Professional Selling (3) |
| :--- | :--- | :--- |
| M RKT | 471 | Business M arketing (3) |
| M RKT | 475 | Sales M anagement (3) |

## Marketing Management Track (9 s.h.)

In fulfilling the requirements for the marketing major, students with a track in marketing management must take the following courses within their supplemental major courses:

| M RKT | 353 | Retail M anagement (3) |
| :--- | :--- | :--- |
| M RKT | 373 | M arketing Channels (3) |
| M RKT | 475 | Sales M anagement (3) |

## Recommendations

The following courses are recommended to fulfill general education requirements or as additional electives:

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

| CM ST | 340 | Computer Applications in M anagement (3) |
| :--- | :--- | :--- |
| IFSM | 300 | Information Systems in O rganizations (3) |

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

| COM M | 390 | Writing for M anagers (3) |
| :--- | :--- | :--- |
| COM M | 393 | Technical Writing (3) |
| COM M | $393 X$ | Technical Writing (3) |
| COM M | 394 | Business Writing (3) |
| COM M | 394 X | 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.

## Objectives

Students should refer to the objectives listed under $M$ ajor in M arketing.

## Requirements for the Minor

A minor in marketing requires the completion of 15 semester hours of coursework in marketing; 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 upper level.

## Marketing Coursework (15 s.h.)

Required Foundation Course (3 s.b.)
Students must take the following foundation course:
M RKT $310 \quad$ M arketing Principles and Organization (3)
Supplemental Minor Courses (12 s.b.)
Students must choose four or more courses from those listed as fulfilling the requirements for the marketing major to complete the 15 semester hours required for the minor.

## M athematical 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 helping the student become a mathematically mature problem solver who can address 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, or 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.
- Interpret 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 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 upper level.
For a listing of all the requirements for the bachelor's degree, students should refer to p .16 .

[^13]Students must complete one of the following mathematics sequences:

Lower-Level Course (3-4 s.b.)
Students must take one of the following courses:

| M AT H | 240 | Introduction to Linear Algebra (4) |
| :--- | :--- | :--- |
| M ATH | 241 | Calculus III (4) |
| M AT H | 246 | Differential Equations (3) |

Upper-Level Courses (6 s.h.)
Students must choose at least two upper-level courses in mathematics or statistics to complete the 17 semester hours required for the minor. Students are strongly encouraged to select one course in pure mathematics and one in applied mathematics from the following lists

Pure Mathematics

| M AT H | 301 | Concepts of Real Analysis I (3) |
| :--- | :--- | :--- |
| M AT H | 302 | Concepts of Real Analysis II (3) |
| M AT H | 402 | Algebraic Structures (3) |
| M AT H | 432 | Point Set Topology (3) |
| M AT H | 436 | M odern Geometry (3) |
| M AT H | 463 | Complex Variables (3) |

Applied Mathematics
M ATH 370 Actuarial Science (3)
M AT H $381 \quad$ O perations Research (3)
M AT H $390 \quad$ M athematics of Communication (3)
M AT H 450 Logic for Computer Science (3)
M ATH 466 Numerical Analysis (3)
M ATH 475 Combinatorics and Graph Theory (3)
STAT 400 Applied Probability and Statistics (3)
STAT 401 Applied Probability and Statistics II (3)
STAT 410 Introduction to Probability Theory (3)
STAT 450 Regression and Variance Analysis (3)

## M icrobiology

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 bacteria and viruses 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

- Understand basic taxonomy, structure, physiology, and ecology of bacteria, fungi, and viruses.
- Understand 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 upper level.
For a listing of all the requirements for the bachelor's degree, students should refer to p .16.
Microbiology Coursework (16 s.h.)
Required Foundation Course (4 s.h.)
Students must take the following foundation course:

| MICB | 200 | General M icrobiology (4) |
| :--- | :--- | :--- |
| Supplemental Minor Courses (12 s.h.) |  |  |
| Students must choose four of the following courses to com |  |  |
| ter hours required for the minor: |  |  |
| BCH M | 261 | Elements of Biochemistry (3) |
| BCH M | 461 | Biochemistry I (3) |
| BCH M | 462 | Biochemistry II (3) |
| BIOL | 220 | Human Genetics (3) |
| BIOL | 301 | Human H ealth and Disease (3) |
| BIOL | 304 | The Biology of Cancer (3) |
| BIOL | $398 R$ | Vaccines and Society (3) |
| BIOL | $398 S$ | M olecular and Cellular Biology (3) |
| MICB |  | All courses other than M ICB 200 |

## N atural 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 base upon which to build a career related to natural science, life science, physical science, and allied health fields, as well as bioinformatics, environmental management, science journalism, and science education.

[^14]
## 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 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 upper level.
For a listing of all the requirements for the bachelor's degree, students should refer to $p$. 16.

Natural Science Coursework (17-19 s.h.)
Required Foundation Courses (7-8 s.h)
Students must take at least 7 semester hours, including a laboratory course, selected from the following courses or course sequences or combinations. All 4-semester-hour science courses include a laboratory component; many 3 -semester-hour science courses are accompanied by a separate 1 -semesterhour lab course. To confirm whether a science course meets requirements for a lab course, students should refer to the course descriptions.

## Course Sequences or Combinations

| - BIOL | 105 | Principles of Biology I (4)* |
| :---: | :---: | :--- |
| BIOL | 106 | Principles of Biology II (4) |
| - BIO L | 101 | Concepts of Biology (3)* |
| BIO L | 102 | Laboratory in Biology (1) |
| - GEOL | 100 | Physical Geology (3) |
| GEOL | 110 | Physical Geology Laboratory (1) |
| Courses |  |  |
| CH EM | 103 | General Chemistry I (4) |
| CH EM | 113 | General Chemistry II (4) |
| PH YS | 121 | Fundamentals of Physics I (4) |
| PHYS | 122 | Fundamentals of Physics II (4) |
| PHYS | 161 | General Physics: M echanics and Particle D ynamics (3) |
| PHYS | 195 | Introductory Physics Laboratory (1) |

Supplemental Minor Courses (7-8 s.h.)
Students must take two or more of the following courses for a minimum of 7 semester hours. N ote: Lab courses of 1 semester hour must be taken in conjunction with the accompanying lecture course.
$\begin{array}{lll}\text { BCH M } & 261 & \text { Elements of Biochemistry (3) } \\ \text { BCH M } & 461 & \text { Biochemistry I (3) }\end{array}$

| BCHM | 462 | Biochemistry II (3) |
| :---: | :---: | :---: |
| BIOL | 201 | Human Anatomy and Physiology I (4) |
| BIOL | 202 | Human Anatomy and Physiology II (4) |
| BIOL | 211 | Environmental Science (3) |
| BIOL | 215 | Population Biology and General Ecology (3) |
| BIOL | 220 | Human Genetics (3)* |
| BIOL | 222 | Principles of Genetics (3)* |
| BIOL | 224 | Genetics Laboratory (1) |
| CHEM | 233 | Organic Chemistry I (4) |
| CHEM | 243 | O rganic C hemistry II (4) |
| MICB | 200 | General M icrobiology (4) |
| MICB | 310 | Applied M icrobiology (4) |
| MICB | 360 | M edical Virology (3) |
| MICB | 420 | Epidemiology and Public Health (2) |
| MICB | 440 | Pathogenic M icrobiology (4) |
| MICB | 450 | Immunology (4) |
| MICB | 460 | General Virology (3) |
| MICB | 461 | General Virology with Laboratory (4) |
| MICB | 470 | M icrobial Physiology (3) |
| MICB | 480 | M icrobial Ecology (3) |
| PHYS | 262 | General Physics: Vibrations, Waves, H eat, Electricity, and $M$ agnetism (4) |
| PHYS | 263 | General Physics: Electrodynamics, Light, Relativity, and M odern Physics (4) |

Specialized Supplemental Course (3 s.h.)
Students must choose one or more courses for a total of 3 semester hours from the supplemental minor courses listed above or from the following courses:

| ASTR | 300 | Stars and Stellar Systems (3) |
| :--- | :--- | :--- |
| ASTR | 330 | Solar-System Astronomy (3) |
| ASTR | 340 | Origin of the Universe (3) |
| ASTR | 398 | Special Topics in Astronomy (1-6) |
| BIOL | 301 | Human H ealth and D isease (3) |
| BIOL | 304 | The Biology of Cancer (3) |
| BIOL | 310 | Technology and the Bioenvironment (3) |
| BIOL | 388 | Problems in Biology (3) |
| BIOL | 398 | Special Topics in Biology (1-6) |
| M ICB | 322 | M icrobiology and the Public (3) |
| M ICB | 388 | Special Problems in M icrobiology (1-6) |
| N SCI | 398 | Special Topics in N atural Science (1-6) |

## 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 apply the principles of psychology for the improvement of human, animal, and environmental welfare. Study applies psychological
knowledge to nonscientific fields and the workplace and promotes multicultural and multinational awareness. It 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 psychology aids job promotability and improves interpersonal relationships.
- Examine psychology in a wide context of interdisciplinary approaches, covering political overviews, cultural diversity, and timely issues.
- Demonstrate how critical observation, experimentation, and empirical reasoning are cornerstones of psychology.
- Apply theory and research in psychology to practical situations and problems.
- Communicate psychological concepts in oral and written form.
- Conduct scientific research projects, 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 focusing on psychology as a natural science, 9 semester hours focusing on psychology as a social science, and 6 semester hours focusing on psychology as a clinical science. At least 17 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 p. 16.

## Psychology Coursework (33 s.h.)

Required Introductory Courses (9 s.b.)
Students must take the following introductory courses:
PSYC 100 Introduction to Psychology (3)
PSYC 305 Experimental $M$ ethods in Psychology (3)
Students must take one of the following statistics courses:

| GN ST | 201 | Introductory Statistics (3) |
| :--- | :--- | :--- |
| PSYC | 200 | Introduction to Statistical M ethods in Psychology (3) |
| STAT | 250 | Intermediate Statistics and Probability (3) |

Natural Science Psychology Courses (9 s.h.)
Students must choose three of the following courses:
PSYC $301 \quad$ Biological Basis of Behavior (3)
PSYC $310 \quad$ Perception (3)

[^15]| PSYC | 315 | M otivation (3) |
| :--- | :--- | :--- |
| PSYC | 341 | Introduction to M emory and Cognition (3) |
| PSYC | 391 | Introduction to N europsychology (3) |
| PSYC | 402 | Physiological Psychology (3) |
| PSYC | 441 | Psychology of Human Learning (3) |
| Social Science Psychology Courses (9 s.h.) |  |  |
| Students must choose 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 O rganizational Psychology (3) |
| PSYC | 424 | Communication and Persuasion (3) |
| Clinical Science | Psychology Courses (6 s.h.) |  |
| Students must choose 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 through studies that investigate the nature of mind and behavior, including the biological basis of behavior, perception, memory and cognition, the influence of environmental and social forces on the individual, personality, lifespan development and adjustment, research methods, and statistical analysis.

## Objectives

Students should refer to the objectives listed under M ajor in Psychology.

## 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 focusing on psychology as a natural science, as a social science, and as a clinical science. At least 9 semester hours must be earned in courses numbered 300 or above. Specific course require ments are listed at right. If a specific course required for the minor is taken instead to satify 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 upper level.

## 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 M ethods in Psychology (3) |

Supplemental Minor Courses (9 s.b.)
Students must choose one course in each of the three major categories (natural science psychology courses, social science psychology courses, and clinical science psychology courses) listed above for the major to complete the 15 semester hours required for the minor.

## Social Science

Students may seek an academic major in social science.

## Major in Social Science

The social science major is an interdisciplinary option for students wishing a broad preparation encompassing the disciplines of gerontology, sociology, behavioral and social science, economics, and government and politics. A major in the social sciences may be applied to a variety of occupations in the public and private sectors, including careers in administration, elder care, business management, government, health services, law enforcement, human resources, community service, and education.

## Objectives

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

- Understand the origin and development of complex social processes.
- Critically analyze social problems and evaluate alternative solutions, making appropriate use of statistics.
- Place the problems and issues of social interaction within a global and historical context.
- Identify, research, and report salient changes in social organization and structure, using effective writing, current software, and the resources of the Internet.
- Apply perspectives from different academic disciplines to social issues such as aging, crime, poverty, and access to social services.


## Requirements for the Major

A major in social science requires the completion of at least 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 $p .16$.

| Social Science Coursework (30-31 s.h.) |  |  |
| :---: | :---: | :---: |
| Statistics Course (3-4 s.b.) |  |  |
| Students must choose one of the following statistics courses: |  |  |
| BM GT | 230 | Business Statistics (3) |
| ECON | 321 | Economic Statistics (3) |
| GNST | 201 | Introductory Statistics (3) |
| PSYC | 200 | Introduction to Statistical M ethods in Psychology (3) |
| SOCY | 201 | Introductory Statistics for Sociology (4) |
| STAT | 100 | Elementary Statistics and Probability (3) |

Introductory Courses (9 s.h.)
Students must take two or more of the following introductory courses for a total of 9 semester hours:

| BEHS | 201 | Introduction to Behavioral and Social Sciences (6) |
| :--- | :--- | :--- |
| ECON | 201 | Principles of Economics I (3) |
| ECON | 203 | Principles of Economics II (3) |
| GERO | 210 | Social Gerontology (3) |
| GERO | 220 | Psychological Aspects of Aging (3) |
| GVPT | 100 | Principles of Government and Politics (3) |
| SOCY | 100 | Introduction to Sociology (3) |
| SOCY | 105 | Introduction to C ontemporary Social Problems (3) |

Courses on Issues in the Social Sciences (12 s.h.)
Students must choose one or more courses in each of the following categories for a total of 6 semester hours in each:

| Cross-Cultural and World Issues (6 s.h.) |  |  |
| :--- | :--- | :--- |
| AN TH | 102 | Introduction to Anthropology: Cultural Anthropology <br> and Linguistics (3) |
| AN TH | 340 | Outlooks in Anthropology (6) <br> BEH S |
| 336 | The M iddle East: An Interdisciplinary Perspective (6) |  |
| BEH S | 361 | Global Environmental Change (6)* |
| ECON | 380 | Comparative Economic Systems (3) |
| ECON | 440 | International Economics (3) |
| GEO G | 202 | The World in Cultural Perspective (3) |
| GVPT | 306 | Global Ecopolitics (3) |
| GVPT | 335 | Foreign Policy and the N ew World O rder (6) |
| GVPT | 401 | Problems of World Politics (3) |
| GVPT | $401 B$ | StateTerrorism (3) |
| GVPT | 481 | Government and Administration of Russia and the <br> States of the Former Soviet Union (3) |
| GVPT | 482 | Government and Politics of Latin America (3) |
| GVPT | 483 | Government and Politics of Asia (3) |
| GVPT | 484 | Government and Politics of Africa (3) |
| GVPT | 485 | Government and Politics of the M iddle East (3) |
| GVPT | 487 | Government and Politics of South Asia (3) |


| GVPT | 488 | Comparative Studies in European Politics (3) |
| :--- | :--- | :--- |
| H IST | 305 | The Pacific Century (3) |
| SO CY | 423 | Ethnic M inorities (3) |


| Developmental and Historical Period Issues (6 s.h.) |  |  |
| :--- | :--- | :--- |
| ANTH | 241 | Introduction to Archaeology (3) |
| ANTH | 414 | Ethnology of Africa (3) |
| ECON | 307 | Development of Economic Ideas: Social and Political (3) <br> ECON 484 |
| GVPT | 442 | The Economy of China (3) <br> History of Political Theory: M iddle Ages to <br> the Present (3) |
| GVPT | 443 | Contemporary Political Theory (3) |
| GVPT | 444 | American Political Theory (3) |
| GVPT | 451 | Foreign Policy of Russia and the States of the Former <br> Soviet Union (3) |
| GVPT | 452 | Inter-American Relations (3) |
| GVPT | 453 | Recent East Asian Politics (3) |
| GVPT | 455 | Contemporary M iddle Eastern Politics (3) |
| GVPT | 457 | American Foreign Relations (3) |
| HIST | 372 | Legacy of the Civil Rights M ovement (3) |
| PSYC | 415 | History of Psychology (3) |
| SOCY | 300 | American Society (3) |
| SOCY | 311 | The Individual and Society (6) |

Supplemental Major Courses (6 s.h.)
Students must choose one or more upper-level courses for a total of 6 semester hours from anthropology, behavioral and social sciences, economics, gerontology, government and politics, or 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 through the study of current social issues and problems, including poverty, divorce, social stratification, and discrimination.

## Objectives

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

- Understand different perspectives through which human societies may be viewed.
- Discuss fluently a wide range of information arising from social investigation.
- Critically analyze evidence of social change and organization.
- Communicate effectively about society.

[^16]
## 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 below. If a spe cific 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 upperlevel course should also be upper level.
For a listing of all the requirements for the bachelor's degree, students should refer to p .16.
Sociology Coursework (15 s.h.)
Foundation Course (3 s.h.)
Students must take one of the following foundation courses:
SOCY 100
SOCY Introduction to Sociology (3)
SO
SO

Statistics Course (3 s.b.)
Students must choose one of the following statistics courses:

| BM GT | 230 | Business Statistics (3) |
| :--- | :--- | :--- |
| GN ST | 201 | Introductory Statistics (3) |
| PSYC | 200 | Introduction to Statistical M ethods in Psychology (3) |
| STAT | 100 | Elementary Statistics and Probability (3) |

Supplemental Minor Courses (9 s.h.)
Students must take three of the following courses to complete the 15 semester hours required for the minor:

| AN TH | 417 | Peoples and Cultures of the Far East (3) |
| :--- | :--- | :--- |
| ASTD | 300 | The Chinese: Adapting the Past, Building the Future (3) |
| ASTD | 301 | TheJapanese: 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 M odern 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 <br> 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 a specialized background and skills in dimensions of speaking and listening that relate to the workplace.

## Objectives

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

- Understand communication theory and how it applies to particular types of communication, including mass communication.
- Understand principles and practice of speech communication appropriate to oral communication specialists in a variety of communication positions within organizations.
- Develop communication products and processes appropriate to a given audience, environment, and need.
- G ather information from a variety of sources and critically identify, examine, and present issues associated with information communicated to a diverse audience.
- Learn about and 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 require ments are listed below. N ote: Students should have taken SPCH 100 or have comparable public speaking experience before enrolling in courses for the speech communication minor. 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 upper level.
For a listing of all the requirements for the bachelor's degree, students should refer to p . 16.

## Speech Communication Coursework ( 15 s.h.)

## Required Foundation Course (3 s.b.)

Students must take the following foundation course:
COMM 300 Communication Theory (3)
Speech or English Language Course (3 s.h.)
Students must choose one of the following speech or English language courses:
COM M 380 Language in Social Contexts (3)
ENGL 278F Introduction to Principles of Text Editing (3)
EN GL $281 \quad$ Standard English Grammar, Usage, and Diction (3)
EN GL 281X Standard English Grammar, Usage, and Diction (3)
EN GL 384 Advanced Grammar and Style (3)
SPCH All courses numbered 300 or above

Supplemental Minor Courses (9 s.h.)
Students must choose three of the following courses to complete the 15 semester hours required for the minor:

| SPCH | 324 | Communication and Gender (3) |
| :--- | :--- | :--- |
| SPCH | 397 | Organizational Presentations (3) |
| SPCH | 420 | Group Discussion and Decision M aking (3) |
| SPCH | 424 | Communication in Complex O rganizations (3) |
| SPCH | 426 | N egotiation and C onflict M anagement (3) |
| SPCH | 470 | Listening (3) |
| SPCH | 482 | Intercultural Communication (3) |

## Strategic and Entrepreneurial $M$ anagement

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 through study of current issues in the effective use of information, the globalization of business, strategic management, and acquiring 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

- Understand and apply key concepts and theories related to strategic and entrepreneurial management areas.
- D emonstrate 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 recruiting 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 acceptable in the workplace today.


## 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; 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 semeter hours for the minor. Any course used to replace an upper-level course should also be upper level.
For a listing of all the requirements for the bachelor's degree, students should refer to p. 16.

Strategic and Entrepreneurial Management Coursework (15 s.h.)
Required Foundation Course (3 s.b.)
Students must take the following foundation course:
BM GT 364 M anagement and Organization Theory (3)
Supplemental Courses (12 s.h.)
Students must choose either four of the following 3-semester-hour courses or three 3 -semester-hour courses and three 1-semester-hour courses to complete the 15 semester hours required for the minor. Courses strongly recommended for the minor are indicated by an asterisk.

Three-Semester-Hour Courses
BM GT 304 M anaging E-Commerce in 0 rganizations (3)
BM GT 317 Problem Solving (3)
BM GT 330 Entrepreneurship and New Venture Planning (3)*
BM GT 334 M anaging $N$ ew Ventures (3)
BM GT 336 M anaging Strategic Venture G rowth and Industry (3)
BM GT 337 Building the Entrepreneurial Team (3)
BM GT 339 Government and Business C ontracting (3)
BM GT 365 Leadership and C hange (3)
BM GT 366 Managing in the Public Sector (3)
BM GT 392 International Business M anagement (3)
BM GT 464 Organizational Behavior (3)
BM GT $465 \quad$ Organization D evelopment and Change (3)
BM GT 484 M anaging Teams in Organizations (3)
BM GT 487 Project M anagement I (3)
BM GT 495 Business Policies and Strategic M anagement (3)*
BM GT 497 Implementing Business Strategy (3)
HRM N 302 Organizational Communication (3)
H RM N $363 \quad$ N egotiation Strategies (3)
H RM N 365 Conflict M anagement in O rganizations (3)
HRM N 367 Organizational Culture (3)
H RM N 394 M otivation, Performance, Productivity (3)
HRM N 404 M anaging Diversity in Organizations (3)
HRM N 406 Employee Training and D evelopment (3)
H RM N 494 Strategic H uman Resource M anagement (3)
One-Semester-Hour Courses
BM GT 388D M anaging a Culturally D iverse O rganization (1)
BM GT 388E M anaging Multicultural Teams (1)
BM GT 388G Effective Business Presentations (1)

[^17]
## 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 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 relevant to the study of women, gender, and human societies.
- Understand aspects of scholarship and theory on the history, status, contributions, and experiences of women in diverse cultural communities and on the significance of gender as a social construct and as 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 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 upper level.
For a listing of all the requirements for the bachelor's degree, students should refer to p .16 .

[^18]| BM GT | 314 | Women as Leaders (3) |
| :--- | :--- | :--- |
| EN GL | 250 | Introduction to Literature by Women (3) |
| EN GL | 354 | 20th-C entury American Women Writers (3) |
| EN GL | 358 | 20th-C entury British Women Writers (3) |
| EN GL | 444 | Feminist Critical Theory (3) |
| GVPT | 436 | Legal Status of Women (3) |
| H LTH | 377 | Human Sexuality (3) |
| H LTH | 471 | Women's H ealth (3) |
| H IST | 301 | Women and Industrial D evelopment (3) |
| H IST | 375 | M odern European Women's H istory (3) |
| H IST | 376 | Women and the Family in America to 1870 (3) |
| H IST | 377 | Women in America Since 1870 (3) |
| H UM N | 442 | Contemporary Sexual Ethics (3) |
| PSYC | 334 | Psychology of Interpersonal Relationships (3) |
| PSYC | 336 | Psychology of Women (3) |
| SOCY | 243 | Sociology of M arriage and Family (3) |
| SOCY | 312 | Family Demography (3) |
| SOCY | 325 | The Sociology of Gender (3) |
| SOCY | 425 | Gender Roles and Social Institutions (3) |
| SO CY | 430 | Social Structure and Identity (3) |
| SOCY | 443 | The Family and Society (3) |
| SO CY | 462 | Women in the M ilitary (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 activeduty military personnel and certain others who conform to special stipulations.

## General Requirements

The Associate of Arts (AA) degree requires the completion of a minimum of 60 semester hours, at least 15 of which must be taken through UM UC. Before applying to receive this degree, students must have completed the general education requirements ( 32 semester hours). An additional 28 semester hours (defined below) are also required. A grade-point average of 2.0 or higher in all courses taken through UM UC is required.

## General Curriculum

The curriculum for the general AA degree requires 28 semester hours, beyond the general education requirements, of coursework related to the student's educational goals. Students must fulfill all prerequisites. Students who anticipate seeking a bachelor's degree should select courses that will advance that goal. Students must earn a grade of $C$ or higher in all courses.

## Specific Curricula

The two specific curricula detailed at right require 28 semester hours, beyond the general education requirements, divided between one of two areas of emphasis and electives. Students who anticipate seeking a bachelor's degree after receiving an associate's degree should consult an advisor for help in selecting courses to advance that goal. Students must earn a grade of $C$ or higher in all courses.

## Criminal Justice

Requirements (28 semester hours)

1. At least 12 semester hours of courses related to criminal justice are required, 9 semester hours of which must be completed through U M U C. The following are examples of applicable courses:
CCJS $100 \quad$ Introduction to Criminal Justice (3)
CCJS 105 Introduction to Criminology (3)
CCJS $230 \quad$ Criminal Law in Action (3)
CCJS $234 \quad$ Criminal Procedure and Evidence (3)
Courses in criminal justice and/or criminology (designated CCJS, CJUS, or CRIM ) numbered 300 to 499
2. The remaining 16 semester hours, consisting of elective courses, should be related to the student's educational goals.

## Management

Requirements (28 semester hours)

1. At least 18 semester hours of management-related coursework are required, at least 9 of which must be taken through UMUC.
2. The remaining 10 semester hours, consisting of elective courses, should be related to the student's educational goals.


To better help working adults meet their educational goals, U M UC has introduced 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. M any 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 succesful 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 0 ffice. Transcripts are updated to reflect certificate completion.

## CURRICULA

Certificates are available in the following areas:
Accounting-Introductory
Accounting-Advanced
Business Project M anagement
Computer Applications
Computer Graphics and Design
Customer Service Communications
Customer Service M anagement
D atabase D esign and Implementation
D atabase M anagement
Desktop Publishing
E-Commerce for IT Professionals
E-C ommerce in Small Business
E -C ommerce M anagement
Environmental and O ccupational H ealth and Safety M anagement
Financial $M$ anagement
H ealth Practice M anagement
H ealth Services M anagement
H uman Resource $M$ anagement
Information M anagement
Internet Technologies
Laboratory M anagement
M anagement Foundations
$N$ egotiation and Conflict $M$ anagement
O bject-O riented Design and Programming
O bject-O riented Programming Using Java
Paralegal Studies
Project $M$ anagement for IT Professionals
Public Fire-Protection M anagement and Administration
Security M anagement
Security 0 perations
Software Engineering
Systems Approach to Fire Safety
Technology and $M$ anagement
UN IX System Administration
Visual Basic Programming
Web Design
Web Programming
W indows Programming
Women in Business
Workplace C ommunications
Workplace Spanish

## REQUIREMENTS

The undergraduate certificate programs generally require 16 to 21 semeter 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. (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.
Unless otherwise specified or necessitated by prerequisites, certificate sequences suggest but do not require that courses be taken in a prescribed order.
C ourses applied toward a certificate may also be applied toward the requirements for another certificate or toward a degree.
Students in certificate programs must be admitted as UM UC students in order to take certificate courses. Students may pursue a degree and certificate simultaneously. The student is responsible for notifying UM UC of his or her intention to complete certificate work.

## 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. A total of 18 semester hours is required for completion of the certificate. Students without a background in economics, basic math, and statistics are encouraged to take courses in those areas before starting the accounting 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 choose 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) |
| BM GT | 340 | Business Finance (3) |
| BM GT | 341 | Finance for the Nonfinancial M anager (3) |

## Accounting-Advanced

The Advanced Accounting certificate program is designed to meet the needs of accounting professionals who want to enhance their accounting skills. A total of 18 semester hours is required for completion of the certificate. In addition to course prerequisites, students are encouraged to take courses in economics, basic math, 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) |

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## Supporting Electives

Students must choose 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 | 425 | International Accounting (3) |
| ACCT | 426 | Advanced Cost Accounting (3) |
| ACCT | 427 | Advanced Auditing (3) |
| ACCT | 436 | Internal Auditing (3) |
| BM GT | 340 | Business Finance (3) |
| BM GT | 341 | Finance for the Nonfinancial M anager (3) |

## Business Project M anagement

The Business Project $M$ anagement certificate program prepares students for entry-level 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. Students complete six or more courses (three required and three or more ectective) for a total of 18 semester hours to earn the certificate.

## Program Courses

## Required Courses

Students must take the following courses:

| BM GT | 484 | M anaging Teams in O rganizations (3) |
| :--- | :--- | :--- |
| BM GT | 487 | Project M anagement I (3) |
| BM G T | 488 | Project M anagement II (3) |

## Supporting Electives

Students must choose three or more of the following courses for a total of 9 semester hours. (Courses in financial management and accounting, indicated with an asterisk, may be useful for project managers; topics include cost estimating, earned value, and selected cost accounting principles.)
ACCT $220 \quad$ Principles of Accounting I (3)*
ACCT 221 Principles of Accounting II (3)*
ACCT 301 Accounting for Nonaccounting M anagers (3)*
BM GT 304 M anaging E-Commerce in O rganizations (3)
BM GT 317 Problem Solving (3)
BM GT 339 Government and Business C ontracting (3)
BM GT 340 Business Finance (3)*
BM GT 341 Finance for the N onfinancial M anager (3)*
BM GT 346 Risk M anagement (3)
BM GT 366 M anaging in the Public Sector (3)
BM GT 398E Time M anagement (1)
COM M 492 Grant and Proposal Writing (3)
H RM N 363 Negotiation Strategies (3)

## Computer Applications

The certificate in Computer Applications is designed for entrylevel students and nontechnical professionals who are seeking 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 the student who succesfully completes six courses (four required and two elective) for a total of 18 semester hours.

## Program Courses

## Required Courses

Students must take the following courses:

| CM ST | 103 | Introduction to M icrocomputer Software (3) |
| :--- | :--- | :--- |
| CM ST | 303 | Advanced Features of M icrocomputer <br> Application Software (3) <br> Computer Applications in M anagement (3) |
| CM ST | 340 | Com |

Students must take one of the following courses:

| CM ST | 300 | Concepts in Computing (3) |
| :--- | :--- | :--- |
| IFSM | 201 | Introduction to Computer-Based Systems (3) |

## Supporting Electives

Students must choose 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

This certificate is designed for students seeking to develop design and composition skills in a computer environment. Emphasis is on integrating effective design principles with computer environments. 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:

| ARTT | 250 | Elements of Commercial D esign (3) |
| :--- | :--- | :--- |
| ARTT | 354 | Elements of Computer Graphics (3) |
| ART T | 479 | Advanced Computer Graphics (3) |
| CM ST | 386 | Internet: An Advanced Guide (3) |

## Supporting Electives

Students must choose two of the following courses:
CM ST 310 D esktop Publishing (3)
CM ST 311 Advanced D esktop Publishing (3)
CM ST $450 \quad$ Web Design M ethodology and Technology (3)
COM M 493 Graphics/Text Integration (3)

## Customer Service Communications

The certificate in Customer Service C ommunications combines courses in communication and customer service with technological skills to prepare students for careers with management potential in technology-related customer service areas, such as marketing, testing, planning, training, and customer assistance. Emphasis is on applying principles of continuous improvement to communication between the customer and the organization and the ability to communicate technical information to nontechnical audiences. Students receive the certificate on the successful completion of 18 semester hours of required coursework.

## Program Courses

Students must take the following courses:

| BM GT | 395 | Customer Service M anagement (3) |
| :--- | :--- | :--- |
| CM ST | 385 | Internet: A Practical Guide (3) |
| IFSM | 303 | H uman Factors in Information Systems (3) |
| BM GT | 396 | Customer Consultation and $N$ eeds Analysis (3) |
| CO M M | $393 / 393 X$ | Technical Writing (3) |
| SPCH | 397 | Organizational Presentations (3) |

Note: Courses assume some basic knowledge of computers. Students without previous computer experience should first take CM ST 103 Introduction to M icrocomputer Software or IFSM 201 Introduction to Computer-Based Systems. Students with no work experience should take BM GT 110 Introduction to Business and M anagement.

## Customer Service M anagement

The Customer Service M anagement certificate program prepares students for supervisory and midlevel management positions related to managing customer service and customer relations. It involves ecommerce, as well as team-management skills. It allows customer serviced customer relations employees al ready working in a private or public-sector organization to upgrade their knowledge and skills in relation to key organizational, management, and customer issues. Students must complete seven courses (six required and one elective) for a total of at least 19 semester hours to earn the certificate.

## Program Courses

## Required Courses

Students must take the following courses:

| BM GT | 395 | Customer Service M anagement (3) |
| :--- | :--- | :--- |
| BM G T | 396 | Customer C onsultation and N eeds Anal ysis (3) |
| BM G T | 484 | M anaging Teams in O rganizations (3) |
| CO M M | 495 | Seminar in Workplace Communication (3) |
| BM GT | 487 | Project M anagement I (3) |
| BM GT | 488 | Project M anagement II (3) |

## Supporting Elective

Students must choose one of the following courses:

| BM GT | 317 | Problem Solving (3) |
| :--- | :--- | :--- |
| BM GT | 398 E | Time M anagement (1) |
| H RM N | 363 | N egotiation Strategies (3) |
| H RM N | 365 | C onflict M anagement in O rganizations (3) |
| M RKT | 310 | M arketing Principles and O rganization (3) |
| M RKT | 318 | Exploring Internet M arketing (1) |
| M RKT | 457 | Web M arketing (3) |
| PSYC | 308 A | Creative Problem Solving (1) |

## D atabase D esign and Implementation

This certificate is designed for technical professionals who will be working with databases. Students are taught Structured Q uery Language (SQ L), and learn about issues involved in the design and implementation of databases. They study topics appropriate to an advanced user as well as to a database designer or administrator. A total of 18 semester hours is required for completion of the certificate.

## Program Courses

## Required Courses

Students must take the following courses:

| CM IS | 160 | D iscrete M athematics for C omputing (3) |
| :--- | :--- | :--- |
| CM IS | 320 | Relational D atabases (3) |
| CM IS | 420 | Advanced Relational D atabases (3) |
| IFSM | 446 | Java-Based Information Systems Applications (3) |
| IFSM | 498 D | D ata M ining: Introduction and Application (3) |

## Supporting Elective

Students must choose one of the following courses:
CM IS 398P Programming in Perl (3)
CM ST 385 Internet: A Practical Guide (3)

## D atabase $M$ anagement

This certificate offers an introduction to the design and management of database systems in a business environment. In-depth practice in the use of Structured Q uery Language (SQ L) is provided in the context of business-related case studies. Advanced database concepts, including database administration, database technology, and selection and acquisition of database management systems, are addressed. In the elective component of the certificate, courses addressing database mining or the system analysis required to begin developing the IT infrastructure in a business environment can betaken. The certificate is awarded to the student who successfully completes six courses (one introductory, three required, and two elective) for a total of 18 semester hours.

## Program Courses

## Introductory Course

Students must choose one of the following courses. (Previous coursework or workplace experience with C, C + , Visual Basic, Ada, CO BO L, or another high-level language may be applied.)

| CM ST | 305 | Introduction to Visual Basic Programming (3) |
| :--- | :--- | :--- |
| CM IS | 102 | Introduction to Problem Solving and Algorithm <br> Design (3) |
| IFSM | 296 | COBOL Programming I (3) |

## Required Courses

Students must take the following courses:

| IFSM | 410 | D atabase C oncepts (3) |
| :--- | :--- | :--- |
| IFSM | 411 | SQ L (3) |
| IFSM | 420 | Advanced D atabase C oncepts (3) |

## Supporting Electives

Students must choose two of the following courses:

| IFSM | 304 | Ethics in the Information Age (3) |
| :--- | :--- | :--- |
| IFSM | 460 | Systems Analysis (3) |
| IFSM | 498 D | D ata M ining: Introduction and Application (3) |
| IFSM | 4980 | PL/SQ L (3) |

## D esktop Publishing

A certificate in Desktop Publishing 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 succesffully complete six courses (four required and two electives) for a total of 18 semester hours.

## Program Courses

## Required Courses

Students must take the following courses:

| CM ST | 310 | Desktop Publishing (3) |
| :--- | :--- | :--- |
| ART T | 354 | Elements of C omputer Graphics (3) |
| COM M | 493 | Graphics/Text Integration (3) |
| CM ST | 311 | Advanced Desktop Publishing (3) |

## Supporting Electives

Students must choose two of the following courses:

| CM ST | 103 | Introduction to M icrocomputer Software (3) |
| :--- | :--- | :--- |
| COM M | 491 | Technical Editing (3) |
| EN GL | 278 F | Introduction to Principles of Text Editing (3) |
| IFSM | 201 | Introduction to Computer-Based Systems (3) <br> or |
| CM ST | 300 | Concepts in Computing (3) |

## E-C ommerce for IT Professionals

This certificate offers an overview of information systems, their role in organizations, and the technological, political, economic, and market forces related to electronic commerce. M ajor issues such as the required hardware and telecommunication infrastructure, consumer behavior, supply chain management, public policy, and legal, ethical, and societal issues are addressed. The certificate is awarded to the student who successfully completes a minimum of 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 | 450 | Telecommunication Systems in M anagement (3) |
| IFSM | 498 F | Information Technology Infrastructure of Electronic <br> Commerce (3) |
| IFSM | 498 H | Information Security and E-Commerce (3) |

## Supporting Electives

Students must choose two of the following courses:
BM GT 411 Systems Performance (3)
IFSM 304 Ethics in the Information Age (3)
IFSM 446 Java-Based Information Systems A pplications (3)
IFSM 498D D ata M ining: Introduction and Application (3)
IFSM $498 \mathrm{G} \quad$ E-Commerce and Customer Relationship M anagement (3)

## E -Commerce in Small Business

The certificate in E -C ommerce in Small Business prepares entre preneurs and managers of small businesses to utilize ecommerce for entrepreneurial ventures. It helps them consider the issues regarding strategy, planning, organizational structure, supportive organizational culture, operations, hardware and software, control systems, customer service infrastructure, and administrative support systems for implementation of ecommerce. 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 to organize an ecommerce effort within the small business. Students must complete seven required courses for a total of 19 semester hours to earn the certificate.

## Program Courses

Students must take the following courses:

| IFSM | 300 | Information Systems in O rganizations (3) |
| :--- | :--- | :--- |
| BM GT | 304 | M anaging E-Commerce in O rganizations (3) |
| BM GT | 330 | Entrepreneurship and N ew Venture Planning (3) |
| M RKT | 310 | M arketing Principles and Organization (3) |
| BM GT | 395 | Customer Service M anagement (3) |
| BM GT | 339 | Government and Business C ontracting (3) |
| M RKT | 318 | Exploring Internet M arketing (1) |

## E-Commerce M anagement

The certificate in E-C ommerce M anagement prepares managers to develop strategy, planning, organizational structure, supportive orga nizational culture, control systems, customer service infrastructure, and management of task teams for implementation of ecommerce. 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 to organize the ecommerce effort within the firm. 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:

| IFSM | 300 | Information Systems in Organizations (3) |
| :--- | :--- | :--- |
| BM GT | 304 | M anaging E-Commerce in Organizations (3) |
| BM GT | 491 | Exploring the Future (3) |
| BM GT | 395 | Customer Service M anagement (3) |

## Supporting Electives

Students must choose two of the following courses:

| BM GT | 411 | Systems Performance (3) |
| :--- | :--- | :--- |
| BM GT | 412 | Program Analysis and Evaluation (3) |
| BM GT | 487 | Project M anagement I (3) |
| BM GT | 488 | Project M anagement II (3) |
| M RKT | 318 | Exploring Internet M arketing (1) |

## Environmental and O ccupational H ealth and Safety M anagement

This certificate program 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; to deal with the health and safety issues in a cost-effective way; to understand and apply federal, state, and local health and safety regulations; and to 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:

| EN M T | 493 | Environmental Regulations and Policy (3) |
| :--- | :--- | :--- |
| EN M T | 305 | H azardous M aterials Toxicology (3) |
| EN M T | 320 | Environmental and Occupational H ealth and Safety |
|  |  | M anagement (3) |
| EN M T | 310 | Emergency Planning and O perations M anagement (3) |
| EN M T | 340 | Environmental Technology (3) |
| EN M T | 390 | Environmental Risk Assessment (3) |

## Financial M anagement

The Financial M anagement 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, and individuals interested in pursuing new careers in financial management. This program is also of benefit to financial management professionals who want to enhance their financial management skills. A minimum of 18 semester hours is required for completion of the certificate.

## Program Courses

## Required Courses

Students must take one of the following finance courses:

| BM GT | 340 | Business Finance (3) |
| :--- | :--- | :--- |
| BM GT | 341 | Finance for the N onfinancial M anager (3) |

Students must take the following courses:

| BM GT | 343 | Investments (3) |
| :--- | :--- | :--- |
| BM GT | 346 | Risk M anagement (3) |
| BM GT | 440 | Financial M anagement (3) |
| BM GT | 446 | International Finance (3) |

## Supporting Elective

Students must choose one of the following courses:
ACCT 301 Accounting for Nonaccounting M anagers (3)
BM GT 345 Property and Liability Insurance (3)
BM GT 347 Life Insurance (3)
BM GT 443 Security Analysis and Valuation (3)
BM GT 444 Futures C ontracts and 0 ptions (3)
BM GT 445 Commercial Bank M anagement (3)
BM GT 498Q Financial Analysis (3)

## H ealth Practice <br> $M$ anagement

The certificate in H ealth Practice $M$ anagement prepares students for supervisory and management positions in health, medical, and dental practices and related organizations. This program is appropriate for students working for health maintenance organizations (H M Os), independent practice associations (IPAs), or preferred provider organizations (PPO s) as office managers with additional responsibilities for managing a physician network or networks within integrated health services delivery systems. Students complete seven courses (five required and two electives) for a total of 21 semester hours to earn the certificate.

## Program Courses

## Required Courses

Students must take the following courses:

| H M GT | 322 | H ealth Services Financial M anagement (3) |
| :--- | :--- | :--- |
| H RM N | 300 | Human Resource M anagement (3) |
| HM GT | 498 D | Health Insurance Analysis and Issues in <br> Health Systems M anagement (3) |
| H M GT | 498 V | Health Information-Systems M anagement (3) <br> HM GT |
| 3981 | Integrated Health Systems M anagement (3) |  |

## Supporting Electives

Students must choose two of the following courses:

| ACCT | 220 | Principles of Accounting I (3) |
| :--- | :--- | :--- |
| ACCT | 221 | Principles of Accounting II (3) |
| ACCT | 301 | Accounting for N onaccounting M anagers (3) |
| BM GT | 340 | Business Finance (3) |
| BM GT | 364 | M anagement and Organization Theory (3) |
| H RM N | 408 | Employment Law for Business (3) |
| H M GT | 320 | Health Services M anagement (3) |
| H M GT | 398 D | M anaged C are in Health Services M anagement (3) |
| H M GT | $398 G$ | M anagement of Tele-H ealth Programs (3) |
| H M GT | 398 H | Pharmacy Practice M anagement (3) |
| H M GT | 416 | Legal Aspects of H ealth Services Administration (3) |

## H ealth Services <br> $M$ anagement

The H ealth Services M anagement certificate prepares students for entry-level supervisory and midlevel management positions in health services organizations. Employment may be related to long-term-care facilities, hospitals, H M Os, medical practices, assisted care in the home, and numerous other forms now emerging. This program enables those already employed in private or public-sector health services organizations to upgrade their skills with the theory and practical knowledge to manage effectively and to advance to a higher level. 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:

| H M GT | 320 | Health Services M anagement (3) |
| :--- | :--- | :--- |
| H M GT | 398 D | M anaged Care in H ealth Services M anagement (3) |
| H M GT | 416 | Legal Aspects of H ealth Services Administration (3) |

Students must take one of the following accounting or finance courses:
ACCT 301 Accounting for Nonaccounting M anagers (3)
BM GT 340 Business Finance (3)
H M GT 322 H ealth Services Financial M anagement (3)

## Supporting Electives

Students must choose two of the following courses:

| H M GT | 325 | H ealth Services Economics (3) |
| :--- | :--- | :--- |
| H M G T | 398 I | Integrated H ealth Systems M anagement (3) |
| H M GT | 498 C | Comparative International H ealth Systems Analysis: <br> A M anagerial Perspective (3) |
| H M GT | 498D | H ealth Insurance Analysis and I ssues in <br> H ealth Systems M anagement (3) |
| H RM N | 300 | H uman Resource M anagement (3) |

## H uman Resource $M$ anagement

TheH uman Resource M anagement certificate program prepares students for supervisory and midlevel management positions in human resource management and enables employees al ready within a privateor public-sector organization to upgrade their skills with the theory and practical knowledge to advance to a higher level. This certificate prepares the student for the Professional in H uman Resources (PH R) and Senior Professional in Human Resources (SPH R) certification examinations. A total of 18 semester hours is required for completion of the certificate.

## Program Courses

## Required Courses

Students must take the following courses:

| H RM N | 300 | Human Resource M anagement (3) |
| :--- | :--- | :--- |
| H RM N | 400 | Human Resource M anagement: Analysis and Problems (3) |
| H RM N | 362 | Labor Relations (3) |
| BM GT | 364 | M anagement and Organization Theory (3) |

## Supporting Electives

Students must choose two of the following courses:

| BM GT | 464 | Organizational Behavior (3) |
| :--- | :--- | :--- |
| BM GT | 465 | Organization D evelopment and Change (3) |
| BM GT | 484 | M anaging Teams in O rganizations (3) |
| H RM N | 367 | Organizational Culture (3) |
| H RM N | 390 | Contemporary Compensation M anagement (3) |
| HRM N | 394 | M otivation, Performance, and Productivity (3) |
| HRM N | 406 | Employee Training and Development (3) |
| HRM N | 463 | Public-Sector Labor Relations (3) |
| HRM N | 490 | International H uman Resource M anagement (3) |
| H RM N | 494 | Strategic H uman Resource M anagement (3) |

## Information M anagement

This certificate offers an overview of information systems, their role in organizations, and the relation of information systems to the objectives and structure of an organization. An introduction to the design and management of database systems in a business environment is provided. A study of the methods used in analyzing needs for information and specifying requirements for an application system 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 the student who successfully completes 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 coursework or workplace experience with C, C + , Visual Basic, Ada, COBOL, or another high-level language may be applied.)

| CM ST | 305 | Introduction to Visual Basic Programming (3) |
| :--- | :--- | :--- |
| CM IS | 102 | Introduction to Problem Solving and Algorithm <br> Design (3) |
| IFSM | 296 | COBOL Programming I (3) |

## Required Courses

Students must take the following courses:

| IFSM | 300 | Information Systems in O rganizations (3) |
| :--- | :--- | :--- |
| IFSM | 410 | D atabase Concepts (3) |
| IFSM | 460 | Systems Analysis (3) |

## Supporting Electives

Students must choose one of the following courses:

| IFSM | 302 | Workplace Productivity (3) |
| :--- | :--- | :--- |
| IFSM | 303 | H uman Factors in Information Systems (3) |
| IFSM | 304 | Ethics in the Information Age (3) |
| IFSM | 390 | M ultimedia D esign and Evaluation for <br> Information Systems M anagers (3) |

Students must choose one of the following courses:

| IFSM | 420 | Advanced D atabase C oncepts (3) |
| :--- | :--- | :--- |
| IFSM | 438 | Project M anagement (3) |
| IFSM | 465 | Systems D esign (3) |
| IFSM | 498 F | Information Technology Infrastructure of Electronic <br>  |
|  | Commerce (3) |  |

## Internet Technologies

The certificate in Internet Technologies is designed for students concentrating on Internet and Web technologies for workplace and academic objectives. H ands-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:

| CM ST | 385 | Internet: A Practical Guide (3) |
| :--- | :--- | :--- |
| CM ST | 386 | Internet: An Advanced Guide (3) |
| CM ST | 430 | Web Site M anagement (3) |
| CM ST | 450 | Web D esign M ethodology and Technology (3) |

## Supporting Electives

Students must choose two of the following courses:

| CM IS | 240 | D ata Structures and Abstractions (3) |
| :--- | :--- | :--- |
| CM IS | 340 | Programming in Java (3) |
| CM IS | 345 | O bject-O riented D esign and Programming (3) |
| CM IS | 398 P | Programming in Perl (3) |
| CM IS | 498 J | Internet Programming in Java (3) |
| IFSM | 390 | M ultimedia D esign and Evaluation for <br> Information Systems M anagers (3) |
| IFSM | 446 | Java-Based Information Systems Applications (3) <br> IFSM |
|  | $498 F$ | Information Technology Infrastructure of Electronic <br> Commerce (3) |

## Laboratory M anagement

The certificate in Laboratory M anagement recognizes competence to aid science professionals in managing basic science research and development laboratories. Students gain 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:

| N SCI | 301 | Laboratory Organization and M anagement (3) |
| :--- | :--- | :--- |
| COM M | $393 / 393 X$ | Technical Writing (3) |
| IFSM | 300 | Information Systems in Organizations (3) |
| BM GT | 487 | Project M anagement I (3) |
| BM GT | 488 | Project M anagement II (3) |

## Supporting Elective

Students must choose one of the following courses:

| BEH S | 398 L | Introduction to M ediation (1) |
| :--- | :--- | :--- |
| BM GT | 305 | Knowledge M anagement (3) |
| BM GT | 398 E | Time M anagement (1) |
| H RM N | 363 | Negotiation Strategies (3) |
| PSYC | 308 A | Creative Problem Solving (1) |
| PSYC | 308 E | Cultivating Executive Skills (1) |
| PSYC | 308 H | Psychology of M otivating People at Work (1) |
| PSYC | 308 P | M ulticultural Training in O rganizations (1) |
| PSYC | 309 K | M anaging Interpersonal Stress and Conflicts (1) |

## M anagement Foundations

The M anagement Foundations certificate program prepares students for entry-level supervisory and midlevel management positions and enables employees already working in a private- or public-sector organization to upgrade their skills with the theory and practical knowledge 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:

| BM GT | 340 | Business Finance (3) |
| :--- | :--- | :--- |
| BM GT | 341 | Finance for the N onfinancial M anager (3) |
| Students must take the following courses: |  |  |
| BM GT | 364 | M anagement and O rganization Theory (3) |
| H RM N | 300 | Human Resource M anagement (3) |
| M RKT | 310 | M arketing Principles and O rganization (3) |
| IFSM | 300 | Information Systems in O rganizations (3) |

## Supporting Elective

Students must choose one of the following courses:
BM GT 365 Leadership and Change (3)
BM GT 380 Business Law I (3)
BM GT 383 Planning and Control of Services (3)
BM GT 464 Organizational Behavior (3)
BM GT 496 Business Ethics and Society (3)

## N egotiation and Conflict $M$ anagement

The certificate in Negotiation and Conflict $M$ anagement is an interdisciplinary certificate for persons (such as middle managers, customer service personnel, union stewards, work team representatives, contract managers, or negotiators) whose jobs involve resolving differences between individuals and groups. They may assist in resolving differences in work teams, work through 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 D ynamics (3) |
| :--- | :--- | :--- |
| SPCH | 420 | Group Discussion and D ecision M aking (3) |
| SPCH | 426 | Negotiation and Conflict M anagement (3) |
| SPCH | 470 | Listening (3) |
| LGST | 327 | Alternative Dispute Resolution (3) |

## Supporting Elective

Students must choose one of the following courses:

| BM GT | 317 | Problem Solving (3) |
| :--- | :--- | :--- |
| BM GT | 484 | M anaging Teams in Organizations (3) |
| H RM N | 362 | Labor Relations (3) |
| SPCH | 472 | Theories of N onverbal Communication (3) |
| SPCH | 482 | Intercultural Communication (3) |

## O bject-O riented D esign and Programming

This certificate is designed 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 concepts in the object-oriented design of programs. A total of 18 semester hours is required for completion of the certificate.

## Program Courses

## Required Courses

Students must take the following courses:

| CM IS | 140 | Introductory Programming (3) |
| :--- | :--- | :--- |
| CM IS | 240 | D ata Structures and Abstraction (3) |
| CM IS | 345 | O bject-O riented D esign and Programming (3) |

## Supporting Electives

Students must choose three of the following courses. (Students should check the course descriptions to ensure that they have taken all prerequisites for each course.)

| CM IS | 330 | Software Engineering Principles and Techniques (3) |
| :--- | :--- | :--- |
| CM IS | 340 | Programming in Java (3) |
| CM IS | 440 | Advanced Programming in Java (3) |
| CM IS | 455 | Requirements D evelopment (3) |
| CM IS | 460 | Software D esign and D evelopment (3) |
| CM IS | 465 | Software Verification and Validation (3) |

## O bject-O riented Programming Using Java

This certificate is designed for technically oriented professionals who need a deep understanding of developing and writing programs using the Java programming language. The certificate is awarded to the student who successfully completes six required courses for a total of 18 semester hours.

## Program Courses

Students must take the following courses:

| CM SC | 130 | Introductory Computer Science (3) |
| :--- | :--- | :--- |
| CM SC | 150 | Introduction to D iscrete Structures (3) |
| CM SC | 230 | Elementary D ata Structures (3) |
| CM SC | 420 | D ata Structures (3) |
| CM SC | 335 | Object-O riented and Concurrent Programming (3) |
| CM SC | 498 J | Internet Programming in Java (3) |

## Paralegal Studies

The Paralegal Studies certificate focuses on legal concepts, procedures, and skills that are used in a wide variety of legal environments. This program addresses the organization, functions, and processes of institutions in the U.S. legal system, roles and issues in the paralegal fiedd, legal ethics, and seected specialty areas. The curriculum empha sizes 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, including 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 covering at least three disciplines. EN GL 101, EN GL 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 from other schools. Up to 30 semester hours in general education and other courses may be earned through credit by examination or Prior Learning.

## 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 223 InvestigativeTechniques (3)
LGST $320 \quad$ 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 333 Administrative Advocacy (3)
LGST 360 Computer Applications in the Legal Environment (3)
LGST 363A Computer-Assisted Litigation Support (3)
LGST 370 Advanced Legal Analysis (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 | D omestic 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 | C onsumer Protection Law (3) |
| LGST | 415 | Intellectual Property (3) |
| LGST | 420 | Immigration Law (3) |
| LGST | 431 | Government Information Practices (3) |
| LGST | 434 | Government Contracts (3) |
| LGST | 442 | Business Organization (3) |
| LGST | 445 | Employment Law (3) |
| LGST | 450 | Bankruptcy Law (3) |

Up to 6 semester hours of 1-semester-hour 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.

## Project $M$ anagement for IT Professionals

This certificate 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 practices and procedures in the workplace is included. The certificate is awarded to the student who successfully completes 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 O rganizations (3) |
| IFSM | 438 | Project M anagement (3) |
| IFSM | 460 | Systems Analysis (3) |

## Supporting Electives

Students must choose 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 | M ultimedia Design and Evaluation for the <br> Information System M anager (3) |
| IFSM | 430 | Information Systems and Security (3) |
| IFSM | 498 F | Information Technology Infrastructure of Electronic <br> Commerce (3) |

## Public Fire Protection M anagement and Administration

The Public FireProtection M anagement and Administration certificate program prepares students for supervisory and midlevel management positions in public fire service management. It also enables employees within public fire protection organizations to upgrade their skills with administrative, management, planning, and legal knowledge to advance to a higher level. Students must complete six required courses for a total of 18 semester hours to earn the certificate.

## Program Courses

Students must take the following courses:

| FSCN | 302 | Advanced Fire Administration (3) |
| :--- | :--- | :--- |
| FSCN | 304 | Fire-Personnel M anagement (3) |
| FSCN | 305 | Fire Prevention O rganization and M anagement (3) |
| FSCN | 401 | Disaster and Fire D efense Planning (3) |
| FSCN | 412 | Political and Legal Foundations of Fire Protection (3) |
| FSCN | 413 | The C ommunity and Fire Threat (3) |

## Security M anagement

The certificate in Security M anagement recognizes management training relevant to modern security organizations. Students receive the certificate on completion of 18 semester hours of required coursework.

## Program Courses

Students must take the following courses:

| CCJS | 357 | Industrial and Retail Security Administration (3) |
| :--- | :--- | :--- |
| CCJS | $498 G$ | Introduction to Security M anagement (3) |
| CCJS | $498 F$ | Legal and Ethical Issues in Security M anagement (3) |
| CCJS | 498 K | Security: A M anagement Perspective (3) |
| CCJS | $486 B$ | Internship in Criminal Justice Through Co-op (6) |

## Security 0 perations

The certificate in Security 0 perations recognizes training in current practice in commercial and government security. Students receive the certificate on successful completion of 18 semester hours of required coursework.

## Program Courses

Students must take the following courses:

| CCJS | 498 C | Computer Crime and Security (3) |
| :--- | :--- | :--- |
| CCJS | 498 E | Institutional Security (3) |
| CCJS | 498 H | Protection of Business Assets (3) |
| GVPT | 399 H | Counterterrorism (3) |
| CCJS | 486 B | Internship in Criminal Justice Through Co-op (6) |

## Software Engineering

This certificate is intended for professionals who will be working in team environments 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. A total of 18 semester hours of required coursework must be earned to complete this certificate ( N ote: Two semesters of $\mathrm{C}++$ or Java programming are prerequisite to the certificate coursework.)

## Program Courses

Students must take the following courses:

| CM IS | 330 | Software Engineering Principles and Techniques (3) |
| :--- | :--- | :--- |
| CM IS | 345 | O bject-O riented D esign and Programming (3) |
| CM IS | 398 S | Software Safety (3) |
| CM IS | 455 | Requirements D evelopment (3) |
| CM IS | 460 | Software D esign and D evelopment (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 those in private or public-sector fire safety positions and organizations to upgrade their skills with the theory and practical knowledge to advance to a higher level. Students must complete six required courses for a total of 18 semester hours to earn the certificate.

## Program Courses

Students must take the following courses:

| FSCN | 303 | Analytic Approaches to Public Fire Protection (3) |
| :--- | :--- | :--- |
| FSC N | 306 | Incendiary-Fire Analysis and Investigation (3) |
| FSCN | 402 | Fire-Related H uman 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 $M$ anagement

The Technology and M anagement certificate program prepares students for entry-level supervisory and midlevel management positions in technology fieds and enables employees already within a private or public-sector organization to upgrade their skills with the theory and practical knowledge to advance to a higher level. Students 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:

| BM GT | 317 | Problem Solving (3) |
| :--- | :--- | :--- |
| BM GT | 487 | Project M anagement I (3) |
| BM GT | 488 | Project M anagement II (3) |
| CM ST | 385 | Internet: A Practical Guide (3) |

## Supporting Electives

Students must choose two of the following courses:

| BM GT | 301 | Computer Systems for Business (3) |
| :--- | :--- | :--- |
| CM ST | 340 | Computer Applications in M anagement (3) |
| CM ST | 386 | Internet: An Advanced Guide (3) |
| IFSM | 390 | M ultimedia D esign and Evaluation for Information <br> Systems M anagers (3) |
| IFSM | 460 | Systems Analysis (3) <br> IFSM |
| 465 | Systems D esign (3) |  |

## UNIX System Administration

This certificate is designed for technical professionals who intend to work as UNIX system administrators. A total of 18 semester hours of required coursework is required for completion of the certificate.

## Program Courses

| Students must take the following courses: |  |  |
| :--- | :--- | :--- |
| CM IS | 140 | Introductory Programming (3) |
| CM IS | 325 | UNIX with Shell Programming (3) |
| CM IS | 390 | UNIX System Administration (3) |
| CM IS | 398 P | Programming in Perl (3) |
| CM IS | 415 | Advanced UNIX and C (3) |
| CM IS | 490 | Advanced UNIX System Administration (3) |

## Visual Basic Programming

The certificate in Visual Basic Programming is designed for students seeking entry-level programming positions. H ands-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:

| CM IS | 102 | Introduction to Problem Solving and Algorithm <br> D esign (3) |
| :--- | :--- | :--- |
| CM ST | 305 | Introduction to Visual Basic Programming (3) |
| CM ST | 415 | Advanced Visual Basic Programming (3) |

Students must take one of the following courses:

| CM IS | 310 | Computer Systems and Architecture (3) |
| :--- | :--- | :--- |
| IFSM | 310 | Software and H ardware C oncepts (3) |

## Supporting Electives

Students must choose two of the following courses:

| CM IS | 240 | D ata Structures and Abstractions (3) |
| :--- | :--- | :--- |
| CM IS | 340 | Programming in Java (3) |
| CM IS | 345 | Object-O riented D esign and Programming (3) |
| CM IS | 498 J | Internet Programming in Java (3) |
| CM ST | 385 | Internet: A Practical Guide (3) |
| CM ST | 386 | Internet: An Advanced Guide (3) |
| IFSM | 410 | D atabase Concepts (3) |
| IFSM | 420 | Advanced D atabase Concepts (3) |
| IFSM | 498 F | Information Technology Infrastructure for Electronic |
|  |  | Commerce (3) |

## Web Design

The certificate in Web D esign prepares students for careers in the Web design field. The focus is on nontechnical employees who wish to advance within their organizations. This certificate is valuable to persons wanting to become involved in establishing, developing, and maintaining 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:

| CM ST | 385 | Internet: A Practical Guide (3) |
| :--- | :--- | :--- |
| ART T | 250 | Elements of Commercial Design (3) |
| CM ST | 386 | Internet: An Advanced Guide (3) |
| ART T | 354 | Elements of C omputer Graphics (3) |
| CM ST | 450 | Web D esign M ethodology and Technology (3) |

## Supporting Electives

Students must choose two of the following courses:

| ART T | 479 | Advanced Computer Graphics (3) |
| :--- | :--- | :--- |
| CM IS | 398 P | Programming in Perl (3) |
| CM IS | 498 J | Internet Programming in Java (3) |
| IFSM | 390 | M ultimedia D esign and Evaluation for Information <br>  <br> Systems M anagers (3) |
| IFSM | 446 | Java-Based Information Systems Applications (3) |

## Web Programming

This certificate is designed for technical professionals who want to learn some of the important tools used in Web programming. Students are taught introductory and advanced features of Perl and Common Gateway Interface (CGI) programming, and will have the opportunity to learn skills in databases, U N IX, JavaScript, and Web site management and design. A total of 18 semester hours is required for completion of the certificate.

## Program Courses

## Required Courses

Students must take the following courses:

| CM IS | 140 | Introductory Programming (3) |
| :--- | :--- | :--- |
| CM IS | 398 P | Programming in Perl (3) |
| CM IS | 498 P | Advanced Programming in Perl (3) |

## Supporting Electives

Students must choose three of the following courses. (Students should check the course descriptions to ensure that they have taken all prerequisites for each course.)

| CM IS | 320 | Relational D atabases (3) |
| :--- | :--- | :--- |
| CM IS | 325 | UNIX with Shell Programming (3) |
| CM ST | 385 | Internet: A Practical Guide (3) |
| CM ST | 386 | Internet: An Advanced Guide (3) |
| CM ST | 430 | Web Site M anagement (3) |
| CM ST | 450 | Web D esign M ethodology and Technology (3) |
| IFSM | $498 F$ | Information Technology Infrastructure of Electronic |
|  |  | Commerce (3) |

## W indows Programming

This certificate is designed for technical professionals who will be developing user interfaces with W indows. Students are taught how to program menus, dialog and message boxes, and different forms of control. A total of 18 semester hours of required coursework must be earned to complete the certificate.

## Program Courses

Students must take the following courses:

| CM IS | 140 | Introductory Programming (3) |
| :--- | :--- | :--- |
| CM IS | 240 | D ata Structures and Abstraction (3) |
| CM IS | 342 | W indows U ser Interface Programming (3) |
| CM IS | 442 | Advanced W indows Programming (3) |
| CM ST | 305 | Introduction to V isual Basic Programming (3) |
| CM ST | 415 | Advanced Visual Basic Programming (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. This certificate pre pares both women and men for dealing effectively with business and management issues related to gender in organizations. Students 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:

| BM GT | 364 | M anagement and Organization Theory (3) |
| :--- | :--- | :--- |
| BM GT | 312 | Women in Business (3) |
| BM GT | 313 | Women as Entrepreneurs (3) |
| BM GT | 314 | Women as Leaders (3) |

## Supporting Electives

Students must choose two of the following courses:

| BM GT | 330 | Entrepreneurship and N ew Venture Planning (3) |
| :--- | :--- | :--- |
| BM GT | 365 | Leadership and Change (3) |
| BM GT | 464 | Organizational Behavior (3) |
| BM GT | 484 | M anaging Teams in Organizations (3) |
| H RM N | 367 | Organizational Culture (3) |
| H RM N | 406 | Employee Training and Development (3) |
| H RM N | 494 | Strategic H uman Resource M anagement (3) |
| PSYC | 308 J | Women Across Cultures (1) |
| SPCH | 324 | Communication and Gender (3) |

Students with less than two years of business experience are encouraged to take BM GT 110 Introduction to Business and $M$ anagement in addition to the courses listed.

## Workplace Communications

The certificate in Workplace Communications 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 fiedd and to the tools and techniques of workplace documents. Students receive the certificate on successful completion of 18 semester hours.

## Program Courses

Students must take the following courses:

| EN GL | 101/101X | Introduction to Writing (3) |
| :--- | :--- | :--- |
| IFSM | 201 | Introduction to Computer-Based Systems (3) |
| CM ST | 310 | Desktop Publishing (3) |
| COM M | 495 | Seminar in Workplace Communication (3) |

Students must take one of the following writing courses:
$\begin{array}{lll}\text { COM M } & 393 / 393 X & \text { Technical Writing (3) } \\ \text { COM M } & 394 / 394 X & \text { Business Writing (3) }\end{array}$
Students must take one of the following editing courses:
COM M 491 Technical Editing (3)
ENGL 278F Introduction to Principles of Text Editing (3)

## Workplace Spanish

This certificate combines language and professional study; it is awarded only upon completion of 16 semester hours of coursework and successful passage of an examination certifying proficiency in reading, writing, understanding, and speaking Spanish. The work is composed of courses, 1-credit projects related to existing jobs or majors and minors (eg., business administration, fire science, legal studies, human resource management, and health care management), and a certifying proficiency test.

## 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) |

## Supporting Electives

Students must choose one of the following options for a total of 4 semester hours:

| - SPAN | 360 | Work Projects in Spanish (1) <br> repeated for 4 credits |
| ---: | :---: | :--- |
| - SPAN | 315 | Commercial Spanish I (3) |
| SPAN | 360 | Work Projects in Spanish (1) |

## Proficiency Test

Students are required to take fee-based individualized testing in Spanish 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. O ne 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 own responsibility to make certain of being academically prepared to take a course. Faculty members are not expected to repeat material listed as being prerequisite.

In some cases, the preparation of students who have gained relevant knowledge through experience is equivalent to the prerequisites for a course at UM UC. In other cases, the preparation of students who fulfilled prerequisites several years previously does not assure them of having retained the necessary knowledge. 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.

EN GL 101 Introduction to Writing or equivalent is prerequisite to any higher-level course in English (with the exception of ENGL 281 Standard English Grammar, U sage, and Diction) or communication studies. M ATH 107 C ollege Algebra or equivalent 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 (EN GL 101) at U M UC will be tested for placement. Placement testing is also required for certain courses in mathematics (p. 192). The current Undergraduate Schedule of Classes gives times and locations of testing. M ore information may be obtained from the Information and Enrollment Team by calling 301-985-7000.

Another way to fulfill prerequisites is to obtain credit by coursechallenge examination (described on p. 12). 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 each student's level of knowledge in a given subject. Students may not take course-challenge examinations for lowerlevel courses that are prerequisite to courses for which they have al ready received credit.

## KEY TO COURSE DESCRIPTIONS

Undergraduate courses that have been (or may be) offered by UM UC 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-eg., (3) - after the title of the course.

C ourse numbers are designated as follows:
000-099 N oncredit 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

U M U C may offer courses listed in the catalogs of other institutions of the University System of $M$ aryland if demand warrants and the academic department concerned approves.


## CHEM 103 General Chemistry I (4)

(The first course in chemistry for students majoring or minoring in a science. Fulfills the laboratory science requirement.) ${ }^{1}$ Prerequisite: M ATH 107, M ATH 115 , or equivalent. ${ }^{2}$ 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: CH EM 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. 16).
- 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.
Effective fall 2001, many courses previously listed under one discipline are now listed under another. All courses previously listed under computer applications (and designated CAPP) are now listed under computer studies (CM ST ); all courses previously listed under general science (GNSC) are now listed under natural science ( NSCI ); all courses previously listed under paralegal studies (PLGL) are now listed under legal studies (LGST). M any courses previously listed under business and management (BM GT) or management (MGMT) are now listed under human resource management (HRM N ) or marketing (M RKT). C ooperative Education (COOP) courses are now listed under the appropriate discipline. Students should check the course descriptions carefully to avoid duplicating previous coursework. UM UC will not award credit for courses that repeat material the student has already been credited with learning.
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The following entries describe courses offered through University of M aryland University College. Requirements pertain only to degrees conferred at UM UC. To use these courses toward degrees offered by other institutions in the University System of $M$ aryland, students should refer to the catalogs of those institutions for restrictions that may apply. In transferring to UM UC - particularly from a community college- students should be careful not to enroll in courses that duplicate their previous studies.

## Accounting

C ourses in accounting (designated ACCT) may be applied as appropriate (according to individual program requirements) toward

- a major in accounting, business administration, 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, and
- electives.

A description of the curriculum for the accounting major and minor begins on p . 25. Descriptions of other related curricula may be found on the following pages: business administration (p. 29), customer service management (p. 41), human resource management (p. 54), management studies (p. 59), marketing (p. 61), and strategic and entrepreneurial management (p. 69).

## 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 BM GT 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, BM GT 221, M G MT 301, or M GST 301.

## ACCT 301 Accounting for Nonaccounting Managers (3)

(Formerly M G M T 301 Accounting for M anagers. M ay 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, BM GT 221, M GMT 301, or M GST 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: BM GT 110 (or at least two years of business or management experience) and ACCT 221, or equivalent. 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 BM GT 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 or equivalent. 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 BM GT 311.

## ACCT 321 Cost Accounting (3)

Prerequisites: BM GT 110 (or at least two years of business or manage ment experience) and ACCT 221, or equivalent. 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 BM GT 321.

## ACCT 323 Taxation of Individuals (3)

(Formerly Income Tax Accounting.) Prerequisite: ACCT 220 or equivalent. An introduction to federal taxation of the income of individuals. Tax laws are examined by means of illustrative examples and problems. Computer applications may be used to analyze specific examples. Students may receive credit for only one of the following courses: ACCT 323 or BM GT 323.

## ACCT 326 Accounting Information Systems (3)

Prerequisites: ACCT 321 and a course in information systems management, or equivalent. A study of the control aspects of accounting systems. Topics include setting standards; defining and imposing administrative, operational, and security controls; and judging cost-effectiveness of systems. Various techniques are used to study accounting information-systems concepts; these may include the use of problem sets, case studies, computer applications, and other materials. Students may receive credit for only one of the following courses: ACCT 326, BM GT 320, or BM GT 326 .

## ACCT 328 Accounting Software (3)

Prerequisite: ACCT 221 or equivalent. 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 or equivalent. 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 BM GT 410.

## ACCT 411 Ethics and Professionalism in Accounting (3)

(Fulfills the civic responsibility requirement.) Prerequisite: ACCT 311 or equivalent. 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. Students may receive credit for only one of the following courses: ACCT 411 or BM GT 411.

## ACCT 417 Taxation of Corporations and Other Entities (3)

(Formerly Advanced Tax Accounting.) Prerequisites: ACCT 311 and 323, or equivalent. 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 BM GT 417.

## ACCT 422 Auditing Theory and Practice (3)

Prerequisite: ACCT 311 or equivalent. A study of the independent accountant's attest function, 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 BM GT 422.

## ACCT 424 Advanced Accounting (3)

Prerequisite: ACCT 311 or equivalent. A study of advanced accounting theory, applied to specialized topics and contemporary problems. Consolidated statements and partnership accounting are emphasized. 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 BM GT 424.

## ACCT 425 International Accounting (3)

(Formerly ACCT 498A. Fulfills the international perspective requirement.) Prerequisite: ACCT 311. A study of accounting in a multinational context. Emphasis is on evolving international accounting and reporting standards, problems of foreign exchange and taxation, intercompany transfer pricing, and emerging issues in international accounting. Students may receive credit for only one of the following courses: ACCT 427 or ACCT 498A.

## ACCT 426 Advanced Cost Accounting (3)

Prerequisite: ACCT 321 or equivalent. A study of advanced cost accounting that emphasizes the managerial aspects of internal systems of record keeping, 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 BM GT 426.

## ACCT 427 Advanced Auditing (3)

Prerequisite: ACCT 422 or equivalent. An examination and a thorough study of special auditing topics. Statistical sampling, information systems auditing, attestation standards, assurance services, and SEC accounting are covered. 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 BM GT 427.

## ACCT 436 Internal Auditing (3)

(Formerly ACCT 498E.) Prerequisite: ACCT 311 or equivalent. An introduction to internal auditing, its rapid growth, and its role in the modern corporation. Focus is on 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 BM GT 498E.

## ACCT 486A Internship in Accounting Through Co-op (3)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p .12 ). 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 total of 180 hours during the C o-op session; four new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. M ay 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 to the workplace. Students may earn up to 15 semester hours in all internship coursework through C o-op toward a first bachelor's degree and up to 9 semester hours toward a second bachelor's degree.

## ACCT 486B Internship in Accounting Through Co-op (6)

Prerequisite: Formal admission to the Co-op program (Co-op requirements are listed on p . 12). 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. M ay 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 to 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.

## ACCT 495 Contemporary Issues in Accounting Practice (3)

(Formerly ACCT 498C.) Prerequisites: ACCT 311, ACCT 321, ACCT 422, and BM GT 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 ecommerce, 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. 26.

## AASP 201 Introduction to African American Studies (3)

(Fulfills the historical perspective requirement.) A study of significant aspects of African American history and culture, emphasizing the development of African American communities both during and after the period of slavery. The social, political, legal, and economic roots of problems that have faced African Americans are examined from an interdisciplinary perspective. Applications to other racial and ethnic minorities in societies on this continent and elsewhere are also considered. Students may receive credit for only one of the following courses: AASP 100 or AASP 201.

## American Studies

Courses in American studies (designated AM ST ) may be applied as appropriate (according to individual program requirements) toward

- a minor in American studies; and
- electives.

A description of the curriculum for the American studies minor begins on p. 27.

## AMST 201 Introduction to American Studies (3)

An introduction to American cultural studies by means of examining the concept of self in autobiographical writing and the concept of society in accounts of various communities.

## Anthropology

Courses in anthropology (designated ANTH ) may be applied as appropriate (according to individual program requirements) toward

- the general education requirement in the social and behavioral sciences;
- a major in humanities or social science;
- a minor in Asian studies or humanities; and
- electives.

D escriptions of related curricula may be found on the following pages: Asian studies (p. 29), humanities (p. 52), and social science (p. 66).

## ANTH 101 Introduction to Anthropology: Archaeology and Physical Anthropology (3)

A survey of general patterns in the development of human culture, addressing the biological and morphological aspects of humans viewed in their cultural setting. Students who complete both AN TH 101 and 102 may not receive credit for AN TH 340, BEHS 340, or BEH S 341.

## ANTH 102 Introduction to Anthropology: Cultural Anthropology and Linguistics (3)

(Fulfills the civic responsibility and international perspective requirements.) A survey of social and cultural principles inherent in ethnographic descriptions, coupled with the study of language in the context of anthropology. Students who complete both AN TH 101 and 102 may not receive credit for AN TH 340, BEH S 340, or BEH S 341.

## ANTH 298 Special Topics in Anthropology (3)

A presentation of anthropological perspectives on selected topics of broad general interest. $M$ ay be repeated to a maximum of 6 credits when topics differ.

## ANTH 340 Outlooks in Anthropology (6)

(Fulfills the civic responsibility and international perspective requirements. M ay be applied toward a specialization in behavioral and social sciences.) An interdisciplinary exploration of physical and cultural anthropology, linguistics, and archaeology. D iscussion covers the evolution of human variation and cultures as adaptive systems. Theory and contemporary applications are examined. Students may receive credit for only one of the following courses: AN TH 340, BEH S 340, or BEH S 341. Students who have completed AN TH 101 and 102 may not receive credit for AN TH 340.

ANTH 398 Intermediate Special Topics in Anthropology (3)
A presentation of anthropological perspectives on selected topics of broad general interest. $M$ ay be repeated to a maximum of 6 credits when topics differ.

## ANTH 414 Ethnology of Africa (3)

(Fulfills the international and historical perspective requirements.) Prerequisites: ANTH 101 and 102. A study of the native peoples and cultures of Africa.

## ANTH 417 Peoples and Cultures of the Far East (3)

(Fulfills the civic responsibility requirement.) Prerequisite: An introductory course in the social sciences or permission of faculty member. A survey of the major sociopolitical systems of China, K orea, and Japan. M ajor 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 .12 ). An opportunity to combine aca demic theory with new, career-related experience in anthropology. 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. M ay 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 to 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.

## ANTH 486B Internship in Anthropology Through Co-op (6)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 12). 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. $M$ ay 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 to the workplace. Students may earn up to 15 semester hours in all internship coursework through C o-op toward a first bachelor's degree and up to 9 semester hours toward a second bachelor's degree.

## Art

Courses in art (designated ART T) 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 D esign, D esktop Publishing, or Web D esign; and
- electives.

A description of the curriculum for the art minor begins on p. 28. A description of the curriculum for the humanities major and minor begins on p .52.

## ARTT 100 Two-Dimensional Art Fundamentals (3)

An exploration of the principles and elements of pictorial space examined 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 200 Elements of Three-Dimensional Form and Space (3)

(A continuation of ARTT 100.) Prerequisites: ARTT 100 and 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)

Prerequisites: ARTT 100 and 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)

(Formerly ARTT 208C.) D evelopment 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. The primary relationship between word and image communications is also discussed. Emphasis is on creative problem solving in media communications. Visual structure, continuity, and coherence are addressed by exploring symbolism and its relationship to image. Psychological and sociocultural questions are also addressed as they reate to ethical standards and practices.

## ARTT 320 Elements of Painting (3)

Prerequisite: ARTT 210. Practice in the basic tools and vocabulary of painting. Oil and/or water-based paints are used.

## ARTT 353 Elements of Photography (3)

Prerequisites: ARTT 100 and 110 or permission of faculty member. An introduction to black and white photography. Topics include basic technical and aesthetic vocabulary, camera mechanics, and darkroom techniques. Photographic message and meaning in both fine art and design concept are discussed.

## ARTT 354 Elements of Computer Graphics (3)

Prerequisites: O ne lower-level course in ARTT or equivalent experience in graphic design, as well as experience in art fundamentals, M icrosoft Office applications, and W indows. An introduction to computer graphics programs and basic concepts in electronic design. Focus in 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. M ay 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. M ay be repeated to a maximum of 12 credits.

## ARTT 468 Seminar: Interrelationship Between Art and Art Theory (3)

An exploration of the relationship between a student's work and the theoretical context of contemporary art. M ay be repeated to a maximum of 6 credits when topics differ.

## ARTT 470 Watercolor (3)

(Formerly ARTT 489B.) An opportunity for further development of painting in watercolors at beginning or advanced levels. Students may receive a maximum of 6 credits (combined) in the following courses: ARTT 489B and ARTT 470.

## 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 . 12). 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 total of 180 hours during the Co-op session; four new tasks must be deline ated in the Learning Proposal; and the course requirements must be completed. M ay 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 to 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.

## ARTT 486B Internship in Art Through Co-op (6)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 12). 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. M ay 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 to 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.

## ARTT 489 Special Problems in Studio Art (3)

$M$ ay be repeated to a maximum of 6 credits.

## ARTT 498 Directed Studies in Art (2-3)

(For advanced students.) M ay 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, American studies, or Asian studies;
- a major or minor in humanities; and
- electives.

UM UC 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 M aryland 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. 28. Descriptions of other related curricula may be found on the following pages: American studies (p. 27), Asian studies (p. 29), and humanities (p. 52).

## ARTH 100 Introduction to Art (3)

A grounding in the basic tools of understanding visual art. M ajor approaches (such as techniques, subject matter, form, and evaluation) are the focus. Painting, sculpture, architecture, and the graphic arts are discussed.

## ARTH 199 Special Topics in Art History (3)

A study of selected topics in art history. Students may receive credit for a given topic in either ARTH 199 or ARTH 489 only once.

## ARTH 200 Art of the Western World to 1300 (3)

(Fulfills the historical and international perspective requirements.) A survey of the development of Western art as expressed in painting, sculpture, and architecture from prehistoric times to the Renaissance. Students may receive credit for only one of the following courses: ARTH 200 or ARTH 260.

## ARTH 201 Art of the Western World

 from 1300 (3)(Fulfills the historical and international perspective requirements.) A survey of the development of Western art as expressed in painting, scul pture, and architecture from the Renaissance to the present.

## ARTH 335 17th-Century Art in the Netherlands (3)

(Formerly ARTH 435. Fulfills the historical and international perspective requirements.) An exploration of painting, from the Dutch Golden Age - the age of Rembrandt, Vermeer, H als, Steen, and Leyter. H istory painting, still life, landscape, portraiture, and scenes of everyday life are studied. Issues of collecting art are also discussed. 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 and international perspective requirements) 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 1500, the European Age of Exploration, when world cultures came into contact.

## ARTH 371 History of World Art II (3)

(Fulfills the historical and international perspective requirements) 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 1500, the European Age of Exploration, to modern day. The effects of contact among world cultures on both the form and content of artistic expression is examined.

## ARTH 380 Masterpieces of Painting (3)

(Fulfills the historical and international perspective requirements.) An 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 and international perspective requirements.) An 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 and international perspective requirements.) An analysis of selected masterworks of architecture, intended to reveal the creative process, 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 486A Internship in Art History Through Co-op (3)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p . 12). An opportunity to combine aca demic theory with new, career-related experience in art history. At least 12 hours per week must be devoted to new tasks for a total of 180 hours during the C o-op session; four new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. M ay 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 to 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.

## ARTH 486B Internship in Art History Through Co-op (6)

Prerequisite: Formal admission to the Co -op program (program requirements are listed on $p$. 12). 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. M ay 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 to 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.

## ARTH 489B History of Graphic Arts (3)

(Fulfills the historical and international perspective requirements.) A historical and technical survey of fine prints, from the 15th through the 20th century, primarily in Western Europe and America. Procedures used by the old masters and contemporary printmaking workshops are studied with emphasis on relief, intaglio, planographic, and screen printing techniques. Approaches for buying and collecting fine prints are explored.

## ARTH 489Y Impressionism and NeoImpressionism (3)

A study of the major trends in 19th-century painting, with the emphasis on Impressionism and its offshoots (neo-Impressionism and post-Impressionism). The contributions of $D$ egas, $M$ anet, Renoir, M onet, Cézanne, Seurat, Van Gogh, and Toulouse Lautrec are discussed. Assignments include advanced reading and research.

## ARTH 490 Chinese Painting (3)

(Fulfills the historical and international perspective requirements.) A historical survey of Chinese painting from the 2nd century b.c. to the present. Cultural, stylistic, and theoretical aspects are analyzed.

## 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 social and behavioral sciences (based on course content);
- a minor in Asian studies;
- a major or minor in humanities; and
- electives.

UM UC offers a limited number of courses each semester in this discipline. To complete a minor or related major, students may need to take courses at other institutions in the University System of M aryland 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 minor begins on p. 29. A description of the curriculum for the humanities major and minor begins on $p$. 52.

## ASTD 150 Introduction to Asian Studies I (3)

(The first course in the two-course sequenceASTD 150-160. Fulfills the civic responsibility and international perspective requirements and the general education requirement in arts and humanities or 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 AST D 150-160. Fulfills the civic responsibility and international perspective require ments and the general education requirement in arts and humanities or social sciences.) Recommended: AST D 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 O cean. 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 rele vance to countries or peoples of the Pacific Rim or Indian 0 cean. 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)

Prerequisite: 9 credits in Asian studies or Asian studies-related course work. 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 AST R) may be applied toward

- the general education requirement in the biological and physical sciences;
- the minor in natural science; and
- electives.

A description of the curriculum for the natural science minor begins on p. 64.

## ASTR 100 Introduction to Astronomy (3)

( N ot 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: M ATH 012. A discussion of the major areas of astronomy. Topics include the solar system, stars and stellar evolution, and galaxies Students may receive credit for only one of the following courses: ASTR 100, AST R 101, ASTR 120, GNSC 125 , or NSCI 125.

## ASTR 330 Solar-System Astronomy (3)

(For students not majoring or minoring in a science.) Prerequiste: ASTR 100, ASTR 101, or NSCI 125. An overview of the structure of planets and their atmospheres, with attention to the composition and behavior of comets, asteroids, and satellites. Various theories of the origin of the solar system are compared; recent data and interpre tations are presented.

## ASTR 399 Independent Study in Astronomy (1-3)

Prerequisite: 6 credits in AST R 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. M ay 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 $p$. 12). 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. M ay 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 to 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.

## ASTR 486B Internship in Astronomy Through Co-op (6)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p .12 ). An opportunity to combine aca demic 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. M ay 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 to 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.

## Behavioral and Social Sciences

Courses in behavioral and social sciences (designated BEH S) may be applied as appropriate (according to individual program requirements) toward

- the general education requirement in the social and behavioral sciences;
- a major in social science;
- a minor in American studies, Asian studies, gerontology, or women's studies; and
- electives.

A description of the curriculum for the social science major begins on $p$. 66. Descriptions of other related curricula may be found on the following pages: American studies (p. 27), Asian studies (p. 29), gerontology (p. 48), and women's studies (p. 70).
M ost BEH S courses require extensive writing. Students should complete a writing course (such as COM M 390, 393, 393X, 394, and 394X and EN GL 101, 101X, 391, 391X, and 396) or have equivalent writing experience before enrolling.
N ote: C ontinuing students who are completing a specialization in behavioral and social sciences should be aware that many courses formerly designated BEH S are now listed under other disciplines; however, these courses may still be applied to the behavioral and social sciences specialization. These courses include AN TH 340; CCJS 351; GERO 415 and 497P; GVPT 335; HIST 305, 319N, 372, 381, and 419K ; PSYC 200, 221, 332, 386, 462, and 465; and SOCY 311.

## BEHS 201 Introduction to Behavioral and Social Sciences (6)

An interdisciplinary introduction to the behavioral and social sciences, focusing on the interrelationships of anthropology, sociology, psychology, and political science. Basic concepts, major schools of thought, and the findings of scientific research are examined. Social phenomena are analyzed from an interdisciplinary perspective.

## BEHS 315 The Adult Years: Continuity and Change (6)

A study of the adult years as a complex process rather than a developmental stage. The adult experience is considered in terms of the variations in experience and in perceptions that are determined by one's age, sex, race, ethnic origins, and social class, as well as historical context. Topics include the social meaning of age, age related physiological changes, marriage and friendships, intergenerational relationships, changes in the self, and transitions in adult life. The multidisciplinary approach incorporates various perspectives in current research.

## BEHS 336 The Middle East: An Interdisciplinary Perspective (6)

(Fulfills the international perspective requirement.) A general overview of the M iddle East, the scene of critical and repeated conflict. D iscussion addresses fundamental questions such as the following; W hat is the M iddle East? W hat links its disparate ethnic, religious, and political groups? W hat are the origins of its current political conditions? Topics include the land and its people, Islam, civilization, nationalism and modernization, the consequences of World Wars I and II, cultural change and gender roles, Israel and the Palestinians, and fundamentalism and sectarianism. Students may receive credit for only one of the following courses: BEH S 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 H UM N 360 and N SCI 361. Yields 3 natural science credits and either 3 social science credits or 3 humanities credits. Fulfills the civic responsibility and international perspective require ments.) 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? W ill 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: BEH S 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. M ediation 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 are also explored. Students may receive credit for only one of the following courses: BEH S 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. Heroism, sacrifice, compassion, and leadership in the face of the unknown and daunting odds are discussed. 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 454 Domestic and Family Violence (6)

(Formerly Family Violence.) An examination of the factors involved in understanding, evaluating, and responding to violence within families and domestic units. Study is based on a systems model, integrating the personal, social, economic, legal, political, and medical considerations that either support the functioning of or cause stress in families and domestic units. Topics include the physical, emotional, and sexual abuse of children; spousal abuse; the abuse of elders; and dysfunction in relationships of unmarried couples (both heterosexual and homosexual). Discussion covers current systems of response and ways of preventing violence by strengthening the resources available to families and domestic units.

## BEHS 486A Internship in Behavioral Science Through Co-op (3)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 12). An opportunity to combine academic theory with new, career-related experience in behavioral and social science. At least 12 hours per week must be devoted to new tasks for a total of 180 hours during the C o-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 science and that continues to advance application of academic theory to 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.

## BEHS 486B Internship in Behavioral Science Through Co-op (6)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on $p$. 12). An opportunity to combine academic theory with new, career-related experience in behavioral and social 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. M ay be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to behavioral and social science and that continues to advance application of academic theory to the workplace. Students may earn up to 15 semester hours in all internship course work through Co-op toward a first bachelor's degree and up to 9 semester hours toward a second bachelor's degree.

## Biochemistry

Courses in biochemistry (designated BCH M ) may be applied as appropriate (according to individual program requirements) toward

- the general education requirement in the biological and physical sciences;
- a minor in microbiology or natural science; and
- electives.

A description of the curriculum for the microbiology minor begins on $p$. 63. A description of the natural science minor begins on p. 64.

## BCHM 261 Elements of Biochemistry (3)

Prerequisite: CHEM 104, CHEM 233, or CHEM 235; one course in biology or zoology emphasizing the molecular and cellular basis of life is strongly recommended. 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: BCH M 261 or BCHM 461.

## BCHM 461 Biochemistry I (3)

Prerequisite: Any organic chemistry course; one course in biology or zoology emphasizing the molecular and cellular basis of life strongly recommended. A comprehensive introduction to general biochemistry. Topics include the chemistry and metabolism of carbohydrates, lipids, nucleic acids, and proteins. Students may receive credit for only one of the following courses: BCH M 261 or BCHM 461.

## BCHM 462 Biochemistry II (3)

(A continuation of BCHM 461.) Prerequisite: BCHM 461. Further study of the chemistry of macromolecules and cells, including complex metabolism, catabolism, and anabolism. Students may receive credit for only one of the following courses: BCH M 261 or BCHM 462.

## 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 microbiology or natural science; and
- electives (including related requirements for the environmental management major).
A description of the curriculum for the microbiology minor begins on p . 63. A description of the curriculum for the natural science minor begins on p. 64. A description of the requirements for the environmental management major begins on p .44.


## BIOL 101 Concepts of Biology (3)

(For students not majoring or minoring in a science.) An introductory study of the fundamental organization, processes, and interdependence of living organisms, considering the implications of the influence of human beings in the biological world. Students may receive credit for only one of the following courses: BIOL 101 or BIOL 105.

## BIOL 102 Laboratory in Biology (1)

(For students not majoring or minoring in a science. Fulfills the laboratory science requirement.) Prerequisite or corequisite: BIOL 101 or equivalent. A laboratory study of the concepts underlying the organization and interrelationships of living organisms. Students may receive credit for only one of the following courses: BIOL 102 or BIOL 105.

## BIOL 105 Principles of Biology I (4)

(For students majoring or minoring in a science. Fulfills the laboratory science requirement.) 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 ZO OL 101.

## BIOL 106 Principles of Biology II (4)

(For students majoring or minoring in a science. Fulfills the laboratory science requirement.) Prerequisite: BIOL 105. An introduction to the basic principles of biology, with special emphasis on organismic, ecological, and evolutionary biology. Students may receive credit for only one of the following courses: BIOL 101, BIOL 106, or BSCI 106.

## BIOL 160 Human Biology (3)

(Formerly GN SC 160.) 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 GN SC 160.

## BIOL 164 Introduction to Human Anatomy and Physiology (3)

(Formerly GN SC 161.) Prerequisite: BIOL 101, BIOL 105, or BIOL 160. An introduction to the anatomy and physiology of the human organism. Topics include basic concepts of physics and chemistry that are necessary for understanding biological function, the structure and function of cells, tissues, and the major organ systems in the body. Students may receive credit for only one of the following courses: BIOL 164, BIOL 201, BIOL 202, GNSC 161, ZO OL 201, or ZO OL 202.

## BIOL 181 Life in the Oceans (3)

(Formerly ZOOL 181. Fulfills the civic responsibility requirement.) 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 requirement.) A survey of ecological principles as they apply to the interrelated dilemmas of overpopulation, pollution, the increasing consumption of natural resources, and the ethics of land use. Students may receive credit for only one of the following courses: BIOL 211, BOTN 211, or PBIO 235.

## BIOL 215 Population Biology and General Ecology (3)

(Formerly ZOOL 270.) 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 both from natural populations and human populations. Students may receive credit for only one of the following courses: BIOL 215 or ZOOL 270.

## BIOL 220 Human Genetics (3)

(For students not majoring in a science.) An introduction to genetics, focusing on the human organism. Topics include transmission and biochemical genetics, mutation, the behavior of genes in populations, and genetic engineering. The roles of recent discoveries in the treatment of genetic diseases, cancer, and organ transplantation are examined. Students may receive credit for only one of the following courses: BIOL 220, BIOL 346, ZOOL 146, or ZOOL 346.

## BIOL 301 Human Health and Disease (3)

(Formerly BIOL 398H . For students not majoring in a science.) A survey of 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. Prevention of disease through control of risk factors and early detection is emphasized. Students may receive credit for only one of the following courses: BIOL 301 or BIOL 398H .

## BIOL 304 The Biology of Cancer (3)

(Formerly GN SC 398C. 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 310 Technology and the Bioenvironment (3)

(Formerly BIO L 398B.) A multidisciplinary study emphasizing the impact of modern technologies (including biotechnology) on the environment, the workplace, and everyday life. Topics include basic ecology, forms of pollution, the electromagnetic spectrum, human and bioenvironmental toxicology, and pertinent federal laws. Students may receive credit for only one of the following courses: BIOL 310 or BIOL 398B.

## BIOL 398A Human Evolution and Ecology (1)

An examination of the varied biological evidence for the theory of evolution, including fossil records, DNA analysis, and geological and biogeographical changes. The struggle for existence, the survival of the fittest, and adaptation to the environment are discussed. Topics include D arwinian medicine, the evolution of disease, and the role of evolution in the human ecosystem.

## BIOL 398I Biotechnology and Genetic Engineering (1)

(Formerly GN SC 398B. 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 3981 or GNSC 398B.

## BIOL 398J The Role of Nutrition in Cancer and Heart Disease (1)

(Formerly GN SC 398F.) A study of the relationship between diet and the development of cancer and heart disesse at the level of molecules, cells, and genes. Topics include the scientific and epidemiological evidence supporting the roles of various foods, nutrients, antioxidants, fiber, fats, and genetics in the progression or prevention of these two major causes of mortality. Students may receive credit for only one of the following courses: BIOL 398J or GN SC 398F.

## BIOL 398P Pesticides and the Environment (1)

A survey of the history of pesticides, their importance in America's environmental "awakening," and their significance as contaminants. The evolution of pesticide usage, from overdependence to attempts at reduction, is also covered.

## BIOL 398R Vaccines and Society (3)

(Formerly GN SC 398H . 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 diseose prevention, with attention given to 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 398R, GNSC 398H, or MICB 388D.

## BIOL 398S Molecular and Cellular Biology (3)

Prerequisite: BIOL 101, BIOL 105, BSCI 105, M ICB 200, or equivalent. 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; RN A processing and metabolism; and molecular transport, traffic, and signaling. The principles and uses of recombinant DNA and genetic engineering technology are discussed.

## BIOL 398T Developmental Biology (3)

Prerequisite: BIOL 101, BIOL 105, BSCI 105, MICB 200, or equivalent. 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, sex determination, and gametogenesis.

## BIOL 398U Bioinformatics (3)

Recommended: Some background in either computer science or introductory biology. An introduction to the use of computers to analyze DN A and protein sequences, and the significance of these analyses. Topics include genome analysis, evolutionary relationships, structurefunction identification, pattern recognition, database searches and structures, and algorithms.

## BIOL 398V The Biology of Aging (3)

(For students not majoring 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 Alzeheime'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.

## BIOL 399 Independent Study in Biology (1-3)

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 biology. M ay be repeated to a maximum of 6 credits when topics differ.

## BIOL 486A Internship in Biology Through Co-op (3)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 12). An opportunity to combine academic theory with new, career-related experience in biology. At least 12 hours per week must be devoted to new tasks for a total of 180 hours during the C 0 -op session; four new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. M ay 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 to 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.

BIOL 486B Internship in Biology Through Co-op (6)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 12). An opportunity to combine academic theory with new, career-related experience in biology. 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. M ay 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 to 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.

## Business and M anagement

Courses in business and management (designated BM GT) may be applied as appropriate (according to individual program requirements) toward

- a major in business administration, human resource management, management studies, or marketing;
- a minor in business administration, business law and public policy, customer service management, ecommerce and technology 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 $p$. 29. Descriptions of other related curricula may be found on the following pages: business law and public policy (p. 32), customer service management (p. 41), e commerce and technology management (p. 41), finance (p. 45), health care administration ( $p .49$ ), human resource management (p. 54), international business management (p. 57), management studies (p. 59), marketing (p. 61), and strategic and entrepreneurial management (p. 69).
Some BM GT courses have been renumbered and designated HRM N (human resource management) or M RKT (marketing). Students may not receive credit for the same course under both numbers.

## BMGT 110 Introduction to Business and Management (3)

(For students with little or no business background. Recommended preparation for many other BM GT 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)

Prerequiste: M ATH 107 or equivalent. An introduction to probabilistic and statistical concepts (including descriptive statistics, set-theoretic development of probability, the properties of discrete and continuous random variables, sampling theory, estimation, hypothesis testing, regression, and decision theory), followed by the application of these concepts to solving problems in business and management. Students may receive credit for only one of the following courses: BEH S 202, BEHS 302, BM GT 230, ECON 321, GN ST 201, M GMT 316, PSYC 200, or SOCY 201.

## BMGT 301 Computer Systems for Business (3)

(Formerly TM GT 201 Introduction to Computer-Based Systems. Course applications require access to a PC, office suite software, and the W orld Wide Web.) An overview of computer information systems and computer applications used in business and not-for-profit organizations. H ardware, software, procedures, systems, and human resources are explored. Integration and application in business and in other segments of society are assessed. Various business software applications, including databases and spreadsheets, and use of the World Wide Web are examined. Students may receive credit for only one of the following courses: BM GT 301, CAPP 101, CAPP 300, CM ST 300, IFSM 201, or TM GT 201.

## BMGT 304 Managing E-Commerce in Organizations (3)

(Formerly BM GT 388M .) An introduction to the ways in which organizations create, identify, and distribute information; market products, and manage organizational units on the Internet using electronic commerce techniques, i.e., ecommerce management. Topics include ecommerce management principles, management of different types of organizations, integration of human and information technology resources, training and development, and information systems. The management of business units to implement technological marketing and knowledge management strategies and the creation of new roles and responsibilities for managers in the e commerce environment of organizations are also covered. Students may receive credit for only one of the following courses: BM GT 304 or BM GT 388M .

## BMGT 305 Knowledge Management (3)

(Formerly BM GT 388C. Course applications require PC, modem, and Internet service provider.) An introduction to the ways in which organizations create, identify, capture, and distribute knowledge, i.e., knowledge management. Topics include knowledge management principles; new organizations and intellectual capital; integration of human resources, training and development, information systems, 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: BM GT 305 or BM GT 388C.

## BMGT 312 Women in Business (3)

Prerequisite: BM GT 110 or equivalent. An examination of women's evolving roles in the business world and the forces that have created change and opportunities. H ow 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: BM GT 312, BM GT 3981, or M GM T 3981.

## 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. The reasons for female exclusion from traditional financing alternatives, along with current funding options for women, are explored. Inspirational real-life examples of women who have achieved success are used. Students may receive credit for only one of the following courses: BM GT 313 or BM GT 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 are used to illustrate the key principles. Students may receive credit for only one of the following courses: BM GT 314 or BM GT 388J.

## BMGT 317 Problem Solving (3)

(Formerly TM GT 310.) 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 are used to illustrate the definition of the problem, the formulation of hypotheses, and the collection and analysis of data. Students may receive credit for only one of the following courses: BM GT 317 or TM GT 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: BM GT 324, BM GT 398F, M GM T 324, M GM T 398B, or SBU S 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: BM GT 325, BM GT 398G, M GM T 325, M GM T 330, M GM T 398C, SBU S 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. M ethods 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: BM GT 327, BM GT 398D, M GM T 327, M GM T 398J, or SBUS 398A.

## BMGT 330 Entrepreneurship and New Venture Planning (3)

(Formerly M GM T 330.) 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 advent of the World WideWeb; 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: BM GT 330, M G MT 330, or SBUS 200.

## BMGT 334 Managing New Ventures (3)

(Formerly M GM T 334 M anaging Early-Stage Ventures.) Prerequiste: Familiarity with new venture planning; BM GT 330 recommended. 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 strate gies, access to capital and capital formation, policy formation, and development of a management philosophy. H ow entrepreneurs make decisions - on growth of the venture, organizational structure, hiring of key employees, information systems, software and hardware use, and building of corporate culture- is also examined. Problems and pitfallsto 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: BM GT 334 or M GMT 334.

## BMGT 336 Managing Strategic Venture Growth and Industry (3)

(Formerly M GMT 336.) Prerequisite: Familiarity with the business functions and factors involved with planning and managing a new venture; BM GT 330 recommended. 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. Consideration is given to how to implement cost controls, reorganize to rekindle entrepreneurial intensity, encourage innovation, and make staffing changes to achieve growth. Cultural diversity and the use of new technologies are also examined. Students may receive credit for only one of the following courses: BM GT 336 or M GMT 336.

## BMGT 337 Building the Entrepreneurial Team (3)

(Formerly M GMT 337.) Prerequisite: Familiarity with business functions and factors involved with planning, organizing, and managing a new venture; BM GT 330, BM GT 334, or BM GT 336 recommended. 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: BM GT 337 or M GMT 337.

## BMGT 339 Government and Business Contracting (3)

(Formerly M GM T 339. Designed for both entrepreneurs evaluating contracting and grant opportunities for the first time and people working in medium to large firms.) 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: BM GT 339, M GM T 220, or M GMT 339.

## BMGT 340 Business Finance (3)

Prerequisites: ACCT 221 and BM GT 230. An overview of the principles and practices of organizing, financing, and rehabilitating a business enterprise. Topics include the various types of securities and their usefulness in raising funds; methods of apportioning income, risk, and control; intercorporate relations; and new developments. Emphasis is on solving problems of financial policy that managers face.

## BMGT 341 Finance for the Nonfinancial Manager (3)

(Formerly TM GT 320. M ay 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 preparation for assuming 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: BM GT 340, BM GT 341, M GM T 398D, or TM GT 320.

## BMGT 342 Fundamentals of Building Wealth (3)

(Formerly BM GT 388N Personal Financial M anagement. For students majoring in both business and nonbusiness disciplines.) A practical overview of personal finance management and creation of wealth that blends financial theory and applications. The development of personal financial management skills is encouraged (e.g., budgeting income and expenditures, planning for financial security and retirement), while an understanding of elements of the U.S. financial structure (such as 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: BM GT 342 or BM GT 388N .

## BMGT 343 Investments (3)

Prerequisite: BM GT 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 BM GT 230. Analysis of the major types of property and casualty insurance, including fire, indirect loss, crime, automobile, ocean and inland marine, and liability insurance. Substandard, residual, and reinsurance markets are investigated; current issues are discussed.

## BMGT 346 Risk Management (3)

Prerequisites: ACCT 221 and BM GT 230. A study focusing on recognizing and evaluating the pure risks facing organizations. Guides for risk-management decisions concerning the retention, control, and transfer (including insurance) of risk 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 364 Management and Organization Theory (3)

Prerequisite: BM GT 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: BM GT 364, TEM N 202, TEM N 300, TM GT 301, or TM GT 302.

## BMGT 365 Leadership and Change (3)

(Formerly M GM T 300 Leadership and M anagement in an Age of Diversity. Fulfills the civic responsibility requirement.) 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: BM GT 365, M G M T 300, M GST 310, or TEM N 310.

## BMGT 366 Managing in the Public Sector (3)

(Formerly TM GT 305.) An exploration of the nature of public-sector management, including issues of public accountability, the budgetary process, and personnel. M odels of decision making and the characteristics of the policy-making process at federal, state, and local levels are examined. M ethods and mechanisms of policy analysis, including cost/benefit analysis and program evaluation, are introduced. Students may receive credit for only one of the following courses: BM GT 366 or TM GT 305.

## BMGT 368 Managing Organizational Change (3)

(Formerly TM GT 350 Organization D evelopment.) Prerequisite: BM GT 364 or equivalent. 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: BM GT 368 or TM GT 350.

## BMGT 370 Introduction to Transportation Management (3)

Prerequisite: M RKT 310 or equivalent. An examination of transportation as it relates to the movement of people and goods between points. Topics include the roles of the private and public sectors (including deregulation), carrier modes, demand for passenger and freight transportation, transportation pricing, management, contemporary public policy issues, and managerial strategies in transportation.

## BMGT 372 Introduction to Logistics Management (3)

Prerequisite: M RKT 310 or equivalent. An examination of the operations involved in managing the movement and storage of materials, supplies, work in progress, and finished goods. Topics include 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: BM GT 364, BM GT 367, or equivalent. 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: BM GT 375, M GM T 347, M GMT 375, or TEM N 360.

## BMGT 378 Legal Environment of Business (3)

(Fulfills the civic responsibility requirement. For students with little or no legal background.) An overview of fundamental legal concepts and principles that affect business in the relevant functional and reguIatory environments. Emphasis is on the definition and application of legal principles and concepts through illustrative examples and cases. Primary 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. Important global concepts are discussed. Assignments include conducting relevant research using computer databases and networks (such as LEXIS-N EXIS and the Web) as well as other methods for accessing information. Students may receive credit for only one of the following courses: BM GT 378 or BM GT 480.

## BMGT 380 Business Law I (3)

(Strongly recommended for students seeking careers as CPAs, lawyers, or managers.) Prerequisite: BM GT 110 or at least two years of business and management experience. An in-depth conceptual and functional analysis and application of legal principles relevant to the conduct and understanding of commercial business transactions. Topics include the legal, ethical, and social environment of business; agencies, partnerships, and other forms of business organizations; and contracts and sales agreements. Salient legal aspects of international business are also discussed. Assignments may include conducting relevant research using computer databases and networks (such as LEXIS-N EXIS and the World Wide Web) as well as other methods for accessing information.

## BMGT 381 Business Law II (3)

(Strongly recommended for students seeking careers as CPAs, lawyers, or managers.) Prerequisite: BM GT 380. Further in-depth conceptual and functional analysis and application of legal principles relevant to the conduct and understanding of commercial business transactions. Topics include personal and real property (bailments, wills, trusts, and estates); government regulations affecting employment and marketing; negotiable instruments; debtor/creditor relationships; and bankruptcy and reorganization. Salient legal aspects of international business are also discussed. Assignments may include conducting relevant research using computer databases and networks (such as LEXIS-N EXIS and the World W ide Web) as well as other methods for accessing information.

## BMGT 383 Planning and Control of Services (3)

(Formerly M GMT 340 Planning and Control.) Prerequisite: BM GT 230 or equivalent. 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: BM GT 383, BM GT 385, M GMT 340, M GST 318, or TEM N 318.

## BMGT 384 Managing for Quality (3)

(Formerly BM GT 425 and M GM T 425 Total Quality M anagement. N ot open to students who have previously taken M GST 398L, M GST 398M , or M GST 398N. Course applications require access to a PC, spreadsheet and statistical software, and the World W ide Web.) Prerequisite: BM GT 230 or equivalent. A survey of methods used to apply principles of total quality management (TQM) in various organizational settings to improve quality and productivity. Topics include evolution of TQM theory; TQM models, tools, and techniques; development of TQM teams; production of graphs and charts; strategies for meeting customer expectations; benchmarking; and comparison of TQ M 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: BM GT 384, BM GT 425, or M GMT 425.

## BMGT 385 Production and Operations Management (3)

Recommended: BM GT 230, GNST 201, or equivalent. An overview of the operations of manufacturing and service enterprises, concentrating on production management, planning, and control. Topics include demand forecasting, materials planning and control, and capacity planning. Case studies are examined to analyze the manufacturing and service environments in terms of operational planning, the use of teams, teamwork, and decision making regarding problems commonly confronting 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: BM GT 383, BM GT 385, M G M T 340, MGST 318, or TEMN 318.

## BMGT 388B Virtual Management (1)

(Course applications require PC, modem, and Internet service provider.) An overview of the key organizational and individual issues involved in technology-assisted employee management, i.e., virtual management. 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 392 International Business Management (3)

(Fulfills the civic responsibility and international perspective requirements.) Prerequisites: BM GT 110 (or at least two years of business and management experience) and ECO N 203, or equivalent. Examination and analysis of international business in its historical, theoretical, environmental, and functional dimensions. Focus is on understanding the growing economic interdependence of nations and the 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: BM GT 392, M GM T 305, or TM GT 390.

## BMGT 393 Real Estate Principles I (3)

(D esigned to fulfill the requirements for the M aryland 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)

(D esigned to fulfill the requirements for the M aryland licensing examination to sell real estate.) Prerequisite: BM GT 393 or equivalent. 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: BM GT 394 or BM GT 398H .

## BMGT 395 Customer Service Management (3)

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. D iscussion 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: BM GT 395, BM GT 398A, M GM T 395, or M GM T 398A.

## BMGT 396 Customer Consultation and Needs Analysis (3)

(Formerly BM GT 3881.) 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: BM GT 3881 or BM GT 396.

## BMGT 397 Customer Satisfaction and Loyalty (3)

(Formerly M GM T 398F Building Customer Satisfaction and Loyalty.) 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: BM GT 397 or M GM T 398F.

## 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. $M$ ay be repeated to a maximum of 6 credits when topics differ.

## BMGT 411 Systems Performance (3)

(Formerly TM GT 411.) Presentation of analytical approaches to comprehending systems. Focus is on powerful techniques for solving problems of managing people and for understanding their behavior in organizations. Examples of well-known systems failures and catastrophes are used to illustrate systems analysis. Case studies of manufacturing companies, municipal government, and a nuclear power plant are investigated. Techniques delineated include systems diagramming, boundary setting, and systems modeling. Students may receive credit for only one of the following courses: BM GT 411 or TMGT 411.

## BMGT 412 Program Analysis and Evaluation (3)

(Formerly TM GT 412.) A survey of the techniques and methodologies used to determine whether programs are operating successfully. Topics include identifying the goals and objectives of a 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. Students may receive credit for only one of the following courses: BM GT 412 or TM GT 412.

## BMGT 436 Managing Entrepreneurial Ventures (3)

(Formerly BM GT 461 Entrepreneurship.) Prerequisite: BM GT 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. Examination 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: BM GT 436, BM GT 461, or M GM T 461.

## BMGT 440 Financial Management (3)

Prerequisite: BM GT 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: BM GT 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: BM GT 343. A study of the 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: BM GT 340 and ECO N 430. An analysis and discussion of cases and readings in commercial bank management. The loan function and the management of liquidity reserves, investments for income, and sources of funds are discussed. The objectives, functions, policies, organization, structure, services, and regulations of banks are considered.

## BMGT 446 International Finance (3)

(Fulfills the international perspective requirement.) Prerequisite: BM GT 340 or equivalent. 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: BM GT 110 (or at least two years of business and management experience) and BM GT 364, or equivalent. 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: BM GT 364, M GM T 300, or equivalent. 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: BM GT 465, M G M T 398K, M GM T 465, or TM GT 350.

## BMGT 481 Public Utilities and Public Policy (3)

(Formerly Public Utilities.) Examination and analysis of salient policy issues in the utilities environment and their impact on business management and strategies. Topics include the telecommunication industry, as well as energy, transportation, and financial entities in both domestic and global contexts.

## BMGT 482 Business and Government (3)

(Fulfills the historical and international perspective requirements.) Prerequisites: BM GT 110 (or at least two years of business and management experience) and ECON 201 (or ECON 203), or equivalent. A study of the role of government in the modern economy and the intricate relationships between the public and private sectors. Emphasis is on the regulatory and public policy dimensions of government intervention, the promotion of business, and corporate responses to government action in the changing domestic and global marketplaces. Students may receive credit for only one of the following courses: BM GT 482 or TM GT 340.

## BMGT 484 Managing Teams in Organizations (3)

(Formerly BM GT 498H .) Prerequisite: BM GT 364 or equivalent. 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: BM GT 484, BM GT 498H, or M GMT 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 $p$. 12). 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 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. M ay 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 to the workplace. Students may earn up to 15 semester hours in all internship coursework through Coop toward a first bachelor's degree and up to 9 semester hours toward a second bachelor's degree.

## BMGT 486B Internship in Business and Management Through Co-op (6)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on $p .12$ ). 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 require ments must be completed. M ay 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 to 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.

## BMGT 487 Project Management I (3)

(Formerly TM GT 430 Project M anagement. The first course in the two-course series BM GT 487-488. Course applications require access to a PC, project management and spreadsheet software, and the World WideWeb.) Prerequisite: BM GT 364 or equivalent. 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 production in research firms, high-technology manufacturing and engineering firms, information systems implementations, service business projects, ecommerce projects, and consulting practices. Appropriate organizational structures, such as collegial and matrix types, are described and assessed. The practical considerations of designing a project management system are covered as well. Students may receive credit for only one of the following courses: BM GT 487, IFSM 438, or TM GT 430.

## BMGT 488 Project Management II (3)

(Formerly TM GT 430 Project M anagement. The second course in the two-course series BM GT 487-488. Course applications require access to a PC, project management and spreadsheet software, and the World W ide Web. Students wishing to use alternate software must contact the faculty member before the start of the course.) Prerequisite: BM GT 487 or equivalent. An exploration of project management applications beyond introductory projects. Project management is discussed in terms of production in research firms, high-technology manufacturing and engineering firms, information systems implementations, service business projects, ecommerce projects, and consulting practices. Appropriate organizational structures, such as collegial and matrix types, are described and assessed. The practical considerations of designing a project management system are covered as well. Students may receive credit for only one of the following courses: BM GT 488 or TM GT 430.

## BMGT 491 Exploring the Future (3)

(Formerly BEHS and TM GT 480. Fulfills the international perspective requirement.) An examination of how to analyze and develop alternate ways of seeing the future. The interactions of population, technology, and political and economic systems, values, and leadership are investigated. Techniques futurists use-including scenario construction, trend analysis, the futures wheel, and environmental scanning- are explained. Techniques are applied in societal, profes sional, and personal settings. Students may receive credit for only one of the following courses: BEH S 480, BM GT 491, M GM T 398H, TM GT 401, or TM GT 480.

## BMGT 495 Business Policies and Strategic Management (3)

(Intended as a final, capstone course to betaken in a student's last 30 semester hours.) Prerequiste: BM GT 364, BM GT 367, or equivalent. 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: BM GT 495, H M GT 430, M GMT 495, or TM GT 380.

## BMGT 496 Business Ethics and Society (3)

(Fulfills the civic responsibility and international perspective require ments.) 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 both the domestic and global environments.

## BMGT 497 Implementing Business Strategy (3)

(Formerly BM GT and M GM T 498M .) Prerequisites: ACCT 220 (or ACCT 301) and BM GT 364, or equivalent. 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 custome service, growth, and profitability in setting targets for future performance. Students may receive credit for only one of the following courses: BM GT 497, BM GT 498M, or MGMT 498M.

## BMGT 4980 The Global Manager and Public Policy (3)

(Fulfills the civic responsibility and international perspective requirements.) An examination and analysis of key public policy issues in the international arena that have an impact on the decisions of the global manager. Topics span the functional aspects of business, including global marketing, finance, management, human resource management, law, and technology transfer. Students may receive credit for only one of the following courses: BM GT 4980 or MGMT 4980.

## BMGT 498P International Business Law (3)

(Fulfills the civic responsibility and international perspective require ments.) 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; international and regional organizations; international contracts and sales; global financing and the regulation of international trade; national and international economic controls; transnational reach of criminal and economic regulations; foreign investments and taxation; global issues related to the environment, technology transfer, and employment; and dispute resolution.

## C areer Planning

Courses in career planning (designated CAPL) may be applied toward

- electives


## CAPL 171 Personal Career Planning and Development (3)

An overview of career-development theories, designed to provide a foundation for the analysis of personal career decisions. Vocationalinterest and personality tests are administered and interpreted. Topics include the assessment of career-related skills, interests, and values, as well as ways to use various research methods and career-related mate rials. D ecision-making and job-search strategies for writing résumés, interviewing, and identifying employers are discussed. Students may receive credit for only one of the following courses: CAPL 171 or EDCP 108D.

## Chemistry

C ourses 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 $p$. 64. A description of the requirements for the environmental management major begins on $p .44$.
Students who intend to continue study in science and are considering programs that require two courses in chemistry (including one course of inorganic chemistry and one course of organic chemistry) should follow sequence I. Students who are considering programs that require four courses in chemistry (including two courses of inorganic chemistry and two courses of organic chemistry) should follow sequence II.


## Sequence I

CHEM 103 General Chemistry I (inorganic)
CH EM 104 Fundamentals of Organic and Biochemistry (organic)

## Sequence II

CHEM 103 General Chemistry I (inorganic)
CHEM 113 General Chemistry II (inorganic)
CHEM 233 Organic Chemistry I (organic)
CHEM 243 Organic Chemistry II (organic)

## CHEM 103 General Chemistry I (4)

(The first course in chemistry for students majoring or minoring in a science. Fulfills the laboratory science requirement.) Prerequisite: M ATH 107, M ATH 115, or equivalent. 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)

(Fulfills the laboratory science requirement.) Prerequisite: CH EM 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 233 Organic Chemistry I (4)

(Fulfills the laboratory science requirement.) Prerequisite: CH EM 113 or CH EM 115. Extensive, systematic analysis of the chemistry of carbon. Topics include 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 233, or CHEM 235.

## CHEM 243 Organic Chemistry II (4)

(Fulfills the laboratory science requirement. A continuation of CH EM 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 CH EM 245.

## Communication Studies

Courses in communication studies (designated CO M M ) 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 Communication or various other areas; and
- electives.

COMM 390, 393, 393X, 394, and 394X (as well as ENGL 303, 391, 391X , and 396, and LGST 401) are designated as writingintensive and may be applied toward the general requirement in upper-level intensive writing.
COM M 380, 395, 490, 491, 492, 493, 494, and 495 may be applied toward the general education requirement in communications, but not toward the general education requirement in upper-level intensive writing.
Specific COM M courses may be recommended in relation to specific majors and minors. Students should check the descriptions of those curricula.

A description of the curriculum for the communication studies major and minor begins on p. 33. Descriptions of other related curricula may be found on the following pages: journalism (p. 58) and speech communication (p. 68).

## COMM 293 Technical Report Writing (3)

(Formerly EN GL 293. Fulfills the general education requirement in communications.) Prerequisite: EN GL 101 or equivalent. 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: CO M M 293 or ENGL 293.

## COMM 300 Communication Theory (3)

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 319D Working as a Writing Consultant (1)

A study of how to produce a part-time editorship for profit. H ow to take manuscripts from the concept stage to publication of the finished product is covered. Emphasis is on the planning, writing, and placement of advertising, as well as the step-by-step process of producing a manuscript. Issues such as content development, structure, and audience are discussed. Topics include insider secrets of editing for professional agents and marketing manuscripts through query letters, proposals, author sheets, and other follow-up correspondence.

## COMM 319E Marketing Your Writing (1)

A study of how to market one's writing, focusing not only on selling to the right publisher but on making the best deal for one's work. Topics include planning a writing strategy, selecting appropriate publishers, negotiating compensation, and promoting the work after publication.

## COMM 380 Language in Social Contexts (3)

(Fulfills the general education requirement in communications, but is not a writing course. Fulfills the historical and international perspective requirements.) Prerequisite: EN GL 101 or equivalent. 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. C ategories of speech and methods of written communication are examined from the perspective of regional and social variation. Cultural, gender, and racial variations are discussed along with underlying perspectives and assumptions.

## COMM 390 Writing for Managers (3)

(Fulfills the general education requirement in intensive upperlevel writing.) Prerequisite: EN GL 101 or equivalent. 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: COM M 390, HUMN 390 , or M GST 161.

## COMM 393 Technical Writing (3)

(Students for whom English is a second language should consider taking COM M 393X instead. Fulfills the general education require ment in intensive upper-level writing.) Prerequisite: EN GL 101 or equivalent. 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 393X, or ENGL 393.

## 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: EN GL 101X or equival ent. 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 (eg., 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: COM M 393, COM M 393X, EN GL 393, or EN GL 393X.

## COMM 394 Business Writing (3)

(Students for whom English is a second language should consider taking COM M 394X instead. Fulfills the general education requirement in intensive upper-level writing.) Prerequisite: EN GL 101 or equivalent. 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 final report that incorporates data analysis and support for conclusions 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: COM M 394, COM M 394X, EN GL 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: EN GL 101X or equivalent. 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 final report that incorporates data analysis and support for conclusions 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: COM M 394, COM M 394X, EN GL 394, or EN GL 394X.

## COMM 395 Writing in the Health Professions (3)

(Fulfills the general education requirement in communications.) Prerequisite: EN GL 101 or equivalent. An introduction to a broad spectrum of writing in the health professions: brochures, fact sheets, medical/insurance/health reports, and articles for newspapers, magazines, and scientific journals. Students may receive credit for only one of the following courses: COM M 395 or EN GL 395.

## COMM 421 Communication Management (3)

(Formerly SPCH 421.) Prerequisite: SPCH 100 or equivalent. A study of communication policies, plans, channels, and practices in the management of the communication function in organizations. Students may receive credit for only one of the following courses: COMM 421 or SPCH 421.

## COMM 486A Internship in Communication Studies Through Co-op (3)

Prerequisite: Formal admission to the Co-op program (program requirements listed on p. 12). 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 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. M ay 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 to the workplace. Students may earn up to 15 semester hours in all internship coursework through C 0 -op toward a first bachelor's degree and up to 9 semester hours toward a second bachelor's degree.

## COMM 486B Internship in Communication Studies Through Co-op (6)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p . 12). 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 C 0-op session; five to eight new tasks must be delineated in the Learning Proposal; and the course require ments must be completed. M ay 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 to 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.

## COMM 490 Seminar in Technical Communication (3)

(Fulfills the general education requirement in communications.) Prerequisite: COM M 393, COM M 394, or equivalent experience. 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: EN GL 278F or equivalent. A systematic approach to methods of preparing a document for publication or other disseminations. The full range of editing levels is addressed: copyediting, substantive editing, and document design. An overview of design goals that reflect specific readers and purposes is included. Students may receive credit for only one of the following courses: COM M 491 or EN GL 489B.

## COMM 492 Grant and Proposal Writing (3)

(Fulfills the general education requirement in communications.) Prerequisite: COM M 393, COM M 394, or equivalent. An advanced study of technical writing, focusing on the structures and formats of competitive proposals (transmittal letter, résumé, plan, executive summary, illustrations, tables). An actual proposal-development cycle is simulated and followed through the stages of issuance and modification of the Request for Proposal (RFP), the bidders' conference, red-team reviews, the Best and Final 0 ffer (BAFO), and evaluation and contract award by a source board. Assignments include working in teams to prepare competitive proposals in response to an RFP from the federal government. Students may receive credit for only one of the following courses: COM M 492 or EN GL 489C.

## COMM 493 Graphics/Text Integration (3)

(Fulfills the general education requirement in communications, but is not a writing course.) Recommended: Familiarity with computers and desktop publishing. An examination of the seamless integration of text and the full spectrum of graphics used in communications. Topics include techniques for creating meaningful design concepts, editing text to enhance the graphics, designing creative page layouts, and making the most of desktop publishing capabilities and tools. H ands-on experience with desktop publishing programs is provided.

## COMM 494 Publishing a Newsletter (3)

(Fulfills the general education requirement in communications.) Prerequisites: EN GL 101 (or equivalent) and basic computer skills. The planning, writing, designing, and production of newsletters for various publics. C oncepts are presented for targeting writing to specific audiences, improving readability, and using typography and design effectively. Newsletter formats and the application of desktop publishing to newsletter layout and design are covered. Commercial printing is also discussed. 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.) Prerequisite: A 300-level writing course. 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. H ow 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.) Prerequisites: EN GL 101 (or equivalent) and basic computer skills. 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, UN IX System Administration, or various other computer-related areas; and
- electives.

Students without recent experience in problem solving with computers must take C M IS 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 CM IS 140) is CM IS 140 and 160 in the first semester followed by CM IS 240 and 310 in the second.
A description of the curriculum for the computer and information science major begins on p . 35 . Descriptions of other computer-related curricula may be found on the following pages: computer informa tion technology (p. 36), computer science (p. 37), computer studies (p. 38), and information systems management (p. 56).

## CMIS 102 Introduction to Problem Solving and Algorithm Design (3)

(M ay not be applied to a major in computer and information science.) 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 the $\mathrm{C}+$ language are illustrated.

## CMIS 140 Introductory Programming (3)

( $N$ ot open to students who have completed CM IS 315. The first in a sequence of courses in C + . Taking CM IS 140 and 240 in consecutive semesters is recommended.) Prerequisite: CM IS 102 or equivalent knowledge. A study of structured programming using the $\mathrm{C}+$ language. The discipline, methodologies, and techniques of software development are covered. Algorithms and simple data structures are developed and implemented in $\mathrm{C}+\mathrm{H}$. Object-oriented concepts such as classes and encapsulation are introduced.

## CMIS 160 Discrete Mathematics for Computing (3)

(N ot open to students who have completed CM SC 150.) Prerequisite M ATH 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)

(The second in a sequence of courses in C + . Taking CM IS 140 and 240 in consecutive semesters is recommended.) Prerequisite: CM IS 140. A study of program design and the implementation of abstract data structures in $\mathrm{C}++$. Topics include programming tools, verification, debugging and testing, and data structures. Emphasis is on stacks, queues, lists, recursion, trees, sorting, and searching. C + is the programming language used. Students may receive credit for only one of the following courses: CM IS 240 or CM IS 315.

## CMIS 310 Computer Systems and Architecture (3)

(N ot open to students who have completed CM SC 311.) Prerequisite: CM IS 140; CM IS 160 trongly recommended. A study of the fundamental concepts and interrelationships of computer architecture and operating systems and the functional approach to components of a computer system. Students may receive credit for only one of the following courses: CM IS 270, CM IS 310, CM SC 311, or IFSM 310.

## CMIS 315 Programming and Application in C++ (3)

Prerequisite: A two-semester sequence in a programming language other than C + (such as Pascal, Ada, PL/I, C, or Java) or equivalent experience. A onesemester study of programming in $\mathrm{C}+\mathrm{+}$. Programming projects in $\mathrm{C}++$ are included. Students may receive credit for only one of the following courses: CM IS 240 or CM IS 315.

## CMIS 320 Relational Databases (3)

Prerequisite: C M IS 140 or equivalent; CM IS 310 or equivalent recommended. A study of the functions and underlying concepts of relationally organized database systems. D ata models are described and their application to database systems is discussed. The entity/ relationship (E/R) model and Codd's relational theory-including relational algebra, normalization and integrity constraints, and the SQ L language- are emphasized. Physical design and data administration issues are addressed. Projects include hands-on work with $E / R$ and relational models (using the latest version of $O$ racle). Students may receive credit for only one of the following courses: CMIS 320 or IFSM 410.

## CMIS 325 UNIX with Shell Programming (3)

Prerequisite: CM IS 140 or equivalent. A study of the U NIX 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: CM IS 240, CMIS 315, or equivalent; CMIS 310 or equivalent recommended. A study of the process of software engineering from initial concept through design, development testing, and maintenance to retirement of the product. D evelopment lifecycle models are presented. Issues in configuration management, integration and testing, software qual ity, quality assurance, security, fault tolerance, project economics, operations, human factors, and organizational structures are considered. Students may receive credit for only one of the following courses: CM IS 330 or CMIS 388A.

## CMIS 340 Programming in Java (3)

Prerequisites: CMIS 240 and knowledge of H TM L. An examination of the features of the Java programming language. Topics include design of classes, class libraries, data structures, exception handling, threads, input and output, and applet programming. Assignments include programming in Java.

## CMIS 342 Windows User Interface Programming (3)

(Formerly CM IS 398W W indows NT Programming.) Prerequisite: CM IS 240 or equivalent. A study of the design and prototyping of user interfaces in a W indows environment. Focus is on programming controls, menus, and dialog and message boxes. Students may receive credit for only one of the following courses: CMIS 342 or CMIS 398W.

## CMIS 345 Object-Oriented Design and Programming (3)

Prerequisite: CM IS 240, CM IS 315, or equivalent. An examination of the principles, practices, and applications of programming in an object-oriented environment. Techniques and language features of object-oriented design are implemented in programming projects. Assignments include programming in an object-oriented language such as C++ or Java. Students may receive credit only once under this course number.

## CMIS 370 Data Communications (3)

Prerequisite: C M IS 310 or equivalent. Investigation of the effects of communication technology on information systems. Topics include components of communication systems, architectures and protocols of networks, security measures, regulatory issues, and the design of network systems. Issues and applications in local area networks and communication services are covered. Students may receive credit for only one of the following courses: CM IS 370, CM SC 370, or IFSM 450.

## CMIS 390 UNIX System Administration (3)

(Formerly CM IS 398U.) Prerequisite: CM IS 325. An in-depth examination of UNIX internals, including loading, configuring, and maintaining UN IX 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 mainte nance. The Red H at Linux operating system is used for all lab work. Students may receive credit for only one of the following courses: CM IS 390 or CM IS 398U.

## CMIS 398P Programming in Perl (3)

Prerequiste: CMIS 140 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.

## CMIS 398S Software Safety (3)

Prerequisite: CM IS 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.

## CMIS 415 Advanced UNIX and C (3)

Prerequisites: CM IS 240 (or CM IS 315) and CM IS 325; CM IS 310 or equivalent recommended. 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, U NIX utilities, debuggers, graphics, and file structure) are presented. Programming projects in C that implement UNIX command features are assigned.

## CMIS 420 Advanced Relational Databases (3)

Prerequisite: CM IS 320 or equivalent. 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 the latest version of O racle) in designing and implementing a small database, creating triggers, loading through forms and utility, querying through interactive and embedded Structured Q uery L anguage (SQ L), restructuring schema, and anal yzing performance. Students may receive credit for only one of the following courses: CMIS 420, IFSM 411, or IFSM 4981.

## CMIS 435 Computer Networking (3)

Prerequisite: CMIS 370 or equivalent. 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: CM IS 435 or CM SC 440.

## CMIS 440 Advanced Programming in Java (3)

 (Formerly CM IS 498A.) Prerequisite: CM IS 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: CM IS 440 or CM IS 498A.
## CMIS 442 Windows Systems Programming (3)

Prerequisites: CM IS 240 and 310 , or equivalent. A study of the W in32 application programming interface (API) used to access underlying system-level objects such as files, memory, processes, threads, and the registry. In-depth descriptions and examples of the necessary API calls are presented. Programming projects implement W indows console applications.

## CMIS 445 Distributed Systems (3)

Prerequisites: CMIS 310 and 240; CMIS 325 recommended. 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 O bject Request Broker Architecture) are discussed. Projects include programming. Students may receive credit for only one of the following courses: CM IS 445 or CM SC 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. M ethods 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: CM IS 330 or equivalent. An in-depth treatment of the concepts and techniques for designing and developing software for large projects. D esign strategies, principles, methodologies, and para digms are discussed, as are evaluation and representation. Architectural models and idioms, development tools and environments, implementation guidelines and documentation, and organization of design and development functions are included. Issues of program quality, program correctness, and system integration are addressed. Project work incorporates principles and techniques of software design and development.

## CMIS 465 Software Verification and Validation (3)

Prerequisite: CM IS 330 or equival ent. 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 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 .12 ). 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. M ay 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 to 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.

## 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. 12). 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 C 0 -op session; five to eight new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. M ay 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 to 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.

## CMIS 490 Advanced UNIX System Administration (3)

(Formerly CM IS 498U .) Prerequisite: CM IS 390. A continuation of the study of UN IX system administration. Topics such as printer administration, mail server configuration and maintenance, storage and backup strategies, domain name service (DNS), kerne configura tions, and UNIX internet server design and setup are explained in detail, covering both theory and implementation. Advanced topics include network file servers (N FS), network information service (NIS), UN IX internet protocols, user and system security, and indepth troubleshooting techniques. Automation of administration tasks and the writing of shell scripts to augment the boot process are also discussed. Students may receive credit for only one of the following courses: CMIS 490 or CM IS 498U .

## CMIS 498 Special Topics in Computer and Information Science (3)

Prerequisites: Vary according to topic. A seminar on topics in computer and information science. M ay be repeated to a maximum of 6 credits when topics differ.

## CMIS 498B Web Database Development (3)

Prerequisite: CMIS 320; CM IS 340 recommended. An exploration of an assortment of current Web technologies and programming language options that serve as interfaces between relational databases and Web servers. Technologies such as CGI/Perl, Active Server Pages, and Java are used in the lab. Threetiered architecture is studied in-depth via a number of hands-on activities and projects.

## CMIS 498J Internet Programming in Java (3)

(Also listed as CM SC 498J.) Prerequisite: CM IS 345, CM SC 300, or equivalent object-oriented programming experience. An examination of the principles, techniques, and applications of programming in Java in the Internet environment. Advanced features of Java are implemented in programming projects. 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: CM IS 498J or CM SC 498J.

## CMIS 498P Advanced Programming in Perl (3)

Prerequisite: C M IS 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 H TM L 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 mode.

## Computer Applications

C ourses formerly listed under computer applications (and designated CAPP) are now listed under computer studies (and designated CM ST ).

## Computer Information Technology

Courses in computer information technology (designated CM IT) may be applied as appropriate (according to individual program requirements) toward

- the general education requirement in computing;
- a major in computer information technology or computer studies;
- a minor in computer studies; and
- electives.

A description of the curriculum for the computer information technology major begins on $p$. 36. Descriptions of other computer-related curricula may befound on the following pages: computer and information science ( p .35 ), computer science ( p .37 ), computer studies (p. 38), and information systems management (p. 56).

## CMIT 2610 Introduction to Oracle SQL and SQL Plus (3)

Prerequisite: Experience with personal computers. An introduction to Structured Query Language (SQL). The syntax and function of the American $N$ ational Standards Institute's standard SQL are examined. SQ L's data definition language is used to create tables, including constraints, and SQ L'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 (e.g., views, sequences, synonyms, aliases, and indexes) and SQL built-in functions are explored. O ther topics include using the O racle SQ L command editor and the local system editor and creating simple reports with SQ L Loader and SQL Plus.

## CMIT 262N Networking Technologies (2)

(Designed to help prepare students to take Networking Technologies Examination 50-632.) Prerequisite: A thorough knowledge of D OS and microcomputer concepts and operations. An introduction to concepts of local and wide area networking. Topics include data communication models, protocols, standards and standards organization, and synchronous and asynchronous communication. Emphasis is on media types, characteristics, and costs.

CMIT 265M Networking Essentials (2)
An introduction to networking technologies for individual workstations, local area networks, wide area networks, and the Internet, with emphasis on security and protocols. While a general knowledge of networking is provided, focus is on M icrosoft operating systems, including W indows 2000. Students may receive credit only once under this course number.

## CMIT 360N Novell NetWare Administrator (3)

(Formerly CAPP 390. D esigned to help prepare students for the Novell Certified $N$ etWare Administrator examination.) Prerequisite: Familiarity with DOS, microcomputer hardware architecture, and basic networking concepts. An introduction to the features of a network. LAN configuration, directory structure, drive mapping, and network security are emphasized. Network administration responsibilities are discussed. Students may receive credit for only one of the following courses: CMIT 360N or CAPP 390.

## CMIT 364N NetWare 5.x Administration (2)

(D esigned to help prepare students to take N ovell NetWare 5
Administration Examination 50-639.) Prerequisite: CMIT 262N or equivalent. The development of the skills needed to be a network administrator and systems manager for NetW are 5 . Topics include installation, file management, user access, file system security, scripts, and management issues.

## CMIT 365M Administering NT 4.0 (2)

(Designed to help prepare students to take Implementing and Supporting M icrosoft W indows NT Server 4.0 Examination 70067 and Implementing and Supporting M icrosoft Windows NT Workstation 4.0 Examination 70-073.) Prerequisite: CM IT 265M or equivalent. The development of the knowledge and skills necessary to perform administrative tasks in a single or multipledomain W indows NT 4.0 network. Topics include network optimization, peripheral management, and system software troubleshooting and maintenance. H ands-on assignments and projects are included.

## CMIT 366M Windows 2000 Professional (3)

(Designed to help prepare students to take Installing, Configuring, and Administering M icrosoft W indows 2000 Professional Examination 70-210.) Prerequiste: CMIT 265M with a grade of C or better, or consent of teacher. An introduction to W indows 2000 Professional. Focus is on developing the skills necessary to install and configure W indows 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. H ands-on exercises are included.

## CMIT 367M Windows 2000 Server (3)

(D esigned to help prepare students to take Installing, Configuring, and Administering M icrosoft W indows 2000 Server Examination 70-215.) Prerequisite: CM IT 366M or equivalent, or consent of teacher. A study of W indows 2000 Server installation and administration. Focus is on developing the skills necessary to install and configure W indows 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. H ands-on exercises are included.

## CMIT 370N NetWare NDS Design and Implementation (1)

(D esigned to help prepare students to take N ovell Directory Services D esign and Implementation Examination 50-634.) Prerequisite: CMIT 464N or equivalent. The development of skills needed by network administrators, network designers, and networking consultants to create a N ovell D irectory Services design and implementation strategy. Focus is on user management and security.

## CMIT 375M Supporting NT 4.0 Core

 Technologies (2)(D esigned to help prepare students to take Implementing and Supporting M icrosoft Windows NT Server 4.0 Examination 70067 and Implementing and Supporting M icrosoft W indows NT Workstation 4.0 Examination 70-073.) Prerequisite: CM IT 365M or equivalent. A study of various elements of the Windows NT 4.0 operating system. Topics include installation, configuration, networking management and integration, and troubleshooting. Emphasis is on capacity management and trust relationships in a multipledomain environment.

## CMIT 376M Windows 2000 Network Infrastructure (3)

(D esigned to help prepare students to take Implementing and Administering a M icrosoft W indows 2000 N etwork Infrastructure Examination 70-216.) Prerequiste: CMIT 366M or equivalent. The development of the knowledge and skills necessary to install, configure, manage, and support the W indows 2000 network infrastructure. Topics include automating Internet protocol address assignment using dynamic host configuration protocol, implementing name resolution using domain name service and W indows Internet naming service, setting up and supporting remote access to a network, configuring network security using public key infrastructure, integrating network services, and deploying W indows 2000 Professional using remote installation services. H ands-on exercises are included.

## CMIT 377M Windows 2000 Directory Services Infrastructure (3)

(D esigned to help prepare students to take Implementing and Administering a M icrosoft W indows 2000 Directory Services Infrastructure Examination 70-217.) Prerequisite: CM IT 376M or equivalent. The development of the knowledge and skills necessary to install, configure, manage, and support the W indows 2000 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. H andson exercises are included.

## CMIT 384N IntraNetWare: Integrating Windows NT (2)

(For information systems professionals who administer or are preparing to administer multiplevendor enterprise networks.) D evelopment of the knowledge and the skills needed to integrate a W indows NT environment with an intraN etWare environment. Emphasis is on streamlining NT administration by using Novell Directory Services for NT and NetW are Administrator. H ands-on experience with Novell Administrator for Windows NT and other Novell products for administering and managing $N T$ workstations and servers and network-based applications in an integrated intraN etWare and Windows NT environment is provided.

## CMIT 385M Internetworking TCP/IP on NT (2)

(D esigned to help prepare students to take Internetworking M icrosoft Transmission C ontrol Protocol/Internet Protocol on M icrosoft Windows NT 4.0 Examination 70-059.) Prerequiste: CM IT 375M or equivalent. A study of the setup, use, and support of transmission control protocol/Internet protocol (TCP/IP) on M icrosoft W indows NT operating systems. Emphasis is on protocols, configuration management, routers, and practical troubleshooting.

## CMIT 392M Designing and Implementing Databases with SQL Server (3)

( $D$ esigned to help prepare students to take $D$ esigning and Implementing D atabases with M icrosoft SQ L Server Examination 70-029.) Prerequisites: M icrosoft or Oracle Certified Professional status, CM IS 320 or equivalent, and working knowledge of Structured Query Language (SQL). 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 $H$ andson exercises are included.

## CMIT 394M Data Warehousing Using SQL Server (3)

(D esigned to help prepare students to take D esigning and Implementing Data Warehouses with M icrosoft SQ L Server 7.0 Examination 70-019.) Prerequisites: M icrosoft or $O$ racle C ertified Professional status, CM IS 320, CM IT 392M , or equivalent; and working knowledge of Structured Query Language (SQ L). A study of design and implementation of data warehouse solutions using SQ L 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 D ata $O$ bjects, file management, data integrity, online analytical processing, monitoring and optimizing performance, and backup and disaster recovery. H ands-on exercises are included.

## CMIT 464N NetWare 5.x Advanced

 Administration (2)(D esigned to help prepare students to take N ovell N etW are 5 Advanced Administration Examination 50-640.) Prerequisites: CM IT 262 N and 364 N , or equivalent. An examination of network backup and configuration, Java-based utility execution, and remote access. Topics include management of N ovell D irectory Services trees, workstation management and configuration, print-server customization, and security auditing.

## CMIT 465M Supporting NT 4.0 Enterprise Technologies (2)

(D esigned to help prepare students to take Implementing and Supporting M icrosoft Windows NT Server 4.0 Enterprise Examination 70-068.) Prerequisite: CM IT 375M or equivalent. An examination of design, implementation, and support for the W indows NT 4.0 Server network operating system. Emphasis is on managing resources in the multiple-domain enterprise computing environment.

## CMIT 470N Service and Support (2)

(D esigned to help prepare students to take N ovell Service and Support Examination 50-635.) Prerequisite: CMIT 262N, CMIT 370N, CMIT 364N, CMIT 464N, or equivalent. A study of the prevention, diagnosis, and resolution of hardware-related problems. Emphasis is on optimizing hardware resources for networking products.

## CMIT 475M Internet Information

Server 4.0 (2)
(D esigned to help prepare students to take Implementing and Supporting M icrosoft Internet Information Server 4.0 Examination 70-087.) Prerequisite: CM IT 385M or equivalent. H ands-on experience in Internet/intranet set up, including installation, configuration, and implementation of the Internet Information Server 4.0. Focus is on protocols.

## CMIT 476M Designing a Windows 2000 Network Infrastructure (2)

(Designed to help prepare students to take D esigning a M icrosoft W indows 2000 N etwork Infrastructure Examination 70-221.) Prerequisite: CMIT 376M.The development of the knowledge and skills necessary to design a W indows 2000 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.

## CMIT 477M Designing a Windows 2000 Directory Services Infrastructure (2)

(D esigned to help prepare students to take $D$ esigning a $M$ icrosoft W indows 2000 Directory Services Infrastructure Examination 70219.) Prerequisite: CMIT 377M . A study of Active D irectory design issues. Topics include naming strategy, delegation of administrative authority, schema policy, group policy support, infrastructure, and domain and multiple domain structure.

## CMIT 480M Designing Security for a Windows 2000 Network (3)

(D esigned to help prepare students to take D esigning Security for a M icrosoft W indows 2000 N etwork Examination 70-220.) Prerequisites: CMIT 376M and 377M. The development of the knowledge and skills neceessary to design a security framework for small, medium, and enterprise networks using W indows 2000 technologies. Topics include providing secure access to local network users, partners, remote users, and remote offices and between private and public networks.

## 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. 12). An opportunity to combine aca demic theory with new, career-related experience in computer information technology. At least 12 hours per week must be devoted to new tasks for a total of 180 hours during the C 0-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 to the workplace. Students may earn up to 15 semeter 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.

## 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. 12). An opportunity to combine aca demic theory with new, career-related experience in computer information technology. At leost 20 hours per week must be devoted to new tasks for a total of 300 hours during the C o-op session; five to eight new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. M ay 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 to 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 bachdor's degree.
## CMIT 490M Designing a Migration Strategy from NT to Windows 2000 (1)

(Designed to help prepare students to take U pgrading from M icrosoft Windows NT 4.0 to M icrosoft W indows 2000 Examination 70-222.) Prerequisites: CMIT 366M and 367M. The development of the skills and knowledge necessary to select and design a migration strategy from NT 4.0 to W indows 2000 Active D irectory 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.

## CMIT 499 Special Topics in Computer Information Technology (1-5)

An inquiry into special topics in computer information technology that reflect the changing field. $M$ ay be repeated when topics differ.

## CMIT 499A Accelerated Upgrade of Support Skills from NT to Windows 2000 (3)

(D esigned to help prepare students to take M icrosoft W indows 2000 Accelerated Exam for M CPs Certified on M icrosoft Windows NT 4.0 [examination 70-240], which covers the core competencies of M icrosoft examinations $70-210,70-215,70-216$, and 70-217.) Prerequisites: M icrosoft Certified Systems Engineer or C ertified Professional status and successful completion of Microsoft examinations 70-067, 70-068, and 70-073. The development of the knowledge and skills necessary to configure and administer W indows 2000 Professional and Windows 2000 Server and implement and support W indows 2000 network and directory services infrastructure. H ands-on exercises are included.

## CMIT 499B Administering SQL Server (3)

(D esigned to help prepare students to take System Administration for Microsoft SQL Server 7.0 Examination 70-028.) Prerequisite: 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 M icrosoft SQL Server 7.0.

## CMIT 499C Designing Cisco Networks (3)

(Formerly CAPP 398C. Designed to help prepare students to take Designing Cisco Networks Certification Examination 640-441.) The development of the knowledge and skills necessary for network design using Cisco Systems technologies. Students may receive credit for only one of the following courses: CAPP 398C or CMIT 499C.

## CMIT 499D Interconnecting Cisco Devices (3)

(Formerly CAPP 498E.) Presentation of and practice in the concepts and commands required to configure Cisco switches and routers in multiprotocol internetworks. Students may receive credit for only one of the following courses: CAPP 498E or CMIT 499D.

## Computer Science

Courses in computer science (designated CM SC) 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 O bject-O riented Programming Using Java; and
- electives.

A description of the curriculum for the computer science major begins on $p$. 37. Descriptions of other computer-related curricula may be found on the following pages: computer and information science (p. 35), computer information technology (p. 36), computer studies (p. 38), and information systems management (p. 56).

## CMSC 130 Introductory Computer Science (3)

(For students majoring in computer science. The first in a sequence of courses in Java.) Prerequisite: CM IS 102 or equivalent experience; CM SC 150 strongly recommended. Presentation of and practice in structured programming and concepts in data abstraction. Verification methodologies are introduced. Students may receive credit for both CM SC 112 and CMSC 130.

## CMSC 150 Introduction to Discrete Structures (3)

Prerequisite or corequisite: M ATH 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: CM SC 150 or CM SC 250.

## CMSC 230 Elementary Data Structures (3)

(For students majoring in computer science. Continuation of CM SC 130.) Prerequisites: CM SC 130 and 150. Presentation and application of additional features of Java. Topics include stacks, queues, links, lists, and binary trees. Students may receive credit only once under this course number and for only one of the following courses: CMSC 135 or CM SC 230.

## CMSC 305 Programming and Applications in Java (3)

(For students with previous programming experience.) Preequiste: CM SC 230 (before spring 1999), CM IS 240, or equivalent. A one semester study of Java syntax. Programming projects in Java are included. Students who completed CM SC 230 after fall 1998 may receive credit for only one of the following courses: CM SC 230 or CM SC 305.

## CMSC 311 Computer Organization (3)

Prerequisite: A two-course sequence in a programming language. 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 CM IS 270, CM IS 310, CM SC 311, or IFSM 310.

## CMSC 330 Advanced Programming Languages (3)

Prerequisite: CMSC 230, CM SC 305, or equivalent. A study of imperative and declarative programming languages. $\mathrm{C}++$ is pre sented as the prime imperative language and compared with Ada and Java. LISP and PRO LOG are introduced as declarative languages. Formal syntax and semantics are discussed.

## CMSC 335 Object-Oriented and Concurrent Programming (3)

Prerequisite: CMSC 230, CM SC 305, or equivalent. 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. The principles of concurrent programming (such as task synchronization, race conditions, deadlock, and threads) are studied. Programming projects are implemented in Java. Students may receive credit for only one of the following courses: CM SC 330 or CM SC 335 .

## CMSC 411 Computer System Architecture (3)

Prerequisite: CM SC 311 or equivalent. A discussion of input/output processors and techniques, covering their relation to intrasystem communication, including buses and caches. Also covered are addressing and memory hierarchies, microprogramming, parallelism, and pipelining.

## CMSC 412 Operating Systems (3)

Prerequisite: CM SC 311 or equivalent. 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. Basic policies for allocating resources are also discussed. Programming projects may be included.

## CMSC 420 Data Structures (3)

Prerequisite: CM SC 230 or equivalent. 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: CM SC 330 and 420, or equivalent. 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, PRO LOG), 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: CM SC 420 or equivalent; CM SC 450 recommended. A study of the applicability of the database approach as a mechanism for modeling the real world. The three popular data models (hierarchical, relational, and network) are reviewed. 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: CM SC 330 and programming experience in C or C ++ , or equivalent; CM SC 420 recommended. 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, $\operatorname{LL}(\mathrm{K})$, $\operatorname{LR}(\mathrm{K})$, and $\operatorname{SLR}(\mathrm{K})$; and improvement and generation of machine-independent code and syntax-directed translation schema.

## CMSC 450 Logic for Computer Science (3)

(Also listed as M ATH 450.) Prerequisites: CM SC 150 and M ATH 241, or equivalent. Elementary development of propositional logic (including the resolution method) and first-order logic (including H ebrand'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: CM SC 450, M ATH 444, M ATH 445, or M ATH 450.

## CMSC 451 Design and Analysis of Computer Algorithms (3)

Prerequisites: CM SC 150 and 230, or equivalent. 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: CM SC 230 or equivalent. 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 M ATH 475.) Prerequisites: M ATH 240 and 241. An exploration of general enumeration methods, difference equa tions, and generating functions. Focus is on elements of graph theory, matrix representations of graphs, and applications of graph theory to transport networks. M atching theory and graphical algorithms are also considered. Students may receive credit for only one of the following courses: CM SC 475 or M ATH 475.

## CMSC 486A Internship in Computer Science Through Co-op (3)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 12). 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 total of 180 hours during the Co-op session; four new tasks must be deline ated in the Learning Proposal; and the course requirements must be completed. M ay 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 to 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.

## CMSC 486B Internship in Computer Science Through Co-op (6)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 12). 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 C o-op session; five to eight new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. M ay 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 to 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.

## CMSC 498 Special Topics in Computer Science (1-3)

Prerequisites: Vary according to topic. A seminar on topics in computer science. M ay be repeated to a maximum of 6 credits when topics differ.

## CMSC 498D Topics in Software Systems Engineering (3)

Prerequisite: CM SC 420, CM SC 430, or equivalent. An exploration of software engineering from both a systems engineering and a mana gerial 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 manage ment 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)
Prerequistes: M ATH 240 and CM IS 345 (or CM SC 330). An investigation of concepts and techniques of image processing and computer graphics. Input/output devices, display programs, and statistical attributes of images are reviewed. Transformations, thresholding, clipping, and edge detection are implemented. Convolution and filters, Fourier and wavelet transforms, and volume rendering and animation of threedimensional graphical objects are introduced. Pre sentation covers methods to scan conversion of lines and polygons and to apply two-dimensional and threedimensional geometric and projective transformations. Algorithms for hidden-surface removal, reflection and lighting, and representation of general curves and surface are included.

## CMSC 498J Internet Programming in Java (3)

(Also listed as CMIS 498J.) Prerequisite: CM SC 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: CM IS 498J or CM SC 498J.

## Computer Studies

Courses in computer studies (designated CM ST) 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.

Students who have already received credit for courses designated CAPP may not receive credit for comparable courses designated CM ST.

A description of the curriculum for the computer studies major and minor begins on $p$. 38. Descriptions of other computer-related curricula may be found on the following pages: computer and information science (p. 35), computer information technology (p. 36), computer science (p. 37), and information systems management ( $p .56$ ).

## CMST 100A Introduction to

## Microcomputers: Hardware and Software (1)

(Formerly CAPP 100A. 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 CM ST 100A.

## CMST 100B Introduction to Microcomputers: Word Processing (1)

(Formerly CAPP 100B. Graded on a satisfactory/D/fail basis only.) Prerequisite: CMST 100A or equivalent. 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 hardware and software. H ands-on practice with typical word-processing software is provided. Students may receive credit for only one of the following courses: CAPP 100B, CAPP 103, CM ST 100B, or CM ST 103.

## CMST 100D Introduction to Microcomputers: Presentation Graphics (1)

(Formerly CAPP 100D. Graded on a satisfactory/D/fail basis only.) Prerequisite: CMST 100A or equivalent. 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. H ands-on practice with typical presentation graphics software is provided. Students may receive credit for only one of the following courses: CAPP 100D or CM ST 100D.

## CMST 100E Introduction to Microcomputers: Networks and Communication (1)

(Formerly CAPP 100E. Graded on a satisfactory/D/fail basis only.) Prerequisite: CM ST 100A or equivalent. 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. H ands-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 CM ST 100E.

## CMST 100F Introduction to Microcomputers: Databases (1)

(Formerly CAPP 100F. Graded on a satisfactory/D /fail basis only.) Prerequisite: CM ST 100A or equivalent. 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. H ands-on practice with typical database software is provided. Students may receive credit for only one of the following courses: CAPP 100F, CAPP 103, CM ST 100F, or CM ST 103.

## CMST 100G Introduction to <br> Microcomputers: Spreadsheets (1)

(Formerly CAPP 100G. Graded on a satisfactory/D /fail basis only.) Prerequisite: CM ST 100A or equivalent. An introduction to the use of electronic worksheets to analyze forecasts and sales data, including basic terminology, formats, and other applications. H ands-on practice with typical spreadsheet software is provided. Students may receive credit for only one of the following courses: CAPP 100G, CAPP 103, CM ST 103, or CM ST 100G.

## CMST 100J Introduction to Microcomputers: Security (1)

(Formerly CAPP 100J. G raded on a satisfactory/D /fail basis only.) Prerequisite: CM ST 100A or equivalent. An introduction to computer security. Both physical and software security and the types of computer viruses that afflict modern information systems are examined. Discussion covers the use of the operating system and antiviral software tools to protect, detect, and recover from viral attacks. H ands-on practice in applying these principles is provided. Students may receive credit for only one of the following courses: CAPP 100 or CM ST 100J.

## CMST 100K Introduction to Microcomputers: Accessing Information via the Internet (1)

(Formerly CAPP 100K. Graded on a satisfactory/D /fail basis only.) Prerequisite: CM ST 100A or equivalent. An introduction to the Internet and the wealth of information it contains. The 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. M echanisms by which the Internet operates, security issues on the Internet, intellectual property right issues, and the ethics of the Internet are also discussed, along with other current topics involving the interface between the Internet and the citizen. Students who have already earned credit for CAPP 385, CAPP 386, CM ST 385, or CM ST 386 cannot earn credit for CM ST 100K. Students may receive credit for only one of the following courses: CAPP 100K, CAPP 101C, or CM ST 100K.

## CMST 100L Introduction to Microcomputers: Web Page Design (1)

(Formerly CAPP 100L. Graded on a satisfactory/D/fail basis only.) Prerequisite: CM ST 100A or equivalent. 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. H ands-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 CM ST 100L.

## CMST 100M Introduction to <br> Microcomputers: HTML (1)

(Formerly CAPP 100M . Graded on a satisfactory/D /fail basis only.) Prerequisite: CM ST 100A or equivalent. An introduction to the use of HTM L to create basic and advanced World W ide Web-enabled documents. Topics include creating and editing Web pages, placing H TM L 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 CM ST 100M .

## CMST 100N Introduction to Microcomputers: Desktop Operating Systems (1)

(Formerly CAPP 100N . Graded on a satisfactory/D/fail basis only.) Prerequisite: CM ST 100A or equivalent. An introduction to the use and configuration of graphical user interfaces, focusing on M icrosoft W indows operating systems. Topics include working with W indows programs, managing files and folders using Windows Explorer, cus tomizing W indows using the control panel, using Internet services in W indows, and managing shared files and resources. Students may receive credit for only one of the following courses: CAPP 100N, CAPP 101M , CAPP 101T, or CM ST 100N.

## CMST 100P Introduction to Microcomputers: Using UNIX/Linux (1)

(Formerly CAPP 100P. Graded on a satisfactory/D/fail basis only.) Prerequisite: CM ST 100A or equivalent. An introduction to configuring and using UNIX and Linux on microcomputers and workstations. $H$ ands-on exercises in configuring the desktop environment of a Linux operating system are included. UNIX commands, file management, the X-W indow graphical user interface, and window managers such as Gnome and KDE are covered. Students may receive credit for only one of the following courses: CAPP 100P or CM ST 100P.

## CMST 103 Introduction to Microcomputer Software (3)

(Formerly CAPP 103.) An introduction to microcomputers and application software. H ands-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 CM ST 100B, CM ST 100F, or CM ST 100G may not receive credit for CM ST 103. Students may receive credit for only one of the following courses: CAPP 103 or CM ST 103.

## CMST 300 Concepts in Computing (3)

(Formerly CAPP 300.) An introduction to the basic principles and techniques of computing. Discussion deals with the effects of computerization on individuals, government, business, and industry; social and ethical issues; concepts of problem solving; and computer hardware. Students may receive credit for only one of the following courses: CAPP 101, CAPP 300, CM ST 300, IFSM 201, or TM GT 201.

## CMST 303 Advanced Features of Microcomputer Application Software (3)

(Formerly CAPP 303.) Prerequisite: CM ST 103 or equivalent. A pres entation 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 CM ST 303.

## CMST 305 Introduction to Visual Basic

 Programming (3)(Formerly CAPP 305.) Prerequisite: CM IS 102 or equivalent. A structured approach to developing programs using the Visual Basic language with W indows. H ands-on experience in implementing features of this event-driven, visual interface for program design is provided. Programming projects in Visual Basic are included. Students may receive credit for only one of the following courses: CAPP 305 or CM ST 305.

## CMST 310 Desktop Publishing (3)

(Formerly CAPP 310.) Prerequisite: Basic familiarity with personal computers and experience with a word-processing or text-editing program. 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 CM ST 310.

## CMST 311 Advanced Desktop Publishing (3)

(Formerly CAPP 311.) Prerequisite: CM ST 310 or equivalent. A project-oriented study of the concepts and methods of desktop publishing. Techniques for using color in page layouts are implemented. Features essential to multimedia presentations are integrated with techniques for capturing and editing photos to produce business publications. Students may receive credit for only one of the following courses: CAPP 311 or CM ST 311.

## CMST 340 Computer Applications in Management (3)

(Formerly CAPP 340.) Prerequisite: CM ST 300, IFSM 201, or equivalent. 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. C onsideration is also given to 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, CM IS 350, or CM ST 340.

## CMST 385 Internet: A Practical Guide (3)

(Formerly CAPP 385.) Prerequisite: CM ST 300, IFSM 201, or equival ent. An introduction to the Internet and the World W ide Web. Topics include basic principles and protocols of the Internet; configuration and use of graphical Web browsers; application programs such as Telnet, FTP, email, and N et news readers; finding and retrieving information on the World Wide Web; and the use of portals and search engines. HTML and Web page design are introduced. Discussion covers Internet security measures as well as social, ethical, and legal issues related to the growth of the Internet. Assignments include designing and publishing a Web page. Students may receive credit for only one of the following courses: CAPP 385 or CM ST 385.

## CMST 386 Internet: An Advanced Guide (3)

(Formerly CAPP 386.) Prerequisite: CM ST 385 or equivalent. A study of advanced applications for the Internet and the World W ide Web. Focus is on Web page design, including features such as frames, animation, and cascading style sheets. D ynamic H TM L and JavaScript are introduced. Assignments include publishing a Web page. Students may receive credit for only one of the following courses: CAPP 386 or CM ST 386.

## CMST 398J Programming with JavaScript (3)

Prerequisites: CMIS 102 and CM ST 386, or equivalent. A structured approach to programming with JavaScript to build dynamic, interactive Web pages. Topics include adaptive forms, dynamic HTM L, event modeling, cross browser compatibility, cookies, and security issues. Programming projects are included.

## CMST 415 Advanced Visual Basic <br> Programming (3)

(Formerly CAPP 498B.) Prerequisite: CM ST 305 or equivalent. An investigation of advanced Visual Basic programming concepts, tools, and methods. Topics include object linking and embedding (OLE), dynamic data exchange (DDE), and data access objects (DAO) for interface with other applications and databases. Emphasis is on application design and development. Practical opportunities to design and develop complete applications integrating multiple features of the Visual Basic programming language are provided. Students may receive credit for only one of the following courses: CAPP 498B or CM ST 415.

## CMST 430 Web Site Management (3)

(Formerly CAPP 498C.) Prerequisites: CM ST 385 and 386, or equivalent. 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 ecommerce 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)

(Formerly CAPP 498D.) Prerequisites: CM ST 385 and 386, or equivalent. 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 Interne security issues are discussed. Assignments include a comprehensive project. Students may receive credit for only one of the following courses CAPP 498D or CM ST 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 .12 ). 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 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. M ay 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 the ory to 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.

## CMST 486B Internship in Computer Studies Through Co-op (6)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 12). 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 require ments must be completed. M ay 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 to 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.

## 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. Approval and registration information is obtained through the Cooperative Education office.
Cooperative Education courses are no longer designated COOP. Instead, they carry the designator of the appropriate academic discipline and the number 486A or 486B. Students are responsible for consulting their resource team regarding applying Co-op credit to their degree program.
M ore details and contact information for Cooperative Education are available on p. 12.

## Criminology/Criminal Justice

C ourses in criminology/criminal justice (designated CCJS) may be applied as appropriate (according to individual program requirements) toward

- the general education requirement in the social and behavioral 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 or sociology;
- a certificate in Security M anagement or Security O perations; 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 des ignated CCJS.
A description of the curriculum for the criminal justice major and minor begins on $p$. 39. Descriptions of other related curricula may be found on the following pages: legal studies (p. 58) and sociology (p. 67).

## 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. 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) are covered. Students may receive credit for only one of the following courses: BEH S 351, CCJS 100, or CJUS 100.

## CCJS 105 Introduction to Criminology (3)

An overview of criminal behavior and the methods of studying it. Topics include causation; typologies of criminal acts and offenders, the practices and effects of punishments, correction, and incapacita tion; 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. Behavioral and legal aspects of criminal acts and the classification and analysis of selected criminal offenses are covered. 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)

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)

An examination of career criminals, prison overcrowding, prediction, ecological studies of crime, family and delinquency, and similar criminological problems. Students may receive credit for only one of the following courses: CCJS 330 or CRIM 330.

## CCJS 331 Contemporary Legal Policy Issues (3)

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 representation of 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)

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)

( M ay be applied toward a specialization in behavioral and social sciences.) 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: BEH S 351, CCJS 100, or CCJS 351.

## CCJS 352 Drugs and Crime (3)

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)

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 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 432 Law of Corrections (3)

A review of the law of criminal corrections, from sentencing to final release or release on parole. Probation, punishments, special treatments for special offenders, parole and pardon, and the prisoner's civil rights are examined. Students may receive credit for only one of the following courses: CCJS 432 or CRIM 432.

## CCJS 444 Advanced Law-Enforcement Administration (3)

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 451 Crime and Delinquency Prevention (3)

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)

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)

An overview of the definition, detection, prosecution, sentencing, and impact of whitecollar and organized crime. Special consideration is given to the role of federal law and enforcement practices.

## CCJS 454 Contemporary Criminological Theory (3)

A brief historical overview of criminological theory up to the 1950s. D eviance, labeling, and typologies, as well as the most recent research on criminalistic subcultures and on middle-class delinquency, are examined. 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)

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 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)

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 464 Certified Protection Professional Program (3)

(D esigned 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)

Prerequisite: Formal admission to the Co -op program (program requirements are listed on p. 12). An opportunity to combine academic theory with new, career-related experience in criminology/ criminal justice. 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 criminal justice and that continues to advance application of academic theory to 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.

## CCJS 486B Internship in Criminal Justice

 Through Co-op (6)Prerequisite: Formal admission to the Co-op program (program requirements are listed on p . 12). An opportunity to combine academic theory with new, career-related experience in criminology/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. M ay 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 to the workplace. Students may earn up to 15 semes ter hours in all internship coursework through C 0 -op toward a first bachelor's degree and up to 9 semester hours toward a second bachelor's degree.

## CCJS 498 Selected Topics in Criminology/

 Criminal Justice (3)(O ffered in response to student requests and faculty interest.) Study of criminological topics of special interest to advanced undergraduates. M ay be repeated to a maximum of 6 credits in CCJS, CJUS, or CRIM when topics differ.

## CCJS 498A Criminal Trial Issues (3)

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 lawenforcement practices. The case-study method is utilized. Actual Supreme C ourt case decisions and cases pending review and decision provide an opportunity to understand the doctrinal development of controlling principles and to predict future developments.

## 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 498C Computer Crime and Security (3)

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.

## CCJS 498D Correctional Administration (3)

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.

## CCJS 498E Institutional Security (3)

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 are examined.

## CCJS 498F Legal and Ethical Issues in Security Management (3)

An examination of current problems facing the security professional. Topics include legal liabilities, compliance issues, and ethical standards of organizations.

## CCJS 498G Introduction to Security Management (3)

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.

## CCJS 498H Protection of Business Assets (3)

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.

## CCJS 498I Domestic Violence and the Response of the Criminal Justice System (3)

An examination of the development and evaluation of the problem 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 M aryland law.

## 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 498K Security: A Management Perspective (3)

An examination of managerial concepts, strategies, and skills needed to manage security-related operations and activities. Focus is on employed/employer security and the skills essential to manage the many, varied, and complex problems encountered in today's business environment.

## 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 The 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 social and behavioral sciences;
- a major in 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. 42. A description of the social science major begins on $p .66$.

## 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: ECO N 201 or ECO N 205.

## ECON 203 Principles of Economics II (3)

Recommended: ECO N 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 205 Fundamentals of Economics (3)

A one-semester introduction to the principles of economics and their applications to the major economic problems of society. Topics include problems of population, poverty, inflation, unemployment, inequality, monopoly, urban renewal, environmental protection, economic planning, imperialism, international trade, and comparative economic systems. Students may receive credit for only one of the following courses: ECO N 201 or ECON 205.

## 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 ECO N 403.

## ECON 307 Development of Economic Ideas: Social and Political (3)

(Fulfills the civic responsibility and historical perspective requirements.) 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 politicoeconomic problems. Theories advanced by M arx, M arshall, Veblen, Schumpeter, Samuelson, Friedman, K eynes, G albraith, M yrdal, Robinson, and others are discussed.

## ECON 315 Economic Development of Underdeveloped Areas (3)

(Fulfills the civic responsibility requirement.) 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 321 Economic Statistics (3)

Prerequisite: M ATH 220 or equivalent. Introduction to the use of statistics in economics. Topics include random variables and their distributions, analysis of variance, estimation, regression analysis, probability theory, sampling theory, and correlation. Students who receive credit for ECON 321 may not receive credit for the following courses: BEH S 202, BEH S 302, BM GT 230, ECON 321, GN ST 201, M GM T 316, PSYC 200, SO CY 201, or STAT 100.

## 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 civic responsibility and international perspective require ments.) Prerequisite(s): ECO N 201 and 203, or ECON 205. A comparative anal ysis 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 (mainland 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 425 Mathematical Economics (3)

(For students with a minor in economics.) Prerequisites: ECO N 201, ECON 203, and M ATH 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: ECO N 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 exchangerate stabilization and their consequences are also analyzed. Students may receive credit for only one of the following courses: BEH S 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. Theories of taxation, public expenditures, governmental budgeting, benefit/cost analysis, and redistribution of income are analyzed, along with their applications in public policy. Students may receive credit for only one of the following courses: ECON 450 or ECON 454.

## ECON 484 The Economy of China (3)

(Fulfills the historical perspective requirement.) Prerequiste(s): ECO N 201 and 203, or ECON 205. An inquiry into policies of the C hinese economy and how it has performed since 1949. A survey of the economic history of the People's Republic of China stresses the strategies and institutional innovations that the mainland Chinese have adopted to overcome problems in their economic development. Some economic controversies raised during the Cultural Revolution are covered in reviewing the problems and prospects of the current C hinese economy.

## ECON 486A Internship in Economics Through Co-op (3)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 12). An opportunity to combine aca demic theory with new, career-related experience in economics. At least 12 hours per week must be devoted to new tasks for a total of 180 hours during the C o-op session; four new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. M ay be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to economics and that continues to advance application of academic theory to the workplace. Students may earn up to 15 semester hours in all internship coursework through C 0 -op toward a first bachelor's degree and up to 9 semester hours toward a second bachelor's degree.

## ECON 486B Internship in Economics Through Co-op (6)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 12). An opportunity to combine academic theory with new, career-related experience in economics. 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. M ay be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to economics and that continues to advance application of academic theory to 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.

## Education

UM UC does not offer a major or minor in education.
Courses in education from other institutions may be accepted as transfer credit and applied toward electives.
Education courses may be scheduled as ED CP, ED H D, or EDUC.
Students enrolling for career purposes should inquire with the state where they plan to teach for information about specific curriculum requirements.

## Education: Counseling and Personnel Services

Courses in this discipline-education: counseling and personnel services (designated EDCP) - do not apply toward teachercertification 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.
G eneral 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)

(D oes not fulfill the general education requirement in communications. Students for whom English is a second language should consider taking ED CP 101X instead. Recommended as preparation for EN GL 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.

## EDCP 101X Effective Writing Skills (3)

(D oes not fulfill the general education requirement in communications. Enrollment restricted to students for whom English is a second language. Recommended as preparation for EN GL 101X.) 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

## EDCP 103 Elements of Composition and Style (3)

(D oes not fulfill the general education requirement in communications. Students for whom English is a second language should consider taking ED CP 103X instead. Recommended as preparation for EN GL 101 or upper-level writing courses.) Prerequisite: Satisfactory performance on a placement test or recommendation of a resource team 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.

## EDCP 103X Elements of Composition and Style (3)

(D oes not fulfill the general education requirement in communications. Enrollment restricted to students for whom English is a second language. Recommended as preparation for EN GL 101X or upper-level courses) Prerequisite: Satisfactory performance on a placement test or recommendation of a resource team 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.

## EDCP 108D Career Development and Decision Making (1)

An analytical approach to self-insight and the world of work. Selfassessment of skills, interests, and values is central. Vocational testing and interpretation are included. New career options are explored based on testing and assessment results, and realistic career goals are set. Students may receive credit for only one of the following courses: CAPL 171 or ED CP 108D .

## EDCP 108R Returning Students: Skills for Taking Charge of Your Life (1)

Presentation of methods for effective life planning. Focus is on self-insight and self-management in clarifying values, setting goals, managing time, and practicing assertive techniques.

## Education: H uman D evelopment

Courses in human development support the study of education by emphasizing the social, behavioral, and cognitive changes that accompany physical growth.
Courses in human development (designated EDH D) may be applied toward

- electives only.


## EDHD 320 Human Development Through the Life Span (3)

A presentation of fundamental concepts underlying social and individual parameters of human development at various stages of life. Focus is on continuity and change over the course of an individual's development. Students may receive credit for only one of the following courses: EDCP 498G or EDHD 320.

## EDHD 411 Child Growth and Development (3)

A study of the growth and development of the child from conception through the early childhood years. Emphasis is on developmental sequences in the physical, psychological, and social spheres. Implications for understanding and working with children at home, at school, and in other settings are considered.

## EDHD 460 Educational Psychology (3)

(Also listed as PSYC 339.) An overview of educational psychology focusing on processes of learning. M easurement of differences between individuals (in intelligence, styles of thinking, understanding, attitudes, ability to learn, motivation, emotions, problem solving, and communication of knowledge) is investigated, and the significance of those differences is discussed. Problems in the field are introduced and outlined. Examination of research in educational psychology supple ments study. Students may receive credit for only one of the following courses: EDCP 498E, EDHD 460, PSYC 309J, or PSYC 339.

## 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.

EN GL 101, 101X, 281, 281X, 384, 493, 498, 498N, 498P, 499, and 499 N may be applied toward the general education require ment in communications. Other writing courses are also available under communication studies.
EN GL 303, 391, 391X, and 396 (as well as COM M 390, 393, 393X, 394, and 394X, and LGST 401) are designated as writing intensive and may be applied toward the general education require ment in upper-level intensive writing.
Courses in literature may be applied toward the general education requirement in the arts and humanities.
EN GL 106 and EDCP 101, 101X, 103, and 103X may be used as electives but do not fulfill requirements.
D egreeseeking students must complete EN GL 101 (or present its equivalent in transfer) during their first 15 semester hours of enrollment at UMUC. EN GL 101 is prerequisite to all English writing courses with higher numbers (except EN GL 281) and most courses in communication studies. Placement tests are required for enrollment in EN GL 101 and 101X. Students may either consult the Undergraduate Schedule of Classes for times and locations of tests or contact the Testing C enter by phone at 301-985-7645 or by email at fdes@info.umuc.edu.
Students for whom English is a second language should consider taking writing courses designated with X, such as EN GL 101X, 391X, etc. O ther writing courses are available under the discipline of communication studies.
A description of the curriculum for the English major and minor begins on p. 42. A description of the curriculum for the humanities major and minor begins on p .52.

## ENGL 101 Introduction to Writing (3)

(Students for whom English is a second language should consider taking EN GL 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: EN GL 101 or EN GL 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: EN GL 101 or ENGL 101X.

## ENGL 106 Introduction to Research Writing (1)

(D esigned to help students enhance their research and writing skills.) Instruction and practice in the fundamentals of the research and writing process: planning and beginning a paper, composing the paper, citing sources, and presenting the paper in manuscript form. Both M LA and APA styles of documentation are used.

## ENGL 205 Introduction to Shakespeare (3)

An examination of representative Shakespearean plays from each genre (comedy, history, tragedy, and romance).

ENGL 211 English Literature: Beginning to the Romantic Period (3)

Prerequisite: EN GL 101. An introduction to significant works of English literature, surveying earlier works to the Romantic period. Readings include Beowulf, and works by Chaucer, Spenser, M arlowe, and Milton.

## ENGL 212 English Literature: The Romantic Period to the Present (3)

Prerequisite: EN GL 101. A survey of the major literary movements of the 19th and 20th centuries, from Romantic to Victorian to M odern. Authors studied may include Wordsworth, Keats, the Brontës, Tennyson, Browning, Yeats, Joyce, and Woolf.

## ENGL 278F Introduction to Principles of Text Editing (3)

(Fulfills the general education requirement in communications.) Prerequisite: EN GL 101 or equivalent. 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. Topics include building an editor's reference library, exploring editing as a profession, and reviewing computer-assisted editing.

## ENGL 281 Standard English Grammar, Usage, and Diction (3)

(Students for whom English is a second language should consider taking EN GL 281X instead. Fulfills the general education require ment in communications, but is not a writing course.) Prerequisite: EN GL 101 or equivalent. 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: EN GL 281 or EN GL 281X.

## ENGL 281X Standard English Grammar, Usage, and Diction (3)

(Enrollment restricted to students for whom English is a second language. Fulfills the general education requirement in communications, but is not a writing course.) Prerequisite: EN GL 101X or equivalent. 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: EN GL 281 or EN GL 281X.

## ENGL 288 Special Topics in English (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 EN GL 288 or EN GL 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 EN GL 289 or EN GL 389 only once.

## ENGL 303 Critical Approaches to Literature (3)

(D esigned as a foundation for other upper-level literature courses. Fulfills the general education requirement in intensive upper-level writing.) Prerequisite: EN GL 101 or equivalent. 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 304 The Major Works of Shakespeare (3)
(Fulfills the international perspective requirement.) An overview of the variety of Shakespeare's works, including a representative sample of comedies, histories, tragedies, and romances. The goal is to gain a better understanding of and appreciation for the plays, both in reading the texts and viewing performances of them.

## ENGL 310 Medieval and Renaissance British Literature (3)

(Fulfills the historical and international perspective requirements.) An exploration of the cultural attitudes and values that separate the M iddle Ages from the Renaissance, highlighting the changing role and purpose of the writer. M ajor works and authors may include Beowulf, Sir Gawain and the Green Knight, Chaucer, Spenser, M arlowe, and Shakespeare.

## ENGL 311 17th- and 18th-Century British Literature (3)

(Fulfills the historical and international perspective requirements.) Prerequisite: Two lower-level English courses, at least one in literature, or permission of department. A study of the culture of 17thand 18th-century Britain, as seen through selected major texts. Readings cover drama, poetry, political writings, and early novels by men and women. Authors may include D onne, M ilton, Jonson, Swift, Pope, M ontagu, and Wollstonecraft.

## ENGL 312 Romantic to Modern British Literature (3)

(Fulfills the historical and international perspective requirements.) 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, C harles D ickens, Thomas H ardy, P. D. James, and others) are explored.

## ENGL 313 American Literature (3)

A detailed study of selected major texts of American literature since the 17th century, including women's literature, African American literature, and literature from various regions of the country.

## ENGL 340 Studies in Fiction, Poetry, and Drama (3)

An exploration of literary genres that incorporates both contemporary and traditional works. Emphasis is on the study of literature-its creation, texts, and interpretations-as a means for developing interpretive and analytical skills. Students may receive credit for only one of the following courses: EN GL 240 or EN GL 340.

## ENGL 345 Modern Poetry (3)

(Not open to students who have already completed EN GL 446.) 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 350 English and American Literature: Blake to Conrad (3)

(Fulfills the historical and international perspective requirements.) An exploration of the poetry, short stories, novels, and prose of British Romanticism, the American Renaissance, and Victorian England. The writings of seminal thinkers such as John Keats, Emily Dickinson, M ark Twain, Robert Browning, and Charles D ickens are studied. Salient topics may include the destruction of the wilderness, the conflicting roles of women, the struggles of African Americans, and the interrelationship of dreams and reality. Students may receive credit for only one of the following courses: ENGL 350 or HUMN 325.

## ENGL 354 20th-Century American Women Writers (3)

An examination of the contributions of major American women writers of the 20th century in the novel, short story, drama, and poetry.

## ENGL 358 20th-Century British Women Writers (3)

An examination of the contributions of major British women writers of the 20th century in the novel, short story, drama, and poetry.

## ENGL 362 African American Slave Narratives and the Oral Tradition (3)

(Fulfills the historical perspective requirement.) An examination of the life stories and freedom philosophies of select African American slaves. Emphasis is on the oral tradition of storytelling, including folk tales, riddles, rhymes, and songs. Topics include the African American slave narrative as a work of translation and description and the desired effect of the narrative- the abolition of slavery.

## ENGL 363 African American Literature to 1900 (3)

(Fulfills the historical perspective requirement.) An examination of the development, diversity, and quantity of African American literature, focusing on works composed prior to 1900. A broad range of African American writers are studied through some of their important but lesser-known works. Readings may include the writings of Phillis W heatley, Frances H arper, M aria W. Stewart, D avid Walker, Frederick D ouglass, W illiam Wells Brown, C harles C hesnutt, and Paul Laurence D unbar, as well as Sojourner Truth's "Ain't I A Woman?" speech.

## ENGL 364 20th-Century African American Literature: The Fictional Vision (3)

An examination of the development, diversity, and quantity of African American literature, focusing on contemporary novels. A broad range of major African American authors since 1900 are studied through some of their important but lesser-known works. Readings may include James Weldon Johnson's The Autobiography of an ExColored Man, Zora N eale H urston's Their Eyes Were Watching God, Richard Wright's Uncle Tom's Children, James Baldwin's Go Tell It on the Mountain, Ann Petry's The Narrous, Paule M arshall's Brown Girl, Brownstones, Toni M orrison's Sula, Alice Walke's Meridian, and Emest Gaines's $A$ Gathering of Old Men. Students may receive credit for only one of the following courses: EN GL 364 or H UM N 364.

## ENGL 377 Medieval Myth and Modern Narrative (3)

( $N$ ot open to students who have completed EN GL 361. Fulfills the historical and international perspective requirements.) 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.) 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 388 Advanced Special Topics in Literature (1-3)

An in-depth introduction to literary works written by a specific author or authors, representative of a literary movement, or produced in a specific time or place. Assignments include advanced reading and research. Students may receive credit for a given topic in either EN GL 288 or EN GL 388 only once.

## ENGL 389 Advanced Special Topics in Literature (1-3)

An in-depth introduction to literary works written by a specific author or authors, representative of a literary movement, or produced in a specific time or place. Assignments include advanced reading and research. Students may receive credit for a given topic in either EN GL 289 or EN GL 389 only once.

## ENGL 391 Advanced Composition (3)

(Fulfills the general education requirement in intensive upper-level writing.) Prerequisite: EN GL 101 or equivalent. 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).

## ENGL 391X Advanced Composition (3)

(Enrollment restricted to students for whom English is a second language. Fulfills the general education requirement in intensive upper-level writing.) Prerequisite: EN GL 101X or equivalent. 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).

## ENGL 396 Critical Analysis in Reading and Writing (6)

(Fulfills the general education requirements in intensive upper-level writing and the arts and humanities. Yields 3 English credits and 3 humanities credits.) Prerequisite: EN GL 101 or equivalent. A study of various strategies for improving thinking abilities and for evaluating the claims, reasoning, and evidence presented in articles and books from a variety of disciplines. Focus is on improving skills, explaining ideas effectively, and analyzing persuasive strategies used by others. Some attention is given to establishing goals for developing critical-thinking habits. Assignments include composing a total of 6,000 words (approximately 25 pages). Students may receive credit for only one of the following courses: EN GL 396, COM M 395 Critical Thinking and Writing, H UM N 395, or HUMN 396.

ENGL 403 Shakespeare: The Early Works (3)
An introduction to Shakespeare's early period, concentrating on the histories and comedies. The study of approximately nine plays usually includes A Midsummer Night's Dream, Romeo and Juliet, Richard II, Richard III, Henry IV, Henry V, Julius Caesar, As You Like It, and Twelfth Night. Analysis of Shakespeare's dramatic techniques is emphasized. Some attention is given to his development and the historical milieu (e.g., the theatre of that time). Titles and the number of plays selected each semester may vary. Students may receive credit only once under this course number.

## ENGL 404 Shakespeare: The Later Works (3)

An overview of Shakespeare's late period, concentrating on the tragedies and final comedies (often called romances). The study of approximately nine plays usually includes Hamlet, Othello, Macbeth, King Lear, Antony and Cleopatra, The Winter's Tale, and The Tempest. Analysis of Shakespeare's dramatic techniques is emphasized. Some attention is given to his development, especially his tragic vision and the historical milieu (e.g., the theatre of that time). Titles and the number of plays selected each semester may vary.

## ENGL 406 Shakespeare: Power and Justice (3)

(Fulfills the international perspective requirement.) An intensive study of eight of Shakespeare's dramatic masterpieces as they illuminate the concepts of power and justice in a social and cultural context. The exercise of power, the nature of kingship, and the responsibilities of those who judge others are traced throughout Henry IV, King Lear, Macbeth, Hamlet, The Merchant of Venice, A Midsummer Night's Dream, Much Ado About Nothing, and The Tempest. Primary considerations are the analysis of text, the development of character, and the constraints that performance imposes on the writing of plays. Students may receive credit for only one of the following courses: EN GL 406 or HUMN 440.

## ENGL 418 Major British Writers Before 1800 (3)

Prerequisite: Two English courses in literature or permission of department. Intensive study of two British writers from the period before 1800 .

## ENGL 419 Major British Writers After 1800 (3)

(Fulfills the historical and international perspective requirements.) Prerequisite: Two courses in English literature. Intensive study of two writers from the period after 1800 .

## ENGL 425 Modern British Literature (3)

(Fulfills the historical and international perspective requirements.) 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.) A study of repre sentative 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)

An examination of representative authors in the development of American drama, with emphasis on post-W orld War II writers. Playwrights studied may include G laspell, O'Neill, H ellman, Miller, W illiams, H ansberry, Inge, Albee, Shepard, Wilson, H owe, H enley, and H wang. Film and television adaptations may be included.

## ENGL 437 Contemporary American Literature (3)

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 0 'C onnor, Anne Tyler, Kurt Vonnegut, and Alice Walker and dramas by Tennessee W illiams, Arthur M iller, Lorraine H ansberry, William Inge, August W ilson, Lanford W ilson, Tina H owe, Sam Shepard, and Tony Kushner. Some films may also be included.

## ENGL 439 Major American Writers (3)

(Fulfills the historical perspective requirement.) A literary analysis of the works of significant American writers, emphasizing subject matter, themes, and techniques. Representative writers usually include Twain, W harton, Dréser, Lewis, Fitzgerald, H emingway, Faulkner, and Frost; other authors may be included. M ay be repeated to a maximum of 6 credits when topics differ.

## ENGL 441 The Novel in America Since 1914 (3)

Prerequisite: Two courses in English literature. A survey of the American novel since W orld War I. Cultural and philosophical contexts and technical developments in the genre are discussed. Authors studied may include Ernest H emingway, Willa C ather, W illiam Faulkner, AnneTyler, and Toni M orrison.

## ENGL 446 Postmodern British and American Poetry (3)

(Fulfills the international perspective requirement.) A study of British and American poetry from the Great D epression to the present. Special emphasis is on W. H. Auden, William C arlos W illiams, D ylan Thomas, Theodore Roethke, and Robert Lowell. M ore general study of the works of other writers - such as Berryman, Jarrell, Fuller, Bishop, Wright, Kinnell, and Larkin - as well as the projectivists, the beats, and writers on the current scene is also included.

## ENGL 454 Modern Drama (3)

(Fulfills the international perspective requirement.) 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 'N eill, M iller, Williams, Brecht, Pirandello, H ansberry, O rton, 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.) An examina tion 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 $T$ homas H ardy, H enry James, Theodore D reiser, Edith W harton, Virginia Woolf, W illiam Faulkner, James Joyce, Anne Tyler, Alice Walker, and Tim 0 'Brien.

## ENGL 466 The Arthurian Legend (3)

(Fulfills the international perspective requirement.) A thematic exposition of the development of the Arthurian legend, traced from the fountainhead of the Arthurian romances, M onmouth's History of the Kings of Britain, to the greatest 20th-century Arthurian work, T. H. W hite'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/G uinevere love affair, and romances of M alory and Tennyson. T hedifferences in the interpretations of a legend are explored. Works selected may vary.

## ENGL 476 Modern Fantasy and Science Fiction (3)

Prerequisite: EN GL 101 or equivalent. 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, M ary Shelley, Nikolai Gogol, Edgar Allan Poe, M ark Twain, Robert Louis Stevenson, H. G. Wells, Ray Bradbury, Isaac Asimov, Ursula LeG uin, T. H. White, Robert H einlein, Philip Dick, D ouglas Adams, and M arion Zimmer Bradley.

## ENGL 480 Creative Writing (3)

(Formerly EN GL 498. Fulfills the general education requirement in communications.) Discussion and critical examination of students' work (poetry, fiction, and/or drama). C onstructive suggestions for improvement are offered. Students may receive credit for only one of the following courses: EN GL 480 or EN GL 498.

## ENGL 481 The Art of Narration (3)

(Formerly EN GL 479E.) An overview of the scope, power, and techniques of narration, the oldest and most versatile form of writing. Topics include the applicability of narration to historic, dramatic, and business purposes Focus is on identifying, analyzing, and practicing the following skills: freewriting, developing structure, delineating episodes, subdividing steps, improving pacing, writing purposeful sentences, controlling time, creating substance, heightening authenticity with voice, and providing interpretation. Students may receive credit for only one of the following courses: ENGL 479E or EN GL 481.

## ENGL 482 Creative Writing: Writing the Novel (3)

(Formerly EN GL 498N . Fulfills the general education require ment in communications.) Exposure to the critical process and consultation on plans and manuscripts. A five-step approach is followed for beginning a novel. Emphasis is on fiction-writing techniques, critical analysis, and creative philosophy. Critiques are given by students and teacher. Students may receive credit for only one of the following courses: EN GL 482 or EN GL 498N.

## ENGL 483 Creative Writing: Writing and Revising the Novel (3)

(Formerly EN GL 499N. Fulfills the general education requirement in communications.) C onsultation on manuscripts in progress, with an emphasis on revision and marketing. Emphasis is on fictionwriting techniques, critical analysis, and creative philosophy. Critiques are given by students and the teacher. Students may receive credit for only one of the following courses: EN GL 483 or EN GL 499N.

## ENGL 485 Creative Writing: Poetry (3)

(Formerly EN GL 498P. Fulfills the general education requirement in communications.) A presentation of various ideas and techniques for writing poetry. Although professional poetry is discussed, the empha sis is on critiquing students' work. Weekly assignments are given. Students may receive credit for only one of the following courses: EN GL 485 or ENGL 498P.

## ENGL 486A Internship in English Through Co-op (3)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 12). 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 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. M ay 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 to 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.

## ENGL 486B Internship in English Through Co-op (6)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 12). 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. M ay 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 to 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.

## ENGL 493 Advanced Expository Writing (3)

(Fulfills the general education requirement in writing and communications.) Prerequisite: EN GL 101 or equivalent. Advanced practice in the cohesive, coherent organization and written presentation of information, facts, opinions, and ideas. Principles of effective writing are discerned in exposition and essays that serve as models for the students' writing.

## ENGL 499 Independent Study in English (3)

Prerequisite: 6 credits in upper-level EN GL courses, consent of department, and agreement of faculty member to act as sponsor. Directed independent study of topics of special interest not covered by regularly scheduled courses in English. M ay be repeated to a maximum of 6 credits when topics differ.

## Environmental M anagement

Courses in environmental management (designated EN M T) may be applied as appropriate (according to individual program requirements) toward

- a major or minor in environmental management or management studies;
- a certificate in Environmental M anagement; 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. 44. A description of the curriculum for the management studies major and minor begins on p. 59.

## ENMT 301 Environment and Ecosystems Management (3)

(Fulfills the civic responsibility requirement.) 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.

## ENMT 305 Hazardous Materials Toxicology (3)

An introduction to regulatory issues with a focus on the physical and chemical characteristics of nuclear, hazardous chemical, and mixed-waste materials. The normal function of human body systems is studied, drawing on the fields of chemistry, biochemistry, anatomy, and physiology. Basic principles of toxicology are applied to provide an overview of human health effects associated with exposure to hazardous chemicals in the community and in work environments.

## ENMT 310 Emergency Planning and Operations Management (3)

A review of human-made and natural hazards and emergencypreparedness laws. The relationships between industrial processes and hazardous materials are covered. Focus is on developing skills to work safely in a hazardous environment and to prepare hazardous materials for transportation, processing, and disposal. Topics include hazardous materials emergency planning, including direction and control of emergency response and remediation. Preparation of emergency plans, methodology of disaster response, and performance of emergency operations are also reviewed. Practical exercises are used to 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 procedure, D epartment of H ealth 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., O SH A/N IO SH ) governing environmental and occupational health and safety.

## ENMT 325 The Biosphere, Energy, and Sustainable Development (3)

(Fulfills the civic responsibility requirement.) An overview of 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. G lobal agreements to balance economic growth against lifesupport systems and the natural resource base are surveyed. The collective thinking of various experts- to advance and create sustainable development, defining the new paradigm and its implications for economic growth and managing the environmentis 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. Focus is on developing and implementing sampling and analysis plans and quality assurance and quality control plans, using equipment for sampling and monitoring, and presenting investigation results. Site assessment and remedial investigation practices are also reviewed to characterize sites and explore "H ow clean is clean?"

## ENMT 340 Environmental Technology (3)

An introduction to multimedia environmental management, control, and remediation. Existing, modified, new, and emerging technologies are surveyed. C ase studies of real-world environmental challenges are presented to demonstrate the evaluation and selection of the appropriate technology for specific uses. Factors of technical integrity, cost effectiveness, and environmental soundness are explained in making technology application decisions.

## ENMT 350 Integrated Waste Management (3)

An overview of applicable regulations and technology and management practices related to generation, handling, minimization, prevention, storage, processing, treatment, transfer, and disposal of municipal hazardous, nuclear, mixed, and special wastes. Topics include regulations, methods, and scientific principles for safely managing wastes from generation through final disposal.

## ENMT 360 Water Environment Management and Use (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. Also covered are safe drinking-water systems, water pollution control systems for sewage and industrial wastewater, and stormwater management.

## ENMT 370 Environmental Communications and Information Systems (3)

A study of the structure, methodology, and application of the theoretical principles of communication 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 provided. Topics include Internet sites, geographical information systems, environmental models and applications, environmental monitoring and measurement, and automated compliance strategies.

## ENMT 380 Outdoor and Indoor Air Quality Management (3)

An overview of air quality management. Focus is on atmosphere, pollutants and sources, dispersion, effects, regulations, air pollution control, 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 relevant regulations and guidelines for performing environmental health and ecological risk assessments. Topics include the pros and cons of different risk assessment methods and how to plan, perform, and report environmental risk assessments. The use and economic effectiveness of risk assessments are also explored.

## ENMT 405 Pollution Prevention and Other Strategies (3)

An overview of alternative environmental strategies. Topics include source reduction, recovery, reuse, recycling, and conservation; material substitution; process modifications, qual ity assurance, quality control, and good housekeeping; waste minimization; zero discharge; and polIution prevention, processing, treatment, and disposal. Emphasis is on pollution prevention techniques, practices, and case studies. Economic analysis and regulatory compliance related to these strategies are also reviewed.

## ENMT 486A Internship in Environmental Management Through Co-op (3)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on $p$. 12). 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 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 environmental management and that continues to advance application of academic theory to 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.

## ENMT 486B Internship in Environmental Management Through Co-op (6)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p .12 ). An opportunity to combine academic theory with new, career-related experience in environmental managment. 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. $M$ ay 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 to 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.

## ENMT 493 Environmental Regulations and Policy (3)

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/H SCA, CERCLA/ SARA, FIFRA, TSCA, FDA, DOT, and OSH A) and becoming familiar with the use of the Federal Register and the Code of Federal Regulations. The social contract and its sanctions, as expressed in law and litigation at local, state, national, and international levels, are also reviewed.

## ENMT 495 Environmental Management Issues and Solutions (3)

(Fulfills the civic responsibility requirement.) An examination of issues in 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 pollution issues. An overview of the fundamental elements of an integrated environmental management program is provided, using specific examples. C ase studies are used to 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. Previously acquired knowledge and skills are used to 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. 12.

## EXCL 301 Learning Analysis and Planning (3)

Prerequisite: Attendance at a Prior Learning orientation and formal admission to the program. (Students should call 301-985-7755, for information, or visit www.umuc.edu/priorlearning to complete the Web orientation and apply to EXCEL.) Instruction in the prepa ration of a portfolio documenting college-level learning gained through noncollege experience. Focus is on defining goals, exploring the relationship of experiential learning to conventional learning, and documenting learning gained through experience. Faculty evaluators assess completed portfolios for a possible award of credit. Access to word-processing equipment is important.

## Fire Science

C ourses 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 M anagement 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.
M ost courses require extensive writing. Students should complete a writing course (such as EN GL 101, 101X, 391, 391X, and 396) or have equivalent writing experience before enrolling.
A description of the curriculum for the fire science major and minor begins on $p .46$. A description of the curriculum for the management studies major and minor begins on p .59.

## 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. Principles of ignition phenomena and propagation variables are explained. Discussion deals with the legislative, economic, psychological, sociological, and legal aspects of incendiarism. The role of insurance and governmental programs in combating arson is assessed. Techniques of analyzing and predicting data, including pattern analysis, are presented.

## 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. O ther 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. The functions and implementation of prevention practices, programs, codes, and ordinances are stressed. 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.

## 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. M ethods of studying community profiles and structures are presented; the economic, geographic, and sociological variables of fire threat are discussed. T he functional basis of the community is examined, with attention to the diverse social roles of community agencies and the roles of fire service as a complex organization within the community.

## FSCN 414 Fire Dynamics (3)

An investigation into the phenomena of fire propagation in the air-regulated phase and the fuel-regulated phase. Variables in the development of pre- and postflashover fire are analyzed. Topics include geometric material; gaseous, fluid-flow, and thermodynamic parameters; and fire models of compartments and buildings.

## FSCN 415 Application of Fire Research (3)

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 . 12). An opportunity to combine aca demic theory with new, career-related experience in fire 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. M ay 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 to the workplace. Students may earn up to 15 semeter 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.

## FSCN 486B Internship in Fire Science Through Co-op (6)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 12). 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. M ay 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 to 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.

## French

Courses in French (designated FREN ) may be applied as appropriate (according to individual program requirements) toward

- the general education requirements for arts and humanities and international perspective coursework;
- a major or minor in humanities (when appropriate); and
- electives.

UM UC offers a limited number of foreign language courses each semester.
A description of the curriculum for the humanities major and minor begins on p. 52.

## FREN 101 Elementary French I (4)

(Fulfills the international perspective requirement.) Beginning work on basic structures, vocabulary, and pronunciation, developing working proficiency in the four skills: listening, speaking, reading, and writing. Emphasis is on using authentic, unedited spoken and written text to find and communicate information.

## FREN 102 Elementary French II (4)

(Fulfills the international perspective requirement.) Prerequisite: FREN 101 or equivalent. Further work on basic structures, vocabulary, and pronunciation, developing working proficiency in the four skills: listening, speaking, reading, and writing. Emphasis is on using authentic, unedited spoken and written text to find and communicate information.

## General Science

C ourses formerly listed under general science (and designated GNSC) are now listed under natural science (and designated N SCI).

## General Studies

Courses in general studies (designated GNST) may be applied as appropriate (according to individual program requirements) toward

- a variety of majors and minors; and
- electives.

UM UC offers only a limited number of courses each semester in this discipline.

## GNST 201 Introductory Statistics (3)

Prerequisite: MATH 107 or equivalent. An introduction to statistics. Topics include descriptive statistics, concepts of probability, probability distributions, sampling distributions, confidence intervals, hypothesis testing, analysis of variance, and regression. Applications in business, social science, and other fields are discussed. Students may receive credit for only one of the following courses: BEH S 202, BEH S 302, BM GT 230, ECON 321, EDMS 451, GNST 201, M GM T 316, PSYC 200, SO CY 201, or STAT 250.

## Geography

C ourses in geography (designated GEO G ) may be applied as appropriate (according to individual program requirements) toward

- the general education requirement in the social and behavioral sciences;
- a major in social science; and
- electives.

UM UC offers only a limited number of courses each semester in this discipline.

## GEOG 100 Introduction to Geography (3)

An introduction to the broad field of geography. Emphasis is on concepts relevant to understanding global, regional, and local issues.

## GEOG 201 Geography of Environmental

 Systems (3)A systematic introduction to the processes and fundamental forms of the atmosphere and Earth's surface. The interactions of climatology, hydrology, and geomorphology are highlighted.

## GEOG 202 The World in Cultural Perspective (3)

(Fulfills the international perspective requirement.) An exploration of the imprint that cultural traits (such as religion, language, and livelihood systems) have left on the landscape of this planet. The transformation of Earth's surface is examined in terms of being a result of cultural evolution, cultural diversity, settlement patterns, population growth, and political organization.

## Geology

Courses in geology (designated GEOL) may be applied toward

- the general education requirement in the biological and physical sciences; and
- electives.

UM UC 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 for arts and humanities and international perspective coursework;
- a major or minor in humanities; and
- electives.

U M U C offers a limited number of foreign language courses each semester.

A description of the curriculum for the humanities major and minor begins on p. 52.

## GERM 101 Elementary German I (4)

(O pen only to students with fewer than two years of German. Fulfills the international perspective requirement.) An introduction to basic structures, vocabulary, and pronunciation, developing working proficiency in the four skills: listening, speaking, reading, and writing. Emphasis is on using authentic unedited spoken and written text to find and communicate information.

## GERM 102 Elementary German II (4)

(A continuation and completion of GERM 101. Fulfills the international perspective requirement.) Prerequisite: GERM 101 or equivalent. Further work on basic structures, vocabulary, and pronunciation, developing working proficiency in the four skills: listening, speaking, reading, and writing. Emphasis is on using authentic unedited spoken and written text to find and communicate information.

## GERM 201 Intermediate German I (4)

(Fulfills the international perspective requirement.) Prerequisite: GERM 102 or equivalent. C ontinued development of work on proficiency in listening, speaking, reading, and writing in German. Emphasis is on using authentic unedited spoken and written text to find and communicate information. Students may receive credit for only one of the following courses: GERM 201 or GERM 104.

## Gerontology

Courses in gerontology (designated GERO) may be applied as appropriate (according to individual program requirements) toward

- the general education requirements for social and behavioral sciences (selected courses only);
- a minor in gerontology; and
- electives.

A description of the curriculum for the gerontology minor begins on p. 48.

## GERO 210 Social Gerontology (3)

An overview of the processes of aging and the older person's place in society. Aging is defined chronologically, functionally, biologically, sociologically, and psychologically. Demographic changes in the average age of the population of the United States are discussed. O ther areas examined include social structure and processes such as family and kinship patterns, the roles of work and retirement, health versus illness, and social roles. Lifecycle socialization, including values, beliefs, and cultural norms, is discussed. O ther topics include the development of agerelated social assumptions, stereotypes, and myths; intergenerational issues; theories of disengagement; and the effects of ethnic, racial, and socioeconomic identity on aging.

## 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, normal versus 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, health care and long-term-care systems, and related medical terminology. Also reviewed are substance abuse, environmental factors affecting aging, and ways of promoting health, preventing disease, and assessing health risks.

## GERO 304 Aging, Public Policy, and the Law (3)

A systematic overview of how federal, state, and local governments affect the health and welfare of older persons in the United States. Topics include the economics of aging, public policy and the aged, and legal rights of elders and their families. Specific areas for consideration include income maintenance programs, protective services, patients' rights, advocacy, and retirement and pension issues.

## GERO 341 Long-Term-Care

Administration I (3)
A framework for understanding institutionally based long-term care, specifically nursing home care. Topics include financing nursing home care, M edicare issues in nursing homes, staffing the nursing home, personnel management, and patient care processes. Emphasis is on care and personnel in the nursing home industry, including general administration and organization of care, team development, staff turnover, medical and patient care planning, and employment needs and issues.

## GERO 342 Long-Term-Care Administration II (3)

(C ontinuation of GERO 341.) Further study of institutionally based long-term-care facilities. Emphasis is on accounting and financial management in long-term-care facilities. Topics include pertinent laws and regulatory codes, including $M$ edi care and $M$ edicaid, the N ursing H ome Reform Act, M aryland regulations, and fire and safety codes. Q uality assurance and marketing issues are also discussed.

## GERO 351 Management of Senior Housing Environment (3)

A framework for backgrounds and training of retirement-housing professionals. Topics include regulatory standards and processes for Housing and Urban D evelopment 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 415 Aging in America (6)

(N ot open to students who have completed GERO 210 and 220.) An interdisciplinary study of aging, from a holistic perspective. Areas of inquiry include the history of gerontology in the United States, research in gerontology, varying styles and patterns of aging in the United States, the value systems of the older population, social forces that affect styles of aging in the United States, and an evaluation of the increasingly significant role of the aged in our nation. Sociological, psychological, anthropological, political, and economic perspectives are considered. Students may receive credit for only one of the following courses: BEHS 352, BEHS 415, ED HD 400, or GERO 415.

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

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p . 12). An opportunity to combine aca demic theory with new, career-related experience in gerontology. At least 12 hours per week must be devoted to new tasks for a total of 180 hours during the C 0-op session; four new tasks must be delineeted in the Learning Proposal; and the course requirements must be completed. M ay 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 to 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.

## GERO 486B Internship in Gerontology Through Co-op (6)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p . 12). An opportunity to combine aca demic 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. M ay 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 to 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.

## GERO 495 Special Topics in Development and Health (1-3)

Specialized study in gerontology and related topics focusing on issues in development and health. M ay be repeated to a maximum of 6 credits when topics differ.

## GERO 496 Special Topics in Social and

 Family Relations (1-3)Specialized study in gerontology and related topics focusing on social and family relations. M ay be repeated to a maximum of 6 credits when topics differ.

## GERO 497 Special Topics in Administration and Planning (1-3)

Specialized study in gerontology and related topics focusing on administration and planning. $M$ ay be repeated to a maximum of 6 credits when topics differ.

## Government and Politics

Courses in government and politics (designated GVPT) may be applied as appropriate (according to individual program require ments) toward

- the general education requirement in the social and behavioral sciences;
- a minor in government and politics, African American studies, American studies, criminal justice, or social science;
- a major in criminal justice or social science; and
- electives.

A description of the curriculum for the government and politics minor begins on $p .49$. Descriptions of other related curricula may be found on the following pages: African American studies (p. 26), American studies (p. 27), criminal justice (p. 39), and social science (p. 66).

## GVPT 100 Principles of Government and Politics (3)

A study of the basic principles and concepts of political science.

## GVPT 170 American Government (3)

A comprehensive study of government in the United Statesnational, state, and local.

## GVPT 199A Korean Public Administration (1)

An examination of the organization and function of the Korean government and its impact on K orean society. C ontemporary political issues in Korea and the legacy of past governments' relations with local governments are discussed.

## GVPT 199B Political Reform in South Korea (1)

A basic study of the reform movement of the past civilian government of Kim Young Sam. The many challenges faced by the new government in attempting to remodel the bureaucratic process after three decades of military-backed leadership are discussed.

## GVPT 199C 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. Students may receive credit for only one of the following courses: GVPT 199C or GVPT 401D.

## GVPT 199H 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 $N$ ations are also considered. Students may receive credit for only one of the following courses: GVPT 199H or GVPT 484A.

## GVPT 199M Austrian Political Issues: Post-World War II to the Present (1)

An analysis of the most pressing issues in Austrian politics, both within the international framework and in internal Austrian affairs. Emphasis is on post-World War II developments and continuities: the system of social partnership, the party system and democratic behavior, and coming to terms with Austria's N azi past before and after the Waldheim affair. The changes after joining the European Union in 1995 in the areas of economics, military security, and status of neutrality, as well as Austria's role vis-à-vis Eastern Central Europe, are also discussed. Students may receive credit for only one of the following courses: GVPT 199M or GVPT 377M

## GVPT 199 O U.N. Peacekeeping (1)

A study of the United $N$ ations and its efforts to maintain or initiate peace in world conflicts. Topics include the C old War, the end of that bipolar system, and current peacekeeping efforts around the globe. The effectiveness of the organization is examined. Students may receive credit for only one of the following courses: GVPT 1990 or GVPT 377L.

GVPT 199P Presidential Election: 2000 (1)
A study of the 2000 presidential election. Topics include the influence of mass media on modern campaigns, the role of issues and ideology in the election, the intricacies of campaign financing, differences in campaign strategies, and the role of third party or minority party candidates during the entire election process. Students may receive credit for only one of the following courses: GVPT 199P or GVPT 3771.

## GVPT 199S The CIA and the Role of Intelligence in U.S. Foreign Policy (1)

A study of the intelligence function and American intelligence agencies. Focus is on American foreign policy, its execution, and objectives. The proper role of a secret intelligence agency in a democratic society is also discussed.

## GVPT 200 International Political Relations (3)

 (Fulfills the civic and international perspective requirements.) 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. Organizational structure and theory are analyzed; the behavior of participants in the administration of policy is probed.

## 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 U nited States. Illustrations are drawn from M aryland 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. Particular emphasis is on the period after World War II.

## GVPT 280 Comparative Politics and Government (3)

Prerequisite: GVPT 100. An introduction to the discipline of comparative politics. The analytic frameworks for comparative studies of politics and governmental institutions are presented, and the salient types of political systems are surveyed.

## GVPT 282 The Government and Politics of the Third World (3)

(Fulfills the civic and 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 socioeconomic environments that are common to most of the states of Africa, the M iddle East, Asia, and Latin America.

## GVPT 306 Global Ecopolitics (3)

(Fulfills the civic and 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, socioeconomic, and political systems of the world. These problems are considered as objects of public policy.

## GVPT 335 Foreign Policy and the New World Order (6)

(M ay be applied toward a specialization in behavioral and social sciences. Fulfills the civic responsibility and international perspective requirements.) A comparative study of foreign policy among the economic and military world powers: the U nited States, the People's Republic of China, Japan, the European Economic Community, 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 M iddle 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: BEH S 332, BEH S 335, BEHS 498B, or GVPT 335.

## GVPT 377A The Role of Intelligence Agencies in U.S. Foreign Policy (1)

A study of the history and development of the intelligence community in the United States، Topics include the CIA, the military intelligence establishment, and intelligence agencies in other federal government departments. The function of the U.S. intelligence community and how it interfaces with the government in foreign policy are discussed.

## GVPT 377B Korean-American Security Relations (1)

A study of the changing K orean-American security relationship. Topics include K orean-American relations, the U.S. involvement in N ortheast Asia, and the perceptions of K oreans of their role in N ortheast Asia. Some techniques of political science and international relations are covered.

## GVPT 377C Japanese-American Security Relations (1)

A study of complex and unique Japanese-American security relationship. Focus is on JapaneseAmerican relations and the Japanese perception of its security and foreign policy role in Asia.

## GVPT 377D North Korea: Socialist Development (1)

A study of the goals, methods, and problems that have marked the economical and political development of the North Korean state, its policy of self-reliant growth, and security issues.

## GVPT 377E The Gulf War: 1990-91 (1)

A study of the political, diplomatic, and economic context of the Gulf War. Emphasis is on the significance of the conflict between Iraq and Kuwait and the struggle for dominance in the Persian Gulf. The problems related to the work of the international coalition under the leadership of President George Bush and the consequences of that coalition and of the war's outcome are surveyed.

## GVPT 377F The Nuclear Question: Strategic Nuclear Doctrine (1)

A study of the nuclear question that examines the relationship of national security policy to foreign policy and of the military strategy of the United States to its moral and political ends. Topics include the nature and effects of nuclear weapons, strategies for their use and nonuse, arms control efforts, and a number of contemporary policy issues.

GVPT 377I Presidential Election: 2000 (1)
A study of the 2000 presidential election. Topics include the influence of mass media on modern campaigns, the role of issues and ideology in the election, the intricacies of campaign financing, differences in campaign strategies, and the role of third party or minority party candidates during the entire election process. Assignments include advanced reading and research. Students may receive credit for only one of the following courses: GVPT 199P or GVPT 3771.

## GVPT 377J Genocide in Bosnia: International War Crimes Tribunal (1)

A study of the first international war crimes trials since those that judged German and Japanese leaders after W orld War II. Topics include conceptual definitions of genocide and ethnic cleansing, historical and current perspectives of genocide in the world, the history of the conflict in former Yugoslavia, acts of crimes against humanity in former Yugoslavia, and war tribunals and the judging of war criminals.

## GVPT 377K Recent U.S.-Russian Relations (1)

A study of the historical relationship between the United States and Russia. Emphasis is on the current postures of the two superpowers.

## GVPT 377L U.N. Peacekeeping (1)

A study of the United Nations and its efforts to maintain or initiate peace in world conflicts. Topics include the Cold War, the end of that bipolar system, and current peacekeeping efforts around the globe. The effectiveness of the organization is examined. Assignments include advanced reading and research. Students may receive credit for only one of the following courses GVPT 1990 or GVPT 377L.

## GVPT 377M Austrian Political Issues: Post-World War II to the Present (1)

An analysis of the most pressing issues in Austrian politics, both within the international framework and in internal Austrian affairs. Emphasis is on post-World War II developments and continuities: the system of social partnership, the party system and democratic behavior, and coming to terms with Austria's N azi past before and after the Waldheim affair. The changes after joining the European Union in 1995 in the areas of economics, military security, and status of neutrality, as well as Austria's role vis-à-vis Eastern Central Europe, are also discussed. Assignments include advanced reading and research. Students may receive credit for only one of the following courses: GVPT 199M or GVPT 377M.

## GVPT 377N Contemporary Issues in Modern Germany (1)

An exploration of the critical social, political, economic, and cultural developments that shape Germany as a reunified state. Topics include the dynamics of reunification, the challenges of Germany's European and international roles in the post-C old War era, Germany's social and economic structures, the political culture, problems of "belttightening" in this former "economic miracle" society, theimpending monetary union, N ATO and defense, education reform, environment, taxation, labor, and foreigners and asylum seekers.

## GVPT 377 O Nuclear Diplomacy and Arms Control (1)

A study of the changing role of nuclear weapons in world politics. Focus is on domestic and international factors affecting nuclear programs and arms control policies.

## GVPT 377P Ethics in International Politics (1)

An analysis of the countless problems of inter-state and inter-human relationships at the global level. Topics include differing customs, principles, and standards of conduct.

## GVPT 377Q The KGB (1)

A survey of the evolution and policies of the Soviet Committee for State Security (KGB). Topics include organizational structure, leaders, worldwide operations, and impact on Soviet policy, espe cially on the Soviet succession struggle.

## GVPT 377S Black Africa, Black America (1)

A study of Africa as the ancestral and spiritual home of Black America. Topics include the particular struggle of the African peoples for emancipation, the role of Africa in contemporary world affairs, the contributions of eminent personalities to the advancement of the Black race, and the development of the Civil Rights movement in the United States and independence movements in Africa beginning in the 1950s.

## GVPT 377T The Declaration of Independence and the U.S. Constitution (1)

An examination of the events, personalities, and political philosophy that led to the Declaration of Independence. The personalities and events that gave rise to the G rand Convention and its final product, the U.S. Constitution, are also explored.

## GVPT 377U Critical Presidential

 Elections in American History (1)An examination of several critical presidential elections, from Jefferson's election in 1800 to the present. Key personalities, major issues, and the election process are explored.

## GVPT 399 Seminar in Government and Politics (3)

Prerequisite: A 200 -level GVPT course. Reading, research, discussion, analysis, and writing on politics. Both substantive issues and methodological approaches are considered.

## GVPT 399B The Legislative Process and Lobbying Techniques (3)

An introduction to the organization and functioning of Congress. Topics include basic rules and procedures and the influence of lobbyists. H ow a bill becomes law and techniques of lobbying are discussed.

## GVPT 399C Lawyers and the Adversary System (3)

An overview of the adversary system of justice, from the perspective of lawyers, their clients, and society as a whole. Topics include the basic structure of the adversary system, criminal law, the social and ideological foundations of the adversary system, and the peculiar role of lawyers in the system. Comparisons are made with the legal systems of several European countries and the People's Republic of China. Assignments include debating two topics related to the adversary system.

## GVPT 399G Recent Right-Wing Terrorism in the United States (1)

A brief survey of right-wing terrorism as practiced by various entities (such as the Ku Klux Klan, contemporary survivalists, religious zealots, and promoters of intolerance).

## GVPT 399H Counterterrorism (3)

An examination of the prevention, detection, handling, and investigation of terrorist attacks. Focus is on the interlocking nature of effective security procedures and investigative techniques and methodologies used before, during, and after real or abortive terrorist incidents. Topics include the role of the media both in covering and in investigating terrorist events, and the emerging constitutional and sociopolitical dilemmas for democracies such as the threats to privacy and individual rights posed by the emergence of highly sophisticated terrorist tactics.

GVPT 399J The Role of a United Germany in Post-Cold War Europe (1)

A critical examination of the position a reunited Germany, distanced from the guilt of the Second World War, is attempting to define for itself in a Europe without the Iron Curtain. Topics include alliances, the Bundeswehr, United $N$ ations membership, European prosperity, and the relationship between Germany and Russia.

## GVPT 399K NATO Expansion (1)

A critical examination of the arguments for and against first-tier NATO expansion and subsequent enlargement. Topics include the case for N ATO expansion, its costs, the three first-tier candidates (Poland, H ungary, and the Czech Republic), beyond the first tier, and Russian concerns.

## GVPT 399L Japanese Politics Since World War II (3)

A study of the evolution of Japanese politics since the end of the Second World War. Emphasis is on changes in bureaucracies and in party politics.

## GVPT 399M The European Union and the Road to European Unification (1)

An examination of the European Union in historical perspective, and an attempt to chart its course into the future. Issues are explored through various questions: C an unification work? H ow far can the diverse cultures of Europe merge? H ow much autonomy are the states willing to relinquish?Topics include the single currency, foreign policy, and possible expansion.

## GVPT 399N Communist Manifesto (3)

An introduction to the Communist Manifesto of Karl M arx and Frederick Engels. Topics include the legacy of the French Revolution of 1789, M arx's appeal to the widest possible audience in the Manifesto itself, M arx's and Engels' subsequent amendments to the original published text, and the 150 -year-old history of the Manifesto and its differing interpretations. The ideological role the Manifesto played in both the rise and the demise of the Soviet Union is considered.

## GVPT 3990 Seminar in National Security (1)

An overview of the different components of U.S. national security, including policy and organization. Internal and external factors affecting national security are covered.

## GVPT 399P Government and Politics of South Korea (3)

A study of the K orean political system and political decision-making process. Topics include the system of government, the origin of governmental policies, and the role of public policies on K orean society. The current government reform movement and recent political events are also discussed. H ow the political system can catch up with recent developments in the K orean economy is considered.

## GVPT 399Q The United Nations (1)

An examination of the United $N$ ations- its history, current status, and possible directions for the future.

## GVPT 399R Violence in the American Character (1)

A brief survey of recent examples of the more violent aspects of American culture and systems of government.

## GVPT 399S The American Congress (1)

A study of one of the most powerful legislative bodies in the world- the American C ongress. Focus is on the structure and inner workings of C ongress as well as the constitutional basis for its operations. The basic rules of the electoral and legislative processes and the resources and strategies of members of C ongress and other key players are also analyzed.

## GVPT 399T National Security Secrets (3)

A study of the protection of national security secrets. Statutes, executive orders, regulations, policy statements, and studies concerning the need for national security secrets and mechanisms for protecting them are examined. Emphasis is on understanding what and how information is classified, as well as the ground rules for informa tion declassification. The government's criminal and civil tools for protecting classified information (including review of espionage statutes, secrecy agreements, and the procedures for granting or denying security clearances) are also discussed.

## GVPT 399U Politics and Government in Maryland (3)

A discussion of the organization and functioning of state government in M aryland, with emphasis on the legislative branch.

## GVPT 399V Change and Conflict in Central and Eastern Europe (3)

Prerequisite: GVPT 100 (or GVPT 170) and 200. An examination of the collapse of Soviet domination and Communist rule from the Baltic to the Balkans. Focus is on the political, social, and economic transition brought on by the end of the Cold War and changes in the former Soviet Union.

## GVPT 399W Personnel Security Clearance Law in the Federal Sector (3)

An examination of the various types of personnel security clearance laws. Emphasis is on security clearances needed by federal civilian workers, military personnel, and contract employees for sensitive duties such as accessing classified information or government computer networks. The security clearance process and guiding laws are reviewed and analyzed.

## GVPT 399X Politics of Southern Africa (3)

An exploration of South African political, economic, and social organization. Emphasis is on the long evolution of "apartheid" policies and their 1990s' reversal. Topics include minority dominance, majority resistance, revolution, and reform.

## GVPT 399Y Human Rights in the World (3)

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.

## GVPT 400 Business and Politics (3)

A study of the inner workings of key political, social, and economic institutions in American society and their affect 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 environment; and business and government in the world economy.

## GVPT 401 Problems of World Politics (3)

(Fulfills the civic responsibility and international perspective requirements.) 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 historical 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 20thcentury 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 governments should be to control it are addressed. Topics include the definiton 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 401E Political Aspects of International Terrorism (3)

An examination of the origins, theories, methods, dangers, and possible future of international terrorism. The serious nature of terrorism today and how prepared governments 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.

## 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 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 defenserelated 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. N ew 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 C ongress to define, protect, and extend those rights are probed.

## GVPT 436 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: 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 M achiavelli to John Stuart Mill.

## GVPT 443 Contemporary Political Theory (3)

(Fulfills the historical and international perspective requirements.) Prerequisite: GVPT 100. A survey of the principal political theories and ideologies from Karl M arx 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 and international perspective requirements.) 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 U nited 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 and international perspective requirements.) 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)

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 and international perspective requirements.) A survey of contemporary developments in the international politics of the M iddle East. Emphasis is on the role emerging M iddle 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. D epartment 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 M aryland 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. O pportunities for contact with C ongress and with the legislature of $M$ aryland 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, executive branches, 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 M exico 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 nationbuilding in emerging countries.

## 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 M iddleEast. Emphasis is on the problems of nationbuilding 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. 12). 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 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. M ay 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 to 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.

## 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. 12). 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. M ay 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 to the workplace. Students may earn up to 15 semester hours in all internship course work through Co-op toward a first bachelor's degree and up to 9 semester hours toward a second bachelor's degree.

## 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, C eylon, 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 498A Contemporary Issues in the Middle East (1)

An investigation of the modern M iddle 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. The problems of state development, the struggle over Palestine, and the causes and possible outcomes of the Gulf War are analyzed.

## H ealth

Courses in health (designated H LTH ) may be applied toward

- electives.

Courses in this discipline do not fulfill the general education requirement in the biological and physical sciences.

## HLTH 106 Drug Use and Abuse (3)

An interdisciplinary analysis of contemporary issues and problems with drugs. The use and the abuse of drugs are explored from historical, social, psychological, philosophical, physiological, legal, and health-related perspectives.

## HLTH 285 Controlling Stress and Tension (3)

An analysis of the many health problems related to stress and tension. C ausative psychosocial stressors and intervening physiological mechanisms are highlighted, with emphasis on the prevention and control of stress by means of techniques such as biofeedback, meditation, and neuromuscular relaxation.

## HLTH 377 Human Sexuality (3)

A comprehensive exploration of biological and developmental aspects of human sexuality. Topics include the psychological and emotional aspects of sexual identity; the historical, cultural, social, linguistic, legal, and moral forces affecting sexual issues; the importance of communication, disclosure, and intimacy in interpersonal relationships, and research trends in the field of human sexuality.

## HLTH 471 Women's Health (3)

An exploration of the women's-health movement from the perspectives of consumerism and feminism. The relationship of physician and patient is considered in relation to the gynecological examination and other medical settings. 0 ther topics include gynecological problems, pregnancy, contraception, breast cancer and cervical cancer, abortion and other surgical procedures, and the psychological aspects of gynecological concerns.

## HLTH 498P Personal Wellness and SelfRealization (3)

An overview of concepts of total health, or wellness. D iscussion explores ways to achieve an optimal quality of life, on the basis of four major tenets: that optimal quality of life involves seeking to realize one's full potential in all dimensions of life; that balance is the guiding principle; that personal responsibility requires an individual to be in control of his or her own well-being; and that a holistic synthesis of lifestyle and guiding philosophies promotes a self-realization that leads to optimal satisfaction.

## H ealth Services <br> $M$ anagement

C ourses in health services management (designated H M GT) may be applied as appropriate (according to individual program requirements) toward

- a minor in health care administration;
- a major or minor in business administration or in management studies;
- a certificate in H ealth Practice $M$ anagement or $H$ ealth Services M anagement; and
- electives.

A description of the curriculum for the health care administration minor begins on $p$. 49. Descriptions of other management-related curricula may be found on the following pages: accounting ( $p .25$ ), business administration (p. 29), customer service management (p. 41), ecommerce and technology management (p.41), environmental management (p. 44), finance (p. 45), fire science (p. 46), human resource management (p. 54), international business management ( $p .57$ ), management studies ( $p .59$ ), marketing ( $p .61$ ), and strategic and entrepreneurial management (p. 69).

## HMGT 310 Health Services Policies (3)

Prerequisite: BM GT 230 or equivalent. An overview and analysis of public policies that govern the organization, delivery, and financing of health services in the United States. Particularly considered are public policy objectives, the decision processes of formulating and implementing objectives and programs, and the effectiveness of major governmental programs. Topics include the effects of rising health care costs, M edicare and M edicaid, competition and regulation, technology and technology assessment, H M Os and alternative reimbursement systems, the supply and distribution of physicians, the availability of capital, and quality assurance.

## HMGT 320 Health Services Management (3)

A thorough treatment of the concepts and principles of effective managerial leadership in a health services organization. The management process is explored; major theories and classic literature in the field are reviewed. Emphasis is on critical aspects of managing people: leadership, communication, motivation, and decision making.

## HMGT 322 Health Services Financial Management (3)

Prerequisite: H M GT 320. Instruction in acquiring, allocating, and managing the financial resources of health services systems. Economic and accounting practices are discussed in terms of budget administration, cost analysis, financing strategies, and internal controls. The probable economic consequences of various national health-insurance proposals are also considered.

## HMGT 325 Health Services Economics (3)

Prerequisite: H M GT 320. An introduction to contemporary economic theory and its application in the management of health services systems. C ompetency in the area of health services economics is furthered by a review of basic theoretical concepts and models in health economics. The goal is to examine how economic forces affect the health services sector and how economic tools can be used by managers and incorporated into public policy to improve performance in health services. Students may receive credit for only one of the following courses: H M GT 325 or H M GT 398A.

## HMGT 330 Issues in Health Services Management (3)

Prerequisite: Any $300-$ level H M GT course. An analysis of social, cultural, and philosophical issues that directly or indirectly affect the management of health services. Emphasis is on developing skills in critical thinking. Students may receive credit for only one of the following courses: H M GT 330 or H M GT 398B.

## HMGT 398 Special Topics in Health Services Management (1-3)

Prerequisite: H M GT 325 or HM GT 410. An advanced, senior-level, intensive inquiry into special topics in health services management that reflect the changing needs and interests of students and faculty. $M$ ay be repeated to a maximum of 6 credits when topics differ.

## HMGT 398C Research Issues and Methods in Health Services Management (3)

Prerequisite: Any 300 -level H M GT course. An overview of the basic instrument and methods used in research on the management of health services. Aspects discussed range from the definition of a problem to the presentation of data. Emphasis is on the information that managers of health services need, how managers obtain that information, and how they use such information in making decisions. Topics include the analysis of needs, evaluation of the effectiveness of programs in health services, and techniques used in reviews for determining rates.

## HMGT 398D Managed Care in Health Services Management (3)

An overview of concepts, strategies, and current practices of managed health care and managed competition systems in the public and private health services sectors. The roles and responsibilities of entry- and midlevel managers as agents for change in developing federal, state, and local government initiatives to reform the delivery of health services are explored. Various methods used to regulate, monitor, and evaluate the effectiveness and efficiency of managed-care organizations and program activities, particularly in terms of implementation issues and cost-containment initiatives, are examined. Discussion covers financing, contracting, and network management of managed-care systems and highlights health informatics and data required to monitor access, quality, cost, and outcomes of managed-care systems.

## HMGT 398E Health Communications (3)

An overview of health service communications that use applied commercial marketing concepts and techniques. Emphasis is on using consumer-oriented approaches of social and commercial marketing as the basis for developing health communications between providers and consumers. The roles and responsibilities of entry- and midlevel managers in developing and delivering communications about health delivery systems and benefits are examined. Topics include concepts and strategies for developing effective health communications in a typical health service program and techniques and paradigms for enhancing organizational efforts to prevent health risk behaviors. Comparisons are made between various frameworks and methods for developing effective health communications from the perspective of health planning and policy.

## HMGT 398F Regulation of Health Services Professionals and Delivery Systems (3)

An exploration of the regulation and certification of health services professionals and delivery systems. Topics include the role and responsibilities of health services regulatory agencies; public licensure and public or private certification of health professionals and health services organizations and delivery systems; regulation of interdisciplinary health practices; regulatory requirements and responses for addressing health professional misconduct, especially related to controlled substances, impairments, and sexual behavior; and administrative law and disciplinary procedures in health professional and systems regulation.

## HMGT 398G Management of Tele-Health Programs (3)

An exploration of health care delivery through the use of telecommunication technology, i.e., telemedicine, and telemedicine programs and systems. Topics include the history of telemedicine, types and applications of telemedicine programs, components of some successful telemedicine programs, the impact of telemedicine on management of the health care delivery process, issues covered in telemedicine programs, management evaluation and measures of effectiveness for telemedicine programs, and trends affecting telemedicine. M anagement evaluations of lessons learned from past telemedicine experiences are conducted, and a case study of management techniques and issues in the approval of an advanced telemedicine program is performed.

## HMGT 398H Pharmacy Practice Management (3)

An exploration of emerging structures for finance, delivery, and systems of pharmacy services within integrated health care networks. Topics include successful development and management of alliances with pharmaceutical companies, vendors, and distributors, insurance and network care providers, provider hospitals, clinics, health mainte nance organizations, preferred provider organizations, managed care systems, and medical practices. Emphasis is on strategies for service delivery, organizational integration within the health care environment, community partnering, contract negotiation, quality control regulation, and governance in relationship to pharmacy management. Cost containment and pricing strategies are addressed as well as pharmacoeconomic strategies.

## HMGT 398I Integrated Health Systems Management (3)

An exploration of emerging structures for finance and delivery of comprehensive health services in integrated health systems and practices. Topics include succesful development and management of alliances, provider hospital organizations, and managed-care systems. Emphasis is on strategies for vertical integrations, community partnering, contract negotiation, and governance.

## HMGT 410 Introduction to <br> Health Services Planning (3)

Prerequisite: Any 300 -level H M GT course. A review of the methodology of planning effectively for health services. The use of data systems for identifying and analyzing problems and for forecasting is explored, along with the processes of setting priorities, developing projects, and allocating resources.

## HMGT 415 Ethical Considerations in Health Services (3)

Prerequisite: Any 300 -level H M GT course. An introduction to contemporary health-related ethical considerations and their implications for providers and consumers of health services. Issues such as abortion, death and dying, research on human subjects, and manipulated genetics are analyzed.

## HMGT 416 Legal Aspects of Health Services Administration (3)

Prerequisite: H M GT 310. A study of federal and state law designed to provide prospective health services professionals with the knowledge and expetise to avoid many legal pitfalls in providing health care and administering health services facilitiess Topics include health-care labor law, screening for drugs, testing for AIDS, medical confidentiality, mal practice, commercial law, and antitrust laws.

## HMGT 430 Health Services Marketing and Strategic Management (3)

Recommended: HM GT 410. An introduction to contemporary the ories of marketing and strategic management as they apply to the management of health services systems. Discussion of applications of the concepts is intended to increase managerial competency. Students may receive credit for only one of the following courses: H M GT 430 or HM GT 498A.

## HMGT 486A Internship in Health Services Management Through Co-op (3)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 12). An opportunity to combine academic theory with new, career-related experience in health services management. 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. M ay be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to health services management and that continues to advance application of academic theory to 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.

## HMGT 486B Internship in Health Services Management Through Co-op (6)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p . 12). An opportunity to combine academic theory with new, career-related experience in health services 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. M ay be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to health services management and that continues to advance application of academic theory to 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.

## HMGT 498 Special Topics in Health Services Management (1-3)

Prerequisite: HM GT 325 or HM GT 410. An advanced, senior-level, intensive inquiry into special topics in health services management that reflect the changing needs and interests of students and faculty. $M$ ay be repeated to a maximum of 6 credits when topics differ.

## HMGT 498B Managing Quality in Health Services Systems (3)

Recommended: H M GT 410. An introduction to contemporary the ories of marketing and strategic management as they apply to the management of health services systems. Discussion of applications of the concepts is intended to increase managerial competency. Students may receive credit for only one of the following courses: H M GT 430 or HM GT 498A.

## HMGT 498C Comparative International Health Systems Analysis: A Managerial Perspective (3)

(Fulfills the civic responsibility and international perspective requirements.) An overview of the concepts, strategies, and current practices employed by various countries in establishing governance policies and financing approaches for health systems delivery. Discussion covers techniques for analyzing various approaches to the delivery of health services and the governance of health providers. The use of the systems approach in analyzing the dimensions, structure, and development of international health systems is examined, and various paradigms for health systems development are considered. Thetargeting of comprehensive health services to key constituencies (including employers, employees, the general population, and at-risk populations) is explored. Focus is on use of economic, financial, qualitative, and quantitative tools to review national and regional cost-based approaches to planning and delivering health services and establishing policies on recovery of costs.

## HMGT 498D Health Insurance Analysis and Issues in Health Systems Management (3)

An analysis of major health insurance issues and study of health insurance administration for various health care entities, including managed-care providers. Topics include coverage by M edicare, M edicaid, and other health insurance programs and relationships between health network practices and insurance companies. Health insurance planning and programming is examined from the perspective of both businesses and health services providers.

## HMGT 498E Practice Management (3)

Recommended: HM GT 398H, HM GT 3981, or experience in the field. An applied management survey of major concepts of managing medical, health, and dental group services practices. Practices examined include preferred provider organizations, physician hospital organizations, independent practice associations, management services organization, and dental group practice networks. Examination covers such issues as structuring professional compensation systems for practices and networks, and negotiating with insurance companies regarding contract reimbursements. Topics also include regulatory guidelines and requirements for medical equipment and pharmaceutical storage and dispensing, and determination of benefits offered to practice and network employees.

## HMGT 498V Health Information-Systems Management (3)

Prerequisite: H M GT 320 or IFSM 300. A study of the use of health information systems to manage the flow of data in various medical professions-a key factor in managing health care costs. The systems perspective is examined in assessing, selecting, and implementing vital processes within the organization. Topics include billing and scheduling systems, accounting and financial information systems, medical records, processing, imaging systems, staffing and work flow, and medical research systems. Governmental and public policy issues related to the transmittal of health care data are also considered. Students may receive credit for only one of the following courses: H M GT 498 V or IFSM 498V.

## 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 historical perspective coursework;
- a major or minor in history or humanities;
- a minor in African American studies, American studies, Asian studies, or women's studies; and
- electives.

A description of the curriculum for the history major and minor begins on $p$. 50 . Descriptions of other related curricula may be found on the following pages: African American studies (p. 26), American studies (p. 27), Asian studies (p. 29), humanities (p. 52), and women's studies (p. 70).

## HIST 115 World History I (3)

(Fulfills the international perspective requirement.) A survey of Western and non-Western civilizations and cultures from the 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 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) <br> 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 216 Special Topics in Regional and National History (1-3)

An introduction to the histories of specific regions or nations. Students may receive credit for a given topic in either HIST 216 or HIST 316 only once.

## HIST 217 Special Topics in Urban and Local History (1-3)

An introduction to the histories of specific cities or localities. Students may receive credit for a given topic in either HIST 217 or HIST 317 only once.

## HIST 218 Special Topics in Military History (1-3)

An introduction to the history of specific battles, campaigns, or wars. Students may receive credit for a given topic in either H IST 218 or HIST 318 only once.

## HIST 219 Special Topics in History (1-3)

An introduction to specific topics, themes, events, or problems in history. Students may receive credit for a given topic in either HIST 219 or HIST 319 only once.

## HIST 284 East Asian Civilization I (3)

(Fulfills the international perspective requirement.) An interdisciplinary survey of the development of East Asian cultures. All facets of traditional life in East Asia are examined from a historical perspective. Emphasis is on gaining an appreciation of the fascinatingly different and complex cultures of the area.

## HIST 285 East Asian Civilization II (3)

(Fulfills the international perspective requirement.) A survey of the historical development of modern Asia since 1700. The efforts of East Asians to preserve traditional cultures while facing Western expansion in the 18th and 19th centuries are presented; the efforts of those cultures to survive as nations in the 20th century are assessed.

## HIST 305 The Pacific Century (3)

(Formerly BEHS 305. Fulfills the international perspective require ment. M ay be applied toward a specialization in behavioral and social sciences.) An interdisciplinary introduction to contemporary East and Southeast Asia that surveys the political, economic, and cultural changes of the past 100 years- from colonialism to nationalism and from military clashes to economic problems. Focus is on understanding the sources of the region's dynamics and the roots of its diversity. The contrasting themes of tradition and modernization, as well as American attitudes of isolationism and expansion toward Asia, are explored. The historic and geographic context for both the development of the Pacific basin and its impact on the global community is illuminated. Video programs from the series "The Pacific Century" are integrated with the course materials. Students may receive credit for only one of the following courses: AST D 305, BEHS 305, or HIST 305.

## HIST 309 Introduction to Historical Writing (3)

Prerequisites: 12 credits in lower-level history courses. A seminar on the methods and problems of historical research and presentation. Assignments include a major research paper.

## HIST 316 Advanced Topics in Regional and National History (1-3)

An in-depth study of the histories of specific regions or nations. Assignments include advanced reading and research. Students may receive credit for a given topic in either H IST 216 or H IST 316 only once.

## HIST 317 Advanced Topics in Urban and Local History (1-3)

An in-depth study of the histories of specific cities or localities. Assignments include advanced reading and research. Students may receive credit for a given topic in either H IST 217 or H IST 317 only once.

## HIST 318 Advanced Topics in Military History (1-3)

An in-depth study of specific battles, campaigns, or wars. Assignments include advanced reading and research. Students may receive credit for a given topic in either H IST 218 or H IST 318 only once.

## HIST 319 Advanced Topics in History (1-3)

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 H IST 319 only once.

## HIST 324 Classical Greece (3)

(Fulfills the international perspective requirement.) A study of the ancient Greeks from H omer to Socrates, from 800 to 400 b.c. The society and religion of the city-state, the Peloponnesian War, the art and literature of Periclean Athens, and the intellectual circle of Socrates are discussed.

## HIST 325 Alexander the Great and the Hellenistic Age (3)

(Fulfills the international perspective requirement.) A study of the his tory of the Greaks from 400 to 30 B.c. Topics include Alexander and the changes he wrought in the $M$ editerranean world; the rise of monarchies and leagues; new directions in religion, art, literature, and science; and the H ellenization of the peoples of the Near East, including the Jews.

## HIST 326 The Roman Republic (3)

(Fulfills the international perspective requirement.) A study of ancient Rome during the period 753 to 44 в.c., from its founding to the assassination of Julius C aesar. Focus is on Rome's conquest of the M editerranean world, on the social and political pressures that led to that conquest, and on the consequent transformation and decline of the republic. Students may receive credit for only one of the following courses: HIST 326 or HIST 421.

## HIST 327 The Roman Empire (3)

(Fulfills the international perspective requirements.) A study of Roman history from Augusus to H eraclius, from 44 B.c. to A.D. 641 . Topics include the imperial court and government, the diversity of culture in the provinces and cities and the progress of Romanization, Roman religion and its transformation in late antiquity, and the Roman army and defense of the frontiers. Students may receive credit for only one of the following courses: HIST 327 or HIST 421.

## HIST 330 Europe in the Early Middle Ages: 300 to 1000 (3)

(Fulfills the international perspective requirement.) A study of medieval Europe from the Roman empire to that of Charlemagne. The period is examined as a crucible in which classical, Christian, and Germanic elements merged, shaping the civilization of the Latin Wes. Topics include the concept of authority, cultural trends, and formation of group solidarity. Students may receive credit only once under this course number.

## HIST 331 Europe in the High Middle Ages: 1000 to 1450 (3)

(Fulfills the international perspective requirement.) An examination of medieval civilization in Europe from the 11th century to the end of the H undred Years War. Emphasis is on the development of significant social, political, economic, and religious institutions. Topics include the development of feudalism and manorialism, chivalry and courtly love, monastic life, medieval scholasticism and the rise of universities, Romanesque and Gothic art and architecture, and the centralization of monarchy.

## HIST 332 Europe During the Renaissance and Reformation I (3)

(Fulfills the international perspective requirement.) An assessment of the transformation of continental Europe from 1400 to 1650, highlighting the changes in modes of Christian piety and the formation of Renaissance culture. M ajor themes include the spread of humanistic ideas, the increasing availability of education, and the development of social and intellectual foundations of reformation theology. The effects on the economic structure, as well as the culture of the Western world, are evaluated.

## HIST 333 Europe During the Renaissance and Reformation II (3)

(Fulfills the international perspective requirement. A continuation of H IST 332.) A study tracing the political, social, and cultural issues in Europe through the mid-18th century.

## HIST 335 Revolutionary Europe (3)

(Fulfills the international perspective requirement.) A study of Europe from 1715 through the French Revolution and the N apoleonic period. Focus is on intellectual, social, and cultural movements in revolutionary Europe.

## HIST 336 Europe in the 19th Century: 1815 to 1919 (3)

(Fulfills the 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 of the 20th Century (3)

(Fulfills the international perspective requirement.) An investigation of the political, economic, and cultural developments of 20th-century Europe, with special emphasis on the factors involved in the two world wars and their worldwide effects and significance.

## HIST 341 African Civilization to 1800 (3)

(Formerly H IST 122. Fulfills the international perspective requirement.) A survey of the history of Africa from earliest times to 1800. Topics include the origins of African societies, Nile Valley civilization, medieval African states and societies, Islam, oral tradition, African slavery and the slave trade, and early African-European interactions. Students may receive credit for only one of the following courses: HIST 122 or HIST 341.

## HIST 342 Sub-Saharan Africa Since 1800 (3)

(Fulfills the international perspective requirement.) An overview of changes in sub-Saharan African societies since 1800. Topics include European conquest and African resistance in the late 19th century, colonial states and societies, African nationalism, and decolonization and the era of independence. Struggles over social, economic, and political changes are emphasized.

## HIST 353 Latin American History I (3)

(Fulfills the international perspective requirement.) A survey of Latin America from late pre-Columbian civilizations and cultures to the wars of independence.

## HIST 354 Latin American History II (3)

(Formerly H IST 251. Fulfills the international perspective requirement.) An overview of the political culture of the republics of Latin America. Topics include nation building, modernization, race relations, economic development, gender, reform and revaluation, and relations between the United States and Latin America. Students may receive credit for only one of the following courses: HIST 251 or HIST 354.

## HIST 360 America in the Colonial Era: 1600 to 1763 (3)

An investigation of the founding of the English colonies in America. Topics include the European backgrounds of the colonies, the reasons for the instability of colonial society, the emergence of stable societies after 1689, and the development of colonial regionalism. Also discussed are political institutions, social divisions, the economy, religion, education, and urban and frontier problems in the 18th century.

## HIST 361 America in the Revolutionary Era: 1763 to 1815 (3)

A consideration of the background and direction of the American Revolution and the early development of the nation through the War of 1812. Emphasis is on how the Revolution shaped American political and social development, including the creation of a new government under the Constitution and the challenges facing the new nation.

## HIST 362 Ante-Bellum America: 1815 to 1861 (3)

An examination of the strong sense of nationalism in the United States after the War of 1812, and its transformation into the sectionalism that led to the Civil War. Issues contributing to North/South antagonism, particularly slavery, are discussed. O ther issues include Jacksonian democracy; capitalism; racism; immigration; M anifest D estiny; 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 M cKinley, Roosevelt, Taft, and Wilson; the world wars; the G reat 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 1960's radi calism, the Cold War, Vietnam, Watergate, and changes in American society.

## HIST 372 Legacy of the Civil Rights Movement (3)

(Fulfills the civic responsibility requirement. M ay be applied toward a specialization in behavioral and social sciences.) 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. M aterials from the telecourse "Eyes on the Prize" are integrated with the course. 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 Iabor 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 H UM N 366.

## HIST 377 Women in America Since 1870 (3)

An examination of the changing role of women in working- 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 thosefor women's rights, birth control, and civil rights. Students may receive credit for only one of the following courses: HIST 211, H IST 367, or HIST 377.

## HIST 381 America in Vietnam (3)

( M ay be applied toward a specialization in behavioral and social sciences. Fulfills the international perspective requirement.) A multidisciplinary interpretation of the complex involvement of the United States in Vietnam. Key themes include foreign policies after W orld 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: BEH S 337 or HIST 381.

## HIST 454 Constitutional History of the United States from Colonial Origins (3)

An analysis of the interaction of government, law, and politics in the constitutional system. Topics include the nature and purpose of constitutions and constitutionalism; the relationship between the C onstitution and social forces and influences; and the way in which constitutional principles, rules, ideas, and institutions affect events and are in turn affected by events. The origins of American politics and constitutionalism and major constitutional problems (such as the origins of judicial review, democratization of government, slavery in the territories, and the political system as a whole) are discussed.

## HIST 455 Constitutional History of the United States Since 1860 (3)

A study of public law and government in the U nited States, with emphasis on the interactions of government, law, and politics. Focus is on the political/constitutional system as a whole, rather than simply the development of constitutional law by the Supreme Court. M ajor crises in U.S. government and politics (such as the Civil War, Reconstruction, the N ew Deal era, and the civil disorder of the 1960s) are also analyzed.

## HIST 460 African American Life: 1500 to 1865 (3)

An examination of African American communities in the Western H emisphere from 1500 to 1865 . Topics include the origins of African American communities in the Western H emisphere and the resulting diversity of experiences and cultures. Emphasis is on African American communities in N orth 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 C onfederacy 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 and the efforts to adapt to changing roles and situations during the 20th century. 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 images of the military in American culture. Students may receive credit for only one of the following courses: HIST 419N or H IST 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 W estern 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 465 World War II (3)

An examination of the Second World War. Topics include the origins and causes of the war; the political, military, economic, and social circumstances and events; and its catastrophic impact and legacy.

## 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 4191, or HIST 466.

## HIST 467 History of Maryland (3)

An examination of the political, social, and economic history of $M$ aryland from the 17th century to the present.

## HIST 480 History of Traditional China (3)

(Fulfills the international perspective requirement.) A study of the history of China from earliest times to 1644. Emphasis is on the development of Chinese institutions that have molded the life of the nation and its people.

## HIST 481 History of Modern China (3)

(Fulfills the international perspective requirement.) A study of the history of modern China, from 1644 to the present. Focus is on the origins of the Western influence in China and the various stages of the C hinese reaction.

## HIST 482 History of Japan to 1800 (3)

(Fulfills the international perspective requirement.) An examination of traditional Japanese civilization from the age of Shinto mythology and the introduction of continental learning to the rule of military families. Topics include transition to a money economy and the creation of a town-based culture Political, economic, religious, and cultural history is also covered.

## HIST 483 History of Japan Since 1800 (3)

(Fulfills the 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 $p$. 12). 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 total of 180 hours during the C o-op session; four new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. $M$ ay 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 to 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.

## HIST 486B Internship in History Through Co-op (6)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 12). 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. M ay 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 the ory to 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.

## HIST 499 Independent Study in History (1-3)

Prerequisite: 6 credits in upper-level history courses, 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. M ay be repeated to a maximum of 6 credits when topics differ.

## Humanities

Courses in humanities (designated H U M N ) 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.

M ost courses require extensive writing. Students should complete a writing course (such as COM M 390, 393, 393X, 394, and 394 X and EN GL 101, 101X, 391, 391X, and 396) or have equivalent writing experience before enrolling.
A description of the curriculum for the humanities major and minor begins on p. 52.

## HUMN 102 Classical Foundations (3)

(Formerly CLAS 100. Fulfills the civic responsibility 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) as revealed through the words and actions of major contemporary figures. 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 103 Greek and Roman Mythology (3)

A study of the major gods and goddesses of ancient Greece, as revealed in the legends and stories of both Greek and Roman authors of ancient history. The stories of the major heroes and heroic events are also studied.

## 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 N ew 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 $N$ ative 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. M aterials from the telecourse "Shaping America" are integrated with the course. Students may receive credit for only one of the following courses: H IST 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. Crucial events and issues in recent history-including the Great D epression, the rise of big business, Roosevelt's N ew D eal, World WarsI and II, the Cold War, the Vietnam War, the civil rights movement, and the end of the C old War- are reviewed. 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. M aterials from the telecourse "America in Perspective" are integrated with the course. Students may receive credit only once under this course number and for only one of the following courses: HIST 157 or HUMN 120.

## HUMN 126 Cosmos (3)

(Fulfills the international perspective requirement. D oes not fulfill the general education requirement in science.) An interdisciplinary study of space, time, and the universe. Topics include astronomy, interstellar communications, Egyptian hieroglyphics, comparative religion, biology, and genetics. H istorical expeditions on this planet are compared and contrasted with the Voyager missions through the solar system. Students may receive credit for only one of the following courses: AST R 398A or H UM N 126.

## HUMN 198 Special Topics in Humanities (3)

A study of selected topics in the humanities. Students may receive credit for a given topic in either H UM N 198 or H UM N 398 only once.

## HUMN 280 This Constitution: A History (3)

(Fulfills the historical perspective requirement.) A study of constitutional government in the U nited States in the late 20th century. Emphasis is on the historical events and processes that have made the Constitution what it is today. The principles and institutions of U.S. constitutionalism are critically evaluated from the perspectives of political science and history. The goal is to draw inferences from the materials of constitutional history, politics, and law, so as to form generalizations about the development of the C onstitution.

## HUMN 300 Modern Moral Choices (6)

(Fulfills the civic responsibility requirement.) An inquiry into the correlation of ethical theory with the broad range of moral decisions facing contemporary society. Basic ethical theories introduced include utilitarianism, relativism, egoism, and K ant's categorical imperative. The theories are then used to evaluate moral decisions in such fields as medicine, war, religion, birth, death, human sexuality, and professional and personal relations. The connection between moral choices and the law is also examined. Assignments include a detailed ethical analysis of one or more contemporary moral issues.

## HUMN 301 Crossing Cultures: World Views in the Humanities (6)

(Fulfills the historical and international perspective requirements.) 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 M iddle East, South Asia, the Far East, the Americas, and Europe. Outcomes of cross-cultural interaction are considered.

## HUMN 310 Business and Professional Ethics (6)

(Fulfills the civic responsibility requirement.) An examination of the relationship between business and ethics. Various views of what is right and good for people in a corporate society are applied to business practices, institutions, and actions. The moral contexts of both corporate decisions and personal decisions are considered. C oncepts of ethics and economic justice are introduced. The nature of the corporation is discussed, with particular emphasis on corporate social responsibility. Examples of the moral dilemmas of conducting business include issues and cases in the areas of hiring procedures; employees' rights and duties (in relation to such matters as privacy, health and safety, and whisteblowing versus loyalty); professional responsibility; ethics in advertising; consumerism in relation to product liability; multinational operations; and ethics as related to the common environment.

## 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 past century and weighing the special relationship between cinema and literature. Students may receive credit for only one of the following courses: H UM N 334 or HUMN 498D.

## HUMN 336 Ideas Shaping the 21st Century (6)

(Fulfills the civic and historical perspective requirements.) 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. These 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 350 The Religious Quest (6)

(Fulfills the historical and international perspective requirements.) A comparative exploration of aspects of several religions, emphasizing specific forms of expression and practice. The religions chosen for study are the major faiths of the world in terms of numbers of adherents: H induism, 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 and international perspective requirements.) 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 nonAmerican cultures. Ideas and symbols from mythology that provide background for literature, music, and art are introduced. M aterials from the telecourse "Joseph C ampbell: Transformations of M yth Through Time" are integrated with the presentation.

## HUMN 360 Global Environmental Change (6)

(Also listed as BEH S 361 and N SCI 361. Fulfills the civic responsibility and international perspective requirements. Yields 3 natural science credits and either 3 humanities credits or 3 social science credits.) An in-depth examination of environmental changes that many believe are caused by human adaptations to Earth's natural resources, and the pos sible effects on both the global biosphere and the human condition. Scientific and social issues are explored through various questions: Is global warming really happening? W ill sea levels rise? W hat are the consequences of massive deforestation? W hat can be done when there is so much scientific uncertainty and global social diversity?T he 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: BEH S 361, GN SC 361, H U M N 360 , or N SCI 361.

## HUMN 370 Humanity of Language (3)

(Fulfills the civic responsibility and historical perspective requirements.) 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 <br> 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; home to monuments, museums, and statuary commemorating visionary leaders as well as a seedbed of avant-garde artistic movements; and an urban center built upon limited industrial growth. Students may receive credit for only one of the following courses: HIST 351, HUM N 375, or HUMN 498C.

## HUMN 380 Technology and the Individual (3)

Training in thinking systematically about the intellectual, moral, and social issues raised by advances in technology. Themes include the cultural dimension of technological innovation, the pervasiveness of the machine as a central metaphor in modern life, and the influences of technological change on social choices. C ase studies are used to analyze the interaction of individuals with technological systems and the application of technology to societal purposes.

## HUMN 398 Advanced Topics in Humanities (1-6)

A study of selected topics in the humanities. Assignments include advanced reading and research. Students may receive credit for a given topic in either H UMN 198 or H UM N 398 only once.

## 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. M ay 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 as to 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. 12). An opportunity to combine aca demic theory with new, career-related experience in the humanities. At least 12 hours per week must be devoted to new tasks for a total of 180 hours during the C o-op session; four new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. M ay 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 aca demic theory to 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

## HUMN 486B Internship in Humanities Through Co-op (6)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 12). 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 C o-op session; five to eight new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. $M$ ay 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 to 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.

## H uman Resource $M$ anagement

Courses in human resource management (designated H RM N) may be applied as appropriate (according to individual program requirements) toward

- a major or minor in human resource management, business administration, or management studies;
- a certificate in various business-related areas; and
- electives.

A description of the curriculum for the human resource management minor begins on $p$. 54. Descriptions of other management-related curricula may be found on the following pages: accounting (p. 25), business administration (p. 29), environmental management (p. 44), fire science (p. 46), management studies (p. 59), and marketing (p. 61).

## HRMN 300 Human Resource Management (3)

(Formerly BM GT 360.) A basic study of human resource management. M ajor aspects covered are 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: BM GT 360, H RM N 300, or TM GT 360.

## HRMN 302 Organizational Communication (3)

(Formerly BM GT 398N and M GM T 320.) Prerequisite: BM GT 364 or equivalent. 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: BM GT 398N , H RM N 302, M GM T 320, M GST 315, or TEMN 315.

## HRMN 362 Labor Relations (3)

(Formerly BM GT 362.) 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. Specific attention is focused 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: BM GT 362 or HRM N 362.

## HRMN 363 Negotiation Strategies (3)

Prerequisite: H RM N 362 or equivalent. An introduction to methods and processes of negotiation and collective bargaining. N egotiation strategies related to selected products, services, and management issues are explored. C ase studies and exercises in negotiation are used to examine various strategies. Students may receive credit for only one of the following courses: BM GT $398 W$, HRMN 363, or M GM T 398W.

## HRMN 365 Conflict Management in Organizations (3)

(Fulfills the civic responsibility requirement.) An introduction to processes observed in and management of conflict within organizations. Topics include general models of conflict, methods of managing conflict, and issues related to disagreements in organizational contexts. Students may receive credit for only one of the following courses: BM GT 398X, HRM N 365, or M GM T 398 X.

## HRMN 367 Organizational Culture (3)

(Formerly BM GT 398T.) Prerequisite: BM GT 364 or equivalent. 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. The role of nationality, gender, and race within organizational culture is discussed. Implications of addressing organizational challenges, as well as theory versus practice, are evaluated. The relative roles of the individual, groups, and the organization in a cultural context are explored. Students may receive credit for only one of the following courses: BM GT 398T or HRM N 367.

## HRMN 390 Contemporary Compensation Management (3)

Prerequisite: HRM N 300 or equivalent. 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. Techniques are discussed 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 also examined. Students may receive credit for only one of the following courses: BM GT 388L or H RM N 390.

## HRMN 392 Stress Management in Organizations (1)

(Formerly BM GT 398Y and M GMT 398Y.) An exploration of the changing nature of work and stress in organizations, due to a business emphasis on productivity and personal and family demands. Focus is on the causes of stress and methods of managing stress in organizational settings. Topics include interactions, performance objectives, social structure, job characteristics, and other factors causing stress in organizations. Consideration is given to political climate, pressure to achieve, interpersonal conflict, and time pressures. Practical approaches to reduce stress at work are discussed. Students may receive credit for only one of the following courses: BM GT 398Y, H RM N 392 , or M GMT 398Y.

## HRMN 394 Motivation, Performance, and Productivity (3)

(Formerly BM GT 398S.) Prerequisite: BM GT 364 or equivalent. 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: BM GT 398S or HRMN 394.

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

(Formerly BM GT 460.) Prerequisite: H RM N 300 or equivalent. 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 employeerelated 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: BM GT 460, H RM N 400, or TM GT 360.

## HRMN 404 Managing Diversity in Organizations (3)

(Formerly BM GT and M GMT 498G Organizational Change and Diversity.) Prerequisite: BM GT 364 or equivalent. 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: BM GT 498G, HRMN 404, or M GMT 498G.

## HRMN 406 Employee Training and Development (3)

(Formerly BM GT 4981.) Prerequisite: BM GT 364 or equivalent. 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 assesment 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: BM GT 4981, H RM N 406, or M GMT 4981.

## HRMN 408 Employment Law for Business (3)

(Formerly BM GT 468. Fulfills the civic responsibility require ment.) A conceptual and functional analysis of the legal frame work and principles of industrial and employment relations, with special emphasis on discrimination in the workplace. Primary topics include wrongful discharge; discrimination based on race, sex, age, and disability; testing and performance appraisal; labor/management issues; and employee benefits. Salient global issues are also examined. Assignments may include conducting relevant research using computer databases and networks (such as LEXIS-N EXIS and the Web) as well as other methods for accessing information. Students may receive credit for only one of the following courses: BM GT 468, BM GT 498G, HRMN 408, or M GM T 498G.

## HRMN 462 Labor Relations Law (3)

(Formerly BM GT 462.) A conceptual and functional analysis and application of legal principles relevant to labor/management relations and the collective bargaining process in both the domestic and global industrial and public sectors. Topics include the historical and statutory development of the N ational Labor Relations Act and other related statutes; 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 global labor/management issues. Students may receive credit for only one of the following courses: BM GT 462 or H RM N 462.

## HRMN 463 Public-Sector Labor Relations (3)

(Formerly BM GT 463.) Prerequisite: HRM N 362 or equivalent. 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 ana lyzed. Case studies of governmental units, public unions, and union issues are used to demonstrate and reinforce principles. Students may receive credit for only one of the following courses: BM GT 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. 12). 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 total of 180 hours during the C o-op session; four new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. M ay 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 to 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.

## 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. 12). 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. M ay 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 to the workplace. Students may earn up to 15 semester hours in all internship course work through Co-op toward a first bachelor's degree and up to 9 semester hours toward a second bachelor's degree.

## HRMN 490 International Human Resource Management (3)

(Formerly BM GT 498K. Fulfills the civic responsibility requirement.) Prerequisite: H RM N 300 or equivalent. A survey of international labor markets, workplaces, multinational alliances, global corporate cultures, and national cultural differences as elements of international human resource planning. Fundamental human resource issues such as compensation, benefits, productivity, training, employment security, and unions are analyzed within an international context. C ase studies of multinational, international, and global companies are used to demonstrate and reinforce principles. Students may receive credit for only one of the following courses: BM GT 498K or HRMN 490.

## HRMN 494 Strategic Human Resource Management (3)

(Formerly BM GT 388K.) Prerequisite: H RM N 300 or equivalent. 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; and 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: BM GT 388K or HRMN 494.

## Information Systems $M$ anagement

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, or management studies;
- a major or minor in computer studies;
- a certificate in various computer-related areas; and
- electives.

A description of the curriculum for the information systems management major begins on p. 56. Descriptions of other computerrelated curricula may be found on the following pages: computer and information science ( $p .35$ ), computer information technology (p. 36), computer science (p.37), and computer studies (p. 38).

## IFSM 201 Introduction to Computer-Based Systems (3)

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: CAPP 101, CAPP 300, CM ST 300, IFSM 201, or TM GT 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 296 COBOL Programming I (3)

Prerequisite: IFSM 201 or equivalent. An introduction to COBOL, a business-oriented programming language, with some of its standard applications.

## IFSM 297 COBOL Programming II (3)

Prerequisite: IFSM 296 or equivalent. Practice in designing complex systems, sophisticated file structures, and advanced COBOL facilities for use in business and industry. A programming style is developed that minimizes errors and facilitates modification and maintenance. Students may receive credit for only one of the following courses: CMIS 180, IFSM 297, or IFSM 498J.

## IFSM 300 Information Systems in Organizations (3)

(Fulfills the international perspective requirement.) Prerequisite: IFSM 201 or equivalent. An overview of information systems, their role in organizations, and the relation of information systems to the objectives and structure of an organization. H uman aspects of computing, types of computer systems, and general theory of systems are discussed.

## IFSM 302 Workplace Productivity (3)

Prerequisite: IFSM 201 or equivalent. 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 or equivalent. 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 humancomputer 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 requirement.) Prerequisite: IFSM 201 or equivalent. 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 M ATH 012, or equivalent. A survey of computer systems. Emphasis is on the interrelationships of hardware architecture, system software, and application software. The architectures of processors and storage systems are explored. Implications for system software design are covered. The effects of the design of hardware and system software on the development of application programs in a business environment are discussed. Students may receive credit for only one of the following courses: CM IS 270, CM IS 310, CM SC 311 , or IFSM 310.

## IFSM 320 Office Automation (3)

Prerequisite: IFSM 201 or equivalent. An examination of officeinformation 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. Interfaces between machines and their users are discussed; current and future technological trends are assessed, and their effects on data processing and the office environment are traced.

## 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. The Internet is introduced and used as a resource for multimedia projects. H ardware selection is discussed. The effects of multimedia presentations and the social issues involved in their use are examined.

## IFSM 410 Database Concepts (3)

(Formerly D atabase Program D evelopment.) Prerequisites: IFSM 296 (or equivalent programming experience) and 300, or equivalent. 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 objectoriented 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: CM IS 320 or IFSM 410.

## IFSM 411 SQL (3)

Prerequisite: IFSM 410, CM IS 320, or equivalent. In-depth practice using Structured Query Language (SQ L), the most common database manipulation language. The various uses of SQL are illustrated through business-related case studies. The underlying theory of relations (including relational operators, keys, and entity and referential integrity) is discussed. Students may receive credit for only one of the following courses: CM IS 420, IFSM 411, or IFSM 4981.

## IFSM 420 Advanced Database Concepts (3)

Prerequisite: IFSM 410 or CM IS 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)

Prerequisites: IFSM 300 (or equivalent) and 410 (or IFSM 411). 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 or equivalent. 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 432 Disaster Recovery Planning (3)

(Formerly IFSM 498N .) A study of disaster recovery and emergency planning as applied to the information-systems function in corporations. Topics include current concepts, skills, and managerial controls needed to protect a company's most important asset: information. Students may receive credit for only one of the following courses: IFSM 432 or IFSM 498N.

## IFSM 438 Project Management (3)

Prerequisite: IFSM 300 or equivalent. An exposition of planning, scheduling, and controlling a system project during its life cycle. The use of project-management techniques such as PERT (Project Evaluation and Review Technique) and $G$ antt charts is examined, along with other techniques of planning, scheduling, and controlling projects. Demonstrations and exercises in using project-management software are provided. Students may receive credit for only one of the following courses: IFSM 438 or TM GT 430.

## IFSM 446 Java-Based Information Systems Applications (3)

(Formerly IFSM 498W.) Prerequisites: Programming experience and IFSM 410. 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 avaz-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, CM SC 370, or IFSM 450.

## IFSM 460 Systems Analysis (3)

(The first course in the two-course series IFSM 460-465.) Pre requisites: IFSM 300 and experience in a high-level programming language. A study of the methods used in analyzing needs for information and in specifying requirements for an application system. Topics include the concept of the sytem life cycle, the iterative nature of the processes of analysis and design, and the methodology for developing a logical specification for a system.

## IFSM 465 Systems Design (3)

(T he second course in the two-course series IFSM 460-465.) Prerequisite: IFSM 460 or equivalent. A study of the concepts and techniques for developing a physical design for an operational system based on the logical design developed in IFSM 460. Implementation of the operational system, integration of computer technology, analysis and design of systems, and aspects of organizational behavior in the design support system are examined.

## IFSM 486A Internship in Information Systems Management Through Co-op (3)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on $p$. 12). 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 total of 180 hours during the C o-op session; four new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. M ay 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 to 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.

## 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 . 12). An opportunity to combine aca demic theory with new, career-related experience in information sys tems management. At least 20 hours per week must be devoted to new tasks for a total of 300 hours during the C 0-op session; five to eight new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. M ay 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 to 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.

## IFSM 490 Information-Systems Resource Management (3)

Prerequisite: IFSM 300; at least 9 credits in upper-level computing courses recommended. A theoretical study of information-systems resource management. Practical principles of computer technology, systems analysis and design, and organizational theory and design are amalgamated.

## IFSM 495 Systems Engineering (3)

Prerequisite: IFSM 300; at least 9 credits in upper-level computing courses recommended. A project-oriented capstone study of systems engineering. Focus is on designing and developing the logical specifications for a system, then tracking the design through the analysis and implementation phases. Research and documentation techniques are stressed.

## IFSM 498 Special Topics in Information Systems (1-3)

A seminar on topics in the design and implementation of information-processing systems.

## IFSM 498D Data Mining: Introduction and Application (3)

Prerequisites: IFSM 410 and a working knowledge of statistics and Structured Query Language. An introduction to data mining with hands-on computer research using state-of-theart data mining tools. Emphasis is on the process used to successfully conduct a datamining project, along with real-world applications and examples. Techniques studied include decision trees, memory-based reasoning, neural networks, affinity analysis, link analysis, and clustering. C ommercially avai able data mining tools and products are used to explore, compare, and contrast technique strengths and weaknesses.

## IFSM 498E Enterprise Network <br> Management (3)

Prerequisite: IFSM 450. An introduction to network and enterprise management. A detailed analysis of Simple $N$ etwork $M$ anagement Protocol (SN M P), the technology upon which most enterprise management systems are based, is provided. The strengths and weaknesses of commercial applications currently underpinned by SN M P are explored. Emphasis is on selecting the appropriate application for a workplace.

## IFSM 498F Information Technology Infrastructure of Electronic Commerce (3)

Prerequisite: IFSM 300 or equivalent. An introduction to both the theory and practice of doing business over the Internet and World Wide Web. Topics include general structure, protocols, utility programs, popular Internet applications, and Web client and 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 issues are also explored.

## IFSM 498G E-Commerce and Customer Relationship Management (3)

Prerequisite: IFSM 300 or equivalent. An exploration of electronic commerce and customer relationship management. Focus is on the importance of the provider developing a relationship based on trust with the customer. Topics include electronic commerce design issues (such as risk mitigation, control, audit, and security) that affect the trust-based relationship between provider and customer. Trends and the future of electronic commerce are also discussed.

## IFSM 498H Information Security and E-Commerce (3)

Prerequisite: IFSM 450. 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.

## IFSM 4980 PL/SQL

(D esigned to help prepare students to take 0 racle Application Developer Certificate Examinations 1 and 2.) Prerequisites: IFSM 411 (or equivalent SQ L programming experience) and knowledge of the O racle SQ L*Plus environment. An in-depth study of the use of PL/SQL to develop enterpriselevel database applications in industry. Topics include application programs, Graphical User Interface (GUI) forms, and standard third-generation language (3GL) programming constructs (such as IF-THEN-ELSE, LO O PS, record-at-atime processing, and error handling).

## IFSM 498S Seminar: Issues in Computer Technology (3)

Prerequiste: 9 credits in upper-level IFSM, CM IS, or C M SC courses. An examination of selected recent developments in information systems technology. Issues, strategies, and policy developments for managing the use of information technology in today's changing environment are investigated via a seminar format. Emphasis is on the implementation of new technology, its impact on the organization, and the manager's role in the process.

## IFSM 498U Rapid Application Prototyping for System Development (3)

Prerequisite: IFSM 460 or IFSM 465. An examination of rapid application prototyping techniques for planning, designing, and implementing a functional and effective information system. Topics include information modeling techniques and the impact of business process reengineering on systems development. Joint application development models for developing business, process, and data models are used.

## IFSM 498V Health Information-Systems Management (3)

Prerequisite: H M GT 320 or IFSM 300. A study of the use of health information systems to manage the flow of data in various medical professions- a key factor in managing health care costs. The systems perspective is examined in assessing, selecting, and implementing vital processes within the organization. Topics include billing and scheduling systems, accounting and financial information systems, medical records, processing, imaging systems, staffing and work flow, and medical research systems. Governmental and public policy issues related to the transmittal of health care data are al so considered. Students may receive credit for only one of the following courses: HM GT 498 V or IFSM 498 V .

## Japanese

Courses in Japanese (designated JAPN ) may be applied as appropriate (according to individual program requirements) toward

- the general education requirement for arts and humanities and international perspective coursework;
- a major or minor in humanities;
- a minor in Asian studies; and
- electives.

U M U C offers a limited number of foreign language courses each semester.
A description of the curriculum for the humanities major and minor begins on p. 52.

## JAPN 105 Introduction to Japanese Language and Culture (3)

( $N$ ot open to students whose native language is Japanese. Conducted in English. Fulfills the international perspective requirement.) An introduction to Japanese language and culture. Emphasis is on practical application.

## Journalism

Courses in journalism (designated JO UR) 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 . 58. Descriptions of related curricula may be found on the following pages: communication studies ( $p .33$ ) and speech communication (p. 68).

## JOUR 201 Writing for the Mass Media (3)

Recommended: 30 wpm typing ability. An introduction to researching, organizing, and writing news and feature articles for the mass media, including print and online newspapers and broadcast media. Emphasis is on writing, from mechanics (grammar, spelling, punctuation, and style) to content (accuracy, completeness, audience, and readability).

## JOUR 202 Editing for the Mass Media (3)

Prerequisite: JOUR 201. Presentation of the basic editing skills that apply to all mass media. Copyediting, graphic principles and processes, and news-media technology are surveyed. Students may receive credit for only one of the following courses: JO UR 202 or JOUR 310.

## JOUR 320 News Reporting (3)

Prerequiste: JOUR 202. A survey of the principles and practices of news reporting. Emphasis is on gathering news for all the media and on covering news beats and other news sources. Researching a news story for accuracy, comprehensiveness, and interpretation is covered.

## 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 rela tions process.

## JOUR 331 Public Relations Techniques (3)

Prerequisite: JOUR 330. A review of the techniques of public relations. Emphasis is on news releases, publications and printed materials, speeches, special events, and audiovisual media. Techniques are applied in laboratory and field projects. Students may receive credit only for only one of the following courses: BM GT 398U or JOUR 331.

## JOUR 334 Public Relations Programs (3)

Prerequisite: JOUR 330. Analysis of eight major programs typically carried out by public relations: employee relations, media relations, financial relations, member relations, governmental relations, community relations, fund raising, and dealing with an activist public.

## JOUR 340 Advertising Communication (3)

Prerequisite: JOUR 202. An exploration of advertising within mass communication and an evaluation of its role in the public-information system of the United States. The application of communication theory and research methods to the research, planning, communication, and evaluation aspects of global advertising is discussed.

## JOUR 341 Advertising Techniques (3)

Prerequisite: JOUR 340. A study of theory and practice in writing and producing advertisements for the print and broadcast media. O pportunities for applying techniques are provided through laboratory and field projects.

## JOUR 345 Advertising Campaigns (3)

Prerequisite: JOUR 341. A discussion of ways to plan and execute advertising campaigns in typical situations that arise in an advertising agency. Integration of advertising theories and techniques into a complete campaign is covered.

## 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: JO UR 201. An exploration of the 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. The medium and its specialized audiences are analyzed. Practice in researching and writing the feature article, and in evaluating freelance markets, is provided.

## JOUR 380 Science Writing for Magazines and Newspapers (3)

Prerequisite: JO UR 320. An introduction to writing and editing scientific and technical material for both the general audience and the specialist.

## JOUR 400 Law of Mass Communication (3)

(N o previous study of law required; however, a fundamental knowledge of U.S. government is essential.) Recommended: GVPT 170 or equivalent. A review of the fields of law that affect the working journalist: copyright, FCC, defamation, invasion of privacy, freedom of information, and freedom of speech and the press. Traditional limits on speech in the areas of advertising, obscenity, and criminal justice are also examined.

## JOUR 410 History of Mass Communication (3)

(Fulfills the historical perspective requirement.) 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)

(O pen to all students.) Study of issues of special concern and current interest. M ay 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. 12). An opportunity to combine aca demic theory with new, career-related experience in journalism. 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 deline ated in the Learning Proposal; and the course requirements must be completed. M ay 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 the ory to 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.

## JOUR 486B Internship in Journalism Through Co-op (6)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p .12 ). 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. M ay 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 to 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.

## K orean

Courses in K orean (designated KO RN ) may be applied as appropriate (according to individual program requirements) toward

- the general education requirement for arts and humanities and international perspective coursework;
- a major or minor in humanities;
- a minor in Asian studies; and
- electives.

U M UC offers a limited number of foreign language courses each semester.
A description of the curriculum for the humanities major and minor begins on p. 52.

## KORN 105 Introduction to Korean Language and Culture (3)

(N ot open to students whose native language is K orean. Conducted in English. Fulfills the international perspective requirement.) An introduction to K orean language and culture. Emphasis is on practical application.

## 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 writing; LGST 360 and 363A may be applied toward the general education requirement in computing.

Students who have already received credit for courses designated PLGL may not receive credit for comparable courses designated LGST.

A description of the legal studies major begins on $p .58$.

## LGST 101 Introduction to Law (3)

(Formerly PLGL 101.) A survey of the U.S. legal system and the role of the paral egal 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)

(Formerly PLGL 200.) Prerequisite: LGST 101. An introduction to the book-based methods paralegals use 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. C omputer-assisted research systems are introduced. Assignments require legal research in a library with a law collection. Students may receive credit for only one of the following courses: LGST 200 or PLGL 200.

## LGST 201 Legal Writing (3)

(Formerly PLGL 201.) 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 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)

(Formerly PLGL 204. Fulfills the civic responsibility requirement.) A survey of basic principles relating to the ethical practice of law and the responsibilities of paralegals. Rules and guidelines governing the ethical conduct of lawyers and nonlawyers are introduced. Also covered are law office management principles relevant to ethical requirements. Students may receive credit for only one of the following courses: LGST 204 or PLGL 204.

## LGST 223 Investigative Techniques (3)

(Formerly PLGL 223.) An exploration of the techniques for gathering factual information relevant to legal situations. Topics include interviewing and using a wide variety of print and online resources to obtain information related to individuals, businesses, institutions, and organizations. Students may receive credit for only one of the following courses: CCJS 220, LGST 223, or PLGL 223.

## LGST 312 Torts (3)

(Formerly PLGL 312.) 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)

(Formerly PLGL 398H .) A thorough study of the M aryland Workers' Compensation Act and the practice of workers' compensation law in $M$ aryland. 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)

(Formerly PLGL 315.) Prerequisite: LGST 201. A study of the various legal aspects of family law. Emphasis is on the processes, procedures, and writings a paralegal may handle. Topics include divorce, separation, and annulment; child custody and visitation; and alimony, child support, disposition of property, and legal rights of children. Relevant aspects of civil procedures, enforcement, and the modification of orders and agreements are covered. Assignments include legal research and written analysis. Students may receive credit for only one of the following courses: FM CD 487, LGST 315, or PLGL 315.

## LGST 316 Estates and Probate (3)

(Formerly PLGL 316.) Prerequisite: LGST 201. A study of the legal concepts entailed in drafting and preparing simple wills and administering estates in M aryland, 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)

(Formerly PLGL 320.) 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)

(Formerly PLGL 322.) 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)

(Formerly PLGL 325.) 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)

(Formerly PLGL 327. Fulfills the civic responsibility requirement.) An overview of the various processes and techniques to settle disputes without court adjudication. Topics include negotiation, mediation, and arbitration, and the role of the paralegal in these areas. Students may receive credit for only one of the following courses: LGST 327, PLGL 327, or PLGL 398G.

## LGST 330 Administrative Law (3)

(Formerly PLGL 330.) 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 333 Administrative Advocacy (3)

(Formerly PLGL 398P.) Prerequisite: LGST 201. The fundamentals of preparing and presenting a case at an administrative agency hearing that allows representation by nonattorneys. 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. Assignments include legal research and written analysis. Students may receive credit for only one of the following courses: LGST 333 or PLGL 398P.

## LGST 335 Elder Law (3)

(Formerly PLGL 335.) 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)

(Formerly PLGL 340.) Prerequisite: LGST 201. A comprehensive study of the major areas of contract law that paralegals are most likely to encounter. Topics include the legal concepts of formation; modification, assignment, delegation, and status of possible third-party beneficiaries; interpretation and enforcement; discharge; breach and remedies for breach; the statute of frauds; and the parole evidence rule. 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)

(Formerly PLGL 343.) Prerequisite: LGST 201. A study of the essentials of real estate law. Emphasis is on settlement procedures in $M$ aryland, with a study of the processes, procedures, and writings for which a paralegal may be responsible. Discussion covers real estate contracts, types and sources of mortgage financing, title work, and closing and settlement. O ther topics examined include easements and covenants, and condos, PUD s, 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)

(Formerly PLGL 398K.) 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)

(Formerly PLGL 360.) Prerequisite: Basic familiarity with computers. An overview of uses of computer software in the legal environment for the prospective paral egal. The concepts and theory of computer operations are explained in the context of needs analysis for law firms. Applications such as text processing, database management, electronic spreadsheets, timekeeping, docket control, and litigation support are emphasized. 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)

(Formerly PLGL 363A.) 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, and project management. Students may receive credit for only one of the following courses: LGST 363A or PLGL 363A.

## LGST 370 Advanced Legal Analysis (3)

(Formerly PLGL 370.) Prerequisite: LGST 201. An advanced study of the legal analysis skills needed by the paralegal to successfully complete a variety of tasks in the legal environment. Skills covered include spotting and framing legal issues, identifying and applying relevant law to predict and to 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 400 Advanced Legal Research (3)

(Formerly PLGL 400.) Prerequisites: LGST 200 and 201. An exhaustive study of methods and techniques for planning and completing a complex legal research project. Features and uses of book-based and 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)

(Formerly PLGL 401.) 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)

(Formerly PLGL 411.) Prerequisites: LGST 201 and 340. A general overview of consumer protection law and the roles of federal, state, and local agencies for the prospective paralegal. 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)

(Formerly PLGL 415.) 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)

(Formerly PLGL 420.) 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 420, or PLGL 398F.

## LGST 425 Advanced Civil Litigation (3)

(Formerly PLGL 398N .) Prerequisites: LGST 201 and 325; LGST 322 recommended. 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)

(Formerly PLGL 431.) Prerequisites: LGST 201 and 330. 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 434 Government Contracts (3)

(Formerly PLGL 434.) 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. M ethods 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)

(Formerly PLGL 442.) 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)

(Formerly PLGL 3980.) 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 3980.

## LGST 450 Bankruptcy Law (3)

(Formerly PLGL 450.) Prerequisites: LGST 201. A study of the bankruptcy code and 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. 12). 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 total of 180 hours during the Co-op session; four new tasks must be deline ated 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 the ory to 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.

## LGST 486B Legal Studies Internship Through Co-op (6)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 12). An opportunity to combine academic theory with new, career-related experience in legal studies. At least 20 hours per weak 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. M ay 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 to 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.

## Library Skills

Courses in library skills (designated LIBS) may be applied toward

- the general education requirement in information literacy; and
- electives.


## LIBS 100 Introduction to Library Research (1)

An introduction to the scope of library resources. Experience in selecting research topics and using advanced techniques to retrieve information on topics of professional or personal interest is provided through the process of preparing a research pathfinder or a bibliogra phy. Topics include the use of libraries, online computer-search services and databoses, government documents and technical reports, and indexes and abstracts of periodicals. Students may receive credit for only one of the following courses: COM P 111, LIBS 100, or LIBS 150.

## LIBS 150 Information Literacy and Research Methods (1)

A self-paced tutorial that provides 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 UM UC Information and Library Services' electronic resources to find information; and evaluating, organizing, and correctly citing the information found. Students may receive credit for only one of the following courses: CO M P 111, LIBS 100, or LIBS 150.

## M anagement Studies

Courses in management studies (designated M GST) may be applied as appropriate (according to individual program requirements) toward

- a major or minor in management studies; and
- electives.

A description of the curriculum for the management studies major and minor begins on $p$. 59. Descriptions of related curricula may be found on the following pages: accounting (p. 25), business administration (p. 29), environmental management (p. 44), fire science (p. 46), human resource management (p. 54), and marketing (p. 61).

## MGST 120 Fundamentals of the Accounting Process (3)

(For students with little or no prior background in accounting. Not open to students who have succesfully completed ACCT 220 or an equivalent course in financial accounting.) A study of the analysis and recording of business transactions. The entire accounting cycle, from journal and ledger entries to the preparation and analysis of financial statements, is examined in-depth for both service and retail concerns. Topics include special journals and cash and payroll accounting.

## MGST 140 Personal Financial Management (3)

An examination of personal financial management, blending financial theory with financial applications. Focus is on developing personal skills in financial management (such as balancing a checkbook, budgeting personal income and expenditures, and planning for financial security and retirement). Topics include elements of the U.S. financial structure (such as savings and investment alternatives, financing and credit sources, the role of insurance in protecting income and assets, and federal income tax requirements).

## MGST 161 Managerial Communication Skills (3)

An examination of the communication model. Practice is provided in sending and receiving information through reading, writing, listening, speaking, and observing nonverbal cues using job-related situations.

## MGST 162 Personnel Counseling (3)

A study of counseling as part of a supervisor's responsibilities. The counseling process is examined through role playing exercises. Focus is on developing skills in areas such as active listening and observing, focusing on the problem, empathetic understanding, guiding decision making, and recognizing referral situations. Counseling situations (e.g., performance appraisals, gender issues, personal crises that affect work performance, and pefformance problems) are drawn from the work environment.

## MGST 310 Managerial Leadership (3)

Prerequisite: BM GT 110 or equivalent business or management expe rience. Advanced study of the characteristics of leaders, as opposed to those of managers and administrators. Concepts of influence, power, and effectiveness are explored. The situational approach to lemdership, with its effects on participation, delegation, and decision making, is also considered. Practice in the techniques of effective leadership (motivation, delegation, conflict resolution, employee performance evaluation, etc.) is emphasized. Students may receive credit for only one of the following courses: M GM T 300, M GST 310, or TEM N 310.

## MGST 315 Organizational Communication (3)

Prerequisite: BM GT 110 or equivalent business or management experience. A study of organizations and communication as a framework for understanding the link between the two. Theories and concepts of organizational behavior and communication are discussed. C ase histories, class exercises, and projects are used to analyze the structure and problems of organizational communication and examine skills and techniques to manage it more effectively. Students may receive credit for only one of the following courses: M GM T 320, M GST 315, or TEM N 315.

## MGST 320 Governmental Accounting (3)

Prerequisites: BM GT 110 (or equivalent business or management experience) and ACCT 221. An examination of both accounting and reporting concepts and standards, and procedures that apply to state and federal organizations. Financial management factors are examined, along with problems peculiar to the not-for-profit sector.

## MGST 398 Special Topics in Management Studies (1-3)

Investigation of special topics focusing on relevant problems and general interest. $M$ ay be repeated when topics differ.

## MGST 486A Internship in Management Studies Through Co-op (3)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 12). An opportunity to combine academic theory with new, career-related experience in management studies. At least 12 hours per week must be devoted to new tasks for a total of 180 hours during the C o-op session; four new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. M ay be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to management studies and that continues to advance application of academic theory to 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.

## MGST 486B Internship in Management Studies Through Co-op (6)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 12). An opportunity to combine academic theory with new, career-related experience in management 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 require ments must be completed. M ay be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to management studies and that continues to advance application of academic theory to the workplace. Students may earn up to 15 semester hours in all internship coursework through C o-op toward a first bachelor's degree and up to 9 semester hours toward a second bachelor's degree.

## M arketing

Courses in marketing (designated M RKT ) may be applied as appropriate (according to individual program requirements) toward

- a major or minor in marketing, business administration, 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 $p$. 61. Descriptions of other management-related curricula may be found on the following pages: accounting (p. 25), business administration (p. 29), environmental management (p. 44), fire science (p. 46), human resource management (p. 54), and manage ment studies (p. 59).

## MRKT 310 Marketing Principles and Organization (3)

(Formerly BM GT 350.) Prerequisite: ECON 203 or equivalent. 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: BM GT 350, M GM T 322, M RKT 310, or TM GT 322.

## MRKT 312 Services Marketing (3)

(Formerly BM GT and M GMT 498D.) Prerequisite: M RKT 310 or equival ent. Evaluation of successes and failures in the marketing of services in service businesses, professional service firms, and government agency settings. Topics include marketing research and analysis; segmentation; strategic planning; design of services and training; customer service and service quality; channel management; pricing; advertising and sales promotion; sales; and implementation, monitoring, and control. Students may receive credit only once under this course number and for only one of the following courses: BM GT 498D, M GM T 498D, or MRKT 312.

## MRKT 314 Nonprofit Marketing (3)

(Formerly BM GT 398B.) Prerequisite: M RKT 310 or equivalent. 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: BM GT 398B or M RKT 314.

## MRKT 317 Issues in Pricing (1)

(Formerly BM GT and M GM T 398V.) Prerequisite: M RKT 310 or equivalent. An introduction to the determination of pricing for a firm's product or service. Integration of pricing strategy with other marketing-mix elements is considered. Case studies and exercises in pricing are used to examine the issues, Students may receive credit for only one of the following courses: BM GT 398V, M GMT 398V, or M RKT 317.

## MRKT 318 Exploring Internet Marketing (1)

 (Formerly BM GT 3980.) Prerequisite: M RKT 310 or equivalent. 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: BM GT 3980, BM GT 398R, M GM T 3980, M GMT 398R, or M RKT 318.
## MRKT 319 Contemporary Issues in Marketing (1)

Prerequisite: M RKT 310 or equivalent. A review of current marketing practices with emphasis on how best practices support marketing theory and relationship building. The marketing decisions of companies reported in the news within the previous year are anal yzed and their ramifications considered. New trends in marketing practices (such as the impact of technology on marketing strategy and the business cycle) are emphasized.

## MRKT 320 New Product Development (1)

Prerequisite: M RKT 310 or equivalent. An exploration of the new product development process from scanning the environment for new product ideas through development and execution of marketing strategy to commercialization. Emphasis is on the need for innovation, product adoption, and product diffusion. Development of new services is also covered.

## MRKT 321 Analyzing the Competition (1)

Prerequisite: MRKT 310 or equivalent. An overview of theoretical frameworks used to analyze industries and competitors, and how these frameworks can be used to gain and maintain competitive advantage and build relationships. Emphasis is on how competitive analysis affects marketing strategy and marketing mix decisions.

## MRKT 322 Evaluating Marketing Programs (1)

 Prerequisite: M RKT 310 or equivalent. An exploration of the techniques and tools used by marketers to assess marketing strategies. The control process, profitability analysis, customer satisfaction, expectation measures, and performance measures are reviewed. Emphasis is on appropriate corrective actions to modify marketing strategies for better results.
## MRKT 323 Fundamentals of Direct Marketing (1)

(Formerly BM GT 398C.) Prerequisite: M RKT 310 or equivalent. An introduction to direct marketing issues. Planning for direct marketing, media, production of direct marketing packages, and operations is briefly explored. Students may receive credit for only one of the following courses: BM GT 398C or M RKT 323.

MRKT 324 Developing Market Segments (1)
Prerequisite: M RKT 310 or equivalent. An in-depth review of the market segmentation process. Topics include identification of market segments, selection of target markets, and competitive positioning. Types of segmentation variables and means for obtaining segmentation data are covered.

## MRKT 325 Developing Channels for Relationship Marketing (1)

Prerequisite: M RKT 310 or equivalent. An introduction to the types of channel members used to build relationships and bring products and services to market. Topics include channel design, use of technology to enhance channel member performance, and assessing the channel member's ability to add value for customers. Both direct and indirect channel design are discussed.

## MRKT 353 Retail Management (3)

(Formerly BM GT 353.) Prerequisite: M RKT 310 or equivalent. 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: BM GT 353 or M RKT 353.

## MRKT 354 Integrated Marketing Communications (3)

(Formerly BM GT 354.) Prerequisites: M RKT 310 or equivalent. 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: BM GT 354 or M RKT 354.

## MRKT 357 Marketing Public Relations (3)

(Formerly BM GT 398U .) Prerequisite: M RKT 310 or equivalent. An in-depth study of how public relations has evolved from a corporate communications function to its current expanded role in the achievement of marketing and sales objectives. Discussion covers the theoretical basis of marketplace forces driving the growth of marketing public relations and how these forces can be used to create value for customers. Topics include planning marketing public relations as part of a firm's overall integrated marketing strategy and using marketing public relations to reinforce advertising messages and launch new products. Special events marketing, sports marketing, public service programming, and causerelated marketing are also discussed. C ase studies are used to assess the impact of both proactive and reactive marketing of public relations strategies. Experience with basic public relations techniques is provided in areas such as writing news, planning special events, and generating publicity and other multimedia communications used by public relations practitioners. Students may receive credit for only one of the following courses: BM G T 398 U or M RKT 357.

## MRKT 371 Professional Selling (3)

(Formerly BM GT 355.) Prerequisite: M RKT 310 or equivalent. A study of the role of selling and sales skills in the modern marketing environment. Types of selling covered include in-store and outside retailing, organizational and industrial sales, trade-show and exhibition sales, consultative sales, and telemarketing. Other topics include the psychology of selling, planning and preparation, time manage ment, profitability analysis, and the entire sales process. Students may receive credit for only one of the following courses: BM G T 355, BM GT 498B, or MRKT 371.

## MRKT 373 Marketing Channels (3)

(Formerly BM GT 388A.) Prerequisite: M RKT 310 or equivalent. A study of how strategic channel design adds value to marketing exchanges, allowing firms to sustain competitive advantage. The process of how products move from manufacturer to resellers to users is explored. C hannel members (manufacturers, wholesalers, retailers, and specialized logistics agencies), strategic channel planning and implementation, legal issues, and the impact of information sys tems and the Internet on channels are covered. Emphasis is on the roles of service quality, relationship marketing, and supplier/reseller partnerships as the keys to successful channel design. Profit and nonprofit industries, as well as international channel management issues, are addressed. Students may receive credit for only one of the following courses: BM GT 388A or M RKT 373.

## MRKT 374 Small-Business Marketing (3)

Prerequisite: M RKT 310 or equivalent. 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, including new business development, core compe tencies and technologies, marketing research, marketing planning, relationship marketing, and partnerships with customers and suppliers. M arketing 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: M GMT 332 or M RKT 374.

## MRKT 410 Consumer Behavior (3)

(Formerly BM GT 451 Consumer Analysis.) Prerequisite: M RKT 310 or equivalent; PSYC 100 or PSYC 221 recommended. An overview of the increasing importance of American consumers in the marketing system and the importance of understanding them. The foundations of consumer behavior (such as economic, social, psychological, and cultural factors) are examined. 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: BM GT 451, CNEC 437, or MRKT 410.

## MRKT 412 Marketing Research Applications (3)

(Formerly BM GT 452 M arketing Research M ethods.) Prerequistes: BM GT 230 and M RKT 310, or equivalent. A study of the specialized field of marketing research as it is used to identify market needs, profile target markets, teet 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: BM GT 452 or MRKT 412.

## MRKT 415 Independent Study in Marketing (3)

(D esigned to allow students an opportunity to explore a marketing topic of special interest.) Prerequiste: M RKT 310 or equivalent and departmental approval of a proposed topic before registration. Independent research or project in marketing, conducted under the supervision of a faculty member. Students may receive credit only once under this course number.

## MRKT 454 Global Marketing (3)

(Formerly BM GT 454. Fulfills the international perspective requirement.) Prerequisite: M RKT 310 or equivalent. 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: BM GT 454 or MRKT 454.

## MRKT 456 Advertising (3)

(Formerly BM GT 456.) Prerequisite: M RKT 310 or equivalent. 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: BM GT 456 or M RKT 456.

## MRKT 457 Web Marketing (3)

(Formerly BM GT 398R.) Prerequisites: CM ST 385 and M RKT 310, or equivalent. An exploration of how computer applications, databases, and the World W ide Web enhance the marketing process and create relationships with customers. Topics include the use of the computer in developing marketing strategy, conducting market research, and making marketing-mix decisions. Emphasis is on the Internet as a marketing communications tool; creative approaches to home page design are included. Use of the computer to measure the effectiveness of marketing efforts is also covered. Students may receive credit for only one of the following courses: BM GT 3980, BM GT 398R, M GMT 3980, or M GMT 398R.

## MRKT 471 Business Marketing (3)

(Formerly BM GT 453.) Prerequisite: M RKT 310 or equivalent. 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: BM GT 453 or MRKT 471.

## MRKT 475 Sales Management (3)

(Formerly BM GT 455.) Prerequisite: M RKT 310 or equivalent. 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: BM GT 455 or M RKT 475.

## MRKT 486A Internship in Marketing Through Co-op (3)

Prerequisites: Formal admission to the Co-op program (program requirements are listed on p . 12). 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 total of 180 hours during the C o-op session; four new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. M ay 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 to 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.

## MRKT 486B Internship in Marketing Through Co-op (6)

Prerequisites: Formal admission to the Co-op program (program requirements are listed on p .12 ). 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. M ay 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 to the workplace. Students may earn up to 15 semester hours in all internship coursework through C 0-op toward a first bachelor's degree and up to 9 semester hours toward a second bachelor's degree.

## MRKT 495 Marketing Policies and Strategies (3)

(Formerly BM GT 457. To be taken in student's last 30 semester hours.) Prerequisites: M RKT 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: BM GT 457 or M RKT 495.

## M athematics

C ourses in mathematics (designated M ATH) may be applied as appropriate (according to individual program requirements) toward

- the general education requirement in mathematics (with the exception of M ATH 009, 009M , 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 sequencell. 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
M ATH 220 Elementary Calculus I
M ATH 221 Elementary Calculus II
Approved course in statistics

## Sequence II

MATH 012 Intermediate Algebra
MATH 115* Pre-Calculus
MATH 140 Calculus I
MATH 141 CalculusII
M ATH 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 M ATH 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 301-985-7645 or by e-mail at fdes@info.umuc.edu.
A description of the curriculum for the mathematical sciences minor begins on $p$. 63. A description of the computer science major beings on p. 37.

## MATH 009 Introductory Algebra (3)

(N ot open to students who have al ready succesfully completed a higher-level mathematics course. D oes not apply toward degree requirements. Yields institutional credit only.) Prerequisite: M ATH 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: M ATH 009, M ATH 009M, or MATH 100.

## MATH 009M Introductory Algebra (3)

(For students whose academic progress is being blocked by anxiety about their mathematics coursework. D oes not apply toward degree requirements. Yields institutional credit only.) Prerequisite: M ATH 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. Strategies to build self-confidence in mathematics are offered. Students may receive credit for only one of the following courses: M ATH 009, M ATH 009 M , or MATH 100.

## MATH 012 Intermediate Algebra (3)

(D oes not apply toward degree requirements. Yields institutional credit only.) Prerequisite: M ATH 009 or an appropriate score on a placement test. A study of problem-solving techniques in intermediate level algebra. Numbers and algebraic properties, graphic skills, and applications drawn from a variety of areas (such as statistics, computing, and discrete mathematics) are emphasized. 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: M ATH 012, M ATH 101, MATH 101M, MATH 102, M ATH 102M, MATH 199A, or MATH 199M.

## MATH 105 Mathematics: Contemporary Topics and Applications (3)

( $N$ ot intended for students planning to take M ATH 107 or highernumbered 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)

(Thefirst course in the two-course series M ATH 107-108. An alternative to M ATH 115 PreCalculus.) Prerequiste: M ATH 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: M ATH 107 or MATH 115.

## MATH 108 Trigonometry and Analytic Geometry (3)

(The second course in the two-course series M ATH 107-108. An alternative to M ATH 115 PreCalculus.) Prerequisite: M ATH 107 or an appropriate score on the placement test. An introduction to trigonometric functions, identities, and equations and their applications. Analytic 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)

( N ot open to students who have completed M ATH 140 or any course for which M ATH 140 is a prerequisite.) Prerequiste: M ATH 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: M ATH 107-108 or M ATH 115.

## MATH 140 Calculus I (4)

Prerequisite(s): M ATH 107 and 108, M ATH 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: M AT H 130, M ATH 131, MATH 140, or MATH 220.

## MATH 141 Calculus II (4)

(A continuation of M ATH 140.) Prerequisite: M ATH 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: M ATH 131, M ATH 132, MATH 141, or MATH 221.

## MATH 220 Elementary Calculus I (3)

Prerequisite: M ATH 107, M ATH 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: M ATH 130, MATH 131, MATH 140 , or MATH 220.

## MATH 221 Elementary Calculus II (3)

Prerequisite: M ATH 140 or M ATH 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: M ATH 131, MATH 132, MATH 141, or MATH 221.

## MATH 240 Introduction to Linear Algebra (4)

Prerequisite: M ATH 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 trans formations, 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)

Prerequisites: M ATH 141. An introduction to multivariable cal culus. 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: M ATH 141. An introduction to the basic methods of solving differential equations. Separable, exact, and linear differential equations are addressed. The main techniques considered are 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: M ATH 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. Also discussed are 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: M ATH 301 or MATH 410.

## MATH 302 Concepts of Real Analysis II (3)

(The second course of a two-course sequence. A continuation of M ATH 301.) Prerequisite: M ATH 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: M ATH 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 anal yzing 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: M ATH 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-to-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: M ATH 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 introduction to computer algebra and Boolean algebra.

## MATH 432 Point Set Topology (3)

Prerequisite: M ATH 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: M ATH 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 CM SC 450. Accessible to advanced undergraduates majoring in computer science.) Prerequisites: CM SC 150 and M ATH 241. Elementary development of propositional logic (including the resolution method) and first-order logic (including H ebrand'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: CM SC 450 , MATH 444, M ATH 445 , or MATH 450.

## MATH 463 Complex Variables (3)

Prerequisite: M ATH 241. A survey of analytic functions, mapping properties of the elementary functions, the algebra of complex numbers, and the Cauchy integral formula. Further topics include conformal mapping as well as theory of residues and its application to evaluation of integrals.

## MATH 466 Numerical Analysis (3)

Prerequisites: M ATH 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. Also discussed are direct methods for solving linear systems and applications to finance and actuarial science.

## MATH 475 Combinatorics and Graph Theory (3)

(Also listed as CM SC 475.) Prerequisites: M ATH 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. M atching theory and graphical algorithms are also considered. Students may receive credit for only one of the following courses: CM SC 475 or M ATH 475.

## MATH 486A Internship in Mathematics Through Co-op (3)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 12). 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 total of 180 hours during the C o-op session; four new tasks must be deline ated in the Learning Proposal; and the course requirements must be completed. M ay 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 to 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.

## MATH 486B Internship in Mathematics Through Co-op (6)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 12). 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. M ay 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 to 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.

## M icrobiology

Courses in microbiology (designated MICB) may be applied as appropriate (according to individual program requirements) toward

- the general education requirement in the biological and physical sciences;
- a minor in microbiology or natural science; and
- electives.

A description of the curriculum for the microbiology minor begins on p . 63. A description of the curriculum for the natural science minor begins on $p .64$.
UM UC offers only a limited number of courses each semester in this discipline.

## MICB 200 General Microbiology (4)

(Fulfills the laboratory science requirement. Lab fee required.) 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 or MICB 200.

## MICB 310 Applied Microbiology (4)

(Fulfills the laboratory science requirement.) Prerequisite: MICB 200. 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.

## MICB 322 Microbiology and the Public (3)

An overview of the sociopolitical effects of microbial phenomena. The roles of epidemic disease, water pollution, immunization require ments, and solid-waste disposal in the current social and political problems of the United States are assessed.

## MICB 360 Medical Virology (3)

(For students interested in health-related careers.) Prerequisite: MICB 200. A summary of viral structure and multiplication, a review of the biology of the immune response, and systematic coverage of the pathogenesis and pathology of major viral diseases. Focus is on the host's response to viral infection.

## MICB 388 Special Problems in Microbiology (1-6)

Prerequisite: 8 credits in microbiology or other life science. Presentation and discussion of special subjects in the field of microbiology.

## MICB 388D Vaccine Development (3)

Recommended: M ICB 200 and 440. A discussion of the basic principles of vaccine development including bacterial and viral vaccines. W hole organism and subunit vaccines, as well as the use of adjuvants and animal models, are discussed.

## MICB 388E Epidemiology of Emerging Infections (3)

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 dengue, influenza, tuberculosis, cholera, and malaria) and those caused by flesh-eating bacteria are discussed.

## MICB 399 Microbiological Problems (1-6)

Prerequisite: 6 credits in upper-level M ICB 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 microbiology. $M$ ay be repeated to a maximum of 6 credits when topics differ.

## MICB 420 Epidemiology and Public

 Health (2)Prerequisite: M ICB 200. A history of epidemiology and its characteristic features. The role of vital statistics is examined, and the critical responsibilities of public health are highlighted.

## MICB 440 Pathogenic Microbiology (4)

(Fulfills the laboratory science requirement. Lab fee required.) Prerequiste: M ICB 200. An investigation of the role that bacteria and fungi play in human disease. Emphasis is on learning to differentiate and culture microorganisms. Types of disease and their modes of transmission are reviewed. Prophylactic, therapeutic, and epidemiological aspects of microbial diseases are investigated.

## MICB 450 Immunology (4)

(Fulfills the laboratory science requirement.) Prerequisite: MICB 440. An exposition of the principles of immunity and hypersensitivity. The fundamental techniques of immunology are presented.

## MICB 460 General Virology (3)

(Students seeking to satify the laboratory science requirement should take MICB 461). Prerequisite: M ICB 200 or equivalent. 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: M ICB 460 or MICB 461.

## MICB 461 General Virology with

 Laboratory (4)(Fulfills the laboratory science requirement. Lab fee required.) Prerequiste: MICB 200. C omprehensive 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: M ICB 460 or M ICB 461.

## MICB 470 Microbial Physiology (3)

Prerequisite: M ICB 200, BCH M 261, or equivalent. An investiga tion 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. The efficiency with which energy is used for growth is assessed; the structure and transport of membranes are examined. Bacterial chemotaxis and the regulation of replication in bacterial chromosomes are examined; the connections between RNA and protein synthesis are traced; the control of meta bolic pathways is considered.

## MICB 480 Microbial Ecology (3)

Prerequisites: CHEM 243 and M ICB 200. A study of the interaction of microorganisms with the environment, with other microorganisms, and with higher organisms. The roles of microorganisms in the biosphere are assessed. The relation of microorganisms to current environmental problems is examined.

## MICB 486A Internship in Microbiology Through Co-op (3)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 12). An opportunity to combine academic theory with new, career-related experience in microbiology. 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 daline ated in the Learning Proposal; and the course requirements must be completed. M ay be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to microbiology and that continues to advance application of academic theory to 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.

## MICB 486B Internship in Microbiology Through Co-op (6)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p . 12). An opportunity to combine academic theory with new, career-related experience in microbiology. 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. M ay be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to microbiology and that continues to advance application of academic theory to 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.

## M usic

Courses in music (designated M U SC) 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 . 52.

## 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, M USC 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: H U M N 140 or M USC 140.

## MUSC 210 The Impact of Music on Life (3)

(Formerly H U M N 211. Fulfills the civic responsibility and international pespective requirements.) A study of music as a part of culture. M aterials 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: H UM N 211 or MUSC 210.

## MUSC 436 Jazz: Then and Now (3)

(Formerly H UMN 436.) An examination of jazz during the past 75 years-its major styles and its influential artists. Students may receive credit for only one of the following courses: H UM N 436 or M USC 436.

## MUSC 448B The Music of the Symphony (1)

(Formerly H UM N 448.) An overview of the symphony, from its birth in the courts of the nobility through its growth into the definitive public musical form in the Western concert arena. Topics include the elements of the symphony; its construction, performers, and composers; and its development as a means of expression in a changing culture. Selected works are explored through reading, discussion, and active listening. The goal is to become familiar with broader trends in the symphonic syle. Students may receive credit for only one of the following courses: HUMN 448 or M USC 448B.

## N atural Science

Courses in natural science 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. 64.

## NSCI 100 Introduction to Physical Science (3)

(Formerly GN SC 100. For students not majoring or minoring in a science.) Prerequisite: M ATH 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: GN SC 100 or N SCI 100.

## NSCI 110 Introduction to Oceanography (3)

(Formerly GNSC 110. For students not majoring or minoring in a science.) A survey of the major physical and chemical facets of the oceans. Topics include the properties of water, air-sea interactions, waves, tides, and coastal geology; plate tectonics; and resources of the sea. M arine life and ecology are briefly introduced. Current topics such as El N iño, global warming, and the effects of human activity on the oceans are also discussed. Students may receive credit for only one of the following courses GN SC 110 or N SCI 110.

## NSCI 130 Introduction to Earth Science (3)

(Formerly GN SC 130. For students not majoring or minoring in a science.) A survey of the earth sciences, including Earth's surface, interior, atmosphere, and oceans. Earth's resources, the future of Earth, the sun and the planets, and Earth's place in the solar system are also discussed. Students may receive credit for only one of the following courses: GNSC 130 or NSCI 130 .

## NSCI 135 The Earth Revealed (3)

(Formerly GN SC 135. For students not majoring or minoring in a science.) A detailed overview of the geological forces that shape Earth and make it unique, and an examination of the interrelation between its inhabitants and their physical environment. Topics include the beginnings of the solar system and the evolution of Earth; major features of the sea floor; theory of plate tectonics; the evolution of mountain belts and continents; earthquakes; the origins, classifica tions, and uses of minerals; volcanoes; processes of change in minerals and rocks; erosional characteristics of moving water; deserts; and glaciers. Students may receive credit for only one of the following courses: GNSC 135 or NSCI 135.

## NSCI 170 Concepts of Meteorology (3)

(Formerly GNSC 170. For students not majoring or minoring in a science.) Prerequisite: M ATH 012. An introduction to the basic principles of atmospheric science. Topics include weather patterns and prediction, climate and climatic change, the role of Earth's topography in determining weather and climate, and the effects of the interaction of sunlight with Earth's atmosphere. The impact of humans on Earth's atmosphere is discussed (with respect to global warming, pollution, and the depletion of the ozone layer) as well as the resulting impact on humans (such as the increase in skin cancer rates). Students may receive credit for only one of the following courses: GNSC 170, GNSC 398D, or NSCI 170.

## NSCI 171 Laboratory in Meteorology (1)

(Formerly GNSC 171. For students not majoring or minoring in a science. Fulfills the laboratory science requirement.) Prerequisite: M ATH 012. Prerequisite or corequisite: NSCI 170. An introduction to the basic concepts of meteorology. Focus is on the observation, meesurement, and prediction of weather patterns and conditions, and the interpretation and analysis of meteorological data. Students may receive credit for only one of the following courses GNSC 171 or NSCI 171.

## NSCI 301 Laboratory Organization and Management (3)

(Formerly GN SC 301. D oes not fulfill the general education requirement in the biological and physical sciences.) An overview of the day-to-day organization and management of research and development laboratories. Topics include laboratory operating systems, finances and recordkeeping, communication systems, saffety 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, M EDT 301, or NSCI 301.

## NSCI 361 Global Environmental Change (6)

(Formerly GNSC 361. Also listed as BEH S 361 and H UM N 360. Yields 3 natural science credits and either 3 social science credits or 3 humanities credits. Fulfills the civic and international perspective requirements.) 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? W ill sea levels rise? W hat are the consequences of massive deforestation? W hat can be done when there is so much scientific uncertainty and global social diversity?T he 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: BEH S 361, GNSC 361 , H UM N 360, or NSCI 361.

## NSCI 398 Special Topics in Natural

Science (3)
A study of topics in the sciences of special interest to students and faculty.

## NSCI 398E Environmental Damage: Separating Fact from Fiction (1)

(Formerly GNSC 398E.) 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: BEH S 361, ENMT 301, GNSC 361, GNSC 398E, HUM N 360, N SCI 361, or NSCI 398E.

## NSCI 398I Astrobiology (3)

(Formerly GN SC 3981. 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 M ars 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 3981, or NSCI 3981.

## NSCI 399 Independent Study in Natural Science (1-6)

Prerequisite: 6 credits in upper-level natural science courses and agreement of faculty member to act as supervisor. Directed inde pendent study of topics of special interest not covered by regularly scheduled courses in natural science. M ay be repeated to a maximum of 6 credits when topics differ.

## NSCI 486A Internship in Natural Science Through Co-op (3)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 12). An opportunity to combine academic theory with new, career-related experience in natural science. At least 12 hours per week must be devoted to new tasks for a total of 180 hours during the C o-op session; four new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. M ay be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to natural science and that continues to advance application of academic theory to the workplace. Students may earn up to 15 semester hours in all internship coursework through C o-op toward a first bachelor's degree and up to 9 semester hours toward a second bachelor's degree.

## NSCI 486B Internship in Natural Science Through Co-op (6)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 12). An opportunity to combine academic theory with new, career-related experience in natural 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. M ay be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to natural science and that continues to advance application of academic theory to 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.

## Nutrition

Courses in nutrition (designated N UTR) may be applied toward

- electives.

NUTR 100 may be applied toward the general education requirement in the biological and physical sciences.

## NUTR 100 Elements of Nutrition (3)

A study of the fundamentals of human nutrition. The changing nutritional needs of individuals and families are explored. Students may receive credit for only one of the following courses: NUTR 100 or NUTR 200.

## Paralegal Studies

C ourses formerly listed under paralegal studies (and designated PLGL) are now listed under legal studies (and designated LGST).

## Pharmacology

Courses in pharmacology (designated PCOL) may be applied toward

- electives only.

Courses in this discipline do not fulfill the general education requirement in the biological and physical sciences.

## PCOL 450A Basic Pharmacology and Therapeutics I (3)

Prerequisite: Some background in a medical or biological science. A survey of the systemic effects of pharmacologic agents based on classification by group. General principles of the action of drugs are outlined, with consideration of drugs that act on the autonomic nervous system, the cardiovascular system, and the kidneys. The discussion of each group of drugs attempts to include its historical background as well as cover the physiological and the pharmacological bases of its action. Pharmacological effects, clinical indications and contraindications, recommended dosages, and toxicity are considered. For each system, a review of relevant physiology is presented.

## PCOL 450B Basic Pharmacology and Therapeutics II (3)

Prerequisite: Some background in a medical or biological science. A survey of the systemic effects of pharmacologic agents, focusing on the classification of drug groups. Agents that act on the central nervous system, endocrine agents, antibacterial agents, and cancerchemotherapeutic agents are emphasized. The discussion of each group of drugs attempts to include its historical background as well as cover the physiological and the pharmacological bases of its action. Pharmacological effects, clinical indications and contraindications, recommended dosage, and toxicity are considered. For each system, a review of relevant physiology is presented.

## 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.

U M U C 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. 52.

## PHIL 100 Introduction to Philosophy (3)

(Formerly H UM N 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: H U M N 125 or PHIL 100.

## 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: HUM N 170 or PHIL 170.

## PHIL 245 Political and Social Philosophy (3)

(Formerly H UM N 245. Fulfills the historical perspective requirement.) A critical examination of classical political theories. Examples are drawn from the work of Plato, H obbes, Locke, Rousseau, M ill, and $M$ arx. C ontemporary theories (such as those of H ayek, Rawls, and recent M arxist thinkers) are also covered. Students may receive credit for only one of the following courses: H U M N 245, PH IL 245, or PHIL 345.

## PHIL 307 Asian Philosophy (3)

(Fulfills the international perspective requirement.) An examination of the major philosophical systems of the East, and their relation to important ideas of Western thought.

## PHIL 311 Studies in Existentialism (3)

A presentation of the high points of existential philosophy as it developed over the last 150 years. In addition to the historical survey, various literary works that dramatize or embody existential viewpoints are examined.

## PHIL 320 Modern Philosophy (3)

(Fulfills the historical and international perspective requirements.) A study of major philosophical issues of the 16th, 17th, and 18th centuries. Writings of philosophers such as D escartes, N ewton, Hume, and $K$ ant are explored.

## PHIL 331 Philosophy of Art (3)

A study of concepts central to thought about art, including the concept of the fine arts both in its historical development and in its present problematic situation.

## PHIL 341 Introduction to Ethical Theory (3)

(Formerly PHIL 142. Fulfills the civic responsibility requirement.) A critical examination of classical and contemporary systems of ethics, such as those of Aristotle, Kant, M ill, and Rawls. Students may receive credit for only one of the following courses: PHIL 142 or PHIL 341.

## PHIL 342 Moral Problems in Medicine (3)

(Fulfills the civic responsibility 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: H UM N 342 or PHIL 342.

## PHIL 343 Sexual Morality (3)

(Fulfills the civic responsibility 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.

## Physics

Courses in physics (designated PH YS) 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. 64.

## PHYS 111 General Physics I (3)

Prerequisite: MATH 107; M ATH 108 recommended. A general study of physics covering classical mechanics at the level of college algebra. Elementary trigonometric and vector properties are introduced. Topics include length, time, mass, motion, force, momentum, and energy.

## PHYS 121 Fundamentals of Physics I (4)

(The first course in a two-course sequence for students majoring or minoring in science. Together with PHYS 122, generally satisfies the minimum requirement of medical and dental schools. Fulfills the laboratory science requirement.) Prerequisite: M ATH 108, M ATH 115, or knowledge of collegelevel trigonometry. An exploration of mechanics. Topics include kinematics, force, dynamics, conservation laws, and rotational motion.

## PHYS 122 Fundamentals of Physics II (4)

(A continuation of PH YS 121. Together with PH YS 121, generally satisfies the minimum requirement of medical and dental schools. Fulfills the laboratory science requirement.) Prerequisite: PH YS 121 or equivalent. An exploration of the fields of heat, sound, electricity, magnetism, optics, and modern physics.

## PHYS 161 General Physics: Mechanics and Particle Dynamics (3)

Prerequisite or corequisite: M ATH 131 or M ATH 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: PH YS 141, PH YS 161, PH YS 171, or PHYS 191.

## PHYS 262 General Physics: Vibrations,

 Waves, Heat, Electricity, and Magnetism (4)(Fulfills the laboratory science requirement.) Prerequisite: PH YS 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: PH YS 142, PH YS 192, PH YS 262, or PHYS 272.

## PHYS 263 General Physics: Electrodynamics, Light, Relativity, and Modern Physics (4)

(Fulfills the laboratory science requirement.) Prerequisite: PH YS 262. Further rigorous study of general physics. Topics include electrodynamics, M axwell's equations, and electromagnetic waves, geometrical optics; interference and diffractions; special theory of relativity; and modern physics. Students may receive credit for only one of the following courses: PH YS 263, PH YS 273, or PH YS 293.

## Psychology

Courses in psychology (designated PSYC) may be applied as appropriate (according to individual program requirements) toward

- the general education requirement in the social and behavioral sciences;
- a major or minor in psychology;
- a major in social science; and
- electives.

A description of the curriculum for the psychology major and minor begins on $p$. 65. A description of the social science major begins on $p .66$.

## 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: BEH S 101 or PSYC 100.

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

(M ay be applied toward a specialization in behavioral and social sciences.) Prerequisites: PSYC 100 and college algebra (M ATH 107, M ATH 115, or equivalent). 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: BEH S 202, BEH S 302, BM GT 230, ECON 321, GNST 201, M GM T 316, SOCY 201, or STAT 100.

## PSYC 221 Social Psychology (3)

( $M$ ay be applied toward a specialization in behavioral and social sciences.) 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: BEH S 221, BEH S 421, BEH S 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; PSYC 200 recommended. 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. O pportunities to enhance laboratory skills and gain experience in the psychological sciences are provided. Students may receive credit for only one of the following courses: PSYC 305 or PSYC 309N.

## PSYC 307 Special Topics in Psychology: Natural Science Theme (1-3)

Prerequisite: PSYC 100. Seminar discussion of topics of current interest. The areas explored may extend or augment those covered in more general topical courses. M ay 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. 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- is explored. Clinical and educational applications of computers are addressed, as are 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. Students may receive credit only once under this course title.

## PSYC 307F Psychology of Superstition (1)

Prerequisite: PSYC 100. An in-depth examination from a psychological perspective of the phenomenon known as superstition and its antidote, skepticism. Laboratory studies of superstitious behavior in animals and humans and the history of superstition are reviewed. The reasons behind the seemingly unlimited capacity for and the tenacious persistence of superstitious behavior in human beings are examined. The causes of and cures for superstition are also discussed.

## 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 depriva tion and disorders, biological rhythms, typical dreams, and dream interpretation.

## PSYC 307S Psychology of Humor (1)

(Formerly PSYC 309S.) Prerequisite: PSYC 100. A presentation of the 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. Students may receive credit only once under this course title.

## PSYC 307T Introduction to the Psychology of Sports (1)

Prerequisite: PSYC 100. An introduction to the field of sports psychology. Key topics include performance enhancement applications related to concentration, goal setting, and visualization. The application of sports psychology principles to business, the performing arts, and other areas is also explored.

## PSYC 307U Military Psychology (1)

(Formerly PSYC 309U.) Prerequisite: PSYC 100. An introduction to the basic principles of and issues in military psychology. The selection and training of personnel, the interaction of soldiers and machine systems, the development of military organizations, the use of psychology in warfare, and the clinical implications of military organizations are considered. Direct application of research to implementation in the field is also addressed. Students may receive credit only once under this course title.

## 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. Biology, personality, lifestyle, and relationships with families, peers, and communities are reviewed. Drug abuse is compared to other social problems, including self-destructive, high-risk, and sabotaging behavior. H ow different cultures respond to drug abuse is also addressed. Practice exercises, observations, interviews, and media summaries supplement class discussions. Students may receive credit only once under this course title.

## PSYC 308 Special Topics in Psychology: Social Science Theme (1-3)

Prerequisite: PSYC 100. Seminar discussion of topics of current interest. The areas explored may extend or augment those covered in more general topical courses. M ay 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 succesful 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. Students may receive credit only once under this course title.

## 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 308G Marketplace Psychology (1)

Prerequisite: PSYC 100. A study of psychological and cultural influences on consumer behavior. Special attention is given to the psychology of advertising as it pertains to marketing strategies and market segmentation. The application of relevant psychological the ory and principles to the production and delivery of advertisements is 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. Students may receive credit only once under this course title.

## 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. Both the problems that affect women as a reult of race, class, or gender and their 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)

Prerequiste: 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 relationship 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 3080 Death and Dying Across Cultures (1)

Prerequisite: PSYC 100. An overview of dying, death, and grief customs among selected racial and ethnic groups.

## 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 crosscultural skills. Students may receive credit only once under this course title.

## 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. Students may receive credit only once under this course title.

PSYC 308R Feminism in Culture and Life (1)
(Formerly PSYC 309R.) Prerequiste: PSYC 100. An overview of the impact of the feminist movement. Focus is on identifying different feminist viewpoints on pertinent issues (e.g., feminism in research) and understanding the impact of feminism on popular culture (e.g., the media) and the lives of women (e.g., family, careers, and therapy). Students may receive credit only once under this course title.

## 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, consumerism, and peace building on the legal and mental health professions. 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. Students may receive credit only once under this course title.

## PSYC 308V Psychology of Law (1)

(Formerly PSYC 309V.) Prerequiste: PSYC 100. An overview of the basic concepts and principles of the law and psychological practices, as well as the relationship between human behavior and consequences. Topics include patient rights, confidential communications, expett testimony, psychological testing and the law, and malpractice. Students may receive credit only once under this course title.

## PSYC 309 Special Topics in Psychology:

 Clinical Science Theme (1-3)Prerequisite: PSYC 100. Seminar discussion of topics of current interest. T he areas explored may extend or augment those covered in more general topical courses. M ay be repeated to a maximum of 6 credits when topics differ.

## PSYC 309B Great Cases in Psychology (1)

Prerequisite: PSYC 100. An introduction to great case histories in psychology from both a clinical and a literary point of view. C ase histories are examined in terms of effective structure and style, historical and cross-cultural perspectives, and developmental issues. Biographical, socioclinical, and nosological aspects of psychology and psychiatry are represented.

## 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, associated factors with eating disorders, and the general management of disorders.

## PSYC 309D Holistic and Medical Psychology (1)

(Formerly Psychology and M edicine.) Prerequisite: PSYC 100. A study of the mind-body connection and its relevance to sickness and health. Topics include the "placebo effect" and its relevance to today's medicine, and prevention as a major focus in today's health care environment.

## 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 issues and underpinnings are emphasized to better understand the development of disorders, the expression of these disorders, and treatment or rehabilitation.

## PSYC 309I Introduction to Psychoanalysis (1)

(N ot 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. Psychological processes that cause interpersonal conflict and those that can bring about its reduction are covered. Interpersonal and group factors, such as cooperation and negotiation, are discussed.

## 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 309N Group Psychotherapy (1)

Prerequisite: PSYC 100. An introduction to basic issues about group psychotherapy as a modality for psychotherapeutic treatment using lecture, audiovisual materials, and discussion. Emphasis is on technique and the practical problems faced by the group therapist, such as selection of appropriate clients, introduction of clients to the group, resistance, and role of the facilitator.

## PSYC 3090 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 casestudy 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 309Q Creative Arts in Psychotherapy (1)

 Prerequisite: PSYC 100; PSYC 432 or 436 recommended. An exploration of how creative-arts therapies are used in inpatient psychiatric settings (as adjuncts to psychotherapy) and many group and individual outpatient psychotherapy settings. Emphasis is on experiential learning through participation in art therapy, music therapy, movement therapy, poetry therapy, drama therapy, and psychodrama. An individual study project is based on one of the creative approaches.
## PSYC 309R Pastoral Counseling (1)

Prerequisite: PSYC 100. An overview of religious and behavioral science themes (e.g., suffering and forgiveness) that establish identity, focus, and direction for the pastoral counselor. The basic concepts and skills used in pastoral counseling (including listening and empathy and the management of feelings, prayer, and resistance) are introduced. Assessment of the client's problems, needs, and resources and therapeutic goals and methods are al so considered.

## PSYC 309S Introduction to the Psychology of Parenting (1)

Prerequisite: PSYC 100. An overview of psychological issues relevant to parenting. Key theories and research findings that directly apply to effective and ineffective parenting are presented. Topics include grand-, step-, and single-parenting; learning disabilities; the influence of media and technology; and cross-cultural aspects. Emphasis is on practical applications.

## PSYC 309W Professional Psychology (1)

Prerequisite: PSYC 100. An overview of the profession of psychology. Lessons learned in teaching, research, therapy, and organizational consulting are presented by a panel of psychologists. C areer 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, record keeping, 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; PSYC 200 and 305 recommended. 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; PSYC 200 and 305 recommended. 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)

(M ay be applied toward a specialization in behavioral and social sciences.) 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.

## PSYC 334 Psychology of Interpersonal Relationships (3)

(Fulfills the civic responsibility requirement.) Prerequisite: PSYC 100; PSYC 200 and 305 recommended. A study of research and theory on the development, maintenance, and dissolution of human relationships, followed by consideration of practical applications. Processes critical to successful relating (such as communication, bargaining, and resolution of conflict) are central topics. Focus is also on issues that are specific to troubled dyadic relations of equal partners (such as jeelousy, 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)

(Formerly PSYC 309). Also listed as ED HD 460.) Prerequisite: PSYC 100. An overview of educational psychology focusing on processes of learning. M easurement of differences between individuals (in intelligence, styles of thinking, understanding, attitudes, ability to learn, motivation, emotions, problem solving, and communication of knowledge) is investigated, and the significance of those differences is discussed. Problems in the fiedd are introduced and outlined. Examination of research in educational psychology supple ments study. Students may receive credit for only one of the following courses: EDCP 498E, ED HD 460, PSYC 309j, or PSYC 339.

## PSYC 341 Introduction to Memory and Cognition (3)

Prerequisite: PSYC 100; PSYC 200 and 305 recommended. An introduction to the 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)

(Formerly PSYC 308W.) Prerequisites: PSYC 100 and 221; PSYC 305 recommended. 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; PSYC 200 and 305 recommended. An analysis and exploration of psychological forces in small-group behavior. Issues of growth, conflict, and succesful performance are considered. Emphasis is on the application of rigorous scientific theory and research to the impact group dynamics has 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 SO CY 447.

## PSYC 353 Adult Psychopathology (3)

Prerequisite: PSYC 100; PSYC 200 and 305 recommended. An examination of mental disorders among adults. The identification and diagnosis of specific disorders are covered; etiology and treatment are investigated. 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 and international perspective require ments.) Prerequisite: PSYC 100; PSYC 200 and 305 recommended. 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, are stressed. Counseling and psychotherapeutic interactions are discussed.

## PSYC 355 Child Psychology (3)

Prerequisite: PSYC 100; PSYC 200 and 305 recommended. A survey of research and theory of 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; PSYC 200 and 305 recommended. 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; PSYC 200 and 305 recommended. 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. Theory and research are studied, and their implications are discussed.

## PSYC 361 Survey of Industrial and Organizational Psychology (3)

Prerequisite: PSYC 100; PSYC 200 and 305 recommended. A general survey of the field of industrial and 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; PSYC 200 and 305 recommended. 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.

## PSYC 385 Health Psychology (3)

Prerequisite: PSYC 100; PSYC 305 and either PSYC 337 or PSYC 353 recommended. 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)

( $M$ ay be applied toward a specialization in behavioral and social science.) 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 organizations, political climate, definitions of achievement, socioeconomic pressures, and the conflicts 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: BEH S 463 or PSYC 386.

PSYC 391 Introduction to Neuropsychology (3)
Prerequisites: PSYC 100, PSYC 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; PSYC 200 and 305 recommended. 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; PSYC 200 and 305 recommended. An inquiry into the 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 Applied Behavior Analysis (3)

Prerequisites: PSYC 100 and 200; PSYC 305 recommended. A review of various features of human behavior. Literature on theory and research is evaluated in the application of operant and respondent conditioning principles. Approaches to behavioral problems in school, home, and professional settings are analyzed.

## 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; PSYC 200 and 305 recommended. 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; PSYC 200 and 305 recommended. A review and analysis of the major phenomena and theories of human learning. Conditioning, the application of behavior analysis to realworld problems, and laboratory techniques in learning research are also presented.

## PSYC 442 Psychology of Language (3)

Prerequisites: PSYC 100 and 341; PSYC 200 and 305 recommended. 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. The role of language as part of cognitive development is assessed, and the relation of language comprehension to thought is analyzed.

## PSYC 443 Thinking and Problem Solving (3)

 Prerequisites: PSYC 100 and 341 ; PSYC 200 and 305 recommended. 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 fied. M ajor 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); PSYC 357 recommended. An exploration of the psychological effects of death and dying on human behavior. D eath-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; PSYC 305 recommended. 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)

(M ay be applied toward a specialization in behavioral and social sciences.) Prerequisite: PSYC 100; PSYC 361 recommended. 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 popula tion 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 Organizational Settings (3)

Prerequisites: PSYC 100 and 361; PSYC 200 recommended. 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 workrelated attitudes. Theory, research, and practice are integrated.

## PSYC 464 Psychology of Leaders in Work Organizations (3)

Prerequisites: PSYC 100 and 361 ; PSYC 200 and 305 recommended. 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 manager's 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)

(M ay be applied toward a specialization in behavioral and social sciences.) Prerequisite: PSYC 100; PSYC 200 and 361 recommended. 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: BEH S 411 or PSYC 465.

## PSYC 466 Environmental and Ecological Psychology (3)

Prerequisite: PSYC 100; PSYC 200 and 305 recommended. An examination of the measurement, description, and impact of the physical environments that affect various aspects of cognition and social behavior in school, at work, and at leisure. Topics include responses to environmental stress and catastrophes, personal and space territoriality, urban living, and psychological solutions to everyday environmental problems.

## PSYC 486A Psychology Field Experience Through Co-op (3)

Prerequisites: Formal admission to the Co-op program (program requirements are listed on p .12 ); a minimum GPA (overall and in PSYC) of 3.0; and PSYC 305 (for a research experience) or PSYC 436 (for a clinical experience). An opportunity to combine academic theory with supervised field experience in hospital, school, clinical, and research or other appropriate work settings in clinical psychology, psychology research, or other psychology-related areas. 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 (participation in online class discussions and completion of five academic assignments) must be completed. M ay 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 to 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.

## PSYC 486B Psychology Field Experience Through Co-op (6)

Prerequisites: Formal admission to the Co-op program (program requirements are listed on p .12 ); a minimum GPA (overall and in PSYC) of 3.0; and PSYC 305 (for a research experience) or PSYC 436 (for a clinical experience). An opportunity to combine academic theory with supervised field experience in hospital, school, clinical, and research or other appropriate work settings in clinical psychology, psychology research, or other psychology-related areas. 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 (participation in online class discussions and completion of five academic assignments) must be completed. $M$ ay 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 to 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.

## Sociology

Courses in sociology (designated SO CY) may be applied as appropriate (according to individual program requirements) toward

- the general education requirement in the social and behavioral sciences;
- a minor in sociology;
- a major in social science; and
- electives.

A description of the curriculum for the sociology minor begins on p. 67. A description of the curriculum for the social science major begins on p. 66.

## SOCY 100 Introduction to Sociology (3)

An introduction to the fundamental concepts and principles of sociology. The study of cultures, patterns of social values, social institutions, stratification, and social change is delineated. Students may receive credit for only one of the following courses: BEH S 102, BEH S 312, SOCY 100, or SOCY 311.

## SOCY 105 Introduction to Contemporary Social Problems (3)

(Fulfills the civic responsibility requirement.) An exploration of various personal, institutional, cultural, and historical or global problems that confront American society today. Problems range from drugs, divorce, crime, mental illness, the environment, and alienation in modern society to economic and political conflicts that are national and global in nature. Special attention is paid to high-tech virtual reality as a new arena for problematic social issues.

## SOCY 201 Introductory Statistics for Sociology (4)

Prerequisite: SOCY 100 or equivalent. An overview of elementary descriptive and inferential statistics. Presentation covers constructing and percentaging bivariate contingency tables, discovering frequency distributions and presenting them in graphics, and calculating measures of central tendency and dispersion. Other topics include parametric and nonparametric measures of association and correIation; regression; probability; hypothesis testing; the normal, binomial, and chi-square distributions; and point and interval estimates. Students who receive credit for SOCY 201 may not receive credit for the following courses: BEHS 202, BEH S 302, BM GT 230, ECON 321, GNST 201, M GMT 316, PSYC 200, or STAT 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 SO CY 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 socie ty, 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)

(M ay be applied toward a specialization in behavioral and social science. Fulfills the historical and international perspective require ments.) 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 popuIation dynamics. Issues of fertility (such as teenage pregnancy, the timing of parenthood, and the determinants and consequences of family size) are discussed 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 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. O ccupational 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: Two courses 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 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 and international perspective require ments.) Prerequisite: 3 credits in sociology. An exposition of basic social processes in the relations of ethnic groups, immigrant groups, African Americans, and $N$ ative Americans in the United States, and of ethnic minorities in Europe.

## SOCY 424 Sociology of Race Relations (3)

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 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 how 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 the ories 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 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 464 Military Sociology (3)

Prerequisite: 3 credits in sociology. An overview of social change and its effects on the growth of military institutions. The structure of complex formal military organizations is clarified. M ilitary service is evaluated as an occupation or a profession. The sociology of military life as a distinct cultural ethos is probed. The interrelations of military institutions, civilian communities, and society are explored.

## SOCY 486A Internship in Sociology Through Co-op (3)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 12). An opportunity to combine academic theory with new, career-related experience in sociology. At least 12 hours per weak must be devoted to new tasks for a total of 180 hours during the C o-op session; four new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. M ay 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 to 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.

SOCY 486B Internship in Sociology Through Co-op (6)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 12). 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. M ay 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 to 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.

## Spanish

Courses in Spanish (designated SPAN ) may be applied as appropriate (according to individual program requirements) toward

- the general education requirement for arts and humanities and international perspective coursework;
- a major or minor in humanities;
- a certificate in Workplace Spanish; and
- electives.

U M UC offers a limited number of foreign language courses each semester.
A description of the curriculum for the humanities major and minor begins on p. 52.

## SPAN 101 Elementary Spanish I (4)

(O pen only to students with fewer than two years of Spanish. Fulfills the international perspective requirement. Video programs, W indows 95, sound card, microphone, and CD-ROM required for online sections.) Introduction to the basic structures, vocabulary, and pronunciation of the Spanish language. Focus is on developing working proficiency in the four skills of listening, speaking, reading, and writing, using authentic, unedited spoken and written text to find and communicate information.

## SPAN 102 Elementary Spanish II (4)

(Fulfills the international perspective requirement. Video programs, W indows 95, sound card, microphone, and CD-ROM required for online sections.) Prerequisite: SPAN 101 or equivalent. Further study of the functions and structures of the Spanish language. Focus is on developing working proficiency in the four skills of listening, speaking, reading, and writing, using authentic, unedited spoken and written text to find and communicate information.

## SPAN 201 Intermediate Spanish (4)

(Fulfills the international perspective requirement. Video programs, W indows 95, sound card, microphone, and CD-ROM required for online sections.) Prerequisite: SPAN 102 or equivalent. Continued development of the functions and structures of the Spanish language. Focus is on the four skills of listening, speaking, reading, and writing, using authentic, unedited spoken and written text to find and communicate information, with emphasis on workplace situations. Students may receive credit for only one of the following courses: SPAN 201 or SPAN 203.

## SPAN 315 Commercial Spanish I (3)

(Fulfills the international perspective requirement. Video programs, W indows 95, sound card, microphone, and CD-RO M required for online sections.) Prerequisite: At least 9 credits in Spanish or equivalent. A study of business terminology, vocabulary, formats, and practices. Emphasis is on everyday spoken and written workplace Spanish, using authentic, unedited readings and discussion of Spanish commercial topics. Exposure to Spanish business environments is included.

## SPAN 360 Work Projects in Spanish (1)

(Video programs, W indows 95, sound card, microphone, and CD-ROM required for online sections.) Prerequisite: SPAN 201 or equivalent Spanish proficiency. A project in Spanish involving specific vocabulary, forms of professional communication, and cultural protocols relevant to the student's workplace or major. Projects must involve spoken and written research or preparation and spoken and written reporting or presentation. $M$ ay be repeated to a maximum of 4 credits when topics and projects differ.

## SPAN 486A Internship in Spanish Through Co-op (3)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 12). 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 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. $M$ ay 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 to 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.

## SPAN 486B Internship in Spanish Through Co-op (6)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 12). An opportunity to combine aca demic 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. M ay 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 to 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.

## Speech

C ourses in speech (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 $p$. 68. Descriptions of related curricula may be found on the following pages: communication studies (p.33) and journalism (p. 58).

## SPCH 100 Foundations of Speech Communication (3)

(Prerequisite for all 300- or 400 -level speech courses.) An overview of the principles of communication. Verbal and nonverbal language, listening, group dynamics, and public speaking are highlighted. Emphasis is on applying communication principles to contemporary problems and preparing various types of oral discourse. Students may receive credit for only one of the following courses: SPCH 100, SPCH 100X, SPCH 101, SPCH 107, or SPCH 108.

## SPCH 107 Speech Communication: Principles and Practice (3)

Study and practice in oral communication, covering principles of interviewing, group discussion, listening, informative briefings, and persuasive speeches. 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, the relationship of language to meaning, perception, listening, and feedback.

## SPCH 200 Advanced Public Speaking (3)

Prerequisite: SPCH 101, SPCH 107, or previous public speaking experience. 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 requirement.) An investigation of the way communication creates images of male and female. C onsideration 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 D elivering O rganizational Presentations: Technique and Technology.) Prerequisite: SPCH 100 or equivalent. 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: SPCH 100 or equivalent. A study of current theory, research, and techniques regarding small-group process. Group dynamics, leadership, and decision making are covered.

## SPCH 423 Communication Processes in Conferences (3)

Prerequisite: A course in speech communication. An exploration of methods of problem solving, semantic aspects of language, and interpersonal dynamics in conferences. Focus is on two aspects of conferences: how communication facilitates participation by members of the group, and how conferences function in settings of business, industry, and government.

## SPCH 424 Communication in Complex Organizations (3)

Prerequisite: A course in speech communication. An examination of the structure and function of communication in organizations. O rganizational climate and culture, information flow, networks, and role relationships are major themes.

## SPCH 426 Negotiation and Conflict Management (3)

(Fulfills the civic responsibility requirement.) Prerequisite: SPCH 100 or equivalent. 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 427 Communications Assessment (3)
Prerequisite: Familiarity with basic statistical concepts and techniques and COM M 421. Field research in designing, administering, and evaluating communication audits. M ethods for evaluating the effectiveness of particular messages in an organization's internal and external communications, such as focus groups, are studied, and the effectiveness of communication training through pre and posttesting is evaluated.

## SPCH 470 Listening (3)

(Formerly Theories of Listening.) 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. 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 and international perspective requirements.) Prerequisite: A course in speech communication. An examination of the major variables of communication in an intercultural context. Topics include cultural, racial, and national differences; stereotypes; values; cultural assumptions; and verbal and nonverbal channels.

## SPCH 486A Internship in Speech Through Co-op (3)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p . 12). An opportunity to combine academic theory with new, career-related experience in speech. At least 12 hours per week must be devoted to new tasks for a total of 180 hours during the C 0-op session; a minimum of four new tasks must be delineated in the Learning Proposal; and the course requirements must be completed. M ay be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to speech and that continues to advance application of academic theory to the workplace. Students may earn up to 15 semeter 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.

## SPCH 486B Internship in Speech Through Co-op (6)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p .12 ). An opportunity to combine academic theory with new, career-related experience in speech. 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. M ay be repeated upon approval of a new Learning Proposal that demonstrates new tasks and objectives related to speech and that continues to advance application of academic theory to the workplace. Students may earn up to 15 semester hours in all internship coursework through C o-op toward a first bachelor's degree and up to 9 semester hours toward a second bachelor's degree.

## Statistics and Probability

Courses in statistics and probability (designated STAT) may be applied as appropriate (according to individual program require ments) 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. 63.

## STAT 100 Elementary Statistics and Probability (3)

Prerequisite: M ATH 107. Introduction to the simplest tests of statistical hypotheses; applications to before-and-after and matched-pair studies; and events, probability, combinations, and independence. Topics include binomial probabilities and confidencelimits, as well as random variables, expected values, median, and variance. Explication extends to tests based on ranks, law of large numbers and normal approximation, and estimates of mean and variance. Students may receive credit for only one of the following courses: BEH S 202, BEH S 302, ECON 321, GNST 201, MATH 111, M GMT 316, PSYC 200, SO CY 201, or STAT 100.

## STAT 250 Intermediate Statistics and Probability (3)

Prerequisite: STAT 100. Further study of elementary statistics and probability. Topics include inference for two populations, population standard deviations and proportions, chi-square procedures, descriptive and inferential methods in regression and correlation, analysis of variance, multiple regression analysis, model building in regression, and experimental design and analysis of variance.

## STAT 400 Applied Probability and Statistics I (3)

Prerequisite: M ATH 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: M ATH 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-M arkov 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. 12). 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 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. M ay 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 to 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.

## STAT 486B Internship in Statistics Through Co-op (6)

Prerequisite: Formal admission to the Co-op program (program requirements are listed on p. 12). 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. M ay 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 to 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.

## 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 .52.

## THET 110 Introduction to the Theatre (3)

(Formerly HUMN 110.) An introduction to the people of the the atre: 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 H UM N 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: H U M N 111 or THET 120.

## THET 320 Acting II (3)

(A continuation of TH ET 120.) Prerequisite: THET 111 (or THET 120) or audition. Further study of the fundamentals of acting. Focus is on textual analysis, personalization, objectives, and characteriza tion in performing short plays.

## THET 420 Acting III (3)

Prerequisites: THET 221 and 320, an audition, and permission of department. Exploration and application of the techniques necessary for the preparation and performance of Shakespeare and other drama.

## Women's Studies

C ourses in women's studies (designated W M ST) 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 .70.

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

(Fulfills the civic responsibility 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

## Graduation Credit and 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. H owever, students required to take these courses do so in addition to the 120 semester hours 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 at higher levels. 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 |
| 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 passffail 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 UM UC) 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. Students must elect pass/fail grading at the time of registration. This status may not be changed after the second week of classes has ended.
This grading method is allowed only for electives. Required courses (e.g., general education courses and courses for the major and minor) may not be taken pass/fail, nor may pass/fail grading be used in retaking a course for which a letter grade was earned previously.
Students who register for pass/fail grading must still complete all the regular requirements of the course. The teacher evaluates the work under the normal procedure for letter grades and submits a regular grade. Grades of $\mathrm{A}, \mathrm{B}, \mathrm{C}$, 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 gradepoint averages.


#### Abstract

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 nota tion AU . No letter grade is given for audited courses, nor are credits earned.


## 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. H owever, 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 require ments of a course. Although it carries no credit, it is included in calculating the gradepoint 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.

## 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.
- The work already completed must be of satisfactory quality.
- 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 six 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 gradechange form to replace the mark of I on the student's record with a grade.
If the mark of I is not made up within six months or by the agreed-upon deadline, the $I$ is changed to an $F$.
The mark of I cannot be removed by means of credit by examination, nor can it be replaced by a mark of W (defined at right). 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 through the Interactive Registration and Information System (IRIS), by completing a registration-change form in Undergraduate Student Affairs, or by submitting a written request approximately two weeks before the last scheduled class in a semester or term. 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 only by submitting a Grade Adjustment Report, along with a written explanation for the change. Any change must be made no later than six 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 succesfully.

## 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 M aryland) is generally forbidden. It may be allowed only under special circumstances, with prior approval of an advisor.

## Grades and Quality Points

The gradepoint average is calculated using the quality points assigned to each grade or mark (chart on p. 218). First, the qualitypoint 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 gradepoint average of each student who has attempted at least 15 semester hours at U M UC
(except provisional students) is computed based on all UM UC graded coursework. At the end of each semester (fall, spring, or summer), Undergraduate Student Affairs takes action, required by U M UC 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 gradepoint 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 G PA 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 UM UC 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 UM UC courses until he or she is reinstated.

## Reinstatement After Dismissal

A student seeking reinstatement is required to

- H ave all official transcripts from previously attended colleges and universities sent to UMUC, preferably before meeting with an advisor.
- M eet 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, U ndergraduate Student Affairs.
D eadlines for requesting reinstatement are as follows:
Fall enrollment . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .july 15
Spring enrollment . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 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 UM UC are eligible for the D ean'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 D ean'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 D ean'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 UM UC 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 UM UC credit (including the 30 semester hours of new credit) and the requisite GPA. M ore information on attaining a second bachelor's degree may be found on p. 19.

## Honor Societies

Inquiries concerning honor societies should be addressed to the student's resource team.

## 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 UM UC courses carrying letter grades of A, B, C, D, or F. The candidate's grade point average in UM UC courses must be in the top 10 percent of the previous UM UC graduating class.

## Alpha Sigma Lambda

UM UC 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 UM UC in courses graded A, B, C, D, or F, and maintained a GPA of 3.7 or higher in all UM UC courses. At least 15 semester hours, from UM UC or transferred, must be in courses outside the major.

## Sigma Tau Delta

M embership in Sigma Tau Delta, the international English honor society, is open to qualified UM UC 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 at UM UC and must include 12 semester hours of English beyond EN GL 101 and 6 semester hours of upper-level credit. Students must also have earned a GPA of 3.6 in English coursework at UM UC.

## Phi Alpha Theta

UM UC 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 UM UC history courses and have an overall UM UC GPA of 3.4.

## 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.
C ourses offered online have their own policies on attendance. The requirements expected for participation are specified in all courses offered online.

## 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.
M ake-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 makeup examinations because of a student's absence unless the student can present evidence that it was caused by unavoidable circumstances or occurred on a religious holiday.* In such cases, an examination may be rescheduled for the mutual convenience of student and teacher and must cover only the material for which the student was originally responsible. Such a rescheduling must not cause a conflict with the student's other classes. The Testing Center schedules make-up exam sessions for students whose teachers cannot schedule a special makeup 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 succesfully complete in any one semester are normally left to the student's discretion. It should be noted, however, that the majority of UM UC 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 his or her resource team. Permission to register for more than 18 semester hours is based on demonstrated academic
excellence at UM UC. A minimum GPA of 3.5 and an enrollment history indicating success in carrying a heavier-than-average course load at UM UC are required.

## Academic Integrity

Integrity in teaching and learning is a fundamental principle of a university. UM UC believes that all members of the university community share the responsibility for academic integrity, as expressed in the University System of M aryland policy "Faculty, Student, and Institutional Rights and Responsibilities for Academic Integrity." D etails are available from the 0 ffice of the D ean, School of Undergraduate Studies.
At U M UC, faculty members are expected to ettablish 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 UM UC 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. N otes 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.
U M U C's policy on Academic Dishonesty and Plagiarism can be found at www.umuc.edu/ugphandbook/bkVI.html or is available from the O ffice of the D ean, School of Undergraduate Studies.

## Appealing a Grade

Procedures for appealing a grade are available from the 0 ffice of the D ean, School of Undergraduate Studies, or online at www.umuc.edu/ugphandbook/bkVI.html.
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 U M UC C ode of Student C onduct, which can be found at www.umuc.edulugphandbook/bkVI.html or is avail able from the O ffice of the Dean, School of Undergraduate Studies. Violations of the code are considered to be violations of UM UC policy and are grounds for discipline by UM UC. Alle gations of misconduct by U M UC students should be referred to the associate provost, Undergraduate Student Affairs.

## Required Withdrawal

When a competent authority, using established procedure, judges a student's behavior to be detrimental to the interests of the university community, the student may be required to withdraw from UM UC.

## Filing Students' Grievances

The procedures necessary to file a formal complaint concerning the actions of members of the UM UC faculty or administrative staff are available at www.umuc.edu/ugphandbook/bkVI.html or from the Office of the D ean, 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 in that office.

## Transfer of Credits from UMUC

To have credits earned through U M U C transferred, each student must obtain authoritative guidance from the destination institution (including other institutions in the University System of M aryland). O nly the destination institution can answer specific questions about its own residency and degree requirements or about the applicability of UM UC courses to its curricula. Specific policies dealing with transfer students are given in the appendices.

## Transcripts

O fficial academic records are maintained by Undergraduate Student Affairs at UM UC. O fficial transcripts show coursework taken through UM UC. For students who have received an official evaluation and have regular status, transfer credit from other institutions (including others in the U niversity System of $M$ aryland) is listed as well. The request for a transcript from UM UC and the fee should be sent to the following address:

[^21]Students who were last enrolled with UM UC in Europe or Asia should mail requests for transcripts 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.
The addresses are as follows:

| UM UC-Europe | UM UC-Asia |
| :--- | :--- |
| Att.: Transcripts | Unit 5060, Box 0100 |
| Unit 29216 | APO AP 96328-0100 |
| APO AE 09102 |  |

APO AE 09102
Students' records are considered confidential. Therefore, UM UC releases transcripts only upon receiving a signed request from the student (by mail or fax, or in person) and payment of the appropriate fee. To pay by fax, students must use VISA or M asterC ard; credit-card information must include the expiration date.
When requesting transcripts, the student must specify a full name, including maiden name or any other names under which records may be filed; student identification number; date of birth; and dates and places of attendance. Each UM U C transcript that is issued costs $\$ 5$ (rush transcripts are 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 M aryland. C hecks should be made payable to University of M aryland University College.
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.

## Application for Diploma

Before applying for a diploma, students are required to have received an official evaluation (details on p. 224).
Students who expect to complete the requirements for a degree are responsible for filing an application for a diploma with Undergraduate Student Affairs, and for 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:

$$
\begin{array}{ll}
\text { D ecember graduation } & \text { October 1 } \\
\text { M ay graduation } & \text { February } 15 \\
\text { August graduation } & \text { June } 15
\end{array}
$$

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.

A graduation ceremony is held in M ay each year. Students who completed degree requirements the previous August and D ecember, as well as those who complete their requirements that M ay, are invited to participate.

## RESPONSIBILITIES OF UMUC

UM UC 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, UM UC 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 email).

## 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.

## TEAM-BASED SERVICES TO STUDENTS

For many services, students turn to a single centralized source - their resource team - for assistance. Resource teams assist with admission, academic advising, career planning and job searches (including résumé review), and applying for financial aid and veterans benefits. Services for disabled students are provided by the Staff Support Team. C ontinuing, in-depth advice regarding financial aid is provided by the Financial Aid Office.

## Prospective or New Students

The Information and Enrollment Team serves individuals who are inquiring about becoming U M UC students at some future time, are admitted but have not yet registered, have not attended UM UC for two or more years and need to be readmitted (at no charge), or attended UM UC overseas.

Students should contact the Information and Enrollment Team at 301-985-7000 to find out about services available to help them get started.

## Enrolled Students

Students are assigned to a resource team when they enroll. E ach team provides services at times and places convenient to the students it serves. To arrange a mutually convenient time to meet with a team advisor, students should call their resource teams between 8:30 a.m. and 5 p.m. eastern time, M onday through Friday. The resource teams are as follows:

```
Based at Adelphi
(Student and Faculty Services Center)
    Rock Creek 301-985-7939 or 1-800-283-6832
    Liberty 301-985-7960 or 1-800-283-6832
    St. James 301-985-7662 or 1-800-283-6832
    W ingate 301-985-7353 or 1-800-283-6832
```

Based at Andrews Air Force Base
Seneca 301-981-3123

## Based at Annapolis

Chesapeake 410-266-3774 or 301-261-8199

## Based at Fort Meade

Chesapeake 410-551-0431 or 301-621-9882

## Based at Shady Grove

Potomac 301-738-6000

## Based at Waldorf

Patuxent 301-645-4303 or 301-870-6013
Students may check their team assignments by calling the Interactive Registration and Information System (IRIS) at 301-985-7499.

## Advising Assistance from Admission to Graduation

Each team provides prospective or enrolled students the information needed to plan an academic program. This assistance can include an evaluation of potential transfer credit, help with clarification of education and career goals, and aid in selecting appropriate courses.

## Initial Estimate of Transfer Credit

Prospective or newly admitted students can have a review of their potential transfer credit done by an Information and Enrollment Team advisor. This review is an estimate of the academic credit U M U C might accept toward a particular degree and of the requirements that would remain to be fulfilled. (Sources of credit are described on p .10 .) This review is not binding on either the student or UM UC 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.
- Send their official international transcripts to the international credit evaluation services selected by UM UC. (Forms are available online at www.umuc.edu/studserv/credeval.html or may be requested by calling 301-985-7000.)
- Pay fees associated with the international evaluation.
- H ave 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 UM UC, with a cumulative grade-point average (GPA) of 2.0 or better, are eligible to request an official evaluation of their transfer credit. For this evalua tion, students need to submit official transcripts from all colleges and universities previously attended, including other institutions of
the University System of M aryland, whether or not transfer credit is requested or granted. UM UC 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 U M UC degree.
An official evaluation

- Includes all transfer credits earned up to the date of the evaluation that may be applied to a UM UC degree program.
- Lists all courses completed at UM UC.
- 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). To be considered official, documents must be sent directly from the issuer to the following address:

```
Undergraduate Student Affairs
U niversity of M aryland University C ollege
3501 University Boulevard East
Adelphi, M D 20783-8070
```

Students should apply for an official evaluation early in their program. No one may apply for graduation before receiving an official evaluation.

## FINANCIAL AID

U M UC 's Financial Aid 0 ffice 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 UM UC Financial Aid Office.
UM UC 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 UM UC, not through any other office or institution of the University System of $M$ aryland. (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 UM UC need-based-assistance must

- Be admitted to UM UC as a regular degree seeking or eligible certificateseeking 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.
- D emonstrate satisfactory academic progress toward a degree or certificate according to UM UC policy.
- H ave a high school diploma or GED.
- 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 or repayment on any grant under Title IV federal student aid programs.
- N ot 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

M ost aid programs are available to both full- and part-time students. UM UC 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 2001-02 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 M aryland, and UM UC. The UM UC Financial Aid Office administers several types of gift assistance: Federal Pell Grants, Federal Supplemental Educational Opportunity Grants (SEO G), UM UC scholarships and grants, and M aryland 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 2001-02 year will range from $\$ 200$ to $\$ 1,875$ 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, firsttime undergraduates. The amount of the award varies depending
on the availability of funds allocated by the Department of Education. Typical awards during the 2001-02 year will range from $\$ 150$ to $\$ 300$ per semester. Funds are limited, so students are encouraged to apply early.
The UMUC Presidents Grant program offers grants to students who demonstrate financial need. Typical awards during the 2001-02 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 UM UC President's Scholarship, offer a number of institutional scholarships as well as scholarships from corporate donors and foundations. A separate scholarship application must be completed for considera tion. Requirements vary according to the individual scholarship programs. Typical awards range from $\$ 200$ to $\$ 1,500$ per semester, depending on the specific program. M ost scholarships require a minimum GPA for consideration. Students may refer to the UM UC scholarship brochure for further information.
Maryland state grant and scholarship programs provide financial assistance to M aryland 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 D elegate Scholarship awards are based on criteria established by the elected official. High school seniors may qualify for the Guaranteed Access Grant if they meed specific criteria. The Educational Assistance Grants are a need-based general state scholarship program. For more information, students should contact the M aryland State Scholarship Administration at 401-974-5370.
The Maryland Part-Time Grants program offers assistance to M aryland 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.
M any UM UC 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/studserv/fincaid.html.

## Loans

Loan programs are avail able 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. UM UC 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 UM UC and begins nine months after the borrower leaves school or attendance drops below half time.

The William D. Ford Federal Direct Loan program offers lowinterest 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. Thefederal 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 UM UC 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 mailed directly to the borrower. Students who are interested in an alternative student loan should contact the bank of their choice or visit UM UC's Web page on alternative student loans at www.umuc.edu/studserv/fincaid. btml for more information.

## Employment Programs for Students

UM UC 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 UMUC Student Assistants program offers U M UC students an opportunity to obtain part-time employment with UM UC, providing a flexible schedule that adjusts to the student's classes. Students should contact Undergraduate Student Affairs at 301-985-7000 for more information on the opportunities 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 in the university 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 UM UC Financial Aid D ata Form to be considered for any type of financial aid at UM UC. 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 $M$ aryland 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

O ne 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 U M UC Financial Aid $D$ ata Form by the priority deadlines shown at right.

| PROGRAM OR PERIOD | PRIORITY DEADLINE FOR |
| :--- | :--- |
| BEING APPLIED FOR | FILING FINANCIAL AID FORMS |

M aryland State Scholarships M arch 1
Full Academic Year or Fall Semester O nly
Spring Semester Only N ovember 1
Summer Semester

## Federal Return of Funds Policy

Students receiving federal financial aid have the responsibility to follow the institution's withdrawal procedures as outlined on p. 9 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. UM UC 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 al so 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 O ffice. Students can also obtain a current financial aid kit by contacting their resource team. All financial aid information and forms also are available at www.umuc.edu/studserv/fincaid.html on the U M U C Web site. Students with additional questions should either contact the Financial Aid Office by phone at 301-985-7510 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. D epartment of Veterans Affairs makes available to active-duty military personne, veterans, and their dependents who are attending UM UC:

- The Post-Vietnam Era Educational Assistance Program (VEAP, C hapter 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 M arch 31, 1987.)
- The Montgomery GI Bill-Active Duty Educational Assistance Program (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.
- Certain veterans and active-duty military personnel who were eligible for educational assistance under the GI Bill (Chapter 34) on D ecember 31, 1989, may become eligible for benefits under the M ontgomery GI Bill if they meet specific criteria (available from Undergraduate Student Affairs) and have some unused entitlement. O ther veterans who were voluntarily or involuntarily separated and who elected to participate in Chapter 30 may be eligible. Certain Post-V ietnam 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 N ovember 30, 1980, and September 30, 1981.


## Application Procedures

Students who are (or who think they may be) eligible for educational benefits from the U.S. D epartment of Veterans Affairs should contact their resource team each semester to complete necessary paperwork. Every educational-assistance program requires different paperwork and documentation to process a claim. After the paperwork has been received by the resource team, the student is certified to the U.S. D epartment of Veterans Affairs. The U.S. D epartment 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 theU.S. D epartment of Veterans Affairs depends on which assistance program the student is eligible for, how many semester hours of credit the student is registered for, how long the semester is, and for (certain programs) how many dependents the student has. Applicants should contact their resource team for detailed information.
Benefits are paid directly to students. The money may be used to help with tuition, books, or other costs of college education.
The benefits that are paid for accelerated courses differ from those granted for other types of courses. Benefits may be paid to students enrolled in Co-op courses if specific criteria are met.

## Evaluation of Prior Training

W hen a student files a claim for educational benefits, the U.S. D epartment 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. 13; 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. D epartment of Veterans Affairs while attending UMUC.
At UM UC, all regulations of the U.S. D epartment 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. Nonpunitive grades are I (Incomplete) and AU (Audit).
- 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. D epartment 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 resource team or at www.umuc.edu/studserv/vainfo.btml on the U M UC Web site.

## OTHER SERVICES

## 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 U M UC W eb site contain information about obtaining required and recommended textbooks and other materials.

## Career and Cooperative Education Center

The C areer and Cooperative Education Center at UM UC serves all UM UC 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.
$M$ any 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 the resource team advisors and representatives from Graduate Services. Students and alumni may take advantage of career resources by calling 301-985-7780, visiting the center in Adelphi, or accessing the Web page at www.umuc.edu/carcercenter. 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@info.umuc.edu.

Programs and resources of the C areer and Cooperative Education Center include

- O nline résumé posting.
- Access to online job postings.
- O nline resources and links for career decision making and development.
- Online career assessment.
- Résumé review online, by phone, or in person.
- Interview preparation.
- Job posting notebooks (available on site).
- A computer workstation available in the Adelphi offices by appointment or on a first-come, first-served basis.
- O ccasional career events and job fairs, held locally and online (publicized at www.umuc.edu/careercenter).

Workshops offered by the center include

- The Job D evelopment Seminar, offered online and on site for a fee. This seminar provides comprehensive information on preparing for and conducting a job search. O ptional 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.
- O ther topical workshops related to career issues. A schedule of upcoming topics is posted at www.umuc.edu/careercenter.
CAPL 171 Personal C areer Planning and D evelopment, a 3-credit course, is available to help students clarify their career goals by assessing their skills, values, and vocational interests; identifying career options; and using career-information resources.
Specifics about Cooperative Education may be found on p. 12.


## Disabled Students

Reasonable accomodations are available for students who have disabilities and are enrolled in any program offered at UM UC. To allow for adequate planning, students who need accommodations should contact the director of Veteran and Disabled Student Services on the Staff Support Team 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. D epending 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.
Students should call the Staff Support Team at 301-985-7930 or 301-985-7466 (TTY) for more information.

## Drug and Alcohol Awareness

As required by federal law, UM UC provides referral services for students with concerns about the use or abuse of alcohol and drugs. Students may discuss referrals with their resource team.

## Information and Library Services

UM UC's O ffice of Information and Library Services promotes the use of library technology, teaches courses in information technology and library use, and provides access to a variety of online library resources on its Web page at www.umuc.edullibrary. Services to students include direct borrowing privileges at all University System of M aryland (USM ) campus libraries; access to VICTO RW eb, the online catalog of the USM ; interlibrary loan services; access to library resources via the Internet; and guides to area libraries.
For information on library services, students may send an email message to library@info.umuc.edu or call 301-985-7209. Students outside the local calling area may call 1-800-888-U M UC. Information and Library Services, located in the Student and Faculty Services Center, is open from 8:30 a.m. to 5 p.m. eastern time, M onday through Friday. The library at the U SM Shady Grove Center provides library services and assistance M onday through Saturday.

## Direct Borrowing Privileges

Currently enrolled students have borrowing privileges at the libraries of the following institutions. To borrow materials, students must have a current validation sticker and bar code on their student identification cards.

## Bowie State University

Coppin State College
Frostburg State U niversity
M organ State University
Salisbury State University
St. M ary's C ollege of M aryland
Towson University
University of Baltimore
University of M aryland, Baltimore
University of $M$ aryland, Baltimore County
University of $M$ aryland Center for Environmental Science
University of M aryland, College Park
University of M aryland Eastern Shore
University of $M$ aryland University College

## Library Resources

Students may access an extensive array of online journal databases and national and international newspapers through M dU SA, the USM 's single database interface, via the Information and Library Services Web page at www.umuc.edu/library. M dU SA offers access to more than 60 databases, many of which are full text, in the business, management, and computing areas.

The USM online catalog, VICTO RWeb, also provides access to M dU SA, as well as to the System's books. All U SM libraries; USM and UM UC centers at Adelphi, Annapolis, Shady Grove, and Waldorf; and other UM UC regional sites offer access to VICTO RWeb. VICTO RWeb is available through any Web browser or through WebTycho. The text-based version of VICTOR is available through a Telnet connection.
Books reserved through VICTO RWeb can be picked up at any USM library, theW Waldorf Center for H igher Education, or the Annapolis Center. Students should already be registered in the library system to place a hold on books or access the journal databases. Students who are not recognized by the system should contact Information and Library Services at 301-985-7209 or by email at library@info.umuc.edu.

## Library Instruction and Research Assistance

Students are often overwhelmed by or are unaware of the vastness of the resources - print, nonprint, and automated- avai lable to them. Information and Library Services provides two sources of assistance: in-class instruction and individualized research assistance.
At the request of a faculty member, Information and Library Services can arrange for an in-class presentation to introduce students to relevant library resources. UM UC also offers LIBS 100 Introduction to Library Research and LIBS 150 Information Literacy and Research M ethods. Subjects covered in the courses include selecting research topics, developing research skills, using sources, organizing material, and footnoting.
UM UC reference librarians are avail able at the Student and Faculty Services Center in Addphi, the M C Keldin Library at College Park, and the Shady Grove Library/M edia C enter in Rockville. The reference librarians are avail able during established hours or by appointment to answer questions or provide oneto-one instruction to help students with their research needs. For more information, students may call Information and Library Services at 301-985-7209, the M cK eldin Library reference office at 301-405-9115, or the Shady Grove Library at 301-738-6020.

## Tutoring

A number of online, on-site, and referral services are available to students who are interested in academic help beyond the classroom. UM UC services that are provided online or on-site (in computing and writing) carry no charge. Fees for tutors on UM UC referral lists are arranged privately between student and tutor. Students may call 301-985-7000 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 online guide at $h t t p: / / /$ ychousa.umuc.edu/writingogdel.

Free, in-person writing services are available to UM UC students at the University of M aryland, College Park, Writing Center, located in room 0125 of Taliaferro H all on the College Park campus. Students should call 301-405-3785 for information about hours and appointments.
The UM UC O nlineWriting Center may be accessed on the Web at www.umuc.edu/writingcenter.

## Alumni Association

The U M U C Alumni Association was established in 1990 to support, enhance, and promote UM UC 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 80,000 alumni, the association offers programs and services that are beneficial to both alumni and students. In addition to funding scholarships for UM UC students, the association seeks to encourage alumni and students
to participate actively in the U M UC community by attending events, volunteering, and staying connected to their alma mater in ways that contribute to its success.
M embership in the UM UC Alumni Association is automatic upon graduation- there are no applications or fees. Following are just a few of the benefits of being a UM UC alumnus:

- Regular issues of the Achiever alumni magazine.
- U M U C start.com, a free Internet portal created exclusively for UM UC alumni and students.
- Eligibility to apply for an Alumni Association affinity credit card.
- Discounted GEICO automobile insurance.
- Networking opportunities and access to career resources.

M ore information about the U M UC Alumni Association is available online at www.umucalumni.org, by contacting the Alumni Relations office at 301-985-7179, or by sending an email to alumni@umuc.edu. Student inquiries are al ways welcome.


## DEGREE AND CERTIFICATE PROGRAMS

After the undergraduate degree, University of $M$ aryland 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, UM UC's G raduate School now has more than 5,600 students. Faculty members are dis tinguished by their extensive professional managerial experience as well as by their advanced education and teaching ability. All degree programs, except those leading to the M aster of Business Administration, consist of 33-39 semester hours of graduate study.
UM UC currently confers 15 master's degrees, including an online M aster of Business Administration, a M aster of Education, a $M$ aster of Arts in Teaching, and a D octor of $M$ anagement. The Graduate School also offers several executive degree programs (including Executive Programs leading to a M aster of Business Administration or a M aster of Science in technology management and an Executive M aster's Program in Information Technology. The Graduate School offers more than 30 certificate programs. For more information, students should call 301-985-7155 or e-mail UMUCinfo@umuc.edu.

## NATIONAL LEADERSHIP INSTITUTE

The Graduate School also administers the National Leadership Institute ( NLI ), which offers a wide range of 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 C enter for Creative Leadership (CCL), the preminent education and research insitution devoted to the development of creative leadership and effective management. N LI also designs training programs and consulting services to meet an organization's unique leadership development needs, provides executive coaching in highly individualized coaching sessions especially suitable for senior managers, and conducts leadership application workshops on topics such as team-centered leadership, leadership assessment and feedback, and leading in a global economy.
For more information, students should call 301-985-7195 or email nli@umuc.edu.


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## UMUC-EUROPE

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Requests for undergraduate and graduate catalogs for UM UCEurope should be sent to University of M aryland University College, Unit 29216, APO AE 09102. Requests for the M annheim Campus catalog or video should be directed to the UM UC M annheim Campus, Unit 24560, APO AE 09183. These catalogs may also be obtained from $O$ verseas Programs, U niversity of $M$ aryland University College, 3501 University Boulevard East, Adelphi, MD 20783-8067.

## UMUC-ASIA

## Yokota Headquarters

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- Military

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- Civilian

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## Fax

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Computer and Information Science
BES, Johns H opkins University, 1983
M S, Florida Institute of Technology, 1992
Bancroft, Barbara Ham
Art
BA, University of M aryland, College Park, 1981
M FA, Pratt Institute, 1986

## Bank, Enid

Computer Studies
BS, University of M aryland, College Park, 1962
M Ed, Towson State University, 1976

## Banks, David

Behavioral and Social Sciences
BA, Le M oyne C ollege, 1982
M S, University of Texas at Austin, 1986
M PH , University of N orth Carolina at Chapel Hill, 1989
PhD, University of M aryland, College Park, 1992

## Bansal, Bhagwati

Computer Information Technology
BS, Ranchi University (India), 1973
M A, San Francisco State University, 1987
M BA, M arymount University, 1989

## Bardi, Abigail

English
BA, O ccidental College, 1975
M A, University of M aryland, College Park, 1982
M FA, University of M aryland, College Park, 1997

## Barilla, Anthony F.

Spanish
BA, University of M aryland, College Park, 1969
M A, University of M aryland, College Park, 1971
PhD, University of M aryland, College Park, 1982
Barks, Cathy W.
English
BS, University of Tennessee, 1974
M A, University of M aryland, College Park, 1989
PhD, University of M aryland, College Park, 1995

## Barnes, Danny

Mathematics
BA, H ampton University, 1994
M S, H ampton University, 1996

## Barnes, Robert C.

Business and Management
BS, M organ State U niversity, 1978
M BA, M organ State University, 1980
Baronoff, Lynne
Accounting
BS, University of M aryland, College Park, 1972
M BA, Frostburg State University, 1993
Barto, Bradley E.
Computer Studies
BE, State University of New York M aritime C ollege, 1982
M GA, University of M aryland University College, 1989

## Bartoo, Diane

Psychology
BS, University of Florida, 1969
M S, University of M aryland, Baltimore, 1975
PhD, University of Southern M ississippi, 1985

## Bassette, Lorraine Pratt

Business and Management
BS, Central State University (O hio), 1970
M A, C atholic University of America, 1972

## Baten, Abdul K.

Accounting
BS, Dhaka University (Bangladesh), 1960
M A, Dhaka University (Bangladesh), 1961
M BA, American University, 1966
M S, Southeastern University, 1978

## Bates, Leroy

Computer and Information Science
BA, Syracuse University, 1960
M A, American University, 1966

## Battle, Kenneth D.

Business and Management
BA, W inston-Salem State University, 1977
JD, H oward University, 1981
Baughn, Thomas M.
History
BA, O klahoma State University, 1972
M A, University of Central Florida, 1977
Baume, Lawrence I.
Humanities
BA, University of N orthern Colorado, 1970
M A, C olorado State University, 1984
Beach, Linda M.
Information Systems Management
BA, Luther Rice University, 1975
M BPA, Southeastern University, 1977

## Beard, DeLawrence

Business and Management
BA, University of M issouri, 1964
JD, University of Baltimore, 1970
LLM, Georgetown University, 1977

## Beck, Kenneth H.

Health
BS, Pennsylvania State University, 1972
M A, Syracuse University, 1975
PhD, Syracuse University, 1977
Becker, Wendy
Computer Science
BS, University of M aryland, College Park, 1984
M S, George M ason University, 1990

## Beckett, Candace H.

Criminology/Criminal Justice
BA, University of Illinois, 1971
M A, University of H awaii at M anoa, 1973
M S, Southern Illinois University, 1980
JD, University of M aryland, Baltimore, 1988
LLM , George W ashington University, 1991

## Beckwith, Hubert E.

Music
BA, M ichigan State University, 1976
BA, George M ason University, 1979
PhD, University of M aryland, College Park, 1983

## Beebe, Richard W.

Business and Management
BS, Johns H opkins University, 1971
JD, University of Baltimore, 1975
M BA, George Washington University, 1980
LLM, Georgetown University, 1983
Beegle, Joseph L.
Information Systems Management
BS, University of M aryland University College, 1978
M BA, G eorge Washington University, 1982
BS, University of M aryland University C ollege, 1989

## Beisel, Joseph

Business and Management
BS, Saint Joseph's U niversity, 1974
M Ed, H oward University, 1974
M Div, C atholic University of America, 1993

## Belding, John

Computer Studies
BS, University of Alabama, 1965
PhD, University of Alabama, 1968
M S, George W ashington U niversity, 1973

## Belenker, Jerry

Experiential Learning
BA, Brooklyn College, 1951
M A, University of M innesota, 1953
JD, Salmon P. Chase College of Law, 1959
Beller-Simms, Nancy
Behavioral and Social Sciences
BS, University of M aryland, College Park, 1978
M S, U niversity of M ichigan, 1981

## Belton, Brenda

Computer Studies
BS, D istrict of C olumbia Teacher's C ollege, 1969
M S, George W ashington U niversity, 1980
Benbury, Karen Zak
Mathematics
BS, University of M assachusetts, 1969
M S, University of M assachusetts, 1971
PhD , University of M assachusetts, 1979
Benedek, Cindy
Biology
BS, University of M aryland, College Park, 1990
M S, H ood C ollege, 1995
Bensimon, Simon
Business and Management
BS, Columbia University, 1967
M A, N ew York University, 1968
PhD, University of Chicago, 1975
Berman, Carl R.
Natural Science
BA, Tulane University, 1964
M S, Old D ominion University, 1977
PhD, College of William and M ary, 1983

## Bhaskar, Shivarajpur K.

Computer and Information Science
BE, Bangalore University (India), 1979
M E, Indian Institute of Science (India), 1981
PhD, U niversity of M aryland, C ollege Park, 1993
Bilker, David
Accounting
BBA, Temple U niversity, 1974
M BA, Drexel University, 1977

## Billeter, Paul A.

Natural Science
BA, H ofstra University, 1970
M A, H ofstra University, 1973
Binkley, John C.
History
BA, Loyola University Chicago, 1970
M A, Loyola University Chicago, 1975
JD, DePaul University, 1983
PhD, Loyola University Chicago, 1985
Bishop, Perry C.
Communication Studies
BA, University of Arizona, 1968
M SEd, University of Southern California, 1974
M S, Butler University, 1978

## Black, Theodore S.

Economics
BA, Florida Atlantic University, 1973
M A, University of Washington, 1975
PhD, University of North Carolina at Chapel Hill, 1980

Blank, Murray D.
Business and Management
BS, U.S. N aval Academy, 1958
M S, George Washington University, 1970
M BA, Loyola College in M aryland, 1985
EdD, G eorge W ashington University, 1995
Blankenship, Jesse L.
Microbiology
BS, University of South C arolina, 1980
D PM , Temple University, 1999
Blattman, Michael
Accounting
BA, Queens College ( New York), 1974
M BA, St. John's University (N ew York), 1978
Blegen, Michael L.
Computer Studies
BS, C ornell University, 1992
M S, George M ason University, 2000
Blinder, Karen J.
Biology
BS, Yale University, 1977
PhD, Georgetown University, 1996
Blissett, Rodney Ricardo
Information Systems Management
BS, University of M aryland University College, 1981
M GA, University of M aryland University College, 1990

Blumberg, Jeffrey S.
Criminology/Criminal Justice
BA, Washington University (M issouri), 1987
JD, University of M aryland, Baltimore, 1990

## Blunck, Ronald G.

Business and Management
BS, Iowa State University, 1969
M BA, University of M aryland, College Park, 1974

## Bobrowsky, Matthew S.

Astronomy
BA, N orthwestern University, 1977
M S, University of M aryland, College Park, 1980
PhD , University of M aryland, College Park, 1985

## Boland, Frederick E.

Computer and Information Science
BS, University of M aryland, College Park, 1974
M S, Pennsylvania State University, 1977
M S, University of M aryland, College Park, 1986
Bonfigli, Michael C.
Journalism
BA, University of Vermont, 1985
M A, Indiana University Bloomington, 1991

## Boubsil, Ouanessa

Computer and Information Science
BS, University of Algiers (Algeria), 1976
M BA, C ase Western Reserve University, 1980

## Bouling, Edward

Computer Studies
BS, University of M aryland University C ollege, 1991
M S, Bowie State University, 1997

## Bowler, Michael H.

Behavioral and Social Sciences
BS, College of the H oly Cross, 1957
M SW, Boston College, 1959
PhD, Washington University (M issouri), 1979
Boyd, Mary
Business and Management
BS, Columbia Union College, 1990
M S, Johns H opkins University, 1993

## Boyd, Thomas

Microbiology
BA, Washington and Lee University, 1987
M S, Scripps Institute of O ceanography, 1992
PhD, Scripps Institute of O ceanography, 1993
Bracy, Tina D.
Gerontology
BA, University of M aryland, Baltimore County, 1981
M BA, H oward University, 1987

## Bradley, Diane

Business and Management
BA, C alifornia State University, Long Beach, 1985
JD, H oward University, 1989

## Brandmark, Edward

Computer and Information Science
BS, State University of New York at Binghamton, 1986
M S, University of Virginia, 1988
M S, M arymount University, 1993
Breeskin, John
Psychology
AB, Teachers C ollege, Columbia University, 1957
M A, Teachers C ollege, Columbia University, 1958
PhD, University of Texas at Austin, 1966

## Bridge, Diane L.

Legal Studies
BA, Duquesne University, 1983
JD, D uquesne University, 1986
M A, George Washington University, 1992
M PA, H arvard University, 1996
Bridgeman, Christine M.
Behavioral and Social Sciences
BA, University of M aryland, College Park, 1995
M A, Edinboro University of Pennsylvania, 1997

## Briggs, Cory J.

Humanities
BA, University of California, Riverside, 1992
JD, California Western School of Law, 1995
M A, Claremont Graduate School, 1997

## Brittan-Powell, Christopher

Psychology
BA, Boston College, 1984
M A, University of M aryland, College Park, 1995
PhD, University of M aryland, College Park, 1998

## Brock, Gerald

Accounting
BS, N ew M exico State University, 1967
M S, New M exico State University, 1969
BS, University of M aryland University College, 1989
Brockunier, Nicholas
Business and Management
BA, Knox College, 1969
BS, University of M aryland University College, 1976
M BA, University of M aryland, College Park, 1978
Brodie, Steven
Biology
BS, University of Texas at San Antonio, 1989
M S, University of Texas at San Antonio, 1990
PhD, University of N ew M exico, 1996

## Brown, Johnnie

Business and Management
BS, M organ State U niversity, 1976
M PA, University of Baltimore, 1979
PhD , M organ State University, 1997

Brown, Major L.
Information Systems Management
BS, University of M aryland University College, 1978
M PA, American University, 1981
Brown, Sabrina P.
Health Services Management
BA, Loyola University N ew Orleans, 1989
M H SA, University of M ichigan, 1994
Brown, Stephen L.
Health
BS, Brigham Young University, 1992
M S, Arizona State University, 1997
Bruzdzinski, Michael C.
Information Systems Management
BA, Loyola College in M aryland, 1978
M A, N orthern Illinois University, 1979
M A, University of Baltimore, 1982

## Buchoff, David E.

Mathematics
BS, University of M aryland, College Park, 1966
M A, University of M aryland, College Park, 1970
Buck, Richard Sutton
Business and Management
BA, University of M aryland, College Park, 1958
JD, George Washington University, 1961
LLM , George W ashington University, 1970
Buckley-Fletcher, Carolyn
English
BA, G eorge M ason University, 1977
M A, C atholic University of America, 1983
PhD, Catholic University of America, 1992
Burgoyne, Susan G.
Speech
BA, Towson State University, 1989
M A, San D iego State University, 1992
Burkhard, Bud
History
BA, Rutgers University, 1978
M A, Rutgers University, 1980
PhD, University of W isconsin-M adison, 1986
Burnett, Cornell C.
Biology
BS, Tougaloo College, 1959
M S, H oward University, 1975
PhD, H oward University, 1978
Burns, Edward R.
Experiential Learning
BA, George Washington University, 1969
M GA, University of M aryland University College, 1995

## Burson, Phyllis J.

## Psychology

BS, Valparaiso University, 1961
M A, University of Chicago, 1965
PhD, University of Chicago, 1974

## Busch, William E.

Accounting
BS, University of M aryland, College Park, 1982
M S, American University, 1985

## Bush, Roberta

Computer Studies
BA, San Francisco State U niversity, 1983
M A, San Francisco State University, 1987

## Buss, Deann

Computer Studies
BS, University of W isconsin-M adison, 1987
M S, N ortheastern University, 1995

## Buszuwski, James A.

Economics
BS, St. Bonaventure U niversity, 1974
PhD, Boston College, 1978

## Butler, Charles J.

Computer and Information Science
BS, University of M aryland, College Park, 1985
M S, Bowie State University, 1989

## Butler, Dollrinia H.

Gerontology
BS, District of Columbia Teacher's College, 1969
M A, O hio University, 1970
M PH, University of Pittsburgh, 1981

## Butler, John J.

Accounting
BS, Pennsylvania State University, 1969
M BA, Pennsylvania State University, 1971
Butts, Barrington G. P.
Business and Management
BS, University of M aryland University College, 1982
JD, Southland University, 1983
Cabot, Adele
Theatre
BA, American University, 1979
M FA, City University of New York, 1992

## Cain, Kim L.

Information Systems Management
BS, University of M aryland University College, 1997
M S, University of M aryland University College, 2000
Callahan, Barbara J.
Communication Studies
BA, State University of New York at Albany, 1962
M A, Teachers C ollege, Columbia University, 1965
EdD, Lehigh University, 1973

## Calloway, Nathaniel Roy

Accounting
BA, O berlin C ollege, 1968
M SA, Southeastern University, 1977
M BA, Southeastern University, 1984
M PA, Southeastern University, 1984

## Campanelli, Linda C.

Gerontology
BS, C oncordia University (Canada), 1976
M A, University of M aryland, College Park, 1978
PhD, University of M aryland, College Park, 1987

## Campbell, Catherine A.

Marketing
BS, K ent State University, 1972
M BA, Florida Atlantic University, 1981

## Campbell, I. Matthew

Behavioral and Social Sciences
BA, Pomona C ollege, 1967
M A, C atholic University of America, 1970
JD, C atholic University of America, 1976

## Campbell, James R.

Microbiology
BA, University of California, Los Angeles, 1972
M A, San D iego State University, 1977
PhD , University of California, Los Angeles, 1981

## Cantor, Eugene H.

Accounting
BS, University of M aryland, College Park, 1972
JD, Emory University, 1976
LLM, Georgetown University, 1980
Capasso, John
Health Services Management
BS, Geneva College, 1979
M S, George Washington University, 1990
Carbone, Elisa L.
Speech
BA, University of M aryland, College Park, 1985
M A, University of M aryland, College Park, 1988

## Carnaroli, Giovanni

Environmental Management
BS, N orth Carolina State University, 1991
M BA, University of M aryland, College Park, 1993
Carr, Deborah M.
Legal Studies
BA, University of IIlinois, 1984
JD, Chicago-K ent College of Law, Illinois Institute of Technology, 1989

Carriere, Colin C.
Legal Studies
BS, Le M oyne C ollege, 1974
JD, Creighton University, 1977

## Carrol, Nora

Business and Management, Human Resource Management
BFA, Syracuse University, 1971
M S, Syracuse University, 1991
Carson-Candy, Tiffany H.
Computer Studies
BS, Long Island University, 1993
M S, G eorge Washington University, 2000

## Caruso, Louis

English
BS, Suffolk University, 1973
M Ed, Suffolk University, 1978
Carvalho, Julie
Psychology
BA, University of M aryland, College Park, 1962
M A, George Washington University, 1966
Carwell, Louise
Legal Studies
BA, University of Rochester, 1984
JD, C ase W estern Reserve University, 1984
Cashman, Richard
Computer Studies
BS, University of M aryland University C ollege, 1992
M A, Webster University, 1994

## Cassidy, Mary

Mathematics
BS, O hio State University, 1954
M A, M arycrest College, 1974

## Cassler, Robert

Journalism
BA, Brandeis University, 1972
JD, Georgetown University, 1975

## Cavanaugh, Andrew

English
BA, M ichigan State University, 1984
M A, Eastern M ichigan University, 1991
Chaires, Margaret S.
Economics
AB, Catholic University of America, 1966
M A, Claremont Graduate School, 1972
AA, Prince George's C ommunity College, 1986

## Champ, Robert L.

English
BA, Loyola University Chicago, 1979
M A, Loyola University Chicago, 1985
PhD, University of M aryland, College Park, 1993

## Chandramouli, Ramaswamy

Computer and Information Science
M S, Indian Institute of Technology (India), 1979
M S, University of Texas at D allas, 1984
PhD, George M ason University, 1994

## Charlton, Suzan F.

Legal Studies
BA, Vassar College, 1988
JD, Georgetown University, 1991

## Chase, Virginia J.

Business and Management
BA, Troy State University, 1983
M S, Troy State University, 1984
Chavis, Earl V.
Information Systems Management
BA, University of M aryland, College Park, 1969
M A, University of M aryland, C ollege Park, 1972
PhD, H oward University, 1979
Chawla, Nishi

## English

M A, University of Delhi (India), 1980
PhD, George Washington University, 1996

## Cheng, Min-Hwa H.

Accounting
BS, N ational Taiwan University, 1981
M AS, Johns H opkins University, 1985
Chiang, Lee
Mathematics
BS, University of Science and Technology of China, 1982
M S, Anhui University (China), 1984
PhD, University of M aryland, College Park, 1994
Chiappelli, Theodore
Health Services Management
M H A, University of Pittsburgh, 1985
M SSM , University of Southern California, 1989
DrPH, Johns H opkins University, 1996

## Chiarella, Donald

Computer and Information Science
BA, University of M aryland, College Park, 1979
M S, American University, 1987
Chirhart, Ann S.
History
BA, Florida State University, 1974
M A, Emory University, 1993
PhD, Emory University, 1997
Chiricosta, Tracey C.
Communication Studies
BA, Smith College, 1988
M S, Rensselaer Polytechnic Institute, 1989

## Choy, Marguerite E.

Mathematics
BA, Reed College, 1967
M S, C ase Western Reserve University, 1969

## Ciliberti, Barrie S.

History
BA, Ursinus C ollege, 1957
M A, Georgetown University, 1960
PhD, Catholic University of America, 1975
Claiborne, Gay D.
English
BS, N ew M exico State University, 1970
M A, N ew M exico State University, 1972
PhD, University of South Florida, 1991

## Clark, Lawrence

English
BA, William Carey College, 1984
M A, University of Texas-Pan American, 1990
PhD, Texas A\&M University, 1999

## Clauson, James R.

Computer Studies
BSBA., University of Central Florida, 1976
M BA, University of South C arolina, 1979
M S, M urray State University, 1990

## Claytor, Bobby

Computer Studies
BS, University of M aryland University College, 1997
M S, University of O klahoma, 2000
M S, George Washington University, 2000
Clegern, Robert W.
Natural Science
BA, University of Colorado, 1965
M S, University of Illinois at Urbana-C hampaign, 1966
PhD, University of Illinois at Urbana-Champaign, 1972

## Clemens, Karen

## Biology

BS, Indiana University Bloomington, 1983
PhD, University of M issouri, 1988

## Cohen, Margaret

Business and Management
BA, Brooklyn College, 1968
M A, U niversity of Pittsburgh, 1970
PhD, University of Pittsburgh, 1975
JD, Brooklyn Law School, 1983

## Cohen, Mark A.

Information Systems Management BS, Old D ominion University, 1978
JD, University of Baltimore, 1981

## Cole, James R.

Information Systems Management
BA, Western M aryland College, 1959
M BA, Loyola College C hicago, 1980

## Coleman, Anne

Biology
BS, Eastern College, 1990
PhD, Allegheny University of the $H$ ealth Sciences, 1997

## Collert, Gerald J.

Business and Management
BS, Wayland Baptist University, 1986
M A, M idwestern State University, 1988
M S, State University of New York College at Plattsburgh, 1992

## Collins, Dale R.

Business and Management
BA, Western Reserve University, 1964
M PA, Syracuse University, 1966
PhD, Syracuse University, 1973
Collins, Pamela
Business and Management
BS, Texas Southern University, 1973
M S, American University, 1995
Colston, Valerie
Computer Studies
BA, University of California, San Diego, 1980
M A, San D iego State University, 1986

## Colton, Rodney A.

Information Systems Management
BSEE, University of N evada, 1969
M SEE, N aval Postgraduate School, 1979
Coltri, Laurie S.
Legal Studies
BS, California Institute of Technology, 1974
JD, University of Southern California, 1978
PhD, University of M aryland, College Park, 1995

## Columbia, Kenneth

Business and Management
BS, George Washington University, 1977
M A, George Washington University, 1980
Conway, Timothy
Criminology/Criminal Justice
BA, University of Pittsburgh, 1974
M A, University of Pittsburgh, 1985

## Cooper, Karen

Experiential Learning
BSW, Indiana University of Pennsylvania, 1985
M A, Bowie State University, 1999

## Copeland, Mary

Psychology
M Ed, Kean College, 1971
M Div, Virginia Union University, 1986
D M in, H oward University, 1991
Corbin, David A.
History
BA, M arshall University, 1969
M A, M arshall University, 1972
PhD, University of M aryland, College Park, 1978

## Corbin, Saladin K.

Psychology
BS, University of California, Irvine, 1989
M S, Virginia Polytechnic Institute and State University, 1991
PhD, C atholic University of America, 1998
Cornick, Delroy L.
Business and Management
BA, Ripon College, 1952
M A, American University, 1969
M PA, University of Southern California, 1976
DPA, University of Southern C alifornia, 1978

## Corte, Denise M.

Theatre
BA, Universidade do Rio de Janeiro (Brazil), 1990
M A, University of M aryland, College Park, 1995
Cottle, James
Communication Studies
BA, University of M aryland, College Park, 1971
M Ed, University of M aryland, College Park, 1972
PhD, University of M aryland, College Park, 1976

## Cowden, Craig

Psychology
BA, O berlin College, 1981
M S, Pennsylvania State University, 1987
PhD, Pennsylvania State University, 1992

## Craig, Patrick M.

Art
BFA, Western M ichigan University, 1974
M FA, University of Cincinnati, 1976

## Crain, Barbara

Natural Science
M AEd, Ruprecht-K arls-U niversität H eidelberg (Germany), 1979
M Ed, State of Bavaria (Germany), 1982
M S, Johns H opkins University, 1998

## Credle, Joann

Behavioral and Social Sciences
BA, N orth Carolina Central University, 1975
M A, N orth C arolina Central University, 1980
EdD, Indiana University of Pennsylvania, 1989

## Creech, Pat L.

Communication Studies
BS, Purdue University, 1961
M A, University of Wisconsin-M ilwaukee, 1970
M A, University of W isconsin-M ilwaukee, 1973
PhD , Indiana University Bloomington, 1979

## Cremins, Casey

Mathematics
BSC, Texas A\& M University, 1986
M A, Johns H opkins University, 1987
PhD, University of Glasgow (Scotland), 1997

## Cromp, Robert

Computer Science
BA, State University of New York at Buffalo, 1982
M S, Arizona State University, 1983
PhD , Arizona State University, 1988

## Crosson, Dena

Art History
BA, George Washington University, 1980
M A, N ew York University, 1986
Csulak, Emery Jonathan
Computer Science
BS, George M ason University, 1991
M S, University of M aryland University College, 1997
Cubillos, Pedro O.
Computer Science
BS, Universidad de Chile, 1974
M S, University of Iowa, 1981
PhD, University of Iowa, 1981

## Cuccia, Robert A.

Communication Studies
BA, Valparaiso University, 1962
M A, American University, 1968
Culver-Jamieson, Marguerite M.
Communication Studies
BA, American University, 1984
M A, University of N orth Carolina at Chapel Hill, 1986
M Ed, East C arolina University, 1994

## Cummins, Melvin B.

Business and Management
BS, Towson State University, 1976
M BA, University of Baltimore, 1980
PhD, University of M aryland, College Park, 1994

## Curry, Emily Dale

Accounting
BA, Antioch College, 1978
M A, University of Alaska, 1985

## Cutler, Herschel

Business and Management
BS, Boston University, 1957
M BA, University of Pennsylvania, 1958
PhD, Syracuse University, 1960

Cuty-Ruiz, Laura
Psychology
BS, Florida State University, 1989
M A, University of Alabama, 1991
PhD, University of Alabama, 1995
Dade, René Lennell
Psychology
BS, Lincoln University (Pennsylvania), 1984
M A, Indiana University of Pennsylvania, 1986
PhD, H oward University, 1993

## Daigh, John

Accounting
BS, U.S. M ilitary Academy, 1970
M D , University of Texas Southwestern M edical School, 1978
BS, University of M aryland University C ollege, 1998

## Damera, Raveendra

Environmental Management
BS, N agarjuna U niversity (India), 1986
M S, University of M aryland, College Park, 1994
Damond, Marietta E.
Behavioral and Social Sciences
BA, Gannon University, 1984
M A, George Washington University, 1988
PhD, G eorge Washington University, 1992
Danner, Horace G.
Communication Studies
BA, University of the Philippines, 1955
M RE, New Orleans Baptist Theological Seminary, 1961
PhD , American University, 1973
Dao, Hung
Computer and Information Science
BS, University of H ouston, 1986
M S, University of M aryland, College Park, 1990
PhD, University of M aryland, C ollege Park, 1996
Darius, Robert G.
Behavioral and Social Sciences
BA, G lenville State College, 1964
M A, American University, 1968
M A, University of M aryland, College Park, 1973
PhD, University of M aryland, C ollege Park, 1973

## Daston, Melissa G.

Business and Management
BA, D uke U niversity, 1976
M A, University of M aryland, College Park, 1978
M BA, University of M aryland, College Park, 1980
M S, University of M aryland, College Park, 1987
Daumit, Richard
Information Systems Management
BEE, C atholic University of America, 1962
M S, George Washington University, 1969
M BA, University of M aryland, College Park, 1973

## Davies, Diane

Mathematics
BS, Boston University, 1980
M BA, Boston University, 1982
Davis, Cynthia A.
English
BA, University of Texas at Austin, 1968
M A, University of W isconsin-M adison, 1969
PhD , University of W isconsin-M adison, 1972
Davis, Marlene
Business and Management
BS, University of M aryland University College, 1994
M A, University of M aryland University College, 1997

## Dawson, David T.

Business and Management
BS, University of M aryland, College Park, 1975
JD, Thomas M. Cooley Law School, 1979
Dean, Michael
Information Systems Management
BS, C hristian Brothers University, 1971
M S, University of Arkansas, 1978
Dean, Robert L.
Criminology/Criminal Justice
BA, Amherst C ollege, 1973
JD, Villanova University, 1976
Dean, Ronald O.
Computer and Information Science
BS, University of M aryland, College Park, 1968
BS, University of M aryland, College Park, 1976
M A, University of M aryland, College Park, 1982

## DeFina, Anna

Communication Studies
M A, Escuela Nacional de Antropología e H istoria
(M exico), 1985
M Ph, University of Cambridge (England), 1986
PhD, Georgetown University, 1999
DeFina, Philip A.
Psychology
BA, N ew York University, 1978
M A, N ew York University, 1980
PhD, Fielding Institute, 1995

## DeGross, Robert L.

History
BA, St. Bonaventure University, 1967
M A, Villanova University, 1968
PhD, M iami University, 1974
Deise, Erich C.
Humanities
BA, Swarthmore C ollege, 1995
M A, N ew York University, 1998

Delahanty, Kathryn A.
Business and Management
BA, State U niversity of N ew York at Albany, 1986
JD, University of M aryland, Baltimore, 1994
Del Rossi, Michael A.
Sociology
BS, University of M aryland, College Park, 1976
M A, Pepperdine University, 1981
Demasco, Joseph M.
Computer and Information Science
BS, Polytechnic Institute of New York, 1970
M S, C ornell University, 1972
Deming, William J.
Information Systems Management
BS, University of M aryland University College, 1981
M GA, University of M aryland University College, 1991

## DePauw, John

Business and Management
BA, Swarthmore College, 1959
M A, American University, 1964
PhD, American University, 1977

## Deppe, John B.

Mathematics
BS, D rexel University, 1986
M S, University of California, Irvine, 1990
PhD, University of California, Irvine, 1990
Derr, Nancy R.
History
BA, O berlin College, 1968
PhD , George Washington University, 1979

## Dharamsi, Manoj

Computer Science
BE, Jabalpur University (India), 1959
M S, Illinois Institute of Technology, 1967
PhD, Southern M ethodist University, 1972
Dickens, David R.
Psychology
BS, University of Baltimore, 1988
M PA, University of Baltimore, 1991
PhD, University of M aryland, College Park, 1997
Didier, Michelle
Communication Studies
BA, University of Toledo, 1977
BS, University of Toledo, 1977
M A, Bowling Green State University, 1983
Diedrich, Paul O.
Computer Studies
BS, Baldwin Wallace College, 1966
M S, N aval Postgraduate School, 1971

# Dietrich, Julie A. <br> Legal Studies <br> BA, College of the H oly Cross, 1992 <br> JD, C atholic University of America, 1995 

Dietz, Elaine M.
Computer Studies
BA, M ichigan State University, 1970
M Ed, Virginia State University, 1992
Digirolamo, Vincent
Information Systems Management
BS, U.S. N aval Academy, 1978
M S, N aval Postgraduate School, 1985
Dillinger, James J.
Art
BA, University of M aryland, College Park, 1964
M FA, University of M aryland, College Park, 1966
Di Marco, Andie J.
English
BA, Rutgers University, 1994
M A, University of M aryland, College Park, 1997
Dolan, Kevin C.
Accounting
BBA, University of N otre D ame, 1969
M BA, Temple University, 1975
Donovan, Dianne
Career Planning
BA, George M ason University, 1988
M A, M arymount University, 1997
Dorsher, Michael D.
Journalism
BA, University of St. Thomas, 1978
M PA, University of N orth D akota, 1990
PhD, University of M aryland, College Park, 1999
Doyle, Aimee E.
English
BA, University of M aryland, C ollege Park, 1979
M A, University of M aryland, College Park, 1984
Drasner, Steven
Computer Studies
BS, State University of New York at Albany, 1977
M S, University of M aryland, College Park, 1979
Drew, Lashawn R.
Natural Science
BS, Spelman College, 1991
PhD, H oward University, 1998

## Duan, Nick N.

Computer and Information Science
BS, Rheinisch-Westfälische Technische H ochschule Aachen (Germany), 1987
M S, Rheinisch-Westfälische Technische H ochschule Aachen (Germany), 1987
M S, Pennsylvania State University, 1990
PhD, Pennsylvania State University, 1993

## Duchon, Nicholas

Computer and Information Science
BS, University of California, Berkeley, 1974
PhD, University of M aryland, College Park, 1982
Dudley, Susan D.
Psychology
BS, Old Dominion University, 1973
M A, C ollege of William and M ary, 1976
PhD, University of M assachusetts, 1980

## Duncan, Richard L.

Criminology/Criminal Justice
BA, University of Baltimore, 1973
M D iv, Wesley Theological Seminary, 1978

## Durmowicz, Meredith

Biology
BS, M arquette University, 1992
PhD, Johns H opkins University, 1998
Dwyer, Joseph M.
Criminology/Criminal Justice
BS, St. Joseph's University, 1962
M SA, George Washington University, 1981

## Eckhart, Richard

Computer Studies
BS, Lehigh State U niversity, 1957
M S, Pennsylvania State U niversity, 1961
PhD, Pennsylvania State University, 1964

## Edwards, Steven T.

Fire Science
BS, University of M aryland University C ollege, 1983
M GA, University of M aryland University C ollege, 1991

## Ehrenstein, Gerald

Natural Science
BEE, Cooper Union for the Advancement of Science and Art, 1952
M A, Columbia University, 1958
PhD, Columbia University, 1962

## Ehresmann, Elaine C.

Business and Management, Human Resource Management
BS, Salve Regina University, 1984
M H SA, Salve Regina University, 1985
PhD, George M ason University, 1995

Ehrmann, Tanya E.
Health Services Management
BA, N ew York University, 1993
M PH , Columbia University, 1997

## Eibel, Patrick

Business and Management
BA, University of M aryland, College Park, 1995
M GA, University of M aryland University College, 1999

## Ellingston, Damon

Natural Science
BA, St. John's C ollege (M aryland), 1984
M A, Wesleyan University, 1990
Ellis, Ronald
Psychology
BS, Eastern M ichigan University, 1968
M D iv, United T heological Seminary, 1971
DM A, D rew University, 1985
PhD, La Salle University, 1997

## Ellison-Potter, Patricia A.

Psychology
BS, Towson State University, 1990
M A, Towson State University, 1993
PhD, Colorado State University, 1997

## Emershaw, Gerard

Philosophy
BA, W ilkes University, 1994
English, Joseph
Information Systems Management
BS, Pennsylvania State University, 1958
M Ed, Pennsylvania State University, 1964
EdD, Temple University, 1984

## Enwefa, Stephen C.

Health Services Management
BS, Grambling State U niversity, 1982
M PA, G rambling State University, 1987
M A, University of Illinois, 1995

## Epps, Jorden K.

Computer Information Technology
BS, M organ State University, 1992

## Ericson, Mark D.

History
BA, University of Washington, 1970
M A, University of H awaii at M anoa, 1972
PhD, University of H awaii at M anoa, 1978

## Eutsey, Dwayne

Humanities
BA, University of M aryland, College Park, 1988
M A, Georgetown University, 1997

## Evans, Joan

Information Systems Management
BA, University of M assachusetts, 1972
M Ed, W orcester State C ollege, 1977
BS, Roger W illiams C ollege, 1990

## Everard, Walter

Communication Studies
BA, Syracuse University, 1965
M A, University of M aryland, College Park, 1972

## Everetts, Roxanne

Information Systems Management
BA, George Washington University, 1995
M S, University of M aryland University C ollege, 1998
Ezeka, Hyacinth A.
Accounting
BS, Alabama Agricultural and M echanical University, 1985
M BA, Alabama Agricultural and M echanical University, 1987

## Fansler, Vince F.

Business and Management
BA, University of M aryland, College Park, 1975
BS, University of M aryland University College, 1997
M S, University of M aryland University College, 1999
Feigenbaum, Kenneth
Psychology
AB, Queens College ( N ew York), 1953
AM , University of Chicago, 1958
PhD, University of Chicago, 1961
Fekete, Gyorgy
Computer Science
BS, University of M aryland, College Park, 1978
M S, University of M aryland, College Park, 1979
PhD, University of M aryland, C ollege Park, 1988
Ferandez, Dan
Natural Science
BS, U.S. N aval Academy, 1981
M S, N aval Postgraduate School, 1993
Ferraris, Patricia A.
Legal Studies
BA, Towson State University, 1985
JD, University of M aryland, Baltimore, 1989
Fierston, Suzanne B.
Communication Studies
BS, University of M assachusetts, 1983
M A, N orthwestern University, 1988
Figueroa, Elizabeth
Legal Studies
BA, National College of Education, 1980
JD, Antioch School of Law, 1984

## Files, William E.

Speech
BS, Lincoln M emorial University, 1968
M A, University of M aine, 1973
EdS, College of William and M ary, 1986
Finkel, Leonard J.
Accounting
BS, Temple University, 1961
M BA, Southern Illinois University, 1983

## Finley, Diane L.

Behavioral and Social Sciences
BA, C ollege of N otre D ame of M aryland, 1974
M A, Louisiana State U niversity, 1980
PhD, University of M aryland, C ollege Park, 1990

## Fischer, George

Computer Studies
BA, Pace University, 1974
M BS, Troy State University, 1989

## Fisher, Charles D.

Communication Studies
BA, Virginia Polytechnic Institute and State
University, 1988
M A, G eorge M ason University, 1997

## Fisher, Pauline

Gerontology
BA, Temple University, 1975
M A, G eorge Washington University, 1978

## Fitzpatrick, Norma

Humanities
BS, Loyola University Chicago, 1976
M S, N aval Postgraduate School, 1983

## Fitzsimmons, Charles F.

Business and Management
AB, Loyola College in M aryland, 1959
M LA, Johns H opkins University, 1965
EdD, G eorge Washington University, 1975
Fitzsimmons, Theodora J.
English
BA, University of M aryland University College, 1982
BA, University of M aryland University C ollege, 1984
M Ed, University of M aryland, College Park, 1995

## Flaisher, Harvey S.

Computer Studies
BEng, N orthwestern University, 1981
M S, Weizmann Institute of Science (Israel), 1983
PhD, Weizmann Institute of Science (Israel), 1987

## Flanagan, Gregory T.

Gerontology
BA, H oward University, 1976
M PA, Long Island University, 1984

## Fletcher, Charles

Mathematics
BS, Purdue University, 1969
M A, University of M aryland, College Park, 1980
PhD, University of M aryland, C ollege Park, 1990
Fletcher, Kim L.
Communication Studies
BA, Regis C ollege, 1978
M A, Georgetown University, 1984

## Flynn, David

Mathematics
BA, Pennsylvania State University, 1987
BS, Pennsylvania State University, 1987
M S, University of M aryland, College Park, 1990

## Foley, Christopher M.

Business and Management
BA, Washington College (M aryland), 1989
JD, Widener University, 1992
Folsom, Virginia J.
Biochemistry
BA, Washington University (M issouri), 1976
PhD, Princeton University, 1982

## Forbai, Jacob T.

Accounting
BBA, H oward University, 1982
M SA, Southeastern University, 1994

## Fournier, Alfred J.

Biology
BS, George Washington University, 1992
M S, University of M aryland, College Park, 1997

## Fratta-Hill, Sharon A.

Information Systems Management
BS, James M adison University, 1975
M Ed, University of M aryland, College Park, 1979
PhD, University of M aryland, College Park, 1990
French, Gregory T.
Natural Science
BS, University of M aryland, College Park, 1986
M A, University of M aryland, College Park, 1991
Fried, Stephanie G.
Business and Management
BA, Smith College, 1987
M BA, George Washington University, 1994

## Frohnhoefer, Frank

Accounting
AB, Catholic University of America, 1963
M BA, University of Pennsylvania, 1978

## Fudge, Valerie

Communication Studies
BA, James M adison University, 1992
M A, University of M aryland, College Park, 1994

## Fulcher, Debra P.

Mathematics
BS, Salisbury State C ollege, 1960
M Ed, Loyola C ollege in M aryland, 1963
AA, Prince George's C ommunity C ollege, 1984

## Gabello, David P.

Computer and Information Science
BS, Pennsylvania State University, 1979
M S, George Washington University, 1988

## Gaetjens, Lesley A.

Environmental Management
BS, American University, 1980
M S, Columbia University, 1982

## Gagnon, Sharon L.

Computer Studies
BS, University of M aryland University College, 1997
M S, University of M aryland University C ollege, 2000

## Galen, Steven M.

Health Services Management
BA, Wesleyan University, 1966
M A, George Washington University, 1972
Galleher, Kathleen
Psychology
BA, University of Steubenville, 1987
M S, C olorado State University, 1991
PhD, C olorado State University, 1993
Galloway, Guice
English
M A, University of Florida, 1993

## Gannon, Michael

Journalism
BS, South D akota State University, 1971
M A, Oklahoma University, 1976
Gao, Shaojian
Computer Studies
BS, Shandong University (China), 1984
PhD, University of Kentucky, 1994
Gardner, Leland L.
Business and Management
BS, University of M aryland, College Park, 1970
M BA, University of M aryland, College Park, 1976
Garrett, Tracy
Health
M A Towson State University, 1986
M A, California School of Professional Psychology, 1990
PhD, California School of Professional Psychology, 1995

Gates, John L.
Computer Studies
BS, University of M aryland, College Park, 1973
M BA, Southeastern University, 1983

Gaudiosi, John A.
Business and Management
BA, Temple University, 1965
M A, Wharton School, University of Pennsylvania, 1967

## Gaughan, Donna F.

Criminology/Criminal Justice
BS, University of M aryland, College Park, 1988
M A, Bowie State University, 1999

## Gay, Billy F.

Information Systems Management
BS, M orehouse College, 1962
M S, American University, 1973
PhD, University of California, Santa Barbara, 1980

## Gentry, Nancy

Business and Management
BS, University of M aryland University College, 1991
M S, University of M aryland University College, 1999

## Georgiou, George C.

Economics
BA, Drew University, 1973
M Ph, George W ashington University, 1978
PhD, George Washington University, 1979

## Ghent, Robert C.

Computer and Information Science
BA, University of Oregon, 1964
AM , H arvard University, 1970
Ghosh, Teesta
Government and Politics
BA, C alcutta University (India), 1985
BA, St. Xavier's C ollege (India), 1985
M A, Jadavpur University (India), 1987
M A, Tulane University, 1991
PhD, Tulane University, 1995

## Giacomozzi, Denise

Humanities
BA, Wesleyan University, 1979
M Div, Wesleyan Theological Seminary, 1986
Gibbons, Lori A.
Computer Information Technology
BA, M ichigan State U niversity, 1985
M A, M ichigan State University, 1987
Gibson, Sidney
Information Systems Management
BS, N orthrop University, 1984
M S, Creighton University, 1990
Gilday, Mark A.
Legal Studies
BA, University of M aryland, College Park, 1982
JD, C atholic University of America, 1985

## Giles, Inez

Business and Management
BA, C arlow College, 1972
M A, D uquesne University, 1978
M BA, University of Southern Illinois, 1983
PhD, Virginia Polytechnic Institute and State University, 1999

## Gill, Janet A.

Computer and Information Science
BS, University of West Florida, 1985
M S, N aval War College, 1989
M S, N aval Postgraduate School, 1990

## Gillin, James O.

Communication Studies
BA, Glassboro State C ollege, 1966
M A, M ontclair State College, 1968
Gilyeat, Colin B.
Computer Science
BS, W ashington State University, 1982
M S, George M ason University, 1997
Gittelman, Richard C.
Accounting
BS, Temple University, 1961
M S, American University, 1990
Glass, James M.
Government and Politics
BA, University of C alifornia, Berkeley, 1961
M A, University of California, Berkeley, 1964
PhD, University of California, Berkeley, 1970

## Glick, Susan I.

English
BA, University of M aryland, College Park, 1976
M A, University of M aryland, College Park, 1982

## Glickman, Mortimer

Business and Management
BBA, St. John's University (N ew York), 1942
M A, N ew York University, 1971
PhD, Walden University, 1996

## Glover, Ken

Business and Management
BA, Amherst College, 1974
M A, University of M aryland, College Park, 1975

## Glover, Lauren

Business and Management
BA, University of W isconsin-M adison, 1979
M BA, M anhattan College, 1994

## Goebl, Daniel R.

Psychology
BS, John C arroll U niversity, 1961
M S, American University, 1970
PhD, American University, 1978

## Gohari, Shahrzad

Economics
BS, University of London (England), 1973
M A, George W ashington University, 1981
M Ph, George Washington University, 1983
Golden, Jim
Computer Studies
BS, C entral State U niversity, 1983
M S, University of M aryland University College, 1998

## Gonzalez, Joe F.

Statistics and Probability
BS, St. M ary's University, 1970
M S, George Washington University, 1982
Gooch, Melinda J.
Information Systems Management
BS, Strayer C ollege, 1991
M S, Strayer College, 1994
Goodman, Alan P.
Business and Management
AB, Rutgers University, 1971
M Ed, O hio University, 1972
PhD, O hio State University, 1984

## Goodwyn, James

Computer and Information Science
BS, Long Island University, 1986
M S, Bowie State University, 1991
Gopal, Rakesh
Computer and Information Science
BE, Birla Institute of Technology and Science, Pilani (India), 1987
M S, Virginia Commonwealth U niversity, 1989

## Gordon, Diane R.

History
BA, Valparaiso University, 1959
M A, University of W isconsin-M adison, 1964
PhD, University of W isconsin-M adison, 1968

## Gordon, Martin K.

History
BA, University of Notre Dame, 1963
M A, University of Wisconsin-M adison, 1965
PhD, George Washington University, 1975
Gorman, C. Jade
English
BA, East C arolina University, 1980
M A, University of M aryland, College Park, 1995

## Gottfried, Richard A.

Accounting
BS, Syracuse University, 1982
M S, Georgetown University, 1993

## Goyal, Shiv N.

Accounting, Business and Management
BS, Agra University (India), 1957
M S, Agra University (India), 1959
LLB, Agra University (India), 1961
M BA, University of M aryland, College Park, 1980
PhD, University of M aryland, Baltimore, 1993

## Goyal, Swarn

Business and Management
M A, University of Delhi (India), 1977
M BPA, Southeastern University, 1977

## Grabowsky, Norman S.

Accounting
BS, Fairleigh Dickinson University, 1966
M S, Fairleigh Dickinson University, 1968
M BA, George M ason University, 1981
Gray, Christine R.
English
BA, George Washington University, 1982
M A, University of M aryland, College Park, 1986
PhD , University of M aryland, College Park, 1995

## Green, Sidney

Environmental Management
BA, Dillard University, 1961
M S, H oward University, 1972
PhD, H oward University, 1972
Greenblatt, Lonnie
Business and Management
BA, University of M aryland, College Park, 1979
JD, Widener University, 1982
LLM , George Washington University, 1988

## Greene, James

Information Systems
BS, University of M aryland University College, 1989
M S, American University, 1992
JD, University of M aryland, Baltimore, 1998

## Greene, Melvin

Business and Management
BA, University of M aryland, College Park, 1974
M S, H oward University, 1976
Greenhut, Jeffrey
History
BS, Arizona State University, 1964
M PA, C ornell University, 1968
M PH, University of California, Berkeley, 1969
PhD, K ansas State University, 1978
Griffith, Gladis C.
Business and Management
BA, Boston College, 1990
JD, Boston College, 1993

## Groce, Thomas C.

Business and Management
BS, D elaware State University, 1956
M S, University of W isconsin-M ilwaukee, 1968
M BA, N aval Postgraduate School, 1971
PhD, American University, 1976

## Gruber, Kerry

Psychology
BA, Indiana University of Pennsylvania, 1992
M Ed, Boston University, 1993
Grzesik, Nancy
Accounting
BS, G wynedd-M ercy College, 1970
M Ed, Suffolk University, 1975
Gudsnuk, Joseph
Information Systems Management
BA, Southern Connecticut State U niversity, 1966
BA, University of Connecticut, 1968
M BA, N ew York Institute of Technology, 1986
M AS, Johns H opkins U niversity, 1990

## Guha, Roy Pallabi

Mathematics
BS, University of Calcutta (India), 1985
M S, U niversity of C alcutta (India), 1988
PhD, U niversity of M aryland, C ollege Park, 1999
Gungordu, Nafia
Computer Studies
BS, Boğaziçi University (Turkey), 1976
M S, Boğaziçi University (Turkey), 1978
Gunther, Stefan
English
BA, State University of N ew York C ollege at O neonta, 1988
M A, Brandeis U niversity, 1993
PhD, Brandeis U niversity, 2000
Guss, Edward Jon
Business and Management
BS, Seton H all University, 1960
M A, University of M aryland, C ollege Park, 1973

## Gustafson, John W.

Psychology
AB, University of California, Berkeley, 1966
PhD, University of Rochester, 1972
Guthrie, Sally
Communication Studies
BS, University of Tennessee, 1961
M S, University of Tennessee, 1992
PhD, University of Tennessee, 1995
Habermacher, Andrew L.
Behavioral and Social Sciences
BA, Bucknell University, 1965
M A, Catholic University of America, 1970
PhD, University of Florida, 1986

Hadi, Khaled A.
Computer Studies
BS, Pittsburg State U niversity (K ansas), 1984
M S, Rochester Institute of Technology, 1990
Haiman, Arnold J.
Business and Management
BA, City C ollege of N ew York, 1967
JD, N ew York University, 1970
LLM, George Washington University, 1983
Haine, W. Scott
History
BA, U niversity of C alifornia, Berkeley, 1976
M A, University of Wisconsin-M adison, 1980
PhD, University of W isconsin-M adison, 1984
Hale, Julie L.
Business and Management
BS, M ount St. M ary's C ollege (M aryland), 1979
M BA, K ent State University, 1981
Hale, Thomas Winter
Economics
BA, Emporia State University, 1976
M A, University of M issouri, 1980
PhD, University of N ebraska, 1987
Hall, Bryant
Gerontology
BA, State U niversity of N ew York at Stony Brook, 1974
BS, State University of N ew York at Stony Brook, 1974
M PS, Long Island University, 1977
Hallion, Marie E.
Government and Politics
BA, University of M aryland, College Park, 1963
M A, University of M aryland, College Park, 1964
PhD, University of M aryland, College Park, 1968
Hamilton, Ernest
English
BA, University of the Panjab (Pakistan), 1960
M A, University of the Panjab (Pakistan), 1963
PhD, Kent State U niversity, 1975

## Hanahoe-Dosch, Patricia <br> English <br> BA, Richard Stockton College of New Jersey, 1982 <br> M FA, University of Arizona, 1987

Hancsak, Lynne J.
Natural Science
BS, University of Akron, 1980
M S, University of Toledo, 1982
Hanley, Susan
Natural Science
BS, University of M aryland, College Park, 1984
M S, University of M aryland, College Park, 1987

## Hanson, Timothy R.

History
BA, Gonzaga U niversity, 1987
M A, Eastern Washington University, 1991
Harasti, Gina M.
Legal Studies
BS, University of M aryland, College Park, 1986
JD, University of Baltimore, 1991

## Harden, Michael P.

Information Systems Management
BS, Virginia Polytechnic Institute and State University, 1974
M A, Central M ichigan University, 1977

## Hardy, Michele

English
BA, University of M aryland, College Park, 1993
M A, Johns H opkins University, 1998

## Harrell, William W.

Communication Studies
BA, University of N orth Carolina at Chapel Hill, 1983
M A, University of Georgia, 1986

## Harrington, Donna

Education: Counseling and Personnel Services
BA, State University of N ew York at Stony Brook, 1978
M FA, University of M aryland, College Park, 1990

## Harris, Edward A.

Communication Studies
BS, M emphis State University, 1961
M A, M emphis State University, 1966
PhD, Vanderbilt University, 1972

## Harris, Kendra L.

Business and Management
BS, American University, 1983
M BA, Duke University, 1985

## Harris, Marion H.

Business and Management
M S, University of Pittsburgh, 1971
M PA, University of Southern California, 1984
D PA, University of Southern California, 1985

## Harris, Tracy S.

Business and Management
BS, Fontbonne College, 1985
M BA, Saint Louis University, 1989
M GA, University of Pennsylvania, 1994

## Hart, John J.

Computer Studies
BS, N ortheastern University, 1958
M S, N ortheastern University, 1960
M S, American University, 1984

Harter, Thomas R.
Business and Management
BS, Washington University (M issouri), 1964
M BA, Washington University (M issouri), 1966
PhD, N orthwestern University, 1972

## Hart-Gonzalez, Lucinda

Theatre
BA, University of M assachusetts, 1975
M S, Georgetown University, 1978
PhD, Georgetown University, 1980

## Hartsock, James

Business and Management BS, Frostburg State University, 1981
M GA, University of M aryland University College, 1995

## Haseltine, Reginald Y.

Computer and Information Science
BS, C ornell University, 1972
M S, George Washington University, 1976
Hassig, Ralph C.
Psychology
BA, Albion College, 1968
PhD, University of California, Los Angeles, 1974
M BA, University of San Francisco, 1987

## Hause, Spedden A.

Business and Management
BA, H ood University, 1984
M S, Johns H opkins University, 1986
PhD, University of M aryland, College Park, 1993

## Hawala, Sam

Business and Management
BS, San Francisco State University, 1986
M A, San Francisco State University, 1988
PhD, University of California, D avis, 1994

## Hawkins, Anita S.

Health Services Management
BS, Georgetown University, 1976
M H S, Lincoln University (Pennsylvania), 1985

## Hazra, Tushar K.

Computer Science
BS, University of Burdwan (India), 1981
BEng, University of Calcutta (India), 1985
M S, University of Bradford (England), 1986
PhD, University of Bradford (England), 1990

## Hebert, Sherri C.

Business and Management
BS, University of M aryland University College, 1994
M S, Johns H opkins University, 1997
Hecht, Sheldon
Criminology/Criminal Justice
BA, St. Joseph's College (N ew York), 1978
M PS, Long Island University, 1979

Hedges, Harold T.
Business and Management
BCS, Strayer College of Accountancy, 1948
BS, American University, 1954
M BA, American University, 1968
Heilman, Lawrence C.
History
BA, University of Florida, 1957
M A, University of California, Berkeley, 1960
PhD, American University, 1982

## Heller, Henry B.

Government and Politics
BS, Frostburg State University, 1964
M A, Virginia Polytechnic Institute and State University, 1981
EdD, Virginia Polytechnic Institute and State University, 1986

Hendrickson, Scott
Information Systems Management
BS, U.S. Naval Academy, 1973
M BA, Golden G ate U niversity, 1983
M A, George Washington University, 1995
Hendrzak, Gary E.
Computer and Information Science
BS, University of Toledo, 1985
M S, George Washington University, 1990
Henley, Carol D.
Computer and Information Science
BA, Fisk University, 1969
M S, University of M iami, 1976
Henley, D. Eugene
Business and Management
BS, University of M aryland, College Park, 1969
M BA, University of M aryland, College Park, 1970

## Hennessey, J. Thomas

Business and Management
BA, Eastern Kentucky University, 1965
M PA, Eastern Kentucky University, 1973
PhD, George M ason University, 1996
Hennessy, William L.
Criminology/Criminal Justice
BS, University of M aryland, College Park, 1994
JD, University of M aryland, Baltimore, 1997

## Hens, Julie

Biology
BA, C anisius College, 1991
M S, Pennsylvania State University, 1994
Herman, Eugene H.
Pharmacology
BA, University of California, Berkeley, 1959
M S, University of California, San Francisco, 1963
PhD, University of California, San Francisco, 1965

## Higgins, Cheryl S.

Business and Management
BS, N orfolk State University, 1980
M BA, M onmouth College, 1983

## Higgins, Nancy B.

Business and Management
BS, Westminster College, 1967
M A, Westminster College, 1970
M A, Pepperdine University, 1979
PhD, Vanderbilt University, 1990

## Hildebrand, Joanne F.

Fire Science
BA, University of M aryland, College Park, 1978
M A, University of M aryland, College Park, 1984
Hill, Anthony
Psychology
BA, Lehman College, 1970
M S, Fordham University, 1972
PhD, Fordham University, 1978

## Hill, James W.

Government and Politics
BA, University of Louisville, 1987
JD, University of Kentucky, 1990

## Hill, Randolph L.

Business and Management
BA, University of California, San Diego, 1983
M PP, University of California, Berkeley, 1986
JD, University of California, Berkeley, 1987

## Hiller, Cheryl

Education: Counseling and Personnel Services
BA, University of M aryland, College Park, 1968
M A, University of M aryland, College Park, 1988
Hirz, Lee J.
Computer and Information Science
BBA, George Washington University, 1976
M S, University of M aryland University College, 1999

## Hoagland, Nancy

Communication Studies
M S, Jacksonville State University, 1968
EdD, Virginia Polytechnic Institute and State
University, 1984
Hockenberry, William E.
Business and Management
AB, Gettysburg College, 1961
M A, Colgate University, 1969
JD, American University, 1971
DEd, American University, 1975
LLM, Georgetown University, 1977
Hoffmann, Theresa A.
Behavioral and Social Sciences, Experiential
Learning
BGS, University of M aryland, College Park, 1982
M A, University of M aryland, College Park, 1986

Hoffmon, Sherri
Criminology/Criminal Justice
BA, University of Arkansas, 1994
M A, University of Arkansas, 1998
Holden, Dennis W.
Communication Studies
BA, O hio University, 1969
M A, O hio University, 1972
Holloway, Arnett
English
BS, Boston University, 1973
M A, Ohio State University, 1975
JD, Georgetown University, 1988

## Hollowell, Gail P.

Natural Science
BS, N orth C arolina C entral University, 1990
M S, H oward University, 1996
PhD , H oward University, 1998

## Holt, Timothy

Computer and Information Science
BS, H oward University, 1987
BS, Bowie State University, 1987
M AS, Johns H opkins University, 1991
M S, Johns H opkins University, 1995

## Horacek, Robert C.

Accounting
BA, University of California, Los Angeles, 1973
M A, C alifornia State University, Northridge, 1980

## Horn, Robert C.

Business and Management, Human Resource Management
BA, University of M assachusetts, 1956
M S, University of M assachusetts, 1957
EdS, New M exico State University, 1963
EdD, N ew M exico State University, 1971

## Hornbeak, Hortencia

Microbiology
BA, Skidmore College, 1968
PhD, Georgetown University, 1972

## Horton, Clifton N.

Accounting
BA, University of M aryland University College, 1976
BS, University of M aryland University College, 1978
M S, George Washington University, 1978
M BA, George Washington University, 1982

## Hossain, Emarat

Computer Information Technology
M S, University of Dhaka (Bangladesh), 1973
BS, University of M aryland, Baltimore, 1997
M S, University of M aryland, Baltimore, 1999

## Hosseinzadeh, Manouchehr

Communication Studies
BS, C ollege of M ass C ommunication (India), 1974
M S, Indiana University Bloomington, 1983

## Hostetler, Craig

Health Services Management
BS, Purdue University, 1989
M H A , University of M innesota Twin Cities, 1992
Houck, Janice M.
Library Skills
BA, University of Richmond, 1992
M SLS, Catholic University of America, 1996
Howard, Robert P.
Health Services Management
BA, C alifornia State University, Los Angeles, 1973
M A, University of California, Los Angeles, 1976
M S, C alifornia State University, Northridge, 1980
Hrutka, Joseph M.
Experiential Learning
BS, N orthwestern University, 1962
M BA, Roosevelt University, 1970
Hrutka, Mary Ellen
Experiential Learning
BA, Southern Connecticut State University, 1968
M A, University of M aryland, College Park, 1970
PhD, University of M iami, 1983
Hudak, Daniel K.
Business and Management
BS, The Citadel, 1964
M SIA, C arnegieM ellon University, 1972
Hudak, Seth
Information Systems Management
BS, U.S. M ilitary Academy, 1962
PhD, Boston College, 1976
Hudson, Peter W.
Business and Management
BS, University of M aryland, College Park, 1974
M Ed, University of M aryland, College Park, 1978

## Huggins, Teresa S.

Psychology
BA, Stephen F. Austin State University, 1978
PhD, University of North Carolina at Chapel Hill, 1983

## Hughes, Arthur M.

Economics
AB, Princeton University, 1950
M PA, Princeton University, 1952

## Hullet, Deborah <br> History

BA, University of M aryland University College, 1987
M A, Boston University, 1989
M S, D efense Intelligence C ollege, 1993
Hundemer, Mary Sue
Behavioral and Social Sciences
BA, Sali sbury State C ollege, 1964
M Ed, University of M aryland, College Park, 1976
M A, University of M aryland, College Park, 1978
PhD, University of M aryland, C ollege Park, 1982

## Hunt, Harold

Business and Management
BS, Park College, 1986
M S, Central M ichigan University, 1994

## Hunt, J. Christopher

Natural Science
BS, M urray State University, 1987
M S, University of M aryland, College Park, 1990
M A, University of M aryland, College Park, 1996
Hunter, Alain E.
Information Systems Management
BS, Pennsylvania State University, 1973
M Ed, Pennsylvania State University, 1974
EdD, University of Illinois, 1980

## Huseonica, Arthur K.

Computer Studies
BS, University of M aryland University College, 1987
M S, University of Southern C alifornia, 1989

## Hutchinson, James

Computer and Information Science
BS, Fayetteville State U niversity, 1982
M S, Boston University, 1984
Hutton, Leon
Business and Management
BBA, N orthwood Institute, 1978
M A, C entral M ichigan University, 1980
M BA, Florida Institute of Technology, 1987
Hyde, David
Health
BS, State University of N ew York College at Brockport, 1968
M S, State University of New York College at Brockport, 1973
PhD, University of M aryland, College Park, 1992
Hyde, Peter
Computer Science
BA, H arvard University, 1963
M S, University of Pennsylvania, 1968
M S, University of M aryland, College Park, 1982

## Hylton, Kevin

Behavioral and Social Sciences
BS, State University of New York College at Buffalo, 1992
M S, State University of New York College at Buffalo, 1993
PhD, H oward University, 1999

## Iler, Marta

Information Systems Management
BA, N orthwest M issouri State U niversity, 1972
M BA, C ollege of N otre D ame (C alifornia), 1983

## Iler, Robert W.

Information Systems Management
BS, University of K ansas, 1972
M S, University of Southern California, 1976
M S, N aval Postgraduate School, 1983
Inukai, Connie
Communication Studies
BA, O hio State U niversity, 1970
M A, Columbia University, 1974
Isherwood, Alex C.
Business and Management
BA, San D iego State University, 1973
M A, San Diego State University, 1975
PhD, University of M aryland, College Park, 1986

## Iwobi, Anthony

Accounting
BS, Central State University (O hio), 1986
M BA, University of the D istrict of Columbia, 1989
Iyer, Sridhar S.
Computer Science
BS, M adras Institute of Technology (India)
BS, University of Delhi (India)
M S, University of New South Wales (Australia), 1987
PhD, University of Sydney (Australia), 1992
Jackson, Jacqueline
Psychology
BM usEd, H oward University, 1978
M S, H oward University, 1985
PhD, H oward University, 1992
Jamal, Mahbub
English
BA, University of Dhaka (Bangladesh), 1975
M A, University of D haka (Bangladesh), 1977
M A, Lakehead University (Canada), 1983
PhD, Purdue University, 1995
James, A. Deloris
Communication Studies
M A, O hio State University, 1974
M Ed, M iami University of Ohio, 1980
PhD, University of Pennsylvania, 2000

James, Marian
Health
BS, Old D ominion University, 1985
M A, University of M aryland, College Park, 1993
Jansen, George J.
Computer and Information Science
BA, University of Denver, 1978
M S, George Washington University, 1994
Jansheski, Beverly L.
Gerontology
BS, Columbia Union College, 1968
M A, George Washington University, 1986
Jarc, Duane J.
Computer and Information Science
BS, C ase Western Reserve University, 1970
M S, C ase Western Reserve University, 1979
D Sc, George Washington University, 1999
Jennings, Donald
Astronomy
BS, N orthern Arizona University, 1970
PhD , University of Tennessee, 1974
Jessell-Shattles, Jennifer
Health
BS, Pennsylvania State University, 1988
M A, University of M aryland, College Park, 1996
Johnson, Allison
Communication Studies
BA, University of N orth Florida, 1989
M S, M ercer University, 1998
Johnson, David Patrick
Computer Studies
BA, University of M aryland, College Park, 1982
M S, University of M aryland University College, 1996
Johnson, Deborah A.
Business and Management
BS, University of M aryland, College Park, 1987
Johnson, Elizabeth Dale
English
BA, University of N orth Carolina at Chapel Hill, 1971
JD, University of N orth Carolina at Chapel Hill, 1976
M A, University of M aryland, College Park, 1987
PhD, University of M aryland, College Park, 1990

## Johnson, Emelda

Criminology/Criminal Justice
BS, Virginia Commonwealth University, 1973
JD, Antioch School of Law, 1979
Johnson, Eric M.
Criminology/Criminal Justice
BS, University of M aryland University College, 1973
JD, University of M aryland, Baltimore, 1981

Johnson, Jack B.
Government and Politics
BS, Benedict C ollege, 1970
JD, H oward University, 1975

## Johnson, Jenny K.

Behavioral and Social Sciences
BA, Pennsylvania State University, 1952
PhD, University of M aryland, College Park, 1976

## Johnson, Judy

Computer Studies
BS, Columbia College, 1996
M A, Webster University, 1998
M BA, Webster University, 1999

## Johnston, Amy Ann

Business and Management
BA, St. M ary's College (Indiana), 1977
M BA, Loyola University Chicago, 1982
AM , University of Chicago, 1986
Johnston, Anne
Business and Management
BS, University of M aryland, College Park, 1966
M Ed, Bowie State University, 1975
Jones, Charles L.
Business and Management
BA, Swarthmore C ollege, 1953
M BA, Columbia University, 1959
Jones, Dionne J.
Behavioral and Social Sciences
BS, H oward University, 1974
M SW, H oward University, 1976
PhD, H oward University, 1987
Jones, Stephen
Criminology/Criminal Justice
BA, Villanova University, 1974
M S, Youngstown State University, 1977
Jones, Thomas L.
Business and Management
BS, Tougaloo College, 1963
JD, H oward University, 1971

## Joyce, John J.

Government and Politics
BA, K ent State University, 1982
JD, Georgetown University, 1985

## Joyner, Brenda F.

Health Services Management
BS, M emphis State University, 1972
M S, University of Texas at Austin, 1984
PhD , University of Texas at Austin, 1995

## Jurca, Ioan

Computer and Information Science
M S, Universitatea Politehnica din Timisoara (Romania), 1970
PhD, Deff University of Technology ( N etherlands), 1977

Jurich, Steven J.
Gerontology
BWS, Adelphi University, 1988
M SW, Adelphi University, 1989
Kachura, Boris L.
Business and Management
BS, City University of N ew York, 1969
M S, George Washington University, 1974
Kalkay, Yvette
Computer Studies
BS, University of Tennessee, 1995
M S, University of Tennessee, 1998

## Kammel, Frank J.

Mathematics
BS, St. John's University ( N ew York), 1957
M A, Georgetown University, 1960

## Kann, Charles W.

Computer Science
BChE, University of Delaware, 1980
M S, New Jersey Institute of Technology, 1989
D Sc, George Washington University, 1998

## Kariotis, Theodore C.

Economics
BA, University of Calgary (Canada), 1972
M A, American University, 1974
PhD , Aristotelian University (Greece), 1989

## Karpel, Wendy B.

Legal Studies
BA, H averford C ollege, 1989
JD, Tulane University, 1992

## Kase, Kevin P.

Communication Studies
BS, Clarion University of Pennsylvania, 1980
M A, C entral M ichigan University, 1981
Kashatus, Gerard P.
Natural Science
BS, Pennsylvania State University, 1984
M S, Texas A\& M University, 1986
Kasper, Marvin
Statistics and Probability
BS, Brooklyn College, 1963
M A, University of M aryland, College Park, 1970

## Kass, Barbara

Health
BS, University of Texas at El Paso, 1995
M PH , University of Texas H ealth Science Center at H ouston, 1998

## Kasunik, Diane

Business and Management
M S, M ichigan State University, 1978
PhD, Wayne State University, 1989

## Kaye, William G.

Business and Management
BA, H averford C ollege, 1954
M BA, H arvard College, 1956

## Kaynek, Katherine

Behavioral and Social Sciences
BA, Yale University, 1993
M S, Rutgers University, 1996
PhD, Rutgers University, 1998

## Keller, William K.

Fire Science
BA, University of Colorado, 1981
M PA, University of Baltimore, 1984

## Kelsey, Serita R.

Behavioral and Social Sciences
BS, Florida Agricultural and M echanical University, 1970
M Ed, Georgia State University, 1974
EdD, M organ State University, 1999

## Kemp, Natonne

Legal Studies
BA, Rutgers University, 1989
JD, George Washington University, 1992
Kendall, Walter
Business and Management
BA, University of Texas at Arlington, 1974
M A, U.S. Naval Postgraduate School, 1980
Kenkel, James E.
Legal Studies
BA, University of M aryland, College Park, 1955
JD, G eorgetown University, 1962

## Kenner, John M.

Business and Management
BBA, University of Cincinnati, 1970
M S, M arymount University, 1995
Kenner, Mary Ellen
Business and Management
BS, M arquette University, 1963
M BA, University of West Florida, 1988
Khilji, Anjum
Humanities
M A, University of the Punjab (Pakistan), 1980
PhD, University of the Punjab (Pakistan), 1983
Khoo, Kok Swee
Information Systems Management
BS, N anyang Technological University (Singapore), 1987
M S, Andrews University, 1996
M S, University of M aryland, Baltimore County, 1998

## Khoshand, Mehrdad

Computer and Information Science
BS, M emorial University, 1990
M S, George Washington University, 1992

## Kiddy, Kevin D.

Computer and Information Science
BA, Frostburg State University, 1990
M S, Johns H opkins University, 1995

## King, Michelle Davis

Legal Studies
BA, Boston University, 1974
JD, State University of New York at Buffalo, 1977

## Kirby, Michele

Gerontology
BA, University of M aryland, College Park, 1979
M SW, University of M aryland, Baltimore, 1981

## Kirby, Patricia

Behavioral and Social Sciences
BA, Trinity College (Washington, D.C.), 1961
M A, C atholic University of America, 1964
EdD, Catholic University of America, 1982
Kirk, Cherlyn H.
Communication Studies
BA, University of M issouri, 1979
M A, Johns H opkins University, 1997

## Kirk, Susan E.

Education: Counseling and Personnel Services
BS, H ope C ollege, 1988
M Ed, University of M aryland, College Park, 1996

## Kirkland, Michael B.

Communication Studies
BA, Louisiana State University, 1960
M A, G eorge Washington University, 1971
Kish Wulsch, Julia A.
Health
BS, University of Delaware, 1993
M S, Pennsylvania State University, 1995

## Klank, Richard E.

Art
BArch, Catholic University of America, 1962
M FA, C atholic University of America, 1964
Klemens, Melissa Lin
Legal Studies
BA, St. Bonaventure University, 1991
JD, State University of N ew York at Buffalo, 1994

## Knapp, James

Sociology
BBA, H arding University, 1987
M A, H arding University, 1990
PhD, University of North Texas, 1995

## Knight, William E.

Business and Management
BS, Old Dominion University, 1973
M A, OId D ominion University, 1974
M A, University of M aryland, College Park, 1984

## Knoll, John Alexander

English
BA, University of Illinois, 1989
M S, University of Illinois, 1991

## Knott, Bradley T.

Business and Management
BA, University of Iowa, 1981
M A, U niversity of Iowa, 1982
JD, Catholic University of America, 1990

## Kofie, Nelson F.

Sociology
BA, University of N ew Brunswick (C anada), 1983
M A, Q ueen's University (C anada), 1985
PhD, George Washington U niversity, 1996

## Koller, Carolyn C.

Legal Studies
BS, Roanoke C ollege, 1981
M S, Virginia C ommonwealth University, 1984
PhD, Virginia State University, 1988

## Kopka, Richard W.

Computer and Information Science
BS, University of Pittsburgh, 1961
M S, University of Pittsburgh, 1967

## Kovach, Kenneth A.

Business and Management
BA, O hio University, 1968
M BA, O hio University, 1972
PhD, University of M aryland, College Park, 1975

## Kreger, Alan K.

Business and Management
BS, Temple University, 1959
M BA, Temple University, 1965

## Kreiser, Jeanette

Behavioral and Social Sciences
BA, University of Chicago, 1965
M AT, University of Chicago, 1969
EdD, University of Rochester, 1980
Kreitzman, Horace
Business and Management
BS, Fairleigh Dickinson University, 1961
M S, George Washington University, 1978

## Kronheim, Steven

Psychology
BA, University of Cincinnati, 1975
M A, University of M aine, 1977
M A, University of M aine, 1979
PhD, American University, 1990

## Krout, Homer L.

Information Systems Management
BA, Park College, 1972
M S, Florida Institute of Technology, 1989
PhD, Florida Institute of Technology, 1992

## Kuang, Lin

Computer Studies
BS, H eilongjiong U niversity (China), 1984
M S, H arbin Institute of Technology (China), 1989
M S, Southeastern University, 1996
Kudel, John Patrick
Legal Studies
BA, University of M aryland, College Park, 1977
JD, American University, 1980
Kulansky, Michael A.
Business and Management
BS, Towson State University, 1970
M Ed, University of M aryland, C ollege Park, 1972
M BA, University of M aryland, College Park, 1981

## Kulemeka, Andrew

English
BEd, University of M alawi, 1982
M A, Australian N ational University (Australia), 1987
PhD, Indiana University, 1993

## Kumar, Veena

Communication Studies
M A, K arnataka University (India), 1971
PhD, Lucknow University (India), 1976
Kushner, Michael P.
Business and Management
BS, University of Pittsburgh, 1969
M BA, University of Dayton, 1979

## Kwiatkowski, Karen U.

Information Systems Management
BS, University of M aryland, College Park, 1982
M S, University of Arkansas, 1987
M A, H arvard University, 1991
Lacienski, Stanley J.
Business and Management, Experiential Learning
BS, American International College, 1984
M GA, University of M aryland University College, 1995

Lagnese, Adelaide A.
Legal Studies
BA, St. John's University (N ew York), 1965
M A, H ofstra University, 1968
JD, C atholic University of America, 1976
M A, Antioch School of Law, 1979
Lahat, Zeev
Accounting
BBA, University of Texas at El Paso, 1984
M S, University of Texas at El Paso, 1990

## Lall, Parshotam S.

Business and Management
BS, O regon State University, 1961
M S, Purdue University, 1963
PhD, Purdue University, 1966
JD, American University, 1974

## Lancaster, Morris S.

Computer Science
BS, N orth C arolina State University, 1972
M S, University of Tennessee, 1976
Land, Janet L.
Communication Studies
BS, University of M aryland University College, 1993
M A, Johns H opkins University, 1995

## Landry, Bart

Sociology
BA, Xavier University of Louisiana, 1966
PhD, Columbia University, 1971

## Lanzer, Francis P.

Computer Studies
BSEE, U.S. N aval Academy, 1973
M SBA, Boston University, 1983
M SEE, University of M aryland, College Park, 1984

## Lapiana, John K.

Legal Studies
BS, State University of N ew York at Buffalo, 1984
JD, State University of N ew York at Buffalo, 1987
M S, Johns H opkins University, 1995

## Lark, Regina

History
BA, C alifornia State University, N orthridge, 1990
M A, California State University, N orthridge, 1992
PhD, University of Southern California, 1999
Larsen, Lana C.
Psychology
BA, Southwest Texas State University, 1975
M A, C hapman College, 1983
M A, Southern IIlinois University, 1991
PhD, Saint Louis University, 1997
Laska, William D.
Information Systems Management
BS, K ent State University, 1974
M S, Virginia Polytechnic Institute and State
University, 1993
Lathrop, Elizabeth Laura
Behavioral and Social Sciences
BA, H ollins C ollege, 1957
M A, Inter American University of Puerto Rico, 1966
PhD, University of M aryland, C ollege Park, 1982

## Lavine, Michael K.

Information Systems Management
BS, Touro College, 1988
M S, City University London (England), 1997
M S, Johns H opkins University, 1998

## Lazarus, Ferdinand F.

Computer Studies
BEE, City University of New York, 1951
M S, Florida Institute of Technology, 1979

## Leahy, Ronald A.

Business and Management
PhB, Loyola College in M aryland, 1954
BS, Johns H opkins University, 1960
M BA, George Washington University, 1963

## Leake, Charles R.

Computer Science
BS, N ew York University, 1963
M S, N ew York University, 1965
PhD, N ew York University, 1969
Leary, William F.
Accounting
BA, C ollege of Wooster, 1973
JD, University of Toledo, 1979
M ST, D ePaul University, 1982
Leberre, Maria L.
Communication Studies
BA, University of Virginia, 1986
M A, O hio State University, 1988
PhD, George M ason University, 1997
Leerburger, Marian
Business and Management
BA, Colby College, 1984
M A, American University, 1986
M A, Georgetown University, 1988
PhD, University of M aryland, College Park, 1996

## Lehman, Charles

Business and Management
BS, M iami University (Ohio), 1960
M BA, University of Cincinnati, 1962

## Leitner, Kina D.

Psychology
BS, University of D enver, 1970
M S, Bank Street College of Education, 1977
PhD, Columbia University, 1992

## LeMaster, John D.

German
BA, Indiana University of Pennsylvania, 1985
M A, University of M aryland, College Park, 1989
Lengermann, Joseph J.
Sociology
BA, University of N otre Dame, 1958
STL, G regorian University, 1962
M A, University of N otre D ame, 1964
PhD, C ornell University, 1969

## Lessans, Michael A.

Computer and Information Science
BS, University of M aryland University College, 1985
M S, George Washington University, 1991
Lesser, Lawrence M.
Business and Management
BS, American University, 1965
M BA, American University, 1968
Levin, Sharon L.
Accounting
BS, University of M aryland, Baltimore County, 1979
M BA, Loyola College in M aryland, 1992
Levine, Leonard F.
Information Systems Management
BA, Columbia University, 1972
M A, Columbia University, 1976
PhM, Columbia University, 1977
Levitas, Tulin M.
Humanities
BA, Wheaton College (M assachusetts), 1962
M A, Boston University, 1969
M A, University of M aryland, College Park, 1974
Lewis, Cassandra C.
Experiential Learning
BA, State University of N ew York at Buffalo, 1992
M A, Boston College, 1996
Lichtenstein, Cecile M.
Computer Studies
BA, University of N orth Carolina at Greensboro, 1962
M AT, Niagara University, 1968
BT, University of North Florida, 1985
M S, University of North Florida, 1991
Liebermann, Roxanne J.
Information Systems Management
BS, University of Pittsburgh, 1987
M S, University of M aryland University C ollege, 1994

## Liu, Lawrence W.

Computer and Information Science
BS, University of Tamkang (Taiwan), 1980
M BA, University of Dallas, 1985

## Lloyd, Timothy

Information Systems Management
BA, University of M aryland, Baltimore County, 1982
M S, University of M aryland University College, 1987

## Lomax, Glen F.

Gerontology
AAS, Washington Technical Institute (O hio), 1971
M S, C ase W estern Reserve University, 1987

## Lombardo, Peter

Computer Studies
BS, Frostburg State University, 1993
M S, Johns H opkins University, 1995

## Long, Anna

Computer Studies
BS, University of Louisville, 1982
M SEE, University of Louisville, 1983

## Lopez-Gonzalez, José

Humanities
BA, Universidad Autónoma de $N$ uevo León (M exico), 1970
M A, Johns H opkins U niversity, 1990
PhD, Johns H opkins University, 1992
Loss, Roderick
Information Systems Management
BS, Rollins College, 1967
M BA, Roosevelt University, 1978
Loughlin, Brian C.
Accounting
BBA, M anhattan C ollege, 1965
M BA, University of M aryland, College Park, 1988

## Lovelace, Douglas

Business and Management
BS, H ampton University, 1976
M BA, G olden Gate University, 1980
Lubetkin, Beth A.
Criminology/Criminal Justice
BS, M iami University (Ohio), 1990
JD, American University, 1995
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
Lundak, Joel D.
Psychology
BA, University of Nebraska, 1963
M A, University of Nebraska, 1981
PhD, University of Nebraska, 1988
Lundregan, Christine C.
Business and Management
BS, University of M aryland, College Park, 1976
M S, University of M aryland University College, 1988
Lupica, Carmela Lena
Business and Management
BA, Cleveland State University, 1971
M S, University of H ouston, 1977

## Lutz, Blanche Sefton

Information Systems Management BA, University of C alifornia, Berkeley, 1982
JD, University of California, Berkeley, 1985

## Lyke, Robert F.

Accounting
BA, Swarthmore C ollege, 1963
M A, Yale U niversity, 1965
PhD, Yale University, 1968
Lynch, Michael E.
Computer Studies
BA, C ollege of William and M ary, 1988
M A, George M ason University, 1996
MacDonald, Duncan
History
BA, University of Tulsa, 1972
M A, University of Tulsa, 1974
PhD, West Virginia University, 1983

## MacFoy, Cyrus

Biology
BS, Royal H olloway College, University of London (England), 1974
M S, Imperial College of Science, Technology and M edicine (England), 1976
PhD , Imperial C ollege of Science, Technology and M edicine (England), 1979

## Mack, Nanette G.

Mathematics
BA, M ichigan State University, 1978
M S, M ichigan State University, 1980
Maderi, Anthony D.
Computer and Information Science
BS, University of M aryland, College Park, 1992
M S, Loyola C ollege in M aryland, 1997
Maggio, Mark J.
Behavioral and Social Sciences
BS, University of M aryland University College, 1987
PhD, University of M aryland, College Park, 1998

## Malloy, Dorothea C.

Accounting
BS, University of M assachusetts, 1987
M S, University of Baltimore, 1993
Mangold, Sanford D.
Business and Management, Human Resource

## Management

BS, University of Florida, 1969
M S, Air Force Institute of Technology, 1973
M A, N aval War College, 1987
Manicke, Robert L.
Mathematics
BA, University of M issouri, 1969
M S, University of H ouston, 1971
PhD, University of M aryland, College Park, 1981
Mannina, Debra
Mathematics
BS, University of M aryland, College Park, 1987
M Ed, University of M aryland, College Park, 1989

Manno, Joseph R.
Cooperative Education
BA, Pennsylvania State University, 1949
M A, American University, 1958
PhD, University of M aryland, C ollege Park, 1989

## Mantel, Wendy

Communication Studies
BA, Ramapo College of N ew Jersey, 1983
M S, Johns H opkins University, 1999
Mardesich, Michael
Computer Studies
BS, C alifornia State University, Dominguez Hills, 1985
M S, University of M aryland University College, 1999
Marin, Allen
Human Resource Management
BA, University of M aryland, College Park, 1969
M A, University of M aryland, College Park, 1971
PhD, University of M aryland, College Park, 1985
Marin, Noemi
Speech
M Ed, Universitatea din Bucaresti (Romania), 1977
M A, C alifornia State University, N orthridge, 1994
PhD, University of M aryland, C ollege Park, 1999

## Mark, Winifred A. N.

Communication Studies
BA, Trinity College (Ireland), 1952
M A, Niagara University, 1975
PhD, C atholic University of America, 1978
Marks, Lori N.
Gerontology
BA, Wellesley College, 1987
M S, Pennsy/vania State University, 1990
PhD, University of M aryland, College Park, 1995
Marquina, Allison A.
Business and Management
BS, Columbia Union College, 1987
JD, University of Baltimore, 1991
Marschall, Sabrina I.
Human Resource Management
BS, University of M aryland, College Park, 1985
M Ed, University of M aryland, College Park, 1990
PhD, University of M aryland, College Park, 1995
Marshall, Heather M.
Business and Management
M S, Johns H opkins University, 1996
M A, Fielding Institute, 1999

## Martin, Gina

Biology
BS, University of M aryland, College Park, 1991
M A, H ood College, 1997
Martin, Sandra O.
English
BS, Saint Louis University, 1964
M A, Saint Louis University, 1967

## Martinez, Rodolfo J.

Computer and Information Science
BS, George Washington University, 1976
M S, George Washington University, 1980

## Martner-Hewes, Patricia M.

Natural Science
BS, University of California, Los Angeles, 1979
M S, University of California, Los Angeles, 1981
D rPH, University of California, Los Angeles, 1984

## Mashayekhi, Mehrdad

Sociology
BA, C ase Western Reserve University, 1976
M A, American University, 1979
PhD, American University, 1986
Matsakis, Aphrodite
Paychology
M A, Stanford University, 1969
M A, University of M aryland, College Park, 1972
PhD, University of M aryland, College Park, 1975

## Mattingly, John A.

Business and Management
BS, Towson State University, 1993
JD, University of Baltimore, 1996

## Maurer, Donna

Sociology
BA, University of M assachusetts, D artmouth, 1985
M A, East Tennessee State Univesity, 1989
PhD, Southern Illinois University, 1997
Mauro, Benjamin C.
Psychology
BA, Temple University, 1980
M A, Temple University, 1984
PhD, Temple U niversity, 1991
Mayer, Michael E.
Business and Management
BS, Loyola C ollege in M aryland, 1968
M A, Central M ichigan University, 1981
Mayeske, Betty Jo
Humanities
BA, University of Illinois, Urbana, 1956
M A, University of Illinois, Urbana, 1958
PhD, University of M aryland, College Park, 1972

Mazeroff, Paul
Psychology
BA, Western M aryland College, 1967
M A, University of M aryland, College Park, 1968
EdD, Peabody College, Vanderbilt University, 1977
McCaffrey, William E.
Information Systems Management
BS, Siena College, 1973
M BA, University of Notre D ame, 1987

## McCauley, Susan Diane

Communication Studies
BA, University of M aryland, College Park, 1982
BS, University of M aryland, College Park, 1984
M A, Saint Louis University, 1985
McClean, Philip M.
Natural Science
BS, Loras College, 1959
M S, University of Iowa, 1967
McClintock, Dorothy A.
Information Systems Management
BS, University of M aryland University College, 1985
M S, Bowie State University, 1989

## McCloskey, Leora

English
BA, University of California, Los Angeles, 1989
M A, N orth Carolina State U niversity, 1994
McCotter, Verjeana C.
Criminology/Criminal Justice
BA, University of M aryland, College Park, 1989
JD, University of the District of Columbia, 1996

## McDermitt, Edward V.

Humanities
AB, Georgetown University, 1975
M A, Georgetown University, 1978
JD, University of Santa Clara, 1980
LLM, University of Pennsylvania, 1984
McDonald, Georgiana C.
English
BA, O berlin College, 1971
M A, University of M aryland, College Park, 1975
McDonald, Robert E.
English
BS, State University of New York College at N ew Paltz, 1963
M A, University of M aryland, College Park, 1970

## McFeeley, Ann

Health Services Management
BS, University of Pittsburgh, 1980
M H A, University of Pittsburgh, 1984

McGinty, Patrick
Government and Politics
BA, University of O maha, 1961
M A, Georgetown University, 1975
PhD, Georgetown University, 1983
McIntosh, Wayne V.
Government and Politics
BA, University of South Carolina, 1973
M A, W ichita State University, 1974
PhD, Washington University (M issouri), 1981

## McKalip, Donna

Information Systems Management
BA, University of the Philippines, 1976
M A, Central M ichigan University, 1978
M S, University of M aryland University C ollege, 2000

## McKeldin, William H.

Criminology/Criminal Justice
BS, University of M aryland University College, 1987
M BA, 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
M Ph, University of Cambridge (England), 1995

## McKenzie, Charlotte

Computer and Information Science
BA, California State University, Long Beach, 1974
M S/M BA, G olden G ate University, 1987
M S, Johns H opkins University, 1995

## McKenzie, Ross A.

Computer Studies
BS, Lock H aven State University, 1982
M S, M issouri State University, 1985
McLaughlin, Debra F.
Psychology
BS, Clark College, 1986
PhD, University of North Carolina at Chapel Hill, 1994

## McLaughlin, William

Computer Studies
BS, University of M aryland, College Park, 1988
M A, Webster University, 1998

## McLean, Kenneth

Computer Studies
M A, George Washington University, 1968
BS, University of M aryland University College, 1984
M S, George Washington University, 1988

## McNeal, Bernard G.

Accounting
BS, M organ State C ollege, 1975
M SM , Purdue University, 1977

## Meek, Steve

Business and Management
BS, University of Alabama, 1966
M S, University of California, Los Angeles, 1982
Mehalick, Michael R.
Information Systems Management
BA, University of Rochester, 1984
M S, University of M aryland University College, 1999
Meiring, Jeffery A.
Business and Management
BA, Ohio State University, 1988
M PA, O hio State University, 1990
M LH R, O hio State U niversity, 1990
Mellin, Robert
Criminology/Criminal Justice
BA, University of M aryland University College, 1982
JD, University of M aryland, Baltimore, 1990

## Memon, Altaf

Environmental Management
BE, University of K arachi (Pakistan), 1972
M S, Asian Institute of Technology (Thailand), 1975
M Eng, University of Pittsburgh, 1979
PhD, University of Pittsburgh, 1980

## Menasian, James

Computer and Information Science
AB, Columbia University, 1967
BS, University of M aryland, College Park, 1985
Mericle, Linda S.
Legal Studies
BS, University of M aryland University C ollege, 1987
JD, University of Baltimore, 1991

## Merkel, Janet R.

Psychology
BA, Alverno College, 1966
M S, Purdue University, 1972
M PS, Loyola University Chicago, 1987
M S, Loyola College in M aryland, 1988
PhD, Loyola College in M aryland, 1992
Michel, Kevin A.
Accounting
BS, Pace University, 1979
M BA, Pace University, 1986
PhD, N ova Southeastern University, 1999

## Michelotti, Gregory A.

Microbiology
BS, Pennsylvania State University, 1986
PhD, University of South C arolina, 1992
Michelson, Bruce K.
Accounting
BS, University of M aryland, College Park, 1971
M BA, George Washington University, 1972

## Mihall, John

Education: Counseling and Personnel Services
BS, University of M aryland, College Park, 1976
M A, Antioch University, 1979

## Mikulski, George R.

Computer and Information Science
BS, King's College (Pennsylvania), 1985
M S, George M ason University, 1991

## Miller, David F.

Accounting
BS, University of M aryland, College Park, 1967
M BA, George Washington University, 1976
Miller, Laura M.
Health
BS, University of M aryland, College Park, 1989
M S, M iami University of Ohio, 1993
Miller, Levi B.
Health Services Management
BS, M organ State U niversity, 1962
JD, University of Baltimore, 1976
Miller, Tammie A.
Computer Studies
BS, N orfolk State University, 1986
M BA, Southeastern University, 1999
Milman, Frank L.
Business and Management
BS, University of M aryland, College Park, 1970
M BA, University of M aryland, College Park, 1973
Mines, Cheryle A.
Gerontology
BA, Clark College, 1984
M SA, C entral M ichigan University, 1986
M PH, University of South Florida, 1991
Minetree, James L.
Fire Science
BGS, University of Nebraska, 1971
M A, University of Southern California, 1973

## Miranda, Citlali

Spanish
BS, Unidad Profesional Interdisciplinaria de Ingeniera y Ciencias Sociales y Administrativas, Instituto
Politécnico Nacional, M exico, 1994
M A, University of M aryland, Baltimore C ounty, 1999
Misram, Nidhi
Computer and Information Science
BS, University of Allahabad (India), 1991
M S, University of Allahabad (India), 1999
Moghadam, Linda L.
Sociology
BA, University of M aryland, College Park, 1976
M A, University of M aryland, College Park, 1981
PhD, University of M aryland, College Park, 1989

## Montano, Robert F.

Computer Studies
BS, Syracuse University, 1974
M A, Loyola C ollege in M aryland, 1984
Moonesinghe, Ramal
Statistics and Probability
BS, University of Columbo (Sri Lanka), 1979
M S, Bowling Green State University, 1985
M A, Bowling Green State University, 1988
PhD, University of M issouri, 1991

## Moore, Dennis

Computer and Information Science
BS, U.S. Air Force Academy, 1987
Moore, Laura M.
Sociology
BA, Louisiana State University, 1989
M A, University of M aryland University College, 1996

## Moore, Marla H.

Natural Science
BS, Pennsylvania State U niversity, 1962
M S, C atholic University of America, 1967
PhD, University of M aryland, C ollege Park, 1981
Moore, Thomas
English
BA, Towson State University, 1973
M A, Pennsylvania State University, 1975
PhD, University of M aryland, College Park, 1983

## Morales, Angela

Environmental Management
BS, C ornell University, 1978
M S, Johns H opkins U niversity, 1996

## Moran, John L.

Business and Management
BS, University of Illinois, 1969
M BA, DePaul University, 1977
M A, G eorgetown University, 1989
Morris, Jon R.
Information Systems Management
BS, Illinois Wesleyan University, 1963
M A, University of Denver, 1965
PhD, University of Colorado at Boulder, 1971
Morrison, Philip Joseph
Astronomy
BA, C ollege of the H oly Cross, 1969
M S, Johns H opkins U niversity, 1974
PhD , University of M aryland, C ollege Park, 1979

## Morse, Gordon A.

Business and Management
BA, American International College, 1962
M BA, University of M iami, 1966

## Motes, Michael J.

Accounting
BS, C ornell University, 1975
M A, C entral M ichigan University, 1979
Moumena, Lhadj
Computer and Information Science
BS, University of Sciences and Technology (Algeria), 1983
M S, University of M aryland, College Park, 1986
PhD, University of M aryland, College Park, 1991

## Mounts, James A.

Business and Management
BA, Washington and Jefferson College, 1953
JD, University of Pennsylvania, 1958
M S, M ichigan State University, 1967

## Moyes, Glen D.

Accounting
BS, University of Utah, 1979
M BA, University of Nevada, 1984
D BA, U.S. International University, 1991

## Mulhall, Raymond

Fire Science
BS, University of M aryland, College Park, 1979
Mulhern, Sally A.
Biology
BS, M arymount University, 1966
M S, G eorge Washington University, 1968
PhD, George Washington University, 1971
Mulherrin, Elizabeth
Library Skills
BA, University of New H ampshire, 1985
M LIS, University of South C arolina, 1993

## Muren, Gary P.

Computer Information Technology
BS, Illinois State University, 1966
M A, University of Illinois, 1968
PhD, University of Illinois, 1972
BA, University of M aryland University College, 1983

## Murray, Teresa

Computer Studies
BA, M ount Vernon College, 1988
M A, University of Baltimore, 1995

## Musavi, Hamid

Computer and Information Science
BS, Clemson University, 1980
M S, Johns H opkins University, 1992
Nacev, Vladimir
Psychology
M A, California School of Professional Psychology, 1974
PhD, U.S. International University, 1977

## Narayan, Krishnaswami

Computer Studies
M A, University of M adras (India), 1980

## Nash, Charles E.

Information Systems Management
BA, University of N orth Carolina at Chapel Hill, 1967
M A, George Washington University, 1974
Nassirdaftari, Saied
Computer Studies
BS, American University, 1981
M S, American University, 1985
Navarra, Joseph L.
Environmental Management
BS, University of M aryland, College Park, 1985
M S, N ational-Louis University, 1994
Nazma, Shirin
Economics
BS, University of Dhaka, Bangladesh, 1981
M A, O hio State University, 1990
PhD, University of Illinois, 1996
Ndubuisi, Samuel C.
Sociology
BA, University of Ibadan (Nigeria), 1975
M A, Georgetown University, 1979
PhD, H oward University, 1986

## Neal, Mark A.

Legal Studies
BA, University of M aryland, College Park, 1988
JD, University of M aryland, Baltimore, 1992

## Neary, John

Information Systems Management
BS, University of M aryland University College, 1976
M S, Strayer University, 1998
Negm, M. Salah
Accounting
BS, Cairo University (Egypt), 1958
M BA, New York University, 1965
PhD , Lawrence University, 1975
Neimeyer, Charles P.
History
BA, University of M aryland, College Park, 1976
M A, Georgetown University, 1983
M A, Naval War College, 1991
PhD, Georgetown University, 1993

## Neri, John A.

Economics
BS, University of M aryland, College Park, 1968
M A, University of M aryland, College Park, 1970
PhD, University of M aryland, College Park, 1973

Neuder, Stanley M.
Mathematics
BS, Brooklyn College, 1955
M S, University of M aryland, College Park, 1960
PhD, C atholic University of America, 1978

## Newhouse, Franklin George

Business and Management
BA, University of M aryland University College, 1972
M BA, University of H awaii at H onolulu, 1974
Newhouse, Quentin, Jr.
Behavioral and Social Sciences
BA, M arietta College, 1971
M S, H oward University, 1974
PhD, H oward University, 1980
Newman, John M.
History
BA, George Washington University, 1973
M A, George Washington University, 1978
PhD, George Washington University, 1991
Neyens, Ruth Lane
Business and Management
AB, Boston University, 1963
M BA, Boston University, 1976
Nichols, Linda
Business and Management
BA, Vassar College, 1982
D Sc, George Washington University, 1984
M S, George Washington University, 1984
Nickens, Shelton
History
BA, N orth Carolina Wesleyan C ollege, 1966
M A, East C arolina University, 1967
M A, University of London (England), 1971
Nickerson, Rosemary G.
Natural Science
BA, Rutgers University, 1981
PhD, State University of New York at Stony Brook, 1988

## Nickols, Jacqueline

Information Systems Management
BA, University of M aryland, College Park, 1993
AA, C ommunity College of the Air Force, 1994
M S, Central M ichigan University, 1999

## Nielson, Michael L.

English
BA, University of M aryland University College, 1981
M A, George Washington University, 1983
Niles, John C.
Computer and Information Science
BS, C atholic University of America, 1987
M S, University of M aryland University College, 1996

## Nnadili, Anthony O.

Government and Politics
BA, H oward University, 1976
M A, H oward University, 1977
PhD, H oward University, 1984
Nolan, Eve
Business and Management
BA, University of M aryland, College Park, 1988
M S, University of M aryland University C ollege, 1996

## Nolan, Theresa A.

Legal Studies
BA, University of Baltimore, 1972
JD, University of Baltimore, 1975

## Noone, Patricia A.

English
BA, University of M aryland, College Park, 1980
M A, University of M aryland, College Park, 1985

## Northrop, Albert W.

Legal Studies
BA, University of M aryland, College Park, 1969
JD, University of M aryland, Baltimore, 1974
Nuth, Eugene M.
Criminology/Criminal Justice
BS, University of Baltimore, 1967
JD, University of Baltimore, 1970

## Nutter, Kathleen B.

History
BA, Smith College, 1990
M A, University of M assachusetts Amherst, 1993
PhD, University of M assachusetts Amherst, 1998

## Nwaka, Charles U.

Economics
BS, St. Joseph's University, 1975
M A, M innesota State University, 1982
PhD, H oward University, 1994
Nye, Michael
Business and Management
JD, University of Nebraska, 1971
LLM , George Washington University, 1980
Oakcrum, Gloria
Business and Management
BS, University of M aryland, College Park, 1983
M S, G olden G ate University, 1987

## Oakcrum, Lewis

Business and Management
BS, University of M aryland, College Park, 1982
M S, Golden Gate University, 1986
Obenwa, Peter
Accounting
BA, Eastern Washington University, 1978
M BA, Eastern Washington University, 1980
M A, American University, 1984
BS, University of M aryland University College, 1990

O'Connell, Walter R.
Business and Management
BS, Rutgers U niversity, 1964
M BA, University of Virginia, 1972
Ogg, Sherry
Biology
BS, D elaware Valley C ollege, 1984
M S, C alifornia State University, Chico, 1988
PhD , University of M aryland, C ollege Park, 1994

## Okigbo, Vincent C.

Speech
BA, Texas Southern U niversity, 1990
M A, Texas Southern University, 1992

## Okoh, Chitua Ada

Gerontology
BS, University of Nigeria, 1974
M S, H oward University, 1982
PhD , H oward University, 1988
M PH , George W ashington University, 1994

## Olden-Stahl, Susan K.

History
BA, University of W isconsin-M adison, 1971
M A, University of Illinois, 1973
Oliva, Linda M .
Psychology
BS, University of M aryland, College Park, 1981
M Ed, Boston University, 1984
EdD, Boston University, 1993

## Oliver, George

English
BA, University of N ew Orleans, 1969
M A, Louisiana State University, 1980

## O'Malley, Sharon R.

Journalism
BA, University of M aryland University C ollege, 1989
M A, University of M aryland, College Park, 1991
Omidpanah, Parvis
Health Services Management
BS, Isfahan University of Technology (Iran), 1977
M A, Western M ichigan University, 1979
PhD, Walden University, 1998

## Onye, Stanley

Government and Politics
BA, St. Anselm C ollege, 1977
M A, H oward University, 1979
PhD , University of M aryland, C ollege Park, 1985

## O'Rourke, Thomas

Business and Management
BA, Alfred University, 1970
M A, Webster University, 1975

Otiji, Sylvester N.
Computer Studies
BA, University of M innesota Twin Cities, 1984
M U P, San Jose State University, 1986
M GA, University of M aryland University College, 1994

Owens, Garrison
Biology
BA, Talladega C ollege, 1987
M S, Wayne State U niversity, 1989
Page, Alfred A.
Accounting
BS, Towson State University, 1979
M S, University of Baltimore, 1982

## Page, Norbert

Environmental Science
DVM , O hio State University, 1956
M S, University of Rochester, 1963
Palm, Sylvia C.
Information Systems Management
BA, University of M aryland, College Park, 1975

## Pang, Leslie

Computer Studies
BS, University of H awaii at H onolulu, 1974
M S, University of N ebraska at Lincoln, 1979
PhD, University of Utah, 1983
M BA, University of M aryland, College Park, 1988
Patterson, Roland N.
Criminology/Criminal Justice
BA, M organ State University, 1981
JD, Antioch College of Law, 1986
Patterson, Tom
Behavioral and Social Sciences
BA, University of M aryland, College Park, 1974
M A, University of M aryland, College Park, 1977
Patterson, William V.
Speech
BFA, University of O klahoma, 1970
M FA, University of Utah, 1972

## Payne, Jerald E.

Business and Management
BS, Troy State University, 1969
M Ed, Loyola College in M aryland, 1979
PhD, University of M aryland, C ollege Park, 1995
Payne, Twanna M.
Information Systems Management
BS, Virginia State University, 1994
M S, University of M aryland University College, 1999
Peabody, Richard M.
English
BA, University of M aryland, College Park, 1973
M A, American University, 1975

## Peavey, Sandra S.

Legal Studies
BA, C ornell University, 1959
LLB, Duke University, 1962
JD, Duke University, 1962

## Pegalis, Linda J.

Psychology
BS, Lehigh University, 1987
M S, University of Georgia, 1991
PhD, University of Georgia, 1994

## Peirce, William P.

Communication Studies
BA, Westminster College, 1960
M A, University of M aryland, College Park, 1963
Pelletier, Jane
Accounting
BA, C olby College, 1980
M BA, University of Pittsburgh, 1982
Pennington, Elizabeth
Humanities
BA, Florida State University, 1975
M A, Florida State University, 1976
Perkins, Wendy
English
BA, Stockton State C ollege, 1985
M A, Rutgers University, 1988
PhD, University of Delaware, 1996

## Persaud, Motee

Business and Management
BA, University of W isconsin-La C rosse, 1966
M A, H oward University, 1970
JD, George Washington University, 1974
PhD, American University, 1978
Persh, Michael G.
Accounting
BA, Washington University (M issouri), 1973
M BA, George Washington University, 1977
Pertillar-Brevard, Lisa A.
Humanities
BA, Smith College, 1991
M A, Emory University, 1994
PhD, Emory University, 1995
Peters, Erica
History
BA, H arvard University, 1991
M A, University of Chicago, 1994
PhD, University of Chicago, 2000

## Peterson, Victoria M.

Business and Management
BA, Tennessee Wesleyan College, 1972
M BA, University of N evada, 1994

## Phillips, Janet B.

Behavioral and Social Sciences
BS, University of M aryland, College Park, 1971
M Ed, University of M aryland, College Park, 1972
PhD, University of M aryland, College Park, 1981
Piccoli, Phil
Natural Science
BA, University of M ontana, 1984
M S, University of Pittsburgh, 1987
PhD, University of M aryland, College Park, 1992

## Pitocco, Nickolas J.

Computer and Information Science
BS, University of M aryland, College Park, 1986
M S, Troy State University, 1991
M S, University of M aryland University College, 1993

## Pittner, Kristen M.

Computer Studies
BS, Florida Atlantic University, 1996
M S, N ova Southeastern University, 1999

## Pitts, David D.

Computer Studies
BEng, Vanderbilt University, 1986
M BA, University of M aryland, College Park, 1995
Plude, Dana J.
Psychology
BA, State University of New York at Buffalo, 1976
M A, Syracuse University, 1979
PhD, Syracuse U niversity, 1980
Pointer, Sharron K.
Information Systems Management
BS, University of California, San Bernardino, 1986
M S, Bowie State University, 1995
Poltilove, Rachel
Biology
BS, University of M aryland, College Park, 1996
M A, George Washington University, 2000
Pomietto, Robert J.
Information Systems Management
BS, D uquesne University, 1970
M S, University of M aryland, College Park, 1989
Ponds, Laveen
Business and Management
BS, O hio State University, 1974
M A, Central M ichigan University, 1978
JD, C apital University, 1983

## Porosky, Peter

Communication Studies
BA, University of Washington, 1958
M FA, University of O regon, 1965

## Porter, Ronald P.

Computer and Information Science
BS, University of M aryland University College, 1993
M S, Johns H opkins University, 1995
Porter, Yvette
Information Systems Management
BS, University of M aryland University C ollege, 1987
M S, Johns H opkins University, 1996
Post, Todd H.
Communication Studies
BA, Old D ominion University, 1984
M FA, George M ason University, 1988
Potter, Marshall R.
Computer and Information Science
BS, University of M aryland, College Park, 1971
M SEE, University of M aryland, College Park, 1974
M S, University of M aryland, College Park, 1979
Powell, Catherine
Psychology
BS, University of Pittsburgh, 1972
M S, University of Pittsburgh, 1973
JD, Antioch School of Law, 1986
LLM , American University, 1987
Powell, Vicky L.
Health Services Management
BA, H oward University, 1988
JD, Georgetown University, 1995
Powroznik, Daniel L.
Business and Management
BA, Allegheny College, 1971
M A, University of M aryland, College Park, 1972
PhD, University of M aryland, College Park, 1980
M BA, George Washington University, 1982
Prakash, Chilin S.
Geology
BS, Bangalore University (India), 1972
M S, Bangalore University (India), 1974
M Ph, Bangalore University (India), 1975
M Ph, University of Aston (England), 1977
PhD, University of C ambridge (England), 1980

## Prasad, Surya S.

Information Systems Management
BS, Andhra Pradesh Agricultural University (India), 1970
M A, Sam H ouston State University, 1971
PhD, Rutgers University, 1977
Prasannappa, Raju
Computer and Information Science
BS, University of M ysore (India), 1981
M S, University of M aryland, College Park, 1986

## Preston-Dillon, Dee

Psychology
BEd, University of H awaii at H onolulu, 1972
M A, University of N orthern C olorado, 1976
PhD, Saybrook Graduate School and Research Center, 1999

## Profozich, Richard P.

Communication Studies
BS, Pennsylvania State University, 1970
M S, Rensselaer Polytechnic Institute, 1972
PhD, University of M aryland, College Park, 1989

## Pu, Fan-Tao

Computer Science
BS, N ational Chiao Tung University (Taiwan), 1986
M A, National Chiao Tung University (Taiwan), 1988
PhD, University of M aryland, College Park, 1998
Pugh, John C.
Natural Science
BS, University of Liverpool (England), 1978
PhD, University of Liverpool (England), 1982

## Pugh, Kathleen W.

Business and Management
BA, State University of New York at Binghamton, 1991
M BA, University of Nevada, 1994

## Pugh, Marilyn B.

Economics
BS, O hio State University, 1969
M A, O hio State University, 1971
PhD, George M ason University, 1994

## Pullen, Jeffrey D.

Computer Studies
BS, University of M aryland University College, 1992
M GA, University of M aryland University College, 1996

## Puma, Daniel R.

Business and Management
BA, University of M aryland, College Park, 1973
BS, University of M aryland, C ollege Park, 1973
M A, Bowie State U niversity, 1982

## Quander, Linda

Communication Studies
BA, Brown University, 1975
M AT, Brown University, 1975
PhD, H oward University, 1981
Quinn, James T.
Art
BFA, Virginia C ommonwealth University, 1964
M FA, Virginia C ommonwealth University, 1966
PhD, Ohio University, 1972

Quinn, Maureen
Business and Management
BS, American University, 1982
JD, Temple University, 1987
Rabinovich, Beth
Psychology
BA, George Washington University, 1973
M A, George Washington University, 1975
PhD , University of M aryland, College Park, 1983
Radja, James E.
Business and Management
BS, Virginia Polytechnic Institute and State University, 1983
M BA, George M ason University, 1989

## Rajagopal, Raj

Computer and Information Science
BS, Indian Institute of Science (India), 1978
M S, Indian Institute of Science (India), 1980
M BA, George Washington University, 1990
Rajaram, Balasubramanian (Raju)
Computer Science
BS, University of M adras (India), 1976
M S, University of M adras (India), 1978
M S, Indian Institute of Technology (India), 1981

## Ramakrishnan, Sekharipuram

Computer and Information Science
BS, University of Kerala (India), 1963
M S, University of Kerala (India), 1965
M S, C ase Western University, 1989
Ramamoorthy, Nagarajan
Business and Management
M A, University of M adras (India), 1982
M BA, Xavier Labor Relations Institute (India), 1986
PhD, University of M aryland, College Park, 1996

## Ramhoff, Ralph E.

Computer and Information Science
BS, Frostburg State C ollege, 1980
M Eng, Loyola College in M aryland, 1993
Randall, Gail A.
Legal Studies
BA, W ichita State U niversity, 1972
JD, Washington University (M issouri), 1984
LLM , George Washington University, 1992

## Rangachar, Ramesh

Computer and Information Science
BE, Sri Jayachamarajendra C ollege of Engineering (India), 1984
M S, University of M aryland, College Park, 1988

## Ratnapala, Narendra

Art
H N D, Reigate School of Art and Design, East Surrey College (England), 1981
BA, University of M aryland, College Park, 1987
M FA, University of M aryland, College Park, 1990

Ray, Loye L.
Information Systems Management
BS, University of Alabama, 1983
M BA, Embry-Riddle University, 1987
M S, LaSalle University, 1996

## Redding, John L.

Computer Science
BS, Antioch College, 1966
M S, University of M aryland, College Park, 1973
Reed, Dale R.
Information Systems Management
BA, H ope C ollege, 1972
M S, Frostburg State University, 1977

## Reed, Randal

Business and Management
BA, C olgate University, 1988
M A, N orthwestern University, 1990
PhD, Northwestern University, 1994

## Reeder, Elizabeth

Natural Science
BS, University of M aryland, College Park, 1978
M S, University of California, D avis, 1983
M S, Towson University, 1999

## Reeves, Robert F.

Computer and Information Science
BS, State University of N ew York at Buffalo, 1979
AA, C harles County Community College, 1982
M S, University of M aryland University College, 1989
Reeves, St. Clair
Accounting
BS, University of South Carolina, 1949
LLB, Georgetown University, 1960
Reier, John M.
English
BS, M ount St. M ary's College (M aryland), 1968
M Ed, Loyola College in M aryland, 1986
Reis, Richard
Computer and Information Science
BE, State University of New York at Stony Brook, 1967
M S, California State University, Northridge, 1975
M S, Johns H opkins University, 1987
Reston, Rocky R.
Business and Management
BS, U.S. Air Force Academy, 1984
M S, Air Force Institute of Technology, 1988
PhD, Air Force Institute of Technology, 1992

## Reston, Victor F.

Business and Management
BS, U.S. N aval Academy, 1968
M S, University of Southern California, 1972
JD, Southwestern University, 1981

## Reynolds, Carolyn B.

English
BA, University of M aryland, Baltimore County, 1977
M A, University of M aryland, College Park, 1981
Rhoads, Jeffrey
Gerontology
BA, University of California, D avis, 1978
M S, University of Alabama, 1981
PhD, Johns H opkins University, 1995

## Rhoads, T. Barry

Business and Management
BA, Ursinus College, 1963
M S, George Washington University, 1968

## Rhodes, Laura K.

Legal Studies
BA, C ollege of William and M ary, 1980
JD, University of M ichigan, 1985
Rhodes, Thurman H.
Legal Studies
BA, M organ State University, 1972
JD, Catholic University of America, 1975

## Richardson, Emily

Humanities
BA, Sweet Briar College, 1957
M A, American University, 1979
PhD, American University, 1987
Richmond, Brian D. F.
Health
BSPH , Indiana University Indianapolis, 1979
M A , University of North C arolina at Chapel H ill, 1985
M PH , University of North C arolina at Chapel Hill, 1985

## Riddick, Carol C.

Gerontology
BA, Florida State University, 1970
M S, Florida State U niversity, 1972
PhD, Pennsylvania State University, 1980

## Rider, Donald G.

Business and Management
BS, C ornell University, 1969
M A, University of M aine, 1973
JD, American University, 1987

## Rigsby, Robert R.

Business and Management
BS, San Jose State University, 1983
JD, University of California, San Francisco, 1986

## Riley, James B.

Business and Management
BS, University of M aryland, College Park, 1954
JD, University of M aryland, Baltimore, 1962

## Rinaldi, James V.

Accounting
BS, University of Scranton, 1966
M PA, American University, 1972

## Ring, Elizabeth

Computer and Information Science
BBA, James M adison University, 1986
M S, Johns H opkins University, 1998
Rio, Daniel
Mathematics
BA, University of South Florida, 1974
M A, University of South Florida, 1981
PhD, University of Florida, 1984

## Ritchie, Leah E.

Speech
BA, M errimack C ollege, 1990
M A, Suffolk University, 1994
Rizzo, Philip
English
BA, University of Pennsylvania, 1948
M A, University of Pennsylvania, 1949
PhD, University of Pennsylvania, 1959
Robertson, James A.
Information Systems Management
BS, University of H ouston, 1989
M S, University of Dayton, 1995

## Robinson, Egan G.

Humanities
BA, George Washington University, 1996
M A, George Washington University, 1998
Robinson, Eugene S.
Journalism
BA, University of M aryland University College, 1973
M A, University of M aryland, College Park, 1975
PhD, University of M aryland, College Park, 1984
Robinson, Keith
Business and Management
BS, Bowie State University, 1989
M SA, Central M ichigan University, 1998
Robison, J. Kelly
History
BA, Kenyon College, 1988
M A, University of M ontana, 1992
PhD, O klahoma State University, 1996

## Robson, Gwyn N.

Communication Studies
BA, Sacramento State University, 1970
M A, University of California, D avis, 1975
PhD, American University, 1985

## Roddy, Robert

Business and Management
BS, University of M aryland University College, 1978
M A, Central M ichigan University, 1980
Rodriguez-Stein, Emilia
Sociology
BA, N ortheast Illinois University, 1978
M A, N ortheast IIlinois University, 1979
PhD, University of Arizona, 1989
Rogers, Gregory T.
Criminology/Criminal Justice
BS, University of M aryland University C ollege, 1993
JD, John M arshall Law School, 1997
Roling, Duane G.
Business and Management
BS, University of M aryland, College Park, 1975
M S, Johns H opkins University, 1978
Rose, David S.
Psychology
BA, Boston University, 1976
M A, American University, 1984
PhD, American University, 1987
Rose, Debra L.
Health
BSN , American University, 1985
M A, George Washington University, 1985
Rosman, Martin
Statistics and Probability
BEE, City College of New York, 1963
M S, Johns H opkins University, 1969
Roth, Ellen
Communication Studies
BA, University of London (England), 1953
M S, C atholic University of America, 1971
PhD, University of M aryland, College Park, 1978
Rothman, Norman C.
History
BA, Dickinson College, 1966
M A, N orthwestern University, 1969
PhD, N orthwestern University, 1972
PhD, G eorgia State University, 1981
Rott, Christopher A.
Business and Management
BS, Flagler C ollege, 1989
M A, N ova Southeastern University, 1994
Rowe, Donna L.
Women's Studies
AB, M ount H olyoke C ollege, 1991
M A, University of M aryland, College Park, 1994

## Rowson, Rebecca

Statistics and Probability
BA, N orth C arolina State University, 1975
M S, N orth C arolina State University, 1977
M S, University of Southern M ississippi, 1985

## Roy, Atul N.

## Mathematics

M S, University of Allahabad (India), 1976
M S, Rutgers University, 1989
PhD, University of Allahabad (India), 1989

## Rubin, Samuel B.

Speech
BA, University of M aryland, College Park, 1978
M A, University of M aryland, College Park, 1980
BS, University of M aryland, College Park, 1987

## Rubinoff, Michael W.

History
BA, Arizona State University, 1973
M A , Arizona State University, 1973
PhD, University of Denver, 1978
Ruffin, Wanda L.
Psychology
BS, M ississippi Valley State University, 1968
M SW, University of Pittsburgh, 1976
PhD, University of M assachusetts, 1988

## Ruggles, Linda

History
BFA, W indham College, 1976
M A, George M ason University, 1990
Ruh, Lawrence A.
Computer Science
BS, Pennsylvania State University, 1965
BA, Pennsylvania State University, 1966
M S, Pennsylvania State University, 1973

## Ruohomaki, Connie

Business and Management
BS, University of N ebraska, 1966
M A, American University, 2000
Rupp, Nelson W.
Legal Studies
BA, Denison University, 1970
JD, American University, 1974
Ryan, Robert
Fire Science
BS, University of M aryland, College Park, 1970
M GA, University of M aryland University College, 1993

Sachidananda, Geet
Computer Science
BS, Bangalore University (India), 1988
M S, George M ason University, 1994

## Sagar, Vidya

Computer and Information Science
BS, Punjab University (India), 1968
LLB, Delhi University (India), 1977
M EE, C atholic University of America, 1988
PhD, C atholic University of America, 1993

## Sager, Robert

Natural Science
BS, University of Wisconsin, 1964
M S, University of W isconsin, 1966
JD, Western State University, 1977

## Sahibzada, Fayez M.

Communication Studies
BA, Edwardes C ollege (Pakistan), 1967
M A, University of Peshawar (Pakistan), 1969
M A, C atholic University of America, 1974

## Saliskas, Joan M.

Communication Studies
BA, DePaul University, 1976
M A, University of Illinois, 1977
PhD, University of Illinois, 1983

## Salomie, Ioan

Computer and Information Sciences
M S, Universitatea Politehnica din Bucaresti (Romania), 1978
PhD, Universitatea Tehnica Cluj $N$ apoca (Romania), 1994

## Salomon, Amnon M.

Computer Studies
BS, Purdue University, 1979
M BA, George M ason University, 1992

## Saltzman, Jennifer

Natural Science
BS, University of Rhode Island, 1989
PhD, University of M ichigan, 1995

## Sanchez, Loreto

Spanish
BA, Universidad de Salamanca (Spain), 1987
BA, Universidad $N$ acional de Educación a Distancia (Spain), 1993
M A, H oward University, 1997

## Sander, Kathleen W.

Humanities
BS, O hio State University, 1969
M A, University of M aryland, College Park, 1981
PhD, University of M aryland, College Park, 1994

## Sands, Suzanne

Computer and Information Science
BA, Goucher College, 1975
M A, University of M aryland, College Park, 1978
PhD, University of M aryland, College Park, 1981

Sanocki, Jack M.
Computer Studies
BS, Westield State C ollege, 1974
M S, University of Southern California, 1991
PhD, Walden University, 1995
Santo, Adam
Computer Studies
BA, American University, 1995
M PA, American University, 1999
Sapp, Edwin G.
Communication Studies
BA, University of $N$ orth Carolina at Chapel Hill, 1960
JD, University of N orth Carolina at Chapel Hill, 1962 M LA, Johns H opkins University, 1973

## Satin, Karen W.

Communication Studies
BA, University of Connecticut, 1958
M A, University of M aryland, College Park, 1984
Sax, Christina M.
Biology
BS, University of Rochester, 1982
PhD, M edical College of Virginia, Virginia Commonwealth University, 1987

Scarpinato, F. J. "Scarp"
Business and Management
BS, University of South Florida, 1975
M S, Pepperdine University, 1977
Schachter, Leon
Legal Studies
BS, University of Illinois, 1964
JD, N orthwestern University, 1967
Scheffler, Elizabeth
Accounting
BS, University of M aryland University College, 1980
M GA, University of M aryland University College, 1995
BS, University of M aryland University College, 1997

## Schehr, Leonard

Information Systems Management
BS, Johns H opkins University, 1965
Schmeissner, Joanna F.
Communication Studies
BA, Agnes Scott College, 1960
M A, Yale University, 1962
Schmitter, Anthony V.
Computer and Information Science
BA, Le M oyne C ollege, 1973
M A, University of Cincinnati, 1980
M S, University of Cincinnati, 1982
M S, Johns H opkins University, 1994

## Schoen, Steven Craig

Information Systems Management
BA, University of Virginia, 1975
M A, University of $H$ awaii at M anoa, 1981
M BA, University of H awaii at M anoa, 1983

## Schultz, Jason P.

## Mathematics

BS, State University of New York at Binghamton, 1990
M A, University of M aryland, College Park, 1996
PhD, University of M aryland, College Park, 1998

## Schwartz, Oscar

Computer Information Technology
BS, University of M aryland, College Park, 1993

## Seaman, Matthew G.

Philosophy
BA, C ollege of Wooster, 1994
M A, Tulane University, 1996

## Secke, Leopold

Business and Management
BS, Université de Paris, D auphine, 1978
M S, Université de Paris, Dauphine, 1978
DEA, Université de Paris, D auphine, 1980
PhD, Université de Paris, Sorbonne, 1996

## Seekri, Sweena

Psychology
BA, W heaton College (M assachusetts), 1991
M A, University of South Dakota, 1993
PhD, University of South D akota, 1996

## Sekaran, Chandra

Computer and Information Science
BS, Birla Institute of Technology and Science (India), 1980
M S, Indian Institute of Technology, 1982
M S, Johns H opkins U niversity, 1988
Sellers, Cheryl A.
Computer and Information Science
BS, Towson State University, 1986
M S, Johns H opkins University, 1990
JD, Chicago-K ent College of Law,
Illinois Institute of Technology, 1994

## Selvage, Robin

Information Systems Management
BS, University of Idaho, 1969
M S, Butler University, 1972
M S, Purdue University, 1974
M BA, Florida Institute of Technology, 1990

## Seneschal, Phillip G.

Human Resource Management
BA, San Luis Rey College, 1969
M A, C alifornia State University, Los Angeles, 1971

## Seymour, Thomas H.

Environmental Management
BS, University of M aryland, College Park, 1965
BS, University of M aryland, College Park, 1972
M S, George Washington University, 1978

## Shapiro, Lawrence E.

Psychology
BA, University of M aryland, College Park, 1969
M S, University of M aryland, College Park, 1976
PhD, University of Florida, 1987
Sharoff, Steven
History
BA, State University of New York College at Plattsburgh, 1967
M A, State University of New York at Binghamton, 1975
M AT, State University of New York at Binghamton, 1976

Sharpe, John P.
Psychology
BS, West Virginia Wesleyan College, 1993
M A, Southern Illinois University, 1996
PhD, Southern Illinois University, 1999

## Shaw-Taylor, Yoku

Sociology
BA, University of Baltimore, 1989
M A, University of Baltimore, 1990
M Ph, George Washington University, 1994
PhD, G eorge Washington University, 1998

## Shea, Gordon

Communication Studies
BA, Syracuse University, 1950
M A, G eorge Washington University, 1961
Sheehan, Thomas T.
Computer and Information Science
BS, C olorado State University, 1968
M S, George M ason University, 1993

## Shender, Barry

Information Systems Management
BA, Temple University, 1977
M S, D rexel University, 1985
PhD , D rexel University, 1988

## Sheppard, Dana

Legal Studies
BS, Bowie State University, 1988
JD, University of Texas at Austin, 1991
Shevlin, Eleanor F.
English
AB, Georgetown University, 1978
M A, University of M aryland, College Park, 1992

Shore, Nina A.
Legal Studies
BA, Alfred University, 1979
JD, Antioch School of Law, 1984
Shoukat, Mary V.
Behavioral and Social Sciences
BS, Park College, 1989
M A, Southern Illinois University, 1992
Siarnicki, Ronald
Fire Science
BS, University of M aryland University College, 1994
Siegel, Michael E.
Humanities
BA, American University, 1972
M A, Tufts University, 1975
PhD, Tufts University, 1976
Silard, Con D.
Computer and Information Science
BSBA, American University, 1973
M S, University of M aryland University College, 2000

## Silenas, Rima V.

Legal Studies
BA, American University, 1982
JD, George Washington University, 1988
Silva, Magdalah R.
Business and Management
BA, Boston University, 1982
M IM , University of M aryland University College, 1995

Simon, Marcella
Business and Management
BA, Antioch College, 1979
M IM , Thunderbird, the American Graduate School of International M anagement, 1984

## Simpson, Thomas

Criminology/Criminal Justice
BA, University of M aryland, Baltimore County, 1974
M A, University of Baltimore, 1984
Sine, Lisa
Behavioral and Social Sciences
M S, Brigham Young University, 1995
M A, Syracuse University, 1997
PhD, Syracuse University, 1998

## Singletary, Judith

Health Services Management
BA, University of Akron, 1985
M A, University of M aryland, College Park, 1992

Skomal, Susan
Anthropology
BA, Scripps College, 1974
PhD, University of California, Los Angeles, 1983

## Sloan, Nicholas

Computer Studies
BS, University of M aryland, 1956
M S, George Washington University, 1967
D Sc, George Washington University, 1971

## Slowikowski, William

Mathematics
BS, U.S. N aval Academy, 1962
M S, Florida State University, 1967
Smaldone, Joseph P.
Behavioral and Social Sciences
BA, College of the H oly Cross, 1967
M A, N orthwestern University, 1969
PhD, Northwestern University, 1970

## Small, Darien C.

Computer Studies
BA, George M ason University, 1993
M A, George M ason University, 1998
M S, Johns H opkins U niversity, 1998
Smerin, Lawrance B.
Business and Management
BA, K nox College, 1972
M A, Columbia University, 1976
M BA, Rutgers University, 1979
Smit, Patrick D.
Computer and Information Science
BS, Rhodes University (South Africa), 1972
BS, Rhodes University (South Africa), 1976
M S, Johns H opkins University, 1988

## Smit, Roberta

Mathematics
BS, University of Cape Town (South Africa), 1969
BS, University of C ape Town (South Africa), 1970
Smith, Barry D.
Psychology
BA, Pennsylvania State University, 1962
M A, Bucknell University, 1964
PhD, University of M assachusetts, 1967
Smith, Gregory
Gerontology
BA, State University of New York College at Brockport, 1973
M A, Villanova University, 1979
EdD, University of Rochester, 1983
Smith, Judith M.
Communication Studies
BA, M ississippi State University, 1985
M S, Trinity College (Washington, D.C.), 1994

Smith, Maggie Jo
Business and Management
BA, N ortheastern University, 1976
M A, University of M iami, 1977
Smith, Phillip
Environmental Management
BS, Brigham Young University, 1984
M PH, University of California, Berkeley, 1987
PhD, Utah State University, 1998
Smith, Timothy S.
Information Systems Management
BS, University of M aryland, College Park, 1982
M S, University of Southern California, 1984
Smith, Wayne
History
BS, Salisbury State College, 1958
M A, University of M aryland, College Park, 1961
PhD, University of M aryland, C ollege Park, 1967
Smith, William
Music
BA, H oward University, 1994
M M , H oward University, 1995

## Smucny, Darlene

Natural Science
BA, Lake Erie C ollege, 1981
M S, Cleveland State U niversity, 1989
PhD, University of California, Los Angeles, 1999

## Snyder, Donald C.

Economics
BA, Alma College, 1966
M A, M iami University, 1968
PhD, University of M aryland, College Park, 1981

## Solenberger, Thomas M.

Government and Politics
BS, U.S. M ilitary Academy, 1963
M A, University of Southern California, 1976
PhD, Ruprecht-K arls-Universität H eidelberg (Germany), 1981

Solomon, Gerald D.
Business and Management
BA, University of M assachusetts, 1969
M BA, New York University, 1971
Somers, Jeri K.
Legal Studies
BA, G eorge M ason University, 1983
JD, American University, 1986

## Sondervan, William W.

Criminology/Criminal Justice
BS, Trenton State College, 1974
EdM , Boston University, 1976
M PA, Jacksonville State University, 1980
EdD, Virginia Polytechnic Institute and State University, 1995

## Sonner, Andrew L.

Behavioral and Social Sciences
BA, American University, 1957
JD, American University, 1963
Spaulding, Jeff
Art
BA, C entral M ichigan University, 1970
M FA, Pennsylvania State University, 1974

## Spear, Jean

Natural Science
BS, University of Delaware, 1997
M S, University of New Hampshire, 2000

## Spear, Mary Helen C.

Behavioral and Social Sciences
BS, Saint Louis University, 1967
M A, University of M aryland, College Park, 1969
PhD, University of M aryland, College Park, 1971
Spencer, Patricia K.
Experiential Learning
BA, University of Denver, 1967
M BA, M arymount University, 1989

## Spicer, Tracy H.

Business and Management
BA, University of M aryland, Baltimore County, 1987
JD, University of M aryland, Baltimore, 1990

## Stairs, Allen

Philosophy
BA, University of New Brunswick (Canada), 1973
M A, University of Western O ntario (C anada), 1975
PhD, University of Western Ontario (Canada), 1978

## Starcher, Mark L.

Information Systems Management
BS, West Virginia University, 1977
JD, West Virginia University, 1979
LLM, Georgetown University, 1982
M S, Johns H opkins University, 1996
Stark, Joan B.
Business and Management
BA, University of Baltimore, 1990
M BA, University of Baltimore, 1995
Statler, Lance S.
Business and Management
BA, G ettysburg College, 1993
M BA, University of M aryland, College Park, 1987

## Stauffer, Stephanie J.

English
BA, Princeton University, 1985
M A, M onterey Institute of International Studies, 1990

## St. Cyr, Robert

Computer Studies
BS, University of M aryland University College, 1998
M S, George Washington University, 2000

## Stein, Peter B.

Hotel and Restaurant Management
BS, Florida International University, 1975
M BA, H ood College, 1989

## Stephens, Gregory J.

Natural Science
BS, O hio University, 1990
M S, Syracuse University, 1993

## Sterin, Charles

Journalism
BS, University of O regon, 1971
M S, University of O regon, 1973
PhD, International College, 1978

## Stiffler, William M.

Communication Studies
BA, Eastern Washington University, 1970
M A, Eastern Washington University, 1971

## Stoff, David M.

Psychology
BA, State University of N ew York at Buffalo, 1966
PhD, Yeshiva University, 1973

## Stojkovic, Vojislav

Computer Science
BS, Univerzitet u Beogradu (Yugoslavia), 1972
M S, Univerzitet u Beogradu (Yugoslavia), 1977
PhD , Univerzitet u Beogradu (Yugoslavia), 1981

## Stolker, Richard S.

Legal Studies
AB, Dickinson College, 1966
JD, Temple University, 1969

## Stough, Michael A.

Criminology/Criminal Justice
BS, University of M aryland University College, 1991
M S, Auburn University, 1995

## Strahs, Roanne P.

Accounting
BSBA, Georgetown University, 1977
M BA, George Washington University, 1986

## Straub, John

Computer Studies
BA, University of W isconsin-M adison, 1968
M S, University of W isconsin-La C rosse, 1971
PhD, Indiana University Bloomington, 1978

## Strauss, Barry L.

Business and Management
BS, DePaul University, 1977
M BA, George Washington University, 1985

## Strauss, Betty M.

## Accounting

BS, University of Baltimore, 1970
M BA, M organ State U niversity, 1972
PhD, University of M aryland, College Park, 1986

## Strickland, Paula

Natural Science
BS, W inston-Salem State U niversity, 1975
PhD, H oward University, 1985
M PH, George W ashington University, 1997
Subramanian, Sathiya
Information Systems Management
BSC, Valliammal Science C ollege for Women, University of M adras (India), 1992
M CA, Valliammal Science C ollege for Women, University of M adras (India), 1995

## Sullivan, Brian

Information Systems Management
BS, C entral C onnecticut State U niversity, 1965
M S, Central C onnecticut State University, 1972
M S, University of Connecticut, 1975
Sullivan, William
Mathematics
BA, City U niversity of New York, 1961
M A, University of California, Long Beach, 1965
PhD , University of M aryland, C ollege Park, 1999
Summerill, Joseph J.
Business and Management
BA, Colby College, 1989
JD, Franklin Pierce Law Center, 1993
LLM , George Washington University, 1997

## Summons, Terry G.

History
BS, Kutztown University of Pennsylvania, 1965
M Ed, Bowie State University, 1975

## Susman, Jack

Criminology/Criminal Justice
BS, University of Pittsburgh, 1940
BA, George Washington University, 1950
PhD , University of M aryland, College Park, 1991
Sussan, Sidney M.
Accounting
BS, University of M aryland, College Park, 1966
M BA, University of M aryland, College Park, 1968
Swank, Lowell J.
Natural Science
BS, University of California, Berkeley, 1960
PhD, University of Illinois, 1967

## Swartz, James M.

Accounting
BS, Rochester Institute of Technology, 1968
M BA, State University of N ew York at Buffalo, 1970

## Swartz, Richard W.

Computer Studies
BS, U niversity of M aryland, College Park, 1976
M S, Johns H opkins University, 1981

## Swayze, Susan

Business and Management
BA, Washington and Lee University, 1990
M A, University of C alifornia, Los Angeles, 1991
PhD, University of California, Los Angeles, 1995

## Sweo, Robert

Business and Management
BA, C alifornia State University, N orthridge, 1985
M A, C alifornia State University, N orthridge, 1988
PhD, University of N orth Texas, 1995
Sypeck, Jeffrey
English
BA, University of D elaware, 1993
M A, University of N ew H ampshire, 1994
M A, Catholic University of America, 1998

## Szporer, Michael M.

Communication Studies
BA, H unter College, 1969
M A, Indiana University Bloomington, 1980
PhD, Indiana University Bloomington, 1980
Takacs, George J.
Computer Studies
BA, M ount C armel College (C anada), 1966
M A, University of N otre D ame, 1971

## Takacs, Linda

Education: Counseling and Personnel Services
BA, Frostburg State C ollege, 1968
M Ed, U niversity of M aryland, C ollege Park, 1970
Tamialis, James
Mathematics
BS, M ichigan State University, 1971
M A, M ichigan State University, 1975
Tarquinio, Michael
Computer and Information Science
BS, University of M aryland, College Park, 1986
M S, Johns H opkins University, 1991
Tavani, Nick
Gerontology
BA, N orthwestern University, 1974
M S, Georgetown University, 1975
M D, Georgetown University, 1980
PhD, Georgetown University, 1984

## Taylor, David L.

Computer Studies
BS, University of M aryland University College, 1993
M A, Webster University, 1996

## Taylor, Frederick E.

Government and Politics
BA, University of Rhode Island, 1959
M A, Fletcher School of Law and Diplomacy, Tufts University, 1959
PhD, Georgetown University, 1971

## Taylor, Kasia J.

Computer Studies
BA, Pennsylvania State University, 1981
M A, University of M aryland, College Park, 1988

## Taylor, Sonja

Business and Management
BA, University of N ew M exico, 1982
M A, George M ason University, 1994

## Ten Eyck, Lawrence

Health Services Management
BSBA, University of Redlands, 1986
M BA, Loyola C ollege in M aryland, 1995
Tengel, Patricia
Gerontology
BS, Bowling Green State University, 1961
M S, Cornell University, 1964
PhD, Pennsylvania State University, 1976

## Terry, Raymond

Gerontology
BS, M organ State University, 1972
PhD, University of M aryland, College Park, 1983

## Terwilliger, Douglas L.

Business and Management
BS, University of M aryland, College Park, 1989
M S, University of M aryland University College, 1997
Thacker, Joann K.
Psychology
BA, University of M aryland, C ollege Park, 1965
M A, American University, 1969
PhD, C atholic University of America, 1981
Theison, David
Humanities
BS, University of W isconsin-M ilwaukee, 1972
M S, University of M aryland, C ollege Park, 1980
Thomas, Katya
Communication Studies
BA, University of M ichigan, 1980
M A, University of C alifornia, Berkeley, 1983
M BA, Saint Xavier University, 1993
Thomas, Patricia
English
BA, Carlow College, 1964
M LA, Johns H opkins University, 1998
Thompson, Bruce
Behavioral and Social Sciences
BA, M arshall University, 1984
M A, M arshall University, 1986
PhD, University of M aryland, College Park, 1996
Thompson, Joseph D.
Communication Studies
BA, University of M aryland, College Park, 1978
M A, University of M aryland, Baltimore, 1991

Thompson, Michael D.
Health Services Management
BA, Lafayette C ollege, 1981
M BA, H oward University, 1984
M PA, H oward University, 1985
Thompson, Scott
Computer and Information Science
BS, Bucknell University, 1986
M S, University of M aryland, College Park, 1989
PhD, University of M aryland, College Park, 1994
Thompson, Terri A.
Health Services Management
M SA, C entral M ichigan University, 1992
JD, Georgia State University, 1994
Thompson, Thomas G.
Human Resource Management
BS, University of Illinois, 1963
M S, University of Illinois, 1965

## Thorn, Virgelean J.

Information Systems Management
BS, Bowie State University, 1989
M S, Bowie State University, 1990
Thorpe, James G.
Art
BA, University of M aryland, College Park, 1973
M FA, University of M aryland, College Park, 1975

## Tiberino, Ernest

Computer Studies
BS, University of Notre Dame, 1980
M S, University of Texas at Austin, 1983
Timko, Thomas J.
Computer and Information Science
BA, University of D ayton, 1965
M A, G eorgetown University, 1969
AA, M ontgomery College, 1981
Timmerman, Edward
Computer Science
BS, University of M aryland, College Park, 1971
M S, Johns H opkins University, 1989
Toback, B. Fred
Business and Management
BA, Lafayette College, 1962
M PA, Syracuse University, 1965
Tofanelli, Dave E.
Health Services Management
BA, O ur Lady of the Lake University, 1979
M BA, Golden Gate University, 1983
M S, University of Denver, 1992

## Toplin, Marc B.

Communication Studies
BA, Temple University, 1975
M A, University of M aryland, College Park, 1977
M BA, American University, 1986

## Tornow, Carina E.

Psychology
BA, Shippensburg University, 1992
M A, O hio State University, 1994

## Towns, Kenneth H.

Business
BS, Pennsylvania State University, 1991
M Ed, Pennsylvania State University, 1995
Transeau, Leon W.
Business and Management
BIE, Georgia Institute of Technology, 1959
M BA, University of D elaware, 1963
PhD, American University, 1968

## Tray, Jim Q.

Computer and Information Science
BS, Zhejiang University (China), 1982
M S, University of M aryland, College Park, 1985
PhD, University of M aryland, College Park, 1989
Tuamokumo, François
Mathematics
BS, University of K ansas, 1978
M S, University of Southwestern Louisiana, 1980
M S, University of West Florida, 1986
PhD, University of Alabama, 1993
Tucker, Irving
Psychology
BA, University of M assachusetts, 1959
M A, University of Iowa, 1961
PhD, University of Iowa, 1962

## Tudose, Florin Catalin

Economics
BS, Universitatea Politehnica din Bucaresti (Romania), 1997
M S, Universitatea Politehnica din Bucaresti
(Romania), 1998
BS, Academy of Economic Studies (Romania), 1999

## Tulay, Preston M.

Information Systems Management
BBA, H oward University, 1979
M S, University of M aryland University College, 1999

## Turner, Marvin W.

Business and Management
BBA, H oward University, 1981
M BA, George W ashington University, 1988
JD, Georgetown University, 1997

## Upadhyay, Shiv R.

Communication Studies
BA, Tribhuvan University (India), 1976
M A, Tribhuvan University (India), 1979
M A, O hio University, 1989
Urman, Sheila
Experiential Learning
BS, University of Connecticut, 1968
M S, University of M aryland, College Park, 1983

## Van Brunt, John E.

Experiential Learning
BS, Fairleigh Dickinson University, 1965
PhD, University of M aryland, College Park, 1972
Vanison, Shirley
Information Systems Management
BA, University of M aryland, College Park, 1995
M A, University of M aryland, College Park, 1997

## Vecchiollo, Dominic J.

Communication Studies
BS, University of Evansville, 1996
M A, University of Baltimore, 1999
Vener, Patricia C.
Natural Science
BS, State University of New York Empire State
College, 1988
M S, Rensselaer Polytechnic Institute, 1991
Vidal, Jose C.
Psychology
BA, San Francisco State University, 1962
M S, C alifornia State University, H ayward, 1969
PhD, University of Southern C alifornia, 1978
Volkov, Marina L.
Psychology
BS, University of Pennsylvania, 1983
M A, New York University, 1986
PhD, New York University, 1991
Voss, Lisa J.
English
BS, University of M aryland, College Park, 1988
M A, Johns H opkins University, 1998
Vowels, Eleanor E.
Health Services Management
BS, H oward University, 1962
M A, C atholic University of America, 1965
PhD, H oward University, 1988

## Vucetic, Jelena

Computer and Information Science
BS, Univerzitet u Beogradu (Yugoslavia), 1983
M S, Univerzitet u Beogradu (Yugoslavia), 1986
PhD, Univerzitet u Beogradu (Yugoslavia), 1990

## Wadbrook, William P.

Economics
BS, Georgetown University, 1959
M A, Fletcher School of Diplomacy, Tufts U niversity, 1959
PhD, Fletcher School of Diplomacy, Tufts University, 1970

Waldman, Jean M.
English
BA, University of M aryland, College Park, 1981
M Ed, University of M aryland, C ollege Park, 1988

## Waldorf, Gerard

Sociology
BA, Fordham U niversity, 1956
M A, Fordham University, 1960
PhD, C ity University of N ew York, 1973
M A, Fordham University, 1986

## Walker, Danna

Journalism
BA, N ortheast Louisiana University, 1975
M A, Georgetown University, 1989

## Walker, Friend L.

Criminology/Criminal Justice
BS, N ew School for Social Research, 1983
M S, Grambling State University, 1994
Walker, Kelly
Behavioral and Social Sciences
BS, Brigham Young University, 1996
M S, Brigham Young University, 1998
Walker, Thomas L.
Business and Management
BS, H ampton University, 1979
M BA, Florida Institute of Technology, 1981

## Wallach, Hal

Gerontology
BS, University of Bridgeport, 1957
M A, University of M ichigan, 1958

## Walters, Laurie

Psychology
M A, Valdosta State U niversity, 1982
M S, University of Georgia, 1985
PhD, University of Georgia, 1989
Wappel, Joseph
English
BA, Eastern IIlinois University, 1977
M A, Southern Illinois University, 1980

## Ward, Maurice S.

Criminology/Criminal Justice
BA, University of M aryland, C ollege Park, 1972
M A, Coppin State U niversity, 1976
M A, G eorge Washington University, 1981

## Washington, Michele A.

Information Systems Management
BA, H oward University, 1979
M S, C entral M ichigan University, 1989
M S, Syracuse University, 1997
Watkins, Charles, Jr.
Computer Studies
BS, University of M aryland, College Park, 1984
M S, Johns H opkins University, 1990
Watkins, Deniece L.
Legal Studies
BS, Bradley University, 1985
JD, Loyola University N ew Orleans, 1990
Watts, Geneva
Business and Management
BA, University of M aryland, College Park, 1975
M A, University of M aryland, College Park, 1979
EdD, G eorge Washington University, 1984
Weatherford, Claudine
Humanities
BA, University of Wisconsin-M adison, 1967
M A, Washington State University, 1971
M A, State University of New York College at O neonta, 1978
PhD, George Washington University, 1985
Weatherly, Julia B.
Legal Studies
BS, University of M ichigan, 1975
JD, George Washington University, 1978
Weaver, John J.
Communication Studies
BA, St. Francis College ( N ew York), 1964
M A, University of Denver, 1974
Wei, Kun-Yao
Computer Studies
BA, N ational Central University (Taiwan), 1975
M A, N ational Taiwan University, 1979
Weinberg, Joseph A.
Psychology
BS, City College of New York, 1972
M S, City College of New York, 1977
PhD, University of Georgia, 1985
Weingarten, Barry E.
Spanish
BA, George Washington University, 1972
M A, University of Pennsylvania, 1974
PhD, University of Pennsylvania, 1978
Weir, Gary E.
History
BA, M anhattan College, 1973
M A, University of Tennessee, 1975
PhD, University of Tennessee, 1982

## Weiskopf, David A.

Business and Management
BA, St. M ary's C ollege of M aryland, 1993
JD, University of Baltimore, 1996
Weiss, Michael D.
Mathematics
BA, Brandeis University, 1964
PhD, Brown University, 1970
M A, University of M aryland, College Park, 1984

## Weissman, Robert A.

Legal Studies
BS, Swarthmore College, 1973
JD, G eorgetown University, 1976
Wellens, Tracy
Psychology
BS, Pennsylvania State University, 1986
M A, New York University, 1989
PhD, N ew York University, 1991
Wennar, Jeffrey T.
Legal Studies
BA, Ricker College, 1972
JD, Potomac School of Law, 1979
Werber, Morton
Psychology
M A, American University, 1960
M Ph, George Washington University, 1970
PhD, George Washington University, 1973
Whalen, Michael P.
Legal Studies
BA, University of M aryland, College Park, 1969
JD, University of Baltimore, 1973
Wharton, Arthur L.
Business and Management
BA, H oward University, 1980
M A, G eorge Washington University, 1989
Wheeler, Frederick O.
Information Systems Management
BS, University of Baltimore, 1969
M BA, Loyola C ollege in M aryland, 1971
Whelan, Joseph M.
Accounting
BS, University of M aryland, College Park, 1977
M BA, George Washington University, 1980
M S, George Washington University, 1988
Whitesel, Cynthia H.
Communication Studies
BA, University of M aryland, College Park, 1970
M A, University of M aryland, C ollege Park, 1973

## Whitlock, Jerry M.

Communication Studies
BA, Emory University, 1968
M A, Rice University, 1973

## Whitney, Raymond

Business and Management
BS, University of Pennsylvania, 1964
M BA, W harton School, University of Pennsylvania, 1971
M S, Iona College, 1979
Williams, Adelisia V.
Health Services Management
BS, Indiana University Bloomington, 1988
JD , Indiana University Bloomington, 1991
Williamson, David L.
Information Systems Management
BS, Randolph-M acon College, 1968
M S, Johns H opkins U niversity, 1985
Wilson, Alvin W.
Information Systems Management
BS, University of M aryland University College, 1985
M S, Johns H opkins U niversity, 1992
M S, D efense Intelligence C ollege, 1993

## Wilson, Connie

Speech
BS, Saint Paul's C ollege (Virginia), 1975
M Ed, University of M aryland, College Park, 1988
Wilson, David J.
Business and Management
BS, U .S. N aval Academy, 1974
M S, N aval Postgraduate School, 1989
Windapo, Adeyinka
Computer Information Technology
BS, M organ State University, 1994
M S, George Washington University, 1997
Wink, Robin S.
Legal Studies
BS, U.S. Air Force Academy, 1984
JD, Catholic University of America, 1992

## Winston, Elizabeth A.

Communication Studies
BS, Georgetown University, 1974
M A, Gallaudet University, 1988
PhD, Georgetown University, 1993

## Winston, Joshua P.

Accounting
BS, Rochester Institute of Technology, 1989
M BA, University of Virginia, 1995

## Winters, Benjamin H.

Mathematics
BS, Saint Peter's C ollege, 1955
M S, University of Delaware, 1957
PhD, Catholic University of America, 1963

## Wisan, Gail

Business and Management
BA, H unter College, 1966
M A, University of Illinois, 1969
PhD, University of IIlinois, 1972
Wiseman, Marian
English
BA, Western M ichigan University, 1966
M A, University of M ichigan, 1974
Witcher, Pamela M.
Behavioral and Social Sciences
BA, University of Southern California, 1979
M A, University of M aryland, C ollege Park, 1982
PhD, George Washington University, 1992
Witkin, Jeffery
Psychology
BS, University of M aryland, College Park, 1975
PhD, University of N orth C arolina, 1979
Witz, Jean
Biology
BS, George Washington University, 1981
M D , George Washington University, 1985
JD, George Washington University, 1994

## Wolf, Patricia

Computer Studies
BA, James M adison University, 1986
M A, Johns H opkins University, 1992
Wolvin, Andrew D.
Speech
BA, University of Nebraska, 1962
M A, University of Nebraska, 1963
PhD, Purdue University, 1968
Wolvin, Darlyn
Speech
BS, University of N ebraska, 1964
M A, University of Nebraska, 1965
Wood, Donald H.
Fire Science
BS, University of the District of Columbia, 1982
BA, University of the District of Columbia, 1986
M A, Bowie State University, 1994
Wood, E. Gaynell
Communication Studies
BA, University of IIlinois, 1963
M A, San Francisco State University, 1967

## Wood, James G.

Information Systems Management
BS, U.S. M ilitary Academy, 1957
M BA, H arvard C ollege, 1963
PhD, Temple University, 1993

## Wood, Marjorie A.

Mathematics
BS, D rexel University, 1968
M S, University of Southern California, 1986

## Wood, Owen

Microbiology
BA, Bates C ollege, 1958
M Ph, Yale University, 1968
PhD, Yale University, 1972

## Wood, Robert L.

## Economics

BS, Sophia University (Tokyo), 1955
M A, George Washington University, 1958
BS, Georgetown University, 1960
Woodman, Daniel
Microbiology
BS, University of M aine, 1964
M S, University of M aryland, College Park, 1966
PhD , University of M aryland, College Park, 1972

## Wortman, Kristin

Computer and Information Science
BS, University of M aryland University College, 1979
M S, University of M aryland University C ollege, 2000

## Wright, Angela C.

Gerontology
BA, Towson State University, 1984
M A, M arymount University, 1987

## Wright, Brian

Computer Studies
BS, U.S. Coast Guard Academy, 1983
M S, N aval Postgraduate School, 1992
Wright, Paul L.
Accounting
BS, Fordham University, 1976
JD, Syracuse University, 1979
Wright, Rosalind
Gerontology
BSN , Coppin State University, 1981
M SN , University of M aryland, Baltimore, 1986
Wright, Wayne E.
Business and Management
BA, Williams College, 1947
M BA, H arvard University, 1950
Wussow, John
Business and Management
BS, University of W isconsin-M adison, 1957
M S, University of W isconsin-M adison, 1960

## Xenakis, William

## Mathematics

BA, Boston University, 1961
M A, University of Southern California, 1970
EdD, University of Southern California, 1982

## Xiong, Xiaoxiong

Computer Studies
BS, Beijing Institute of Technology (China), 1984
M S, University of M assachusetts, 1986
PhD , University of M aryland, C ollege Park, 1991
Yao, Andy S.
Computer and Information Science
BS, Old D ominion University, 1983
M S, O Id D ominion University, 1984
Yost, Anastasia D.
Career Planning
BA, University of M aryland, College Park, 1993
M A, University of M aryland, College Park, 1996

## Young, Leon R.

Behavioral and Social Sciences
BA, Roanoke C ollege, 1965
M A, University of M aryland, College Park, 1969
Yuan, Bill P.
Business and Management
BS, University of M aryland, College Park, 1984
M S, Université Catholique de Louvain (Belgium), 1987

## Zachary, Woodford

Mathematics
BS, N orth Carolina State, 1957
M S, University of M ichigan, 1958
PhD , University of M aryland, College Park, 1965
Zarnoch, Robert A.
Government and Politics
BA, Loyola College in M aryland, 1967
M A, American University, 1969
JD, Georgetown University, 1974

## Zavala, Norma

Spanish
BA, Benemérita Universidad Autonóma de Puebla (M exico), 1997
M A, University of M aryland, Baltimore C ounty, 2000

## Ziegler, Herbert L.

Behavioral and Social Sciences
BA, State U niversity of N ew York at Stony Brook, 1970
M A, State University of New York at Stony Brook, 1976
PhD, University of M aryland, College Park, 1982

## Zietoon, Raeda

Education: Counseling and Personnel Services
BA, University of Akron, 1985
M A, University of Akron, 1987

## Zigo, Edward C.

Business and Management
BA, Villanova University, 1974
M BA, Fordham University, 1981

## Zimmer, Janet

Information Systems Management
BA, Briar Cliff College (Iowa), 1985
M S, Johns H opkins U niversity, 1989

## Zinner, Ellen S.

Psychology
BA, Goucher College, 1967
M A, Duke University, 1968
PhD, N orfolk State University, 1989

## Zubritsky, John

Communication Studies
BA, University of M aryland, College Park, 1964
M A, George W ashington U niversity, 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 N ovember 27, 2000)

## I. Policy

It is the policy of the Board of Regents of the University System of M aryland (USM ) to recognize the categories of in-state and out-of-state students for the purposes 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 M aryland. 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 $M$ aryland primarily to attend an educational institution; and,
2. O wns and continuously occupies or rents and continuously occupies living quarters in M aryland. 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 M aryland, a student may share living quarters in M aryland that are owned or rented and occupied by a parent, legal guardian, or spouse; and,
3. $M$ aintains within $M$ aryland substantially all personal property; and,
4. Pays $M$ aryland income tax on all earned taxable income, including all taxable income earned outside the state; and,
5. Registers all owned motor vehicles in $M$ aryland in accordance with M aryland law; and,
6. Possesses a valid M aryland driver's license, if licensed, in accordance with M aryland law; and,
7. Is registered in $M$ aryland, if registered to vote; and,
8. Receives no public assistance from a state other than the state of $M$ aryland or from a city, county or municipal agency other than one in $M$ aryland; and,
9. $H$ as a legal ability under federal and $M$ aryland law to live permanently without interruption in $M$ aryland.
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:
10. A full-time or part-time (at least 50-percent time) regular employee of the University System of $M$ aryland.
11. The spouse or financially dependent child of a fulltime or part-time (at least 50-percent time) regular employee of the USM .
12. A full-time active member of the Armed Forces of the United States whose home of residency is $M$ aryland or one who resides or is stationed in M aryland, or the spouse or a financially dependent child of such a person.
13. For UM UC, a full-time active member of the Armed Forces of the U nited States on active duty, or the spouse of a member of the Armed Forces of the United States on active duty.
14. A graduate assistant appointed through the University System of M aryland 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 instate status shall have the burden of proving that he or she satisfies all requirements.
E. The following circumstances raise a presumption that the student is residing in the state of $M$ aryland primarily for the purpose of attending an educational institution:
15. The student was attending high school or residing outside $M$ aryland at the time of application for admission to aUSM institution.
16. The student is both (a) not financially independent and (b) is financially dependent upon a person who is not a resident of M aryland.
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 there after, 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 U SM "Petition for Change in Classification for Admission, Tuition, and C harge 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 University System of M aryland 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. T hese procedures shall be filed with the $O$ ffice of the $C$ hancellor.

## 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 onehalf 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 onehalf of his or her support from any other person or persons; and (4) demonstrates that he or she provides through self-generated support onehalf or more of his or her total expenses.
C. Parent: A parent may be a natural parent, or, if etablished by a court order recognized under the law of the state of M aryland, an adoptive parent.
D. Guardian: A guardian is a person so appointed by a court order recognized under the law of the state of $M$ aryland.
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 $M$ aryland.
G. Self-G enerated: 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 seff-generated income.
H. Regular Employes: A regular employee is a person employed by USM who is assigned to a state budget line or who is otherwise eligible to enroll in a state retirement system. Examples of categories N OT considered regular employees are graduate students, contingent employees, and independent contractors.

## IV. Implementation

This policy as amended by the Board of Regents on N ovember 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 M aryland RegulationsTitle 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 D efined

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. C ourses 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 introduce undergraduates to the funda mental knowledge, skills, and values that are essential to the study of academic disciplines, to encourage the pursuit of lifelong learning, and to 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. "M athematics" means courses that provide students with numerical, analytical, statistical, and problemsolving 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 anothe 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 history and cultural diversity; concepts of groups, work, and political systems, applications of qualitative and quantitative data to social issues; and 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 gradepoint average of at least 2.0 on a 4.0 scale or its equivalent in parallel courses, except as provided in subsection 4 below.
2. A student attending a public institution who has not completed an AA, AAS, or AS degree, or who has completed fewer than 56 semester hours of credit, shall be eligible to transfer to a public institution regardless of the number of credits earned if the student satisfied the admission criteria of that receiving public institution as a high school senior and 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 based on criteria developed and published by the receiving public institution and 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 are developed and published by the receiving public institution and 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 based on criteria developed and published by the receiving public institution and made to provide fair and equal treatment for native and transfer students.
3. C ourses 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 baccal aureate 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 require ments in major fields of study that simultaneously fulfill general education requirements.
3. A receiving public institution, in developing lowerdivision 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 $A A$ or $A S$ degree to include no fewer than 30 and no more than 36 semester hours, and each baccal aureate 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. M athematics, and
e. English composition
or
2. Conforming with $C O M A R 13 B .02 .02 .16 \mathrm{D}(2)(\mathrm{b})$-(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
3. O ne course in each of two disciplines in arts and humanities;
4. O ne course in each of two disciplines in social and behavioral sciences;
5. Two science courses, at least one of which shall be a laboratory course;
6. O ne course in mathematics at or above the level of college algebra; and
7. One course in English composition.
D. Interdisciplinary and Emerging Issues
8. 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.
9. 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. N otwithstanding 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 D egrees

1. While there may be variance in the numbers of hours of general education required for $A A, A S$, 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 baccalaureatedegreegranting 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 trans fer 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
3. O nehalf the baccalaureate degree program require ment but no more than 70 semester hours, and
4. The first two years of the undergraduate education experience.
C. Nontraditional Credit
5. 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.
6. Transfer of credit from the following areas shall be consistent with COM AR 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.
7. The basis for the awarding of the credit shall be indicated on the student's transcript by the receiving institution.
8. 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.
9. The receiving baccalaureatedegreegranting institution shall use validation procedures when a transferring student successfully completes a course at the lowerdivision 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 baccal aureate degree to plan their programs. These programs constitute freshman/sophomorelevel 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.
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
4. Admission requirements and curriculum prerequisites shall be stated explicitly in institutional publications.
5. A receiving institution shall admit transfer students from newly established public colleges that are functioning with the approval of the M aryland H igher Education Commission on the same basis as applicants from regionally accredited colleges.
6. A receiving institution shall evaluate the transcript of a degreeseeking 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.
7. 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. W hen 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 M ediation 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 M ediation Committee. TheTransfer M ediation 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 theTransfer M ediation 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 timelimitations 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
5. 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.
6. 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.
7. 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 coordina tor 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
3. Representatives of the two institutions shall have 15 working days to resolve the issues involved in an appeal.
4. As a result of a consultation in this section, the receiving institution may affirm, modify, or reverse its earlier decision.
5. The receiving institution shall inform a student in writing of the result of the consultation.
6. 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 $M$ aryland 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 educa tion 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 M aryland H igher Education Commission shall establish a permanent Student Transfer Advisory C ommittee that meets regularly to review transfer issues and recommend policy changes as needed. The Student Transfer Advisory C ommittee shall address issues of interpretation and implementation of this chapter.

## Appendix C

## Statement on Transferring Undergraduate CollegeLevel Credits to UMUC

University of M aryland University College actively subscribes to the policy of the M aryland H igher Education Commission on the transfer of undergraduates within M aryland (found in Appendix B) and welcomes transfer students. UM UC is also a designated fouryear Servicemembers 0 pportunity College (SO C); the SOC institutions have developed degree networks corresponding to Army, Navy, and M arine career specialties. UM UC grants transfer credit for courses graded C or higher if they are applicable to an Associate of Arts, a Bachelor of Arts, or a Bachelor of Science degree.
C redit earned elsewhere during a period of disciplinary dismissal or suspension may not be applied toward a degree from UM UC.
N ewly admitted and prospective students may request a tentative evaluation of potential transfer credit from the Information and Enrollment Team. Degreeseeking students who have completed 6 semester hours at UM UC with a grade point average of at least 2.0 may request an official evaluation of transfer credit from an advisor on their resource team. (M ore information on credit evaluation is given on p. 224.)

## Maximum Number of Transfer Credits Accepted

UM UC 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. $N$ o more than 60 of the 90 semester hours may be accepted from two-year institutions (details on p. 13).

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 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 portfolio assessment (details on p. 12).
- Up to 60 semester hours of credit for learning evaluated by means of UM UC course challenge examinations and 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 pp. 12 and 14).
- 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 (details on p. 12). 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 an academic major.
- Up to 60 semester hours of credit for study completed in service schools or in M ilitary O ccupational Specialties (M O Ss), on the basis of the recommendations made by the American C ouncil on Education (ACE) in its Guide to the Evaluation of Educational Experiences in the Armed Services (details on p. 13).
- 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 N ew York N ational Program on Noncollegiate Sponsored Instruction (PO NSI) College Credit Recommendations (details on p. 14).
- Up to 21 semester hours of coherently related vocational and technical credit from regionally accredited institutions, applicable as elective credit only toward the BS but not toward the $B A$ (details on p. 14).

Minimum Number of Credits Required for Instruction in the Major and for the Degree
UM UC 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 completea minimum of 30 credits at UM UC. As part of that minimum, students must earn at least 15 semester hours of the major at UM UC.

## Grade Level Acceptable for Transfer

UM UC 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 M aryland community college will have met UM UC's general education requirement, as stated in Appendix B. For other students, courses are evaluated on a casebycase basis. UM UC has included its evaluation of many M aryland community college courses in its section of the University System of $M$ aryland's computerized articulation system (ARTSYS). This software is avai lable at all two- and four-year M aryland public institutions and at www.umuc.edu/studserv/ugp_ss/transfer.html on the Web. Students should see an advisor for details.

## Appendix D

## Nondiscrimination

UM UC 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 U M UC and/or University System of M aryland policy or by federal, state, or local authorities The university does not discriminate against any person because of age, race, national origin, color, disability, religion, gender, sexual orientation, or veteran status.

All inquiries regarding UM UC's nondiscrimination policy should be directed to the director, Diversity Initiatives and Affirmative Action, $O$ ffice of the President, 3501 University Boulevard East, Adelphi, M D 20783-8000 (phone 301-985-7395).

## Appendix E

## Policy on Religious Observances

(UM UC Policy 51.00)
I. UM UC conforms to the Board of Regents Policy III-5.10

C oncerning the Scheduling of A cademic Assignments on Dates of Religious O bservance, approved on January 11, 1990.
II. So that the academic programs and services of UM UC 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. UM UC prohibits scheduling examinations on the following religious holidays: Rosh H ashanah, Yom Kippur, and Good Friday.

## Appendix F

## Financial Aid—Satisfactory Academic Progress

(U M U C Policy 220.30)

## I. Purpose

A. Financial aid is intended to meet the financial needs of students who otherwise could not or would not consider continuing their education. Students who receive financial aid must not only demonstrate financial need but must also make satisfactory progress as determined by U niversity of M aryland University College, in accordance with federal regulations.
B. Financial aid recipients are required to be in good standing and to maintain satisfactory academic progress toward their degree requirements for each semester or term in which they are enrolled. Satisfactory academic progress, as described below, is evaluated at the end of the fall, spring, and summer semesters or each term of enrollment. Failure to maintain satisfactory progress, as described below, may result in cancellation of financial aid awards, and the student may have to repay any funds al ready received.

## II. Definitions

A. Basic Standard for Undergraduate Students

1. UMUC's institutional requirements for minimum satisfactory performance for financial aid recipients are defined as follows:
a. M inimum cumulative grade-point average (GPA). The student must maintain a minimum cumulative GPA of 2.0.
b. M inimum completion rate. The minimum completion rate is 50 percent of credits attempted for the semester or term. For example, for a student who attempted 12 credits for the semester or term, a 50-percent completion rate would mean that the student must have earned at least 6 of those 12 credits.
C. Federally mandated maximum time frame to complete the program or degree. Students must complete their educational program within a time frame no longer than 150 percent of the published length of the educational program. For example, a student must complete his or her program after attempting a maximum of 180 semester hours for a 120-semester-hour program.
2. Federal regulations require that $U M \cup C$ track the academic progress of financial aid recipients from the first date of enrollment at UM UC, whether or not financial aid was received.
3. C redits transferred from all other credit sources will be considered as attempted and completed credits in the evaluation of the 150-percent program-completion standard. The two cumulative standards outlined above are eligibility requirements for student aid.
4. Students whose attempted credits, including transfer credits, exceed the 150-percent time frame for any reason will be placed in Financial Aid D enial, not Financial Aid Probation. No financial aid will be disbursed for the student during subsequent semesters or terms unless the student has made an appeal of the Financial Aid Denied and the appeal is granted.
B. Treatment of W, I, AU , F, and S Grades, No Grade Reported, and Repeated C oursework
5. C ourse withdrawals (W) after the drop/add period are not included in the GPA calculation, but are considered a noncompletion of attempted coursework.
6. Incomplete (I) grades are not included in the GPA calculation, and are considered a noncompletion of attempted coursework until the Incomplete grade is replaced with a permanent grade and academic progress can be re-evaluated.
7. An audit (AU) grade is not considered attempted coursework. It is not included in the GPA calculation or completion-rate determinations.
8. A satisfactory grade $(\mathrm{S})$ is treated as attempted semester hours that are earned, but it is not included in calcula tion of GPA.
9. F grades will be treated as attempted credits that were not earned, and so will be included both in the calculation of GPA and minimum completion rate.
10. If no grade is assigned, for any reason, the grade will be treated as an I in determination of satisfactory academic progress.
11. 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. Please note that no financial aid can be disbursed for a repeated attempt if the student already has achieved a passing grade for that course, and UM UC's policy allows students to receive aid for only one repeat of a course.
C. Financial Aid Academic Probation
12. Students who fail to meet the minimum 2.0 cumula tive grade point average standard or fail to meet the minimum 50 -percent completion rate will be placed in Financial Aid Probation for the next semester or term of enrollment. Financial aid can be received during the semester or term of probation. Financial aid disbursements for the next period of enrollment will be held until the grades and course completions have been reviewed for the semester or term of Financial Aid Probation.
13. Students receiving financial aid for the first time will be placed on Financial Aid Probation if they do not meet the minimum grade-point average or course completion standards in a previous semester or term of enrollment at UM UC as noted in this policy.

## D. Financial Aid Denied Status

1. Students who, while on Financial Aid Probation or on Financial Aid D enied status, fail to maintain the minimum completion rate and/or fail to maintain a minimum cumulative GPA of 2.0 or better will be placed in Financial Aid Denied status for the following period of enrollment. No financial aid will be disbursed during subsequent semesters/terms until the student is removed from Financial Aid Denied status.
2. Students who fail to satisfy the 150 -percent require ment will also be placed in Financial Aid D enied status. No aid will be disbursed during subsequent semesters or terms unless the student has made an appeal and the appeal is granted for that semester or term. There are no exceptions to this requirement. Students in a 120 -semester-hour bachelor's degree program who have attempted more than 180 credits, including transfer credits, are no longer eligible for financial aid. There is no probationary period.

## III. Student Procedures

A. Reinstatement of Aid After Financial Aid D enied Status

1. Reinstatement of financial aid after a student is placed in Financial Aid Denied status is achieved in one of the following ways:
a. The student submits an appeal, in writing, in accordance with the appeal process in Section III.A. 2 and the Financial Aid Appeals Committee grants the appeal. The student is placed in Financial Aid Probation rather than on Financial Aid D enied status for the semester or term.
b. The student attends UM UC, pays for tuition and fees without the help of student financial aid, and does well enough in the coursework to satisfy all the satisfactory academic progress standards. The student regains aid eligibility in a probationary status. Students who are in Financial Aid Denied status for failure to meet the 150-percent requirement cannot regain eligibility this way. Students whose attempted credits have exceeded 150 percent of their program cannot regain financial aid eligibility except on a semester-by-semester or term-by-term basis through the appeals process.
c. The student does not enroll in any courses at UM UC for three calendar years following the assignment of Financial Aid D enied status. W hen the student is readmitted, the student will be placed in Financial Aid Probation. Students who are in Financial Aid D enied status for failure to meet the 150-percent requirement cannot regain eligibility this way. Students whose attempted credits have exceeded 150 percent of their program cannot regain financial aid eligibility except on a semester-by-semester or term-by-term basis through the appeals process.
2. Appeal Process

The student must submit an appeal of Financial Aid D enied status in writing to the assistant vice president, Financial Aid, by the date specified in the Financial Aid Denied notification letter. 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. All decisions madeby the Financial Aid Appeals C ommittee are final.

## Appendix G

## Disclosure of Student Records

(U M UC Policy 210.14)
UM UC complies with the Family Educational Rights and Privacy Act of 1974 (also known as "the Buckley Amendment"). The policy of UM UC is (1) to permit students to inspect and review their education records, (2) to provide students the opportunity to seek an amendment of their education records where appropriate, (3) to limit disclosure to others of personally identifiable information from education records without the student's prior written consent, and (4) to provide students with information about how to file formal complaints with the D epartment of Education.

## I. Definitions

A. "Student" means an individual who is attending or who has attended UM UC. It does not include any applicant for admission to UM UC who does not matriculate, even if he or she previously attended UM UC. (H owever, such an applicant would be considered a "student" for purposes of his or her records relating to that previous attendance.)
B. "Education records" includes records that contain informa tion directly related to a student and that are maintained as official working files by UM UC. The following are not education records:

1. Campus police records maintained solely for lawenforcement purposes and kept separate from the education records described above.
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. (These records, however, may be reviewed by an appropriate professional of the student's choosing.)
4. Records that contain only information relating to a person's activities after that person is no longer a student at UM UC.

## II. Inspection and Review of Education Records by Students

A. Right of Access-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.

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. UM UC 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 recommenda tions. 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. Types and Locations of Education Records; Titles of Custodians of Record

1. UM UC maintains the following types of student records:
a. Permanent academic record cards (hard copy and electronic);
b. Academic data, including application for admis sion, transcripts from institutions previously attended, unofficial and official evaluations, grade reports, and correspondence concerning the student;
c. Financial aid folder; and
d. Veterans' benefits folder.
2. The officials responsible for the maintenance of each type of record are
a. For UM UC-Adelphi- the registrar located in Adelphi, M aryland.
b. For UM UC-Asia- the registrar located in Tokyo, Japan.
c. For UM UC-Europe (except M annheim Campus) - the registrar located in Heidelberg, Germany.
d. For the M annheim Campus- assistant to the dean.
e. For the Schwäbisch G münd Campus- registrar.
C. Procedure: Requests for access should be made in writing to the appropriate official. UM UC will comply with a request for access within a reasonable time. In the usual case, arrangements will be made for the student to read his or her records in the presence of a staff member. If facilities permit, a student may ordinarily obtain copies of his or her records by paying reproduction costs. Thefeefor copies is 50 cents per page. UM UC will not provide copies of any transcripts in the student's records other than the student's current UM UC transcript. O fficial transcripts (with the seal of UMUC) will be provided for a separate fee.

## III. Amendment of Education Records

UM UC provides students with the opportunity to seek correction of their education records.
A. Request to Correct Records

A student who believes that information contained in his or her education records is inaccurate, misleading, or violative of privacy right or other rights may submit a written request to the appropriate official (see Article II, Section B.2, above) specifying the document(s) being challenged and the basis for the complaint. The request is then sent to the person responsible for any amendments to the record in question. Within a reasonable time after receipt of the request, UM UC decides whether to amend the records in accordance with the request. If the decision is to refuse to amend, the student will be so notified and is advised of his or her right to a hearing. He or she may then exercise that right by written request to the $O$ ffice of the President.

1. Conduct of the H earing

All hearings are conducted by a staff member appointed by the university registrar and vice provost, Student Affairs, who does not have a direct interest in the outcome. The student is given a full and fair 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.
2. Decision

W ithin a reasonable period of time after the conclusion of a hearing, U M UC will notify the student in writing of its decision. The decision is based solely upon evidence presented at the hearing and includes a summary of the evidence and the reasons for the decision. If UM UC decides that the information is inaccurate, miseading, or otherwise in violation of the privacy or other rights of students, UM UC amends the records accordingly.
B. Right to Place an Explanation in the Records

If, as a result of the hearing, UM UC decides that the information is not inaccurate, miseading, or otherwise in viola tion of the student's rights, UM UC informs the student of the right to place in his or her record a statement commenting on the information and/or explaining any reasons for disagreeing with the decision. Any such explanation is 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.

## IV. Disclosures

UM UC will not disclose education records or the personally identifiable information contained therein unless allowed in accordance with 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 of 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 can be provided.
B. Directory Information

1. UM UC designates the following categories of information as directory information:
a. Name.
b. M ajor field of study.
c. Dates of attendance.
d. Degrees and awards received.
e. Previous educational institution most recently attended.
2. Directory information is disclosed even 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 UM UC 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 office as indicated in this policy.
C. Additional Disclosures without Prior C onsent

Prior consent is not required for disclosure of education records in the following circumstances:

1. The disclosure is to other school officials, generally within the University System of M aryland or UM UC, 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.
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. D epartment of Education, and state 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 neces sary 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 N ovember 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. (N ote: UM U C 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, UM UC 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 UM UC against the alleged perpetrator of that crime with respect to that crime.
D. Record of Disclosures- UM UC maintains with the student's education records a record of each request and each disclosure, except for
12. Disclosures to the student himself or herself.
13. Disclosures made pursuant to the written consent of the student (the written consent itself suffices as a record).
14. Disclosures to USM instructional or administrative officials.
15. Disclosures of directory information. This record of disclosures may be inspected by the student, the official custodian of the records, and other officials of U M UC and governmental officials.

## V. Right to File Complaint

A student alleging that UM UC has not complied with the Family Education Rights and Privacy Act (FERPA) may file a written complaint to
Family Policy Compliance Office
U.S. Department of Education

400 M aryland Avenue, SW
Washington, DC 20202-4605

## COMMUNITY COLLEGE ALLIANCES

UM UC 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 U M UC through a single application, and may take advantage of any of UM UC's locations for their upper-level coursework. Students may also complete upper-level coursework through UM UC online. Advisors both at UM UC and the community college provide academic advising, financial aid coordination, and library services information.
$M$ ore academic alliances are currently in the planning stages.

## Maryland Alliances

## AACC-UMUC Alliance

In Anne Arundel County, U M UC offers classes at Anne Arundel Community College, the U M UC Annapolis Center, Fort M eade, and the Glen BurnieTown Center. Students participating in the Anne Arundel Community College-U niversity of M aryland 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.

## CCC-UMUC Alliance

The C arroll C ommunity College-University of M aryland University College Alliance offers students in Carroll C ounty 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 UM U C 's bachelor's degree in computer studies. Additionally, articulated programs leading to majors in psychology and communication studies are available. Carroll C ounty students may attend a limited number of UM UC courses at the community college, but will find it convenient to complete their programs online.

## CSM-UMUC Alliance

In Southern M aryland, the College of Southern M aryland and University of M aryland University College have formed the CSM UM UC Alliance. The Waldorf C enter for Higher Education offers students a state-of-theart education facility. Instructional technology (including computer labs), instructional television, 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 UM U C's other locations. The articulated programs include bachelor's degrees in accounting, business administration, computer and information science, computer science, computer studies, information systems management, and management studies.

## FCC-UMUC Alliance

The Frederick Community C ollege-University of M aryland University College Alliance allows students in Frederick County to complete both associate's and bachelor's degrees in the county. In Frederick County, UM UC offers courses at Frederick Community College and the Frostburg State University Center at Frederick. FCC associate's degrees in several disciplines are linked to the related UM UC bachelor's degrees in computer and information science, computer studies, information systems management, and psychology. Additional programs may be articulated at a later date.

## HCC-UMUC Alliance

Washington County students will find the H agerstown Community College-University of M aryland University College Alliance an ideal relationship as they pursue advanced education. Several articulated academic programs, the dual-admission process, and coordinated student support make the transition from associate's degree to bachelor's degree smooth and convenient. HCC programs in accounting, management, paralegal studies, and computer-related studies lead to bachelor's degrees in the same area at U M UC. Students may attend classes at the Frostburg State University C enter at H agerstown, participate in instructional television classes at the community college, or complete their UM UC requirements online.

## MC-UMUC Alliance

The M ontgomery College-University of M aryland University College Alliance offers students articulated bachelor's degree programs in accounting, business administration, computer and information science, computer science, computer studies, information systems management, and management studies. Students at the M ontgomery College campuses in Rockville and Germantown may find it most convenient to take UM UC classes at the U niversity System of M aryland Shady G rove Center, while students at the M ontgomery College Takoma Park campus may take advantage of UM UC offerings at nearby College Park.

## PGCC-UMUC Alliance

Students in Prince George's County who participate in the Prince George's C ommunity College-University of $M$ aryland University College Alliance may complete their bachelor's degree in Prince George's County at the UM UC 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, English, information systems management, legal studies, management studies, psychology, 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

UM UC also reaches out to students from community colleges outside $M$ aryland who want to complete their bachelor's degree online. In 2000, U M U C formed its first out-of-state alliance with H onolulu Community C ollege. O ther collaborations with out-of-state community colleges are in development.

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## APPLICATION FOR ADMISSION TO THE SCHOOL OF UNDERGRADUATESTUDIES

U ndergraduate Admissions
University of $M$ aryland 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.

| $\square$ Fall | 2001 |
| :--- | :--- |
| $\square$ M id-fall | 2001 |
| $\square$ Spring | 2002 |
| $\square$ M id-spring | 2002 |
| $\square$ Summer | 2002 |

1. Social Security number $\qquad$ - $\qquad$ - $\qquad$
2. N ame (last, first, middle) $\qquad$ --------

Any other name under which your educational records may be held $\qquad$
3. Current address $\qquad$
 State $\qquad$ Zip+4/Postal code $\qquad$ Country
City $\qquad$
$\qquad$
Yrs _____ M OS ____-_-_
If you have lived less than one year at this address, please provide the following information:
Previous address $\qquad$
 State $\qquad$ Zip+4/Postal code $\qquad$ Apt. no. $\qquad$

$\square$ Own $\quad \square$ Rent How long did you live at this address? Yrs $\qquad$ M OS $\qquad$
4. D aytime phone number ( ____-_ )


Evening phone number ( $\qquad$ ) $\qquad$
Fax number ( _____ ) $\qquad$ E-mail address $\qquad$ Employer's Zip+4/Postal code $\qquad$
5. Employer $\qquad$
6. Gender $\square$ M ale Female
7. D ate of birth ( $\mathrm{M} \mathrm{o/D} \mathrm{ay/Yr} \mathrm{)}$ $\qquad$ I____I I___-_
8. R acial/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.
$\square$ African American $\square$ Asian/Pacific Islander
$\square$ Hispanic
N ative American
White $\square$ Other $\qquad$
9. Are you currently or have you ever been a member of the U.S. Armed Forces? $\square \mathrm{Yes} \square \mathrm{N} 0$ Ifyes, complete service information below. If currently on active duty, please attach a copy of most recent assignment orders.
$\square$ Active duty $\square$ Veteran $\square$ Reserve component
H ome state of record $\qquad$ D ates of service $\qquad$ Duty station Country $\qquad$

Branch of the military $\qquad$ Separation date (M o/D ay/Yr) $\qquad$ l____-_
10. Are you the spouse or dependent of a full-time, active-duty member of the U.S. Armed Forces?
$\square$ No $\square \mathrm{Yes}$ (spouse) $\square \mathrm{Yes}$ (dependent)
If yes, complete service information below and attach a copy of servicemember's most recent assignment orders.
H ome state of record $\qquad$ D ates of service $\qquad$ D uty station
Branch of the military $\qquad$ Separation date (M o/D ay/Yr) $\square$
11. Are you a U.S. citizen? $\square \mathrm{YeS} \square \mathrm{N} O$ If no, please provide the following information and supply copies of all supporting documentation.

Country of birth Current citizenship $\qquad$
Type of visa $\qquad$ Expiration date (M o/D ay/Yr) _____ D ate issued (M o/D ay/Yr) $\qquad$ |___-_1 l_-_-_ Alien registration no. $\qquad$ I___-_
Note: UMUC does not issue I-20s for student visas.
12. Is English your native language? $\square \mathrm{YeS} \square \mathrm{No}$ If no, you must demonstrate college-level proficiency in written English before admission to UMUC.

DO NOT WRITE BELOW THIS LINE
$\square \mathrm{MS} \quad \square \mathrm{Citz} \quad \square$ Res $\quad \square$ Race $\quad \square \mathrm{FA} \quad \square \mathrm{DS} \quad \square \mathrm{GID} \quad \square \mathrm{DE} \quad \square \mathrm{Cert} \quad \square \mathrm{Geog}$

Name $\qquad$ Social Security number $\qquad$ - $\qquad$ $-$ $\qquad$
13. Are you applying for any of the following types of aid?

Financial aid $\square$ Yes $\square$ No Veterans benefits $\square$ Yes $\square$ No Golden ID benefits $\square$ Yes $\square$ No
14. H ave you already earned a college-level degree? $\square \mathrm{No} \quad \square \mathrm{Yes}$ If yes, indicate below any degree you have already earned.
$\square$ Associate's degree
$\square$ M aster's degree
$\square$ Professional degree (M D , JD )
$\square$ Bachelor's degree
$\square$ D octoral degree
$\square 0$ ther $\qquad$
15. What is your academic goal in attending $U M \cup C$ ?
$\square$ I plan to earn a bachelor's degree at UM UC.
$\square \mathrm{I}$ am undecided about my academic goal.
$\square$ I am interested in taking courses, but I am not
$\square$ I plan to earn a certificate in one of UM UC's seeking a degree at U M UC. specialized programs.
16. If you plan to earn a degree or certificate at UM UC, please select the appropriate choices below.
a. $\square$ AA (for activeduty military only)
$\square \mathrm{BA}$
$\square$ BS
Certificate
FOR OFFICE USE ONLY
b. Major $\qquad$ Team
M inor $\qquad$
Certificate area of study $\qquad$
17. Please indicate below how you completed your secondary school education.
$\square$ High school
N ame of high school $\qquad$
Location (City/State/C ountry) $\qquad$ D ate of graduation ( $\mathrm{M} \mathrm{o/Yr} \mathrm{)}$ $\qquad$ 1 ___-_-_
GED
D ate of exam ( $\mathrm{M} \mathrm{o/Yr} \mathrm{)}$ $\qquad$ 1 _-_-_-_-
D o your GED scores total at least 225, with no score lower than 40 on any of the five tests? $\square$ Yes $\square$ No
Study abroad
$N$ ame of exam/certificate $\qquad$ Date (Mo/Yr) $\qquad$ I___-_-_
18. List all colleges and universities previously attended, including other University System of $M$ aryland institutions. 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 <br> previously attended | City, State, Country | From | To | N umber of <br> credits earned | Type of <br> degree earned | D ate <br> awarded |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Example: University of M D, College Park | College Park, M D, USA | $6 / 97$ | $12 / 99$ | 18 | none | N/A |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |

DO NOT WRITE BELOW THIS LINE


Name $\qquad$ Social Security number $\qquad$ - $\qquad$ - $\qquad$
19. If you have previously attended UM UC, please indicate where and list dates of attendance.
$\square$ In the United States $\square$ In Europe In Asia D ates $\qquad$
If you attended U M U C courses on a military base, please indicate the base where you most recently attended class.
20. Are you currently admitted to another institution in the U niversity System of $M$ aryland or to the UM UC Graduate School?
$\square$ No Yes If yes, indicate which institution
21. Indicate your status at the last institution you attended.
$\square$ In good academic standing $\quad$ Academically dismissed within the last two years $\quad$ Disciplinarily dismissed within the last three years
22. Do you have at least a 2.0 grade-point average from your last institution? Yes $\square$ No
23. Determination of Maryland Residency: Do you wish to be considered for in-state tuition status? $\square$ No Yes If yes, you must complete the following questions. If no, skip to \#35.
24. 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 \#25.

- I am a part-time (50-percent-time) or full-time regular employee of the University System of M aryland (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 M aryland as his or her home of residency or who resides in or is stationed in $M$ aryland. 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 or her home of residency. Also, please indicate date of expected separation from the military.

25. If you are seeking in-state status and did not select one of the statements in \#24, you must complete the following questions. Failure to complete all of the required items may result in a non-M aryland resident classification and out-of-state charges being applied. Residency classification information is evaluated in accordance with the University System of M aryland residency policy. If UM UC 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 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 \#26.
I 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 claimed me as a dependent on his or her most recent income tax returns or $I$ am a ward of M aryland. If you are a ward of Maryland, please attach documentation verifying your status and go to \#35; otherwise, please supply the following information.
Provider's name $\qquad$ Relationship to applicant $\qquad$
a. Length of time you have been financially dependent on provider ( $\mathrm{Yrs} / \mathrm{M} \mathrm{os}$ ) $\qquad$
b. Is the provider a resident of M aryland? $\square$ Yes $\square \mathrm{N}_{0}$
c. Provider's address
d. Is the provider a U.S. citizen? $\square$ Yes $\square$ No

If no, type of visa $\qquad$ Expiration date (M o/D ay/Yr)
Alien registration no. $\qquad$ D ate issued (M o/D ay/Yr)
$\qquad$
e. H as the provider filed a M aryland income tax return for the most recent year on all earned income, including taxable income earned outside the state? $\square$ Yes $\square$ No
If yes, list the year(s) in which a $M$ aryland income tax return has been filed within the past three years $\qquad$
If a M aryland tax return has not been filed within the last 12 months, state the reason(s)

Name $\qquad$ Social Security number $\qquad$ $-$ $\qquad$ - $\qquad$
The student applicant is responsible for completing \#26-35.
26. Are you residing in $M$ aryland primarily to attend an educational institution? $\square$ No Yes
27. Permanent address


Apt. no. $\qquad$

H ow long have you lived at this address? Yrs $\qquad$ Mos $\qquad$
If you have lived less than one year at this address, please provide the following information.
Permanent address $\qquad$ Apt. no. $\qquad$

H ow long did you live at this address? Yrs _____ M OS $\qquad$
28. Are all, or substantially all, of your possessions in $M$ aryland? $\square$ No Yes
29. Do you have a valid driver's license? $\square$ No $\square$ Yes
a. If yes, provide the initial date of issue $\qquad$ From which state was the license issued?
b. Were you previously licensed to drive in another state? No Yes
30. Do you own a motor vehicle? $\square$ No Yes
a. If yes, provide the initial registration date $\qquad$ In which state?
b. Was your car previously registered in another state? No Yes
31. Are you registered to vote? $\square$ No Yes
a. If yes, in which state? $\qquad$ Provide the original voter registration date ( $\mathrm{M} \mathrm{o/Yr}$ ) $\qquad$
b. Were you previously registered to vote in another state? $\square$ No Yes
32. H ave you filed a $M$ aryland income tax return for the most recent year? $\square$ No Yes
a. List the year(s) in which you filed a $M$ aryland income tax return within the past three years $\qquad$
b. If you did not file a tax return in $M$ aryland within the past 12 months, state the reason(s) $\qquad$
33. Are you currently paying $M$ aryland income tax, either through payroll deduction or quarterly estimated payments? $\square$ No Yes If no, why not?
34. D o you receive public assistance from a state or local agency other than one in $M$ aryland? $\square$ No Yes

If yes, please explain
35. 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 mefor 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. • U M UC 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 agreethat the information in this application and all my records from any institution in the University System of $M$ aryland 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 U M U C'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 UM UC in writing within 15 days.

Signature of applicant $\qquad$ D ate of application (M o/D ay/Yr) $\qquad$
A $\$ 30$ nonrefundable fee must accompany this application (unless you have attended U M UC 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.
$\square$ M asterC ard $\square$ VISA
Customer acct. no. $\qquad$ Exp. date (M o/Yr) $\qquad$

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 require ments may not be used to satisfy major requirements. |
| Communications (12 s.h.): <br> - ENGL 101 or equivalent <br> - Other writing <br> - Writing, speech, or communications <br> - Upper-level intensive writing | $\qquad$ |  | -------------- $\qquad$ $\qquad$ | No more than 3 s.h. in writing may be earned through credit by exam. <br> For other writing, choose from COM M (except 380 and 493); EN GL 278, 291, 294, 303, 391, 391X, 396, 493, 498, 499, 499N . <br> For writing/speech/communications, choose from COMM ; SPCH ; EN GL 278F, 281, 281X, 291, 294, 303, 384, 391, 391X, 396, 493, 498, 499, 499N . <br> For upper-level intensive writing courses, choose from COM M 390, 393, 393X, 394, 394X; EN GL 303, 391, 391X, 396; LGST 401. |
| Social and Behavioral Sciences (6 s.h.) | $\qquad$ | $\qquad$ | $\qquad$ | Choose from two areas: AN TH, BEH S, CCJS (105, 330, 350, 360, 432, 451, 452, 453, 454, or 461 only), ECON, GEO G, GERO (210, 220, 302, 304, or 415 only), GVPT, PSYC, SO CY. |
| Arts and Humanities (6 s.h.) | ------------- | -- | ------ | Choose from two areas: ARTH, ARTT, HIST, HUM N, M USC, PHIL, THET, dance, literature, foreign language. |
| M ath (3 s.h.) |  | ------------ | ------------ | MATH 105, MATH 107, or highe. |
| Biological and Physical Sciences (7 s.h.) | ---------------------------------- | $\qquad$ | $\qquad$ | - One 3-s.h. lecture course plus related 1-s.h. lab course, or one 4-s.h. lecture/lab course. <br> - Any other 3-s.h. science course. C hoose from the following areas: ASTR, BCHM, BIOL, CHEM, GEOL, MICB, NSCI, PH YS, botany, entomology, zoology. |
| Emerging Issues (7 s.h.): <br> - Information literacy (1 s.h.) <br> - Information technology (6 s.h.) | ----------------------------------- | ---------------------------------- |  | - LIBS 100 or LIBS 150. <br> - N on-computer majors: Two computer courses chosen from CM IS, CM IT, CM SC, CM ST, IFSM , BM GT 301, LGST 360 or 363A. <br> - Computer majors: C ross-curricular courses in global and civic responsibility. |


| Requirement | Completed | In Progress | To Take | Notes |
| :---: | :---: | :---: | :---: | :---: |
| Requirements for Major (30-38 s.h., at least half must be in upper-level courses) |  |  |  |  |
| $\qquad$ s.h. <br> See Bachelor's D egree Curricula (pp. 24-70) for required courses for your major. |  |  |  |  |
| M inor Requirements (15-19 s.h.) <br> See requirements of individual minor. <br> M inor 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 Initiative Requirements (9 s.h.): <br> - Historical (3 s.h.) <br> - International (3 s.h.) <br> - Civic responsibility (3 s.h.) |  |  |  | See Bachelor's D egree Require ments (pp. 15-19) for more information. <br> If cross-curricular requirements are satisfied elsewhere in the degree, these credits are available as electives. |
| Electives and Related Requirements $\qquad$ s.h. <br> Choose additional electives to meet 120 s.h. minimum. |  |  |  | If cross-curricular courses and/or related requirements are satisfied in general education requirements, more electives will be available. <br> 12 s.h. of foreign language recommended for BA. |

## Additional Degree Requirements:

- 30 s.h. at UMUC, of which at least 15 must be in the major and 15 must be in upper-level courses (numbered 300-499).
- 45 s.h. must be upper level.


## STATESIDE

H undreds of courses and programs are scheduled each term at times and places convenient to students. Because of that variety, conflicts may arise that affect the calendar dates. D ates given below are approximate. Specific dates, times, and locations are published in the Undergraduate Schedule of Classes each term. An Undergraduate Schedule of Classes is available from umисinfo@umис.edu.

## Fall 2001

Undergraduate Schedule of Classes available; registration (mail-in, fax, online, touch-tone, and walk-in) begins M id-June
M ail, fax, and online registration for standard semester and term I ends

August 10
Registration with no late fee for standard semester and term I ends

August 28
Standard semester and term I begin at most locations
H oliday
Late registration for standard semester and term I ends

August 30
September 1-3

M ail, fax, and online registration for mid-fall and term II ends
Term I classes end at most locations
Registration without late fee for mid-fall and term II classes ends

September 6
0 ctober 12
0 ctober 22
0 ctober 22
M id-fall and term II classes begin at most locations

0 ctober 23
Late registration for mid-fall and term II classes ends
Holiday
Standard semester and term II classes end at most locations
M id-fall classes end
0 ctober 30
N ovember 21-25
December 17
February 12

## Spring 2002

Undergraduate Schedule of Classes available; registration (mail-in, fax, online, touchtone, and walk-in) begins
Registration for January term ends
January term begins
M ail, fax, and online registration for standard semester and term I ends
H oliday
Registration with no late fee for standard semester and term I ends
January term ends
Standard semester and term I begin at most locations
Late registration for standard semester and term I ends
$M$ ail, fax, and online registration for mid-spring and term II ends
Term I classes end at most locations
Registration without late fee for mid-spring and term II classes ends

M id-O ctober
January 3
January 3
January 4
January 21
January 24
January 27
January 28
February 4
M arch 8
M arch 19
M arch 19

H oliday
M arch 25-31
M id-spring and term II classes begin at most locations

April 2
Late registration for mid-spring and term II classes ends
Standard semester and term II classes end at most locations

M ay 14
Undergraduate Commencement
M ay 18
M id-spring classes end

## Summer 2002

Undergraduate Schedule of Classes available; registration (mail-in, fax, online, touch-tone, and walk-in) begins

M id-M arch
M ail, fax, and online registration for standard semester and term I ends

M ay 10
Registration with no late fee for standard semester and term I ends

M ay 23
Standard semester and term I begin at most locations $M$ ay 28
Late registration for standard semester and term I ends June 5
M ail, fax, and online registration for term II ends June 21

## H oliday

July 4
Term I classes end at most locations July 8
Registration without late fee for term II classes ends July 8
Term II classes begin at most locations July 9
Late registration for term II classes ends July 16
Standard semester and term II classes end at most locations

August 19

## OVERSEAS

## UMUC-Asia

Term I
Term II
Term III
August 20-0 ctober 13

Term IV
ober 29-D ecember 22
January $21-\mathrm{M}$ arch 16 April 1-M ay 25

June 3-July 27
April 20
Term V
Tokyo Commencement

## UMUC-Europe

Term I
Term II
Term III
Term IV
Term V
Commencement
August 20-0 ctober 12
0 ctober 29-D ecember 21
January $14-\mathrm{M}$ arch 8
M arch 25-M ay 17
June 3-July 26

## Mannheim Campus

Fall semester
August 20-D ecember 13
January $21-\mathrm{M}$ ay 16
Spring semester
M ay 11

## Schwäbisch Gmünd Campus

Fall semester
Spring semester
August 27-D ecember 14
January $21-\mathrm{M}$ ay 10
Commencement
M ay 11


## THE ASIAN COLLECTIONS—THE ART OF CHINA

## THEI-LING CHOW AND THOMASM. LI FAMILIES OF M ARYLAND HAVE CREATED A UNIQUE VISION FOR PRESERVING VALUABLE CHINESE ART THROUGH DONATIONS TO THE UNIVERSITY OF MARYLAND UNIVERSITY COLLEGE (UMUC) ARTS PROGRAM.

The art has been passed down from the donors' ancestors over the years. Because both families are interested in ensuring that their treasured collections are kept intact, both in honor of their heritage and for the appreciation of future generations, they came to realize that UM UC would be the perfect place for their gifts. Recognized for its innovative use of technology in providing higher education worldwide, UM UC is also strongly committed to creating an environment in which artistic creativity is valued and the arts play a major role in providing students with a rich and balanced education. The university
also has a strong historical connection to Asia, having spent the last 50 years providing educational opportunities for servicemembers and their families stationed there.

UM UC's students, faculty, and staff are profoundly grateful to the Chow and Li families for this, the largest donation ever received by the Arts Program. The collection will be incorporated into the appropriate art and history curricula for study by UM UC students and will serve as a valuable resource for faculty. And it will be cherished by all who see it, now and in perpetuity.


[^0]:    Cover art: (Front inset) D ong Yu, Ink Plum After Evening Rain (1764), hanging scroll mounted as a panel, ink on paper, on loan from M r. and M rs. Thomas M. Li; (Front background) Zhu Yumming (1416-1526), Mountains and Willows in Spring-A Poem, hanging scroll mounted as a panel, ink on paper, on loan from M r. and M rs. Thomas M. Li; (Back) Chrysanthemums, Rock, and Finches Vying for Berries (1750), ceramic painted in famille rose style, on loan from M r. and M rs. I-Ling Chow. U M UC Asian Collections: The Art of China.

[^1]:    * ENGL 396 is a 6 -credit course that earns 3 credits in upper-level writing and 3 credits in humanities.

[^2]:    * Students should consult an advisor before selecting this major.

[^3]:    * Should be taken in the student's final 30 semester hours of study.

[^4]:    * Strongly recommended.

[^5]:    * 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 the above courses, as appropriate.

[^6]:    ${ }^{*}$ Covers literature written before 1800.

[^7]:    * Strongly recommended.

[^8]:    * Also listed as BEHS 361 and NSCI 361.

[^9]:    * Up to 6 semester hours of 1-semester-hour special topic courses in legal studies may also be used to satisfy the substantive law or the procedure and skill course requirements.

[^10]:    Management Studies Coursework (36 s.h.)
    Required Introductory Courses (9-12 s.h.)
    Students without previous business experience must take the following course:
    BM GT 110 Introduction to Business and $M$ anagement (3)
    Students must take the following introductory course:
    ACCT 220 Principles of Accounting I (3)
    Students must take one of the following introductory economics courses:
    ECON 201 Principles of Economics ( 3 )
    ECON 203 Principles of Economics II (3)

[^11]:    * Strongly recommended.

[^12]:    * Should be taken in the student's final 30 semester hours of study.
    ** May only be taken once.

[^13]:    Mathematics Coursework (17-19 s.h.)
    Required Foundation Courses (8-9 s.h.)

    | - M ATH | 130 | Calculus A (3) |
    | ---: | :--- | :--- |
    | M ATH | 131 | Calculus B (3) |
    | M AT H | 132 | Calculus C (3) |
    | - M ATH | 140 | Calculus ( 4 ) |
    | M ATH | 141 | Calculus II (4) |

[^14]:    * Students may not apply both the BIOL 105-106 sequence and the

    BIOL 101-102 sequence to the minor.

[^15]:    * Students may not apply both BIOL 220 and BIOL 222 to the minor.

[^16]:    * Also listed as HUMN 360 and NSCI 360.

[^17]:    * Strongly recommended.

[^18]:    Women's Studies Coursework ( $\mathbf{1 5}$ s.h.)
    Required Foundation Course (3 s.h.)
    Students must take the following foundation course:
    W M ST 200 Introduction to Women's Studies: Women and Society (3)

    Supplemental Minor Courses (12 s.h.)
    Students must choose four of the following courses to complete the 15 semester hours required for the minor. No more than 6 semester hours may be taken from any single discipline.

    | BEH S | 343 | Parenting Today (3) |
    | :--- | :--- | :--- |
    | BEH S | 454 | D omestic and Family Violence (3) |
    | BM GT | 312 | Women in Business (3) |
    | BM GT | 313 | Women as Entrepreneurs (3) |

[^19]:    * Course in financial management.

[^20]:    * Only a limited number of courses are available each semester in this discipline.

[^21]:    Undergraduate Student Affairs
    University of M aryland University College
    3501 University Boulevard East
    Adelphi, M D 20783-8070

